



Technical Submission

Project	Sunlight House, Manchester	Project Ref.	1394
Tech Sub Ref.	TS-M- 0013	Issued By	Lee Holland
Date	19/07/2024	Authorised	David Wilson

Technical Submission	AC	
SPECIFICATION COMPLIANCE		N/A
DEROGATIONS	✓	Dainkin System Proposed than Mitsubishi
CALCULATIONS PROVIDED		N/A

This technical submission has been issued by G&H Building Services Ltd for the approval of VRV Heating and cooling systems:

FCU Schedule

Heat loss calculations

Condensor Units - REYA8A, REYA12A, REYA16A, REY18A, REYA20A

Door Curtains - CYAM200DK100FBN

FCU - FXAA range - FXAA15A, FXAA20A, FXAA32A, FXAA40A, FXAA63A

Wall Mounted Units - FXAA range

Concealed Ceiling Units - FXSA-A range

BACnet interface - DMS502A51

Information Required From	Myco
Latest Date Required	02/08/2024

Acceptance/Refusal		
Rev 1 as per Flatts comments: 1. Pages removed 2. Schedule now included 3. Kings reference now removed 4. Zoning layouts now included 5. Heat loss figures include 10l/s per person based on 10msq to cover worst case scenario 6. High heating figures under review 7.To be confirmed with Acoustician 8. Noted		
STATUS A	STATUS B	STATUS C

Response From	
Response Date	

FCU SCHEDULE											
Project:	Sunlight House - Manchester										
Project No:	CSD1298										
Revision:	Rev 1 (unit added to L03, selection details added)										
Schedule No:	1298-CSD-ZZ-ZZ-SH-M-56013										
Date	18.07.24										
Reference	TENANCY	UNIT DETAILS						SPIGOTS		ELEC	
		TYPE	MODEL	SENSIBLE COOLING (kW)	TOTAL COOLING (KW)	HEATING (kW)	AIR VOLUME (l/s)	SIZE	REQ'D QTY	FULL LOAD AMPS	Max SFP (W/l/s)
GROUND FLOOR											
AC1	LOBBY	AIR CURTAIN	CYAM200DK100FBN	N/A	N/A	N/A	-	N/A	N/A		TBC
FS1	LOUNGE	WALL MOUNTED	FXAA63A	2.500	3.000	1.500	303	N/A	N/A	0.7	N/A
FS2	LOUNGE	WALL MOUNTED	FXAA63A	2.500	3.000	1.500	303	N/A	N/A	0.7	N/A
FS3	LOUNGE	WALL MOUNTED	FXAA63A	2.500	3.000	1.500	303	N/A	N/A	0.7	N/A
FS4	LOUNGE	WALL MOUNTED	FXSA50A	2.500	3.000	1.500	253	N/A	N/A	1.1	N/A
FCU1	RECEPTION	CONCEALED CEILING UNIT	FXAA40A	3.000	3.500	2.500	203	150DIA	5	0.4	0.376
WM1	CAFÉ	WALL MOUNTED	FXAA40A	3.600	4.100	6.000	203	N/A	N/A	0.4	N/A
WM2	CAFÉ	WALL MOUNTED	FXAA40A	3.600	4.100	6.000	203	N/A	N/A	0.4	N/A
WM3	CAFÉ	WALL MOUNTED	FXAA40A	3.600	4.100	6.000	203	N/A	N/A	0.4	N/A
LEVEL 1											
FCU01-01	MEZZ	CONCEALED CEILING UNIT	FXSA32A	2.000	2.500	2.000	158	150DIA	3	0.8	0.310
FCU01-02	MEZZ	CONCEALED CEILING UNIT	FXSA32A	2.000	2.500	2.000	158	150DIA	3	0.8	0.310
FCU01-03	MEZZ	CONCEALED CEILING UNIT	FXSA32A	2.000	2.500	2.000	158	150DIA	3	0.8	0.310
FCU01-04	MEETING ROOM	CONCEALED CEILING UNIT	FXSA32A	2.124	2.979	3.000	158	150DIA	3	0.8	0.310
FCU01-05	TEA POINT	CONCEALED CEILING UNIT	FXSA20A	0.415	0.415	2.000	150	150DIA	3	0.8	0.307
FCU01-06	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.137	3.487	3.789	253	150DIA	5	1.1	0.379
FCU01-07	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.503	1.897	2.522	150	150DIA	3	0.8	0.307
FCU01-08	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.790	2.122	2.558	158	150DIA	3	0.8	0.310
FCU01-09	SOUTH	CONCEALED CEILING UNIT	FXSA20A	1.104	1.432	2.054	150	150DIA	3	0.8	0.307
FCU01-10	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.777	2.119	2.720	158	150DIA	3	0.8	0.310
FCU01-11	SOUTH	CONCEALED CEILING UNIT	FXSA15A	0.878	1.139	1.632	145	150DIA	3	0.8	0.317
FCU01-12	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.830	2.186	2.800	158	150DIA	3	0.8	0.310
FCU01-13	SOUTH	CONCEALED CEILING UNIT	FXSA20A	1.252	1.585	2.199	150	150DIA	3	0.8	0.307
FCU01-14	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.966	2.327	2.880	158	150DIA	3	0.8	0.310
FCU01-15	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.477	1.721	2.074	150	150DIA	3	0.8	0.307
FCU01-16	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.454	1.689	2.043	150	150DIA	3	0.8	0.307
FCU01-17	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.530	3.979	4.869	253	150DIA	5	1.1	0.379
FCU01-18	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.428	3.748	3.411	253	150DIA	5	1.1	0.379
FCU01-19	NORTH	WALL MOUNTED	FXAA15A	0.608	0.752	0.823	118	N/A	N/A	0.3	N/A
FCU01-20	NORTH	WALL MOUNTED	FXAA20A	1.201	1.552	1.806	132	N/A	N/A	0.3	N/A
FCU01-21	NORTH	WALL MOUNTED	FXAA15A	0.867	1.121	1.321	118	N/A	N/A	0.3	N/A
FCU01-22	NORTH	WALL MOUNTED	FXAA20A	1.047	1.317	1.546	132	N/A	N/A	0.3	N/A
LEVEL 2											
FCU02-01	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.358	3.693	3.718	253	150DIA	5	1.1	0.379
FCU02-02	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.020	3.340	3.014	253	150DIA	5	1.1	0.379
FCU02-03	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.118	3.437	3.009	253	150DIA	5	1.1	0.379
FCU02-04	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.208	3.546	3.153	253	150DIA	5	1.1	0.379
FCU02-05	SOUTH	CONCEALED CEILING UNIT	FXSA40A	3.527	3.878	3.271	250	150DIA	3	1.1	0.376
FCU02-06	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.441	1.792	2.431	150	150DIA	3	0.8	0.306
FCU02-07	SOUTH	CONCEALED CEILING UNIT	FXSA15A	1.016	1.281	1.766	145	150DIA	3	0.8	0.317
FCU02-08	SOUTH	CONCEALED CEILING UNIT	FXSA20A	1.269	1.598	2.189	150	150DIA	3	0.8	0.307
FCU02-09	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.519	1.894	2.486	150	150DIA	3	0.8	0.307
FCU02-10	EAST	CONCEALED CEILING UNIT	FXSA50A	3.213	3.467	2.262	253	150DIA	5	1.1	0.379
FCU02-11	EAST	CONCEALED CEILING UNIT	FXSA32A	2.111	2.316	1.747	158	150DIA	3	0.8	0.310
FCU02-12	EAST	CONCEALED CEILING UNIT	FXSA80A	4.495	4.948	4.491	383	150DIA	7	1.9	0.373
FCU02-13	EAST	CONCEALED CEILING UNIT	FXSA50A	3.444	3.804	3.003	253	150DIA	5	1.1	0.379
FCU02-14	EAST	CONCEALED CEILING UNIT	FXSA50A	2.885	3.158	2.395	253	150DIA	5	1.1	0.379
FCU02-15	EAST	CONCEALED CEILING UNIT	FXSA15A	0.920	1.154	1.326	145	150DIA	3	0.8	0.317
FCU02-16	EAST	CONCEALED CEILING UNIT	FXSA40A	2.724	3.033	2.506	250	150DIA	3	1.1	0.376
FCU02-17	EAST	CONCEALED CEILING UNIT	FXSA15A	0.739	0.916	1.035	145	150DIA	3	0.8	0.317
FCU02-18	EAST	CONCEALED CEILING UNIT	FXSA63A	3.860	4.255	3.350	350	150DIA	6	1.6	0.303
FCU02-19	EAST	CONCEALED CEILING UNIT	FXSA63A	3.743	4.122	3.264	350	150DIA	6	1.6	0.303
FCU02-20	EAST	CONCEALED CEILING UNIT	FXSA32A	1.898	2.186	2.656	158	150DIA	3	0.8	0.310
FCU02-21	EAST	CONCEALED CEILING UNIT	FXSA15A	0.891	1.080	1.637	145	150DIA	3	0.8	0.317
FCU02-22	EAST	CONCEALED CEILING UNIT	FXSA25A	1.494	1.796	2.556	150	150DIA	3	0.8	0.307
FCU02-23	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.862	2.367	3.467	158	150DIA	3	0.8	0.310
FCU02-24	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.867	3.473	5.893	253	150DIA	5	1.1	0.379
FCU02-25	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.305	1.683	2.545	150	150DIA	3	0.8	0.307
FCU02-26	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.431	1.745	3.020	150	150DIA	3	0.8	0.307
FCU02-27	NORTH	CONCEALED CEILING UNIT	FXSA63A	3.116	3.688	6.112	350	150DIA	6	1.6	0.303
FCU02-28	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.740	0.956	1.333	145	150DIA	3	0.8	0.317
FCU02-29	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.987	2.263	2.908	158	150DIA	3	0.8	0.310

FCU02-30	NORTH	CONCEALED CEILING UNIT	FXSA20A	1.066	1.359	2.248	150	150DIA	3	0.8	0.307
LEVEL 3											
FCU03-01	SOUTH	CONCEALED CEILING UNIT	FXSA80A	4.353	5.357	6.545	383	150DIA	7	1.9	0.373
FCU03-02	SOUTH	CONCEALED CEILING UNIT	FXSA80A	4.703	5.606	5.669	383	150DIA	7	1.9	0.373
FCU03-03	SOUTH	CONCEALED CEILING UNIT	FXSA20A	1.246	1.466	1.899	150	150DIA	3	0.8	0.307
FCU03-04	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.384	2.619	2.438	250	150DIA	3	1.1	0.376
FCU03-05	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.045	3.358	3.366	253	150DIA	5	1.1	0.379
FCU03-06	SOUTH	CONCEALED CEILING UNIT	FXSA32A	2.112	2.378	2.385	158	150DIA	3	0.8	0.310
FCU03-07	SOUTH	CONCEALED CEILING UNIT	FXSA80A	4.713	5.608	5.650	383	150DIA	7	1.9	0.373
FCU03-08	SOUTH	CONCEALED CEILING UNIT	FXSA40A	1.882	2.384	3.892	250	150DIA	3	1.1	0.376
FCU03-09	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.164	1.437	2.487	150	150DIA	3	0.8	0.307
FCU03-10	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.209	1.489	2.562	150	150DIA	3	0.8	0.307
FCU03-11	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.732	2.134	3.233	158	150DIA	3	0.8	0.310
FCU03-12	SOUTH	WALL MOUNTED	FXAA15A	0.659	0.937	1.578	118	N/A	N/A	0.3	N/A
FCU03-13	EAST (S)	CONCEALED CEILING UNIT	FXSA80A	4.604	5.451	5.375	383	150DIA	7	1.9	0.373
FCU03-14	EAST (S)	CONCEALED CEILING UNIT	FXSA50A	3.298	3.967	4.135	253	150DIA	5	1.1	0.379
FCU03-15	EAST (S)	CONCEALED CEILING UNIT	FXSA100A	6.191	6.840	7.314	533	150DIA	9	2.4	0.330
FCU03-16	EAST (S)	CONCEALED CEILING UNIT	FXSA50A	3.458	3.810	3.857	253	150DIA	5	1.1	0.379
FCU03-17	EAST (S)	CONCEALED CEILING UNIT	FXSA50A	3.174	3.439	3.016	253	150DIA	5	1.1	0.379
FCU03-18	EAST (N)	CONCEALED CEILING UNIT	FXSA50A	2.413	3.432	5.377	253	150DIA	5	1.1	0.379
FCU03-19	EAST (N)	CONCEALED CEILING UNIT	FXSA50A	3.308	3.591	3.194	253	150DIA	5	1.1	0.379
FCU03-20	EAST (N)	CONCEALED CEILING UNIT	FXSA40A	1.789	2.539	4.004	250	150DIA	3	1.1	0.376
FCU03-21	EAST (N)	CONCEALED CEILING UNIT	FXSA50A	2.975	3.241	3.063	253	150DIA	5	1.1	0.379
FCU03-22	EAST (N)	CONCEALED CEILING UNIT	FXSA80A	4.769	5.202	5.016	383	150DIA	7	1.9	0.373
FCU03-23	EAST (N)	CONCEALED CEILING UNIT	FXSA50A	3.335	3.866	5.558	253	150DIA	5	1.1	0.379
FCU03-24	EAST (N)	CONCEALED CEILING UNIT	FXSA40A	1.710	2.357	4.037	250	150DIA	3	1.1	0.376
FCU03-25	EAST (N)	CONCEALED CEILING UNIT	FXSA50A	2.413	3.312	5.660	253	150DIA	5	1.1	0.379
FCU03-26	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.401	3.298	5.653	253	150DIA	5	1.1	0.379
FCU03-27	NORTH	CONCEALED CEILING UNIT	FXSA40A	2.423	2.933	4.857	250	150DIA	3	1.1	0.376
FCU03-28	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.489	3.564	5.549	253	150DIA	5	1.1	0.379
FCU03-29	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.371	3.454	5.547	253	150DIA	5	1.1	0.379
FCU03-30	NORTH	CONCEALED CEILING UNIT	FXSA20A	1.033	1.290	2.340	150	150DIA	3	0.8	0.307
FCU03-31	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.503	1.813	3.329	158	150DIA	3	0.8	0.310
FCU03-32	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.699	2.046	3.605	158	150DIA	3	0.8	0.310
FCU03-33	NORTH	CONCEALED CEILING UNIT	FXSA40A	2.155	2.850	4.778	250	150DIA	3	1.1	0.376
FCU03-34	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.269	1.595	2.596	150	150DIA	3	0.8	0.307

FCU07-01	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.457	3.802	3.794	253	150DIA	5	1.1	0.379
FCU07-02	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.096	3.417	3.018	253	150DIA	5	1.1	0.379
FCU07-03	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.295	3.626	3.109	253	150DIA	5	1.1	0.379
FCU07-04	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.276	3.606	3.094	253	150DIA	5	1.1	0.379
FCU07-05	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.338	3.670	3.132	253	150DIA	5	1.1	0.379
FCU07-06	SOUTH	CONCEALED CEILING UNIT	FXSA32A	2.055	2.401	3.737	158	150DIA	3	0.8	0.310
FCU07-07	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.440	1.698	2.871	150	150DIA	3	0.8	0.307
FCU07-08	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.828	2.159	3.680	158	150DIA	3	0.8	0.310
FCU07-09	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.360	2.728	3.219	250	150DIA	3	1.1	0.376
FCU07-10	EAST	CONCEALED CEILING UNIT	FXSA50A	3.192	3.466	2.387	253	150DIA	5	1.1	0.379
FCU07-11	EAST	CONCEALED CEILING UNIT	FXSA32A	2.168	2.382	1.785	158	150DIA	3	0.8	0.310
FCU07-12	EAST	CONCEALED CEILING UNIT	FXSA80A	4.506	4.940	4.321	383	150DIA	7	1.9	0.373
FCU07-13	EAST	CONCEALED CEILING UNIT	FXSA63A	3.673	4.055	3.133	350	150DIA	6	1.6	0.303
FCU07-14	EAST	CONCEALED CEILING UNIT	FXSA50A	3.009	3.283	2.358	253	150DIA	5	1.1	0.379
FCU07-15	EAST	CONCEALED CEILING UNIT	FXSA25A	1.428	1.673	2.394	150	150DIA	3	0.8	0.307
FCU07-16	EAST	CONCEALED CEILING UNIT	FXSA50A	2.844	3.149	2.456	253	150DIA	5	1.1	0.379
FCU07-17	EAST	CONCEALED CEILING UNIT	FXSA20A	1.173	1.346	1.808	150	150DIA	3	0.8	0.307
FCU07-18	EAST	CONCEALED CEILING UNIT	FXSA63A	3.965	4.351	3.234	350	150DIA	6	1.6	0.303
FCU07-19	EAST	CONCEALED CEILING UNIT	FXSA63A	3.992	4.382	3.337	350	150DIA	6	1.6	0.303
FCU07-20	EAST	CONCEALED CEILING UNIT	FXSA32A	2.134	2.421	3.054	158	150DIA	3	0.8	0.310
FCU07-21	EAST	CONCEALED CEILING UNIT	FXSA15A	0.934	1.115	1.589	145	150DIA	3	0.8	0.317
FCU07-22	EAST	CONCEALED CEILING UNIT	FXSA25A	1.462	1.730	2.320	150	150DIA	3	0.8	0.307
FCU07-23	NORTH	CONCEALED CEILING UNIT	FXSA100A	5.560	6.058	5.467	533	150DIA	9	2.4	0.330
FCU07-24	NORTH	CONCEALED CEILING UNIT	FXSA63A	3.459	4.113	6.221	350	150DIA	6	1.6	0.303
FCU07-25	NORTH	CONCEALED CEILING UNIT	FXSA63A	3.901	4.281	4.270	350	150DIA	6	1.6	0.303
FCU07-26	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.624	1.940	3.019	150	150DIA	3	0.8	0.307
FCU07-27	NORTH	CONCEALED CEILING UNIT	FXSA80A	4.410	4.977	6.510	383	150DIA	7	1.9	0.373
FCU07-28	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.872	1.071	1.280	145	150DIA	3	0.8	0.317
FCU07-29	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.955	3.282	3.598	253	150DIA	5	1.1	0.379
FCU07-30	NORTH	CONCEALED CEILING UNIT	FXSA63A	3.576	3.858	4.255	350	150DIA	6	1.6	0.303
LEVEL 8											
FCU08-01	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.450	3.795	3.802	253	150DIA	5	1.1	0.379
FCU08-02	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.096	3.417	3.024	253	150DIA	5	1.1	0.379
FCU08-03	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.296	3.627	3.114	253	150DIA	5	1.1	0.379
FCU08-04	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.277	3.607	3.100	253	150DIA	5	1.1	0.379
FCU08-05	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.338	3.670	3.137	253	150DIA	5	1.1	0.379
FCU08-06	SOUTH	CONCEALED CEILING UNIT	FXSA32A	2.059	2.405	3.737	158	150DIA	3	0.8	0.310
FCU08-07	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.443	1.701	2.871	150	150DIA	3	0.8	0.307
FCU08-08	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.831	2.162	3.680	158	150DIA	3	0.8	0.310
FCU08-09	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.363	2.731	3.217	250	150DIA	3	1.1	0.376
FCU08-10	EAST	CONCEALED CEILING UNIT	FXSA50A	3.192	3.466	2.391	253	150DIA	5	1.1	0.379
FCU08-11	EAST	CONCEALED CEILING UNIT	FXSA32A	2.168	2.382	1.788	158	150DIA	3	0.8	0.310
FCU08-12	EAST	CONCEALED CEILING UNIT	FXSA80A	4.506	4.940	4.326	383	150DIA	7	1.9	0.373
FCU08-13	EAST	CONCEALED CEILING UNIT	FXSA63A	3.670	4.052	3.140	350	150DIA	6	1.6	0.303
FCU08-14	EAST	CONCEALED CEILING UNIT	FXSA50A	3.008	3.282	2.364	253	150DIA	5	1.1	0.379
FCU08-15	EAST	CONCEALED CEILING UNIT	FXSA25A	1.458	1.703	2.393	150	150DIA	3	0.8	0.307
FCU08-16	EAST	CONCEALED CEILING UNIT	FXSA50A	2.845	3.150	2.462	253	150DIA	5	1.1	0.379
FCU08-17	EAST	CONCEALED CEILING UNIT	FXSA25A	1.596	1.769	1.807	150	150DIA	3	0.8	0.307
FCU08-18	EAST	CONCEALED CEILING UNIT	FXSA63A	3.968	4.354	3.242	350	150DIA	6	1.6	0.303
FCU08-19	EAST	CONCEALED CEILING UNIT	FXSA63A	3.999	4.389	3.345	350	150DIA	6	1.6	0.303
FCU08-20	EAST	CONCEALED CEILING UNIT	FXSA32A	2.162	2.449	3.055	158	150DIA	3	0.8	0.310
FCU08-21	EAST	CONCEALED CEILING UNIT	FXSA15A	0.951	1.132	1.593	145	150DIA	3	0.8	0.317
FCU08-22	EAST	CONCEALED CEILING UNIT	FXSA25A	1.493	1.761	2.324	150	150DIA	3	0.8	0.307
FCU08-23	NORTH	CONCEALED CEILING UNIT	FXSA100A	5.657	6.155	5.467	533	150DIA	9	2.4	0.330
FCU08-24	NORTH	CONCEALED CEILING UNIT	FXSA63A	3.530	4.184	6.232	350	150DIA	6	1.6	0.303
FCU08-25	NORTH	CONCEALED CEILING UNIT	FXSA63A	4.140	4.520	4.269	350	150DIA	6	1.6	0.303
FCU08-26	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.668	1.984	3.025	158	150DIA	3	0.8	0.310
FCU08-27	NORTH	CONCEALED CEILING UNIT	FXSA80A	4.439	5.006	6.523	383	150DIA	7	1.9	0.373
FCU08-28	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.894	1.093	1.279	145	150DIA	3	0.8	0.317
FCU08-29	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.960	3.287	3.593	253	150DIA	5	1.1	0.379
FCU08-30	NORTH	CONCEALED CEILING UNIT	FXSA63A	3.624	3.906	4.255	350	150DIA	6	1.6	0.303
LEVEL 9											
FCU09-01	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.380	3.725	4.275	253	150DIA	5	1.1	0.379
FCU09-02	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.096	3.417	3.291	253	150DIA	5	1.1	0.379
FCU09-03	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.297	3.628	3.378	253	150DIA	5	1.1	0.379
FCU09-04	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.278	3.608	3.361	253	150DIA	5	1.1	0.379
FCU09-05	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.340	3.672	3.401	253	150DIA	5	1.1	0.379
FCU09-06	SOUTH	CONCEALED CEILING UNIT	FXSA32A	2.053	2.399	3.739	158	150DIA	3	0.8	0.310
FCU09-07	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.435	1.693	2.871	150	150DIA	3	0.8	0.307
FCU09-08	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.824	2.155	3.680	158	150DIA	3	0.8	0.310
FCU09-09	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.402	2.770	3.225	250	150DIA	3	1.1	0.376
FCU09-10	EAST	CONCEALED CEILING UNIT	FXSA50A	3.372	3.646	2.642	253	150DIA	5	1.1	0.379
FCU09-11	EAST	CONCEALED CEILING UNIT	FXSA40A	2.338	2.552	1.995	250	150DIA	3	1.1	0.376

FCU09-12	EAST	CONCEALED CEILING UNIT	FXSA80A	4.634	5.068	4.581	383	150DIA	7	1.9	0.373
FCU09-13	EAST	CONCEALED CEILING UNIT	FXSA63A	3.829	4.211	3.535	350	150DIA	6	1.6	0.303
FCU09-14	EAST	CONCEALED CEILING UNIT	FXSA50A	2.980	3.254	2.660	253	150DIA	5	1.1	0.379
FCU09-15	EAST	CONCEALED CEILING UNIT	FXSA25A	1.599	1.844	2.396	150	150DIA	3	0.8	0.307
FCU09-16	EAST	CONCEALED CEILING UNIT	FXSA50A	2.821	3.126	2.763	253	150DIA	5	1.1	0.379
FCU09-17	EAST	CONCEALED CEILING UNIT	FXSA32A	1.827	2.000	1.808	158	150DIA	3	0.8	0.310
FCU09-18	EAST	CONCEALED CEILING UNIT	FXSA63A	3.921	4.307	3.645	350	150DIA	6	1.6	0.303
FCU09-19	EAST	CONCEALED CEILING UNIT	FXSA63A	3.994	4.384	3.799	350	150DIA	6	1.6	0.303
FCU09-20	EAST	CONCEALED CEILING UNIT	FXSA32A	2.159	2.446	3.105	158	150DIA	3	0.8	0.310
FCU09-21	EAST	CONCEALED CEILING UNIT	FXSA15A	0.971	1.152	1.805	145	150DIA	3	0.8	0.317
FCU09-22	EAST	CONCEALED CEILING UNIT	FXSA25A	1.513	1.781	2.587	150	150DIA	3	0.8	0.307
FCU09-23	NORTH	CONCEALED CEILING UNIT	FXSA100A	6.148	6.646	5.470	533	150DIA	9	2.4	0.330
FCU09-24	NORTH	CONCEALED CEILING UNIT	FXSA63A	3.558	4.212	6.829	350	150DIA	6	1.6	0.303
FCU09-25	NORTH	CONCEALED CEILING UNIT	FXSA63A	4.314	4.694	4.272	350	150DIA	6	1.6	0.303
FCU09-26	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.675	1.991	3.306	158	150DIA	3	0.8	0.310
FCU09-27	NORTH	CONCEALED CEILING UNIT	FXSA80A	4.661	5.228	7.197	383	150DIA	7	1.9	0.373
FCU09-28	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.902	1.101	1.291	145	150DIA	3	0.8	0.317
FCU09-29	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.961	3.288	3.600	253	150DIA	5	1.1	0.379
FCU09-30	NORTH	CONCEALED CEILING UNIT	FXSA80A	4.475	4.757	4.255	383	150DIA	7	1.9	0.303
LEVEL 10											
FCU10-01	SOUTH	CONCEALED CEILING UNIT	FXSA100A	5.445	6.000	6.901	533	150DIA	9	2.4	0.330
FCU10-02	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.310	2.596	2.937	250	150DIA	3	1.1	0.376
FCU10-03	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.371	2.667	3.020	250	150DIA	3	1.1	0.376
FCU10-04	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.859	2.168	3.159	158	150DIA	3	0.8	0.310
FCU10-05	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.605	1.962	2.989	150	150DIA	3	0.8	0.307
FCU10-06	SOUTH	CONCEALED CEILING UNIT	FXSA20A	1.102	1.369	2.208	150	150DIA	3	0.8	0.307
FCU10-07	SOUTH	CONCEALED CEILING UNIT	FXSA20A	1.084	1.342	2.145	150	150DIA	3	0.8	0.307
FCU10-08	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.001	3.476	4.252	253	150DIA	5	1.1	0.379
FCU10-09	EAST	CONCEALED CEILING UNIT	FXSA32A	1.723	1.948	2.223	158	150DIA	3	0.8	0.310
FCU10-10	EAST	CONCEALED CEILING UNIT	FXSA80A	4.926	5.464	5.771	383	150DIA	7	1.9	0.373
FCU10-11	EAST	CONCEALED CEILING UNIT	FXSA20A	1.264	1.404	1.577	150	150DIA	3	0.8	0.307
FCU10-12	EAST	CONCEALED CEILING UNIT	FXSA32A	2.120	2.359	2.279	158	150DIA	3	0.8	0.310
FCU10-13	EAST	CONCEALED CEILING UNIT	FXSA32A	2.068	2.303	2.213	158	150DIA	3	0.8	0.310
FCU10-14	EAST	CONCEALED CEILING UNIT	FXSA40A	2.404	2.640	2.349	250	150DIA	3	1.1	0.376
FCU10-15	EAST	CONCEALED CEILING UNIT	FXSA32A	2.025	2.296	2.360	158	150DIA	3	0.8	0.310
FCU10-16	EAST	CONCEALED CEILING UNIT	FXSA32A	2.085	2.263	1.839	158	150DIA	3	0.8	0.310
FCU10-17	EAST	CONCEALED CEILING UNIT	FXSA32A	2.023	2.278	2.304	158	150DIA	3	0.8	0.310
FCU10-18	EAST	CONCEALED CEILING UNIT	FXSA50A	2.995	3.321	3.394	253	150DIA	5	1.1	0.379
FCU10-19	EAST	CONCEALED CEILING UNIT	FXSA50A	2.926	3.456	5.273	253	150DIA	5	1.1	0.379
FCU10-20	EAST	CONCEALED CEILING UNIT	FXSA25A	1.307	1.560	2.461	150	150DIA	3	0.8	0.307
FCU10-21	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.150	3.389	2.626	253	150DIA	5	1.1	0.379
FCU10-22	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.374	1.638	2.847	150	150DIA	3	0.8	0.307
FCU10-23	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.077	3.342	2.902	253	150DIA	5	1.1	0.379
FCU10-24	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.424	1.700	2.904	150	150DIA	3	0.8	0.307
FCU10-25	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.148	3.413	2.904	253	150DIA	5	1.1	0.379
FCU10-26	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.426	1.704	2.944	150	150DIA	3	0.8	0.307
FCU10-27	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.099	3.554	5.741	253	150DIA	5	1.1	0.379
FCU10-28	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.775	2.005	2.030	158	150DIA	3	0.8	0.310
FCU10-29	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.528	0.648	0.783	145	150DIA	3	0.8	0.317
FCU10-30	NORTH	CONCEALED CEILING UNIT	FXSA20A	1.277	1.449	1.792	150	150DIA	3	0.8	0.307
FCU10-31	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.963	1.102	1.431	145	150DIA	3	0.8	0.317
FCU10-32	NORTH	CONCEALED CEILING UNIT	FXSA80A	4.714	5.003	4.349	383	150DIA	7	1.9	0.373
LEVEL 11											
FCU11-01	SOUTH	CONCEALED CEILING UNIT	FXSA100A	5.939	6.381	6.273	533	150DIA	9	2.4	0.330
FCU11-02	SOUTH	CONCEALED CEILING UNIT	FXSA32A	1.790	2.025	2.871	158	150DIA	3	0.8	0.310
FCU11-03	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.076	3.321	2.951	253	150DIA	5	1.1	0.379
FCU11-04	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.023	3.263	2.910	253	150DIA	5	1.1	0.379
FCU11-05	SOUTH	CONCEALED CEILING UNIT	FXSA32A	2.121	2.473	3.785	158	150DIA	3	0.8	0.310
FCU11-06	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.526	1.797	2.972	150	150DIA	3	0.8	0.307
FCU11-07	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.473	1.733	2.890	150	150DIA	3	0.8	0.307
FCU11-08	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.182	3.657	4.246	253	150DIA	5	1.1	0.379
FCU11-09	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.373	3.582	2.830	253	150DIA	5	1.1	0.379
FCU11-10	EAST	CONCEALED CEILING UNIT	FXSA100A	5.514	6.014	8.433	533	150DIA	9	2.4	0.330
FCU11-11	EAST	CONCEALED CEILING UNIT	FXSA32A	1.651	1.848	2.708	158	150DIA	3	0.8	0.310
FCU11-12	EAST	CONCEALED CEILING UNIT	FXSA40A	2.422	2.617	2.675	250	150DIA	3	1.1	0.376
FCU11-13	EAST	CONCEALED CEILING UNIT	FXSA40A	2.728	2.966	2.732	250	150DIA	3	1.1	0.376
FCU11-14	EAST	CONCEALED CEILING UNIT	FXSA40A	2.488	2.708	2.792	250	150DIA	3	1.1	0.376
FCU11-15	EAST	CONCEALED CEILING UNIT	FXSA40A	2.547	2.732	2.175	250	150DIA	3	1.1	0.376
FCU11-16	EAST	CONCEALED CEILING UNIT	FXSA40A	2.250	2.454	2.676	250	150DIA	3	1.1	0.376
FCU11-17	EAST	CONCEALED CEILING UNIT	FXSA63A	3.705	3.973	4.042	350	150DIA	6	1.6	0.303
FCU11-18	EAST	CONCEALED CEILING UNIT	FXSA63A	3.357	3.860	6.820	350	150DIA	6	1.6	0.303
FCU11-19	NORTH	CONCEALED CEILING UNIT	FXSA20A	1.132	1.306	2.371	150	150DIA	3	0.8	0.307
FCU11-20	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.140	3.369	2.558	253	150DIA	5	1.1	0.379

FCU11-21	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.295	1.511	2.733	150	150DIA	3	0.8	0.307
FCU11-22	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.915	3.174	2.878	253	150DIA	5	1.1	0.379
FCU11-23	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.276	1.507	2.779	150	150DIA	3	0.8	0.307
FCU11-24	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.165	3.418	2.831	253	150DIA	5	1.1	0.379
FCU11-25	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.392	1.624	2.801	150	150DIA	3	0.8	0.307
FCU11-26	NORTH	CONCEALED CEILING UNIT	FXSA40A	2.197	2.511	4.421	250	150DIA	3	1.1	0.376
FCU11-27	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.923	1.101	1.715	145	150DIA	3	0.8	0.317
FCU11-28	NORTH	CONCEALED CEILING UNIT	FXSA15A	0.754	0.910	1.033	145	150DIA	3	0.8	0.317
FCU11-29	NORTH	CONCEALED CEILING UNIT	FXSA40A	2.655	2.870	2.904	250	150DIA	3	1.1	0.376
FCU11-30	NORTH	CONCEALED CEILING UNIT	FXSA20A	1.224	1.362	1.576	150	150DIA	3	0.8	0.307
FCU11-31	NORTH	CONCEALED CEILING UNIT	FXSA40A	2.223	2.530	4.508	250	150DIA	3	1.1	0.376
LEVEL 12											
FCU12-01	SOUTH	CONCEALED CEILING UNIT	FXSA80A	5.265	5.590	5.178	383	150DIA	7	1.9	0.373
FCU12-02	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.628	2.818	2.710	250	150DIA	3	1.1	0.376
FCU12-03	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.662	2.854	2.728	250	150DIA	3	1.1	0.376
FCU12-04	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.003	3.228	3.133	253	150DIA	5	1.1	0.379
FCU12-05	SOUTH	CONCEALED CEILING UNIT	FXSA32A	2.126	2.470	3.753	158	150DIA	3	0.8	0.310
FCU12-06	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.487	1.751	2.943	150	150DIA	3	0.8	0.307
FCU12-07	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.484	1.737	2.851	150	150DIA	3	0.8	0.307
FCU12-08	SOUTH	CONCEALED CEILING UNIT	FXSA50A	3.359	3.831	4.285	253	150DIA	5	1.1	0.379
FCU12-09	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.727	2.873	2.607	250	150DIA	3	1.1	0.376
FCU12-10	EAST	CONCEALED CEILING UNIT	FXSA80A	5.285	5.796	7.910	383	150DIA	7	1.9	0.373
FCU12-11	EAST	CONCEALED CEILING UNIT	FXSA40A	2.545	2.684	2.317	250	150DIA	3	1.1	0.376
FCU12-12	EAST	CONCEALED CEILING UNIT	FXSA20A	1.100	1.241	2.350	150	150DIA	3	0.8	0.307
FCU12-13	EAST	CONCEALED CEILING UNIT	FXSA50A	3.463	3.707	2.790	253	150DIA	5	1.1	0.379
FCU12-14	EAST	CONCEALED CEILING UNIT	FXSA32A	2.244	2.401	2.373	158	150DIA	3	0.8	0.310
FCU12-15	EAST	CONCEALED CEILING UNIT	FXSA32A	2.217	2.400	2.160	158	150DIA	3	0.8	0.310
FCU12-16	EAST	CONCEALED CEILING UNIT	FXSA32A	2.224	2.372	2.346	158	150DIA	3	0.8	0.310
FCU12-17	EAST	CONCEALED CEILING UNIT	FXSA50A	3.242	3.401	3.012	253	150DIA	5	1.1	0.379
FCU12-18	EAST	CONCEALED CEILING UNIT	FXSA63A	3.428	3.851	6.903	350	150DIA	6	1.6	0.303
FCU12-19	NORTH	CONCEALED CEILING UNIT	FXSA20A	1.136	1.276	2.284	150	150DIA	3	0.8	0.307
FCU12-20	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.176	3.406	2.572	253	150DIA	5	1.1	0.379
FCU12-21	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.161	1.327	2.497	150	150DIA	3	0.8	0.307
FCU12-22	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.241	3.506	2.930	253	150DIA	5	1.1	0.379
FCU12-23	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.174	1.351	2.543	150	150DIA	3	0.8	0.307
FCU12-24	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.171	3.434	2.906	253	150DIA	5	1.1	0.379
FCU12-25	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.055	1.233	2.565	150	150DIA	3	0.8	0.307
FCU12-26	NORTH	CONCEALED CEILING UNIT	FXSA32A	1.430	1.640	3.230	158	150DIA	3	0.8	0.310
FCU12-27	NORTH	CONCEALED CEILING UNIT	FXSA32A	2.236	2.581	2.821	158	150DIA	3	0.8	0.310
FCU12-28	NORTH	CONCEALED CEILING UNIT	FXSA50A	2.773	2.982	3.126	253	150DIA	5	1.1	0.379
FCU12-29	NORTH	CONCEALED CEILING UNIT	FXSA20A	1.295	1.433	1.611	150	150DIA	3	0.8	0.307
FCU12-30	NORTH	CONCEALED CEILING UNIT	FXSA40A	2.350	2.664	4.531	250	150DIA	3	1.1	0.376
LEVEL 13											
FCU13-01	SOUTH	CONCEALED CEILING UNIT	FXSA25A	1.229	1.532	2.866	150	150DIA	3	0.8	0.307
FCU13-02	SOUTH	CONCEALED CEILING UNIT	FXSA20A	1.076	1.244	2.199	150	150DIA	3	0.8	0.307
FCU13-03	SOUTH	WALL MOUNTED	FXAA32A	1.965	2.243	2.230	157	N/A	N/A	0.4	N/A
FCU13-04	SOUTH	CONCEALED CEILING UNIT	FXSA40A	2.118	2.428	4.085	250	150DIA	3	1.1	0.376
FCU13-05	EAST (S)	CONCEALED CEILING UNIT	FXSA40A	2.192	2.511	4.190	250	150DIA	3	1.1	0.376
FCU13-06	EAST (S)	CONCEALED CEILING UNIT	FXSA25A	1.480	1.702	2.960	150	150DIA	3	0.8	0.307
FCU13-07	EAST (S)	CONCEALED CEILING UNIT	FXSA32A	1.650	1.869	2.676	158	150DIA	3	0.8	0.307
FCU13-09	EAST (N)	CONCEALED CEILING UNIT	FXSA40A	2.461	2.461	2.432	250	150DIA	3	1.1	0.376
FCU13-10	EAST (N)	CONCEALED CEILING UNIT	FXSA63A	2.960	4.151	7.602	350	150DIA	6	1.6	0.303
FCU13-12	EAST (N)	CONCEALED CEILING UNIT	FXSA63A	3.836	4.133	3.825	350	150DIA	6	1.6	0.303
FCU13-13	EAST (N)	CONCEALED CEILING UNIT	FXSA63A	3.935	4.245	4.095	350	150DIA	6	1.6	0.303
FCU13-14	EAST (N)	CONCEALED CEILING UNIT	FXSA63A	4.259	4.575	4.164	350	150DIA	6	1.6	0.303
FCU13-15	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.577	1.768	2.313	150	150DIA	3	0.8	0.307
FCU13-16	NORTH	CONCEALED CEILING UNIT	FXSA25A	1.467	1.726	2.456	150	150DIA	3	0.8	0.307
FCU13-17	NORTH	CONCEALED CEILING UNIT	FXSA50A	3.049	3.264	3.238	253	150DIA	5	1.1	0.379
FCU13-18	NORTH	CONCEALED CEILING UNIT	FXSA40A	2.542	2.705	2.264	250	150DIA	3	1.1	0.376
FCU13-19	NORTH	WALL MOUNTED	FXAA20A	1.006	1.259	1.991	132	N/A	N/A	0.3	N/A

NOTES:

1) Units to be installed in office, within services bulkhead. Breakout noise to not exceed **NR35**

Column1	Peak Date	Peak Time	Space conditioning		Cooling plant sensible load (kW)	Floor Area	W/m2 (Sensible)	Occupant latent Gain (kW)	Column 2
			Dry Resultant Temperature	sensible (kW)					
(01 Landlords) 01.03 Meeting Room	Jul	15:00	24	-2.124	2.124	22.8	93	0.855	2.979
(01 Landlords) 01.04 Tea Point	Jun	12:00	24	-0.415	0.415	18.0	23	0.000	0.415
00-03 Reception	Jul	12:00	24	-6.635	6.635	197.3	34	0.150	6.785
00-04-Cafe	Aug	12:00	24	-9.944	9.943	93.7	106	2.342	12.285
00-04-Cafe Servery	Aug	15:00	24	-2.287	2.287	16.2	142	0.404	2.691
01.24 Building Manager Office	Jul	16:00	24	-0.821	0.821	23.2	35	0.174	0.995
01.XX Atrium Seating	Aug	20:00	24	-5.012	5.012	219.1	23	1.643	6.655
01.XX Tenant Occupied Space Unit A	Jul	12:00	24	-13.781	13.781	326.6	42	2.449	16.230
FCU01.06 South Workspace	Aug	16:00	24	-3.137	3.137	46.6	67	0.350	3.487
FCU01.07 South Workspace	Jul	16:00	24	-1.503	1.503	52.6	29	0.394	1.897
FCU01.08 South Workspace	Aug	15:00	24	-1.790	1.790	44.2	40	0.332	2.122
FCU01.09 South Workspace	Jul	16:00	24	-1.104	1.104	43.8	25	0.328	1.432
FCU01.10 South Workspace	Aug	16:00	24	-1.777	1.777	45.6	39	0.342	2.119
FCU01.11 South Workspace	Jul	16:00	24	-0.878	0.878	34.7	25	0.261	1.139
FCU01.12 South Workspace	Aug	15:00	24	-1.830	1.830	47.5	39	0.356	2.186
FCU01.13 South Workspace	Jul	15:00	24	-1.252	1.252	44.4	28	0.333	1.585
FCU01.14 South Workspace	Aug	15:00	24	-1.966	1.966	48.1	41	0.361	2.327
FCU01.15 South Workspace	Aug	15:00	24	-1.477	1.477	32.5	45	0.244	1.721
FCU01.16 South Workspace	Aug	15:00	24	-1.454	1.454	31.3	46	0.235	1.689
FCU01.17 South Workspace	Aug	12:00	24	-3.530	3.530	59.9	59	0.449	3.979
FCU01.18 South Workspace	Jul	12:00	24	-3.428	3.428	42.6	80	0.320	3.748
FCU01.19 North Workspace	Jul	15:00	24	-0.608	0.608	19.2	32	0.144	0.752
FCU01.20 North Workspace	Jul	16:00	24	-1.201	1.201	46.9	26	0.351	1.552
FCU01.21 North Workspace	Jul	16:00	24	-0.867	0.867	33.9	26	0.254	1.121
FCU01.22 North Workspace	Jul	16:00	24	-1.047	1.047	36.0	29	0.270	1.317
FCU02.01 South Workspace	Aug	16:00	24	-3.358	3.358	44.7	75	0.335	3.693
FCU02.02 South Workspace	Aug	15:00	24	-3.020	3.020	42.6	71	0.320	3.340
FCU02.03 South Workspace	Aug	15:00	24	-3.118	3.118	42.6	73	0.319	3.437
FCU02.04 South Workspace	Aug	15:00	24	-3.208	3.208	45.0	71	0.338	3.546
FCU02.05 South Workspace	Aug	15:00	24	-3.527	3.527	46.8	75	0.351	3.878
FCU02.06 South Workspace	Jul	16:00	24	-1.441	1.441	46.8	31	0.351	1.792
FCU02.07 South Workspace	Aug	15:00	24	-1.016	1.016	35.4	29	0.265	1.281
FCU02.08 South Workspace	Aug	15:00	24	-1.269	1.269	43.9	29	0.329	1.598
FCU02.09 South Workspace	Jul	16:00	24	-1.519	1.519	50.0	30	0.375	1.894
FCU02.10 East Workspace	Aug	15:00	24	-3.213	3.213	33.9	95	0.254	3.467
FCU02.11 East Workspace	Aug	15:00	24	-2.111	2.111	27.3	77	0.205	2.316
FCU02.12 East Workspace	Aug	12:00	24	-4.495	4.495	60.4	74	0.453	4.948
FCU02.13 East Workspace	Aug	11:00	24	-3.444	3.444	48.0	72	0.360	3.804
FCU02.14 East Workspace	Aug	11:00	24	-2.885	2.885	36.4	79	0.273	3.158
FCU02.15 East Workspace	Jul	13:00	24	-0.920	0.920	31.2	29	0.234	1.154
FCU02.16 East Workspace	Aug	11:00	24	-2.724	2.724	41.1	66	0.309	3.033
FCU02.17 East Workspace	Jul	15:00	24	-0.739	0.739	23.6	31	0.177	0.916
FCU02.18 East Workspace	Aug	11:00	24	-3.860	3.860	52.7	73	0.395	4.255
FCU02.19 East Workspace	Aug	11:00	24	-3.743	3.743	50.5	74	0.379	4.122
FCU02.20 East Workspace	Aug	11:00	24	-1.898	1.898	38.5	49	0.288	2.186
FCU02.21 East Workspace	Jul	15:00	24	-0.891	0.891	25.3	35	0.189	1.080
FCU02.22 East Workspace	Jul	15:00	24	-1.494	1.494	40.2	37	0.302	1.796

FCU02.23 North Workspace	Jul	15:00	24	-1.862	1.862	67.3	28	0.505	2.367
FCU02.24 North Workspace	Jul	15:00	24	-2.867	2.867	80.8	35	0.606	3.473
FCU02.25 North Workspace	Jul	16:00	24	-1.305	1.305	50.4	26	0.378	1.683
FCU02.26 North Workspace	Jul	16:00	24	-1.431	1.431	41.9	34	0.314	1.745
FCU02.27 North Workspace	Jul	17:00	24	-3.116	3.116	76.3	41	0.572	3.688
FCU02.28 North Workspace	Jul	16:00	24	-0.740	0.740	28.8	26	0.216	0.956
FCU02.29 North Workspace	Jul	18:00	24	-1.987	1.987	36.8	54	0.276	2.263
FCU02.30 North Workspace	Jul	16:00	24	-1.066	1.066	39.1	27	0.293	1.359
FCU03.01 Meeting Room South	Aug	16:00	24	-4.353	4.353	26.8	163	1.004	5.357
FCU03.02 Meeting Room South	Aug	15:00	24	-4.703	4.703	24.1	195	0.903	5.606
FCU03.03 Workspace South	Aug	17:00	24	-1.246	1.246	29.3	42	0.220	1.466
FCU03.04 Workspace South	Aug	15:00	24	-2.384	2.384	31.4	76	0.235	2.619
FCU03.05 Workspace South	Aug	15:00	24	-3.045	3.045	41.7	73	0.313	3.358
FCU03.06 Workspace South	Aug	15:00	24	-2.112	2.112	35.5	59	0.266	2.378
FCU03.07 Meeting Room South	Aug	15:00	24	-4.713	4.713	23.9	197	0.895	5.608
FCU03.08 Quiet Room South	Jul	16:00	24	-0.444	0.444	4.7	94	0.178	0.622
FCU03.08 Workspace South	Jul	16:00	24	-1.438	1.438	43.2	33	0.324	1.762
FCU03.09 Workspace South	Jul	16:00	24	-1.164	1.164	36.5	32	0.273	1.437
FCU03.10 Workspace South	Jul	16:00	24	-1.209	1.209	37.4	32	0.280	1.489
FCU03.11 Workspace South	Jul	16:00	24	-1.732	1.732	53.6	32	0.402	2.134
FCU03.12 Quiet Room South	Jul	16:00	24	-0.659	0.659	7.4	89	0.278	0.937
FCU03.13 Meeting Room East South	Aug	15:00	24	-4.604	4.604	22.6	204	0.847	5.451
FCU03.14 Meeting Room East South	Aug	15:00	24	-3.298	3.298	17.8	185	0.669	3.967
FCU03.15 Workspace East South	Aug	12:00	24	-6.191	6.191	86.6	72	0.649	6.840
FCU03.16 Workspace East South	Aug	11:00	24	-3.458	3.458	46.9	74	0.352	3.810
FCU03.17 Workspace East South	Aug	11:00	24	-3.174	3.174	35.3	90	0.265	3.439
FCU03.18 Boardroom Landlord	Jul	16:00	24	-2.413	2.413	27.2	89	1.019	3.432
FCU03.19 Workspace East North	Aug	11:00	24	-3.308	3.308	37.7	88	0.283	3.591
FCU03.20 Boardroom Landlord	Jul	16:00	24	-1.789	1.789	20.0	89	0.750	2.539
FCU03.21 Workspace East North	Aug	11:00	24	-2.975	2.975	35.5	84	0.266	3.241
FCU03.22 Workspace East North	Aug	11:00	24	-4.769	4.769	57.8	83	0.433	5.202
FCU03.23 Workspace East North	Aug	11:00	24	-3.335	3.335	70.8	47	0.531	3.866
FCU03.24 Meeting East North	Jul	15:00	24	-1.711	1.710	17.2	99	0.647	2.357
FCU03.25 Meeting East North	Jul	15:00	24	-2.413	2.413	24.0	101	0.899	3.312
FCU03.26 Meeting North	Jul	15:00	24	-2.401	2.401	23.9	100	0.897	3.298
FCU03.27 Workspace North	Jul	16:00	24	-2.423	2.423	68.0	36	0.510	2.933
FCU03.28 Meeting North	Jul	16:00	24	-2.489	2.489	28.7	87	1.075	3.564
FCU03.29 Meeting North	Jul	16:00	24	-2.371	2.371	28.9	82	1.083	3.454
FCU03.30 Workspace North	Jul	16:00	24	-1.033	1.033	34.2	30	0.257	1.290
FCU03.31 Workspace North	Jul	16:00	24	-1.503	1.503	41.3	36	0.310	1.813
FCU03.32 Workspace North	Jul	16:00	24	-1.699	1.699	46.3	37	0.347	2.046
FCU03.33 Meeting North	Jul	17:00	24	-2.155	2.155	18.5	116	0.695	2.850
FCU03.34 Workspace North	Jul	16:00	24	-1.269	1.269	43.5	29	0.326	1.595
FCU03.35 Workspace North	Jul	18:00	24	-1.822	1.822	31.4	58	0.236	2.058
FCU03.36 Workspace North	Jul	18:00	24	-1.069	1.069	20.6	52	0.154	1.223
FCU03.37 Workspace North	Jul	16:00	24	-0.935	0.935	29.9	31	0.224	1.159
FCU03.38 Quiet Room North	Jul	16:00	24	-0.628	0.628	6.6	95	0.248	0.876
FCU06.01 Tenancy South	Aug	16:00	24	-3.254	3.254	43.2	75	0.324	3.578
FCU06.02 Tenancy South	Aug	15:00	24	-3.065	3.065	42.0	73	0.315	3.380
FCU06.03 Tenancy South	Aug	15:00	24	-3.240	3.240	43.0	75	0.323	3.563

FCU06.04 Tenancy South	Aug	15:00	24	-3.255	3.254	43.3	75	0.325	3.579
FCU06.05 Tenancy South	Aug	15:00	24	-3.265	3.265	43.3	75	0.325	3.590
FCU06.06 Tenancy South	Jul	15:00	24	-2.174	2.174	49.1	44	0.368	2.542
FCU06.07 Tenancy South	Jul	15:00	24	-1.478	1.478	35.3	42	0.265	1.743
FCU06.08 Tenancy South	Jul	15:00	24	-1.846	1.846	44.7	41	0.335	2.181
FCU06.09 Tenancy South	Jul	15:00	24	-1.901	1.901	48.2	39	0.361	2.262
FCU06.10 Tenancy East	Aug	15:00	24	-3.267	3.267	36.9	89	0.277	3.544
FCU06.11 Tenancy East	Aug	15:00	24	-2.183	2.183	28.6	76	0.214	2.397
FCU06.12 Tenancy East	Aug	12:00	24	-4.882	4.882	61.5	79	0.461	5.343
FCU06.13 Tenancy East	Aug	11:00	24	-3.521	3.521	47.7	74	0.358	3.879
FCU06.14 Tenancy East	Aug	11:00	24	-3.005	3.005	36.7	82	0.275	3.280
FCU06.15 Tenancy East	Jul	15:00	24	-1.356	1.356	30.1	45	0.226	1.582
FCU06.16 Tenancy East	Aug	11:00	24	-2.898	2.898	42.1	69	0.316	3.214
FCU06.17 Tenancy East	Jul	15:00	24	-1.029	1.029	23.5	44	0.176	1.205
FCU06.18 Tenancy East	Aug	11:00	24	-4.000	4.000	53.3	75	0.399	4.399
FCU06.19 Tenancy East	Aug	11:00	24	-3.926	3.926	51.2	77	0.384	4.310
FCU06.20 Tenancy East	Jul	10:00	24	-2.134	2.134	39.4	54	0.296	2.430
FCU06.21 Tenancy East	Jul	15:00	24	-0.910	0.910	24.0	38	0.180	1.090
FCU06.22 Tenancy East	Jul	16:00	24	-1.437	1.437	36.1	40	0.271	1.708
FCU06.23 Tenancy North	Jun	14:00	24	-5.073	5.073	67.8	75	0.508	5.581
FCU06.24 Tenancy North	Jul	15:00	24	-3.253	3.252	87.7	37	0.658	3.910
FCU06.25 Tenancy North	Jul	13:00	24	-3.578	3.578	51.2	70	0.384	3.962
FCU06.26 Tenancy North	Jul	16:00	24	-1.572	1.572	41.8	38	0.313	1.885
FCU06.27 Tenancy North	Jul	17:00	24	-4.375	4.375	74.7	59	0.560	4.935
FCU06.28 Tenancy North	Jul	17:00	24	-0.929	0.929	29.3	32	0.220	1.149
FCU06.29 Tenancy North	Jul	17:00	24	-2.830	2.830	34.8	81	0.261	3.091
FCU06.30 Tenancy North	Jun	12:00	24	-2.194	2.193	42.7	51	0.320	2.513
FCU07.01 Workspace South	Aug	16:00	24	-3.457	3.457	46.0	75	0.345	3.802
FCU07.02 Workspace South	Aug	15:00	24	-3.096	3.096	42.7	72	0.321	3.417
FCU07.03 Workspace South	Aug	15:00	24	-3.295	3.295	44.2	75	0.331	3.626
FCU07.04 Workspace South	Aug	15:00	24	-3.276	3.276	43.9	75	0.330	3.606
FCU07.05 Workspace South	Aug	15:00	24	-3.338	3.338	44.3	75	0.332	3.670
FCU07.06 Workspace South	Jul	15:00	24	-2.055	2.055	46.2	45	0.346	2.401
FCU07.07 Workspace South	Jul	15:00	24	-1.440	1.440	34.4	42	0.258	1.698
FCU07.08 Workspace South	Jul	15:00	24	-1.829	1.828	44.1	41	0.331	2.159
FCU07.09 Workspace South	Aug	10:00	24	-2.360	2.360	49.1	48	0.368	2.728
FCU07.10 Workspace East	Aug	15:00	24	-3.192	3.192	36.5	87	0.274	3.466
FCU07.11 Workspace East	Aug	15:00	24	-2.168	2.168	28.6	76	0.214	2.382
FCU07.12 Workspace East	Aug	12:00	24	-4.506	4.506	57.9	78	0.434	4.940
FCU07.13 Workspace East	Aug	11:00	24	-3.673	3.673	50.9	72	0.382	4.055
FCU07.14 Workspace East	Aug	11:00	24	-3.009	3.009	36.5	82	0.274	3.283
FCU07.15 Workspace East	Jul	15:00	24	-1.428	1.428	32.6	44	0.245	1.673
FCU07.16 Workspace East	Aug	11:00	24	-2.844	2.844	40.7	70	0.305	3.149
FCU07.17 Workspace East	Jun	17:00	24	-1.173	1.173	23.1	51	0.173	1.346
FCU07.18 Workspace East	Aug	11:00	24	-3.965	3.965	51.5	77	0.386	4.351
FCU07.19 Workspace East	Aug	11:00	24	-3.992	3.992	52.0	77	0.390	4.382
FCU07.20 Workspace East	Jul	10:00	24	-2.134	2.134	38.3	56	0.287	2.421
FCU07.21 Workspace East	Jul	16:00	24	-0.934	0.934	24.1	39	0.181	1.115
FCU07.22 Workspace East	Jul	16:00	24	-1.463	1.462	35.7	41	0.268	1.730
FCU07.23 Workspace North	Jul	14:00	24	-5.560	5.560	66.4	84	0.498	6.058

FCU07.24 Workspace North	Jul	15:00	24	-3.459	3.459	87.3	40	0.654	4.113
FCU07.25 Workspace North	Jul	14:00	24	-3.901	3.901	50.7	77	0.380	4.281
FCU07.26 Workspace North	Jul	14:00	24	-1.624	1.624	42.2	38	0.316	1.940
FCU07.27 Workspace North	Jul	17:00	24	-4.410	4.410	75.7	58	0.567	4.977
FCU07.28 Workspace North	Jul	14:00	24	-0.872	0.872	26.6	33	0.199	1.071
FCU07.29 Workspace North	Jul	18:00	24	-2.955	2.955	43.6	68	0.327	3.282
FCU07.30 Workspace North	Aug	09:00	24	-3.576	3.576	37.6	95	0.282	3.858
FCU08.01 Workspace South	Aug	16:00	24	-3.450	3.450	46.0	75	0.345	3.795
FCU08.02 Workspace South	Aug	15:00	24	-3.096	3.096	42.7	72	0.321	3.417
FCU08.03 Workspace South	Aug	15:00	24	-3.296	3.296	44.2	75	0.331	3.627
FCU08.04 Workspace South	Aug	15:00	24	-3.277	3.277	43.9	75	0.330	3.607
FCU08.05 Workspace South	Aug	15:00	24	-3.338	3.338	44.3	75	0.332	3.670
FCU08.06 Workspace South	Jul	15:00	24	-2.059	2.059	46.2	45	0.346	2.405
FCU08.07 Workspace South	Jul	15:00	24	-1.444	1.443	34.4	42	0.258	1.701
FCU08.08 Workspace South	Jul	15:00	24	-1.831	1.831	44.1	42	0.331	2.162
FCU08.09 Workspace South	Aug	10:00	24	-2.363	2.363	49.1	48	0.368	2.731
FCU08.10 Workspace East	Aug	15:00	24	-3.192	3.192	36.5	87	0.274	3.466
FCU08.11 Workspace East	Aug	15:00	24	-2.168	2.168	28.6	76	0.214	2.382
FCU08.12 Workspace East	Aug	12:00	24	-4.507	4.506	57.9	78	0.434	4.940
FCU08.13 Workspace East	Aug	11:00	24	-3.670	3.670	50.9	72	0.382	4.052
FCU08.14 Workspace East	Aug	11:00	24	-3.008	3.008	36.5	82	0.274	3.282
FCU08.15 Workspace East	Jul	16:00	24	-1.458	1.458	32.6	45	0.245	1.703
FCU08.16 Workspace East	Aug	11:00	24	-2.845	2.845	40.7	70	0.305	3.150
FCU08.17 Workspace East	Jun	17:00	24	-1.596	1.596	23.1	69	0.173	1.769
FCU08.18 Workspace East	Aug	11:00	24	-3.968	3.968	51.5	77	0.386	4.354
FCU08.19 Workspace East	Aug	11:00	24	-3.999	3.999	52.0	77	0.390	4.389
FCU08.20 Workspace East	Jul	10:00	24	-2.162	2.162	38.3	56	0.287	2.449
FCU08.21 Workspace East	Jul	16:00	24	-0.951	0.951	24.1	39	0.181	1.132
FCU08.22 Workspace East	Jul	16:00	24	-1.493	1.493	35.7	42	0.268	1.761
FCU08.23 Workspace North	Jul	14:00	24	-5.657	5.657	66.4	85	0.498	6.155
FCU08.24 Workspace North	Jul	15:00	24	-3.530	3.530	87.3	40	0.654	4.184
FCU08.25 Workspace North	Jul	14:00	24	-4.140	4.140	50.7	82	0.380	4.520
FCU08.26 Workspace North	Jul	14:00	24	-1.668	1.668	42.2	40	0.316	1.984
FCU08.27 Workspace North	Jul	17:00	24	-4.439	4.439	75.7	59	0.567	5.006
FCU08.28 Workspace North	Jul	14:00	24	-0.894	0.894	26.6	34	0.199	1.093
FCU08.29 Workspace North	Jul	18:00	24	-2.960	2.960	43.6	68	0.327	3.287
FCU08.30 Workspace North	Jul	11:00	24	-3.624	3.624	37.6	96	0.282	3.906
FCU09.01 Workspace South	Aug	16:00	24	-3.380	3.380	46.0	73	0.345	3.725
FCU09.02 Workspace South	Aug	15:00	24	-3.097	3.096	42.7	72	0.321	3.417
FCU09.03 Workspace South	Aug	15:00	24	-3.297	3.297	44.2	75	0.331	3.628
FCU09.04 Workspace South	Aug	15:00	24	-3.278	3.278	43.9	75	0.330	3.608
FCU09.05 Workspace South	Aug	15:00	24	-3.340	3.340	44.3	75	0.332	3.672
FCU09.06 Workspace South	Jul	15:00	24	-2.053	2.053	46.2	44	0.346	2.399
FCU09.07 Workspace South	Jul	15:00	24	-1.435	1.435	34.4	42	0.258	1.693
FCU09.08 Workspace South	Jul	15:00	24	-1.824	1.824	44.1	41	0.331	2.155
FCU09.09 Workspace South	Jun	10:00	24	-2.402	2.402	49.1	49	0.368	2.770
FCU09.10 Workspace East	Aug	15:00	24	-3.372	3.372	36.5	92	0.274	3.646
FCU09.11 Workspace East	Aug	15:00	24	-2.338	2.338	28.6	82	0.214	2.552
FCU09.12 Workspace East	Aug	12:00	24	-4.634	4.634	57.9	80	0.434	5.068
FCU09.13 Workspace East	Aug	11:00	24	-3.829	3.829	50.9	75	0.382	4.211

FCU09.14 Workspace East	Aug	11:00	24	-2.980	2.980	36.5	82	0.274	3.254
FCU09.15 Workspace East	Jun	17:00	24	-1.599	1.599	32.6	49	0.245	1.844
FCU09.16 Workspace East	Aug	11:00	24	-2.821	2.821	40.7	69	0.305	3.126
FCU09.17 Workspace East	Jul	17:00	24	-1.827	1.827	23.1	79	0.173	2.000
FCU09.18 Workspace East	Aug	11:00	24	-3.921	3.921	51.5	76	0.386	4.307
FCU09.19 Workspace East	Aug	11:00	24	-3.994	3.994	52.0	77	0.390	4.384
FCU09.20 Workspace East	Jul	10:00	24	-2.159	2.159	38.3	56	0.287	2.446
FCU09.21 Workspace East	Jul	16:00	24	-0.971	0.971	24.1	40	0.181	1.152
FCU09.22 Workspace East	Jul	16:00	24	-1.513	1.513	35.7	42	0.268	1.781
FCU09.23 Workspace North	Aug	14:00	24	-6.148	6.148	66.4	93	0.498	6.646
FCU09.24 Workspace North	Jul	15:00	24	-3.558	3.558	87.3	41	0.654	4.212
FCU09.25 Workspace North	Aug	14:00	24	-4.314	4.314	50.7	85	0.380	4.694
FCU09.26 Workspace North	Jul	14:00	24	-1.675	1.675	42.2	40	0.316	1.991
FCU09.27 Workspace North	Jul	17:00	24	-4.661	4.661	75.7	62	0.567	5.228
FCU09.28 Workspace North	Jul	14:00	24	-0.902	0.902	26.6	34	0.199	1.101
FCU09.29 Workspace North	Jul	18:00	24	-2.961	2.961	43.6	68	0.327	3.288
FCU09.30 Workspace North	Jun	10:00	24	-4.475	4.475	37.6	119	0.282	4.757
FCU10.01 Workspace South	Aug	15:00	24	-5.445	5.445	74.1	74	0.555	6.000
FCU10.02 Workspace South	Aug	15:00	24	-2.310	2.310	38.1	61	0.286	2.596
FCU10.03 Workspace South	Aug	15:00	24	-2.371	2.371	39.5	60	0.296	2.667
FCU10.04 Workspace South	Aug	12:00	24	-1.859	1.859	41.2	45	0.309	2.168
FCU10.05 Workspace South	Jul	16:00	24	-1.605	1.605	47.6	34	0.357	1.962
FCU10.06 Workspace South	Jul	16:00	24	-1.103	1.102	35.6	31	0.267	1.369
FCU10.07 Workspace South	Jul	16:00	24	-1.084	1.084	34.4	32	0.258	1.342
FCU10.08 Workspace South	Aug	10:00	24	-3.001	3.001	63.4	47	0.475	3.476
FCU10.09 Workspace East	Jul	12:00	24	-1.723	1.723	30.1	57	0.225	1.948
FCU10.10 Workspace East	Aug	14:00	24	-4.926	4.926	71.7	69	0.538	5.464
FCU10.11 Workspace East	Aug	12:00	24	-1.264	1.264	18.6	68	0.140	1.404
FCU10.12 Workspace East	Aug	11:00	24	-2.120	2.120	31.9	66	0.239	2.359
FCU10.13 Workspace East	Aug	11:00	24	-2.068	2.068	31.4	66	0.235	2.303
FCU10.14 Workspace East	Jun	18:00	24	-2.404	2.404	31.5	76	0.236	2.640
FCU10.15 Workspace East	Aug	11:00	24	-2.025	2.025	36.1	56	0.271	2.296
FCU10.16 Workspace East	Jul	18:00	24	-2.085	2.085	23.7	88	0.178	2.263
FCU10.17 Workspace East	Aug	11:00	24	-2.023	2.023	34.0	59	0.255	2.278
FCU10.18 Workspace East	Aug	11:00	24	-2.995	2.995	43.5	69	0.326	3.321
FCU10.19 Workspace East	Jul	12:00	24	-2.926	2.926	70.6	41	0.530	3.456
FCU10.20 Workspace East	Jul	16:00	24	-1.307	1.307	33.8	39	0.253	1.560
FCU10.21 Workspace North	Aug	15:00	24	-3.150	3.150	31.9	99	0.239	3.389
FCU10.22 Workspace North	Jul	16:00	24	-1.374	1.374	35.2	39	0.264	1.638
FCU10.23 Workspace North	Aug	14:00	24	-3.077	3.077	35.3	87	0.265	3.342
FCU10.24 Workspace North	Jul	15:00	24	-1.424	1.424	36.8	39	0.276	1.700
FCU10.25 Workspace North	Aug	14:00	24	-3.148	3.148	35.3	89	0.265	3.413
FCU10.26 Workspace North	Jul	15:00	24	-1.426	1.426	37.1	38	0.278	1.704
FCU10.27 Workspace North	Jul	17:00	24	-3.099	3.099	60.6	51	0.455	3.554
FCU10.28 Workspace North	Aug	14:00	24	-1.775	1.775	30.7	58	0.230	2.005
FCU10.29 Workspace North	Aug	15:00	24	-0.528	0.528	16.0	33	0.120	0.648
FCU10.30 Workspace North	Jul	18:00	24	-1.277	1.277	23.0	56	0.172	1.449
FCU10.31 Workspace North	Jul	18:00	24	-0.963	0.963	18.5	52	0.139	1.102
FCU10.32 Workspace North	Jul	11:00	24	-4.714	4.714	38.6	122	0.289	5.003
FCU11.01 Workspace South	Aug	16:00	24	-5.939	5.939	58.9	101	0.442	6.381

FCU11.02 Workspace South	Jun	12:00	24	-1.790	1.790	31.4	57	0.235	2.025
FCU11.03 Workspace South	Aug	15:00	24	-3.076	3.076	32.7	94	0.245	3.321
FCU11.04 Workspace South	Aug	15:00	24	-3.023	3.023	32.0	94	0.240	3.263
FCU11.05 Workspace South	Jul	15:00	24	-2.121	2.121	46.9	45	0.352	2.473
FCU11.06 Workspace South	Jul	15:00	24	-1.526	1.526	36.1	42	0.271	1.797
FCU11.07 Workspace South	Jul	15:00	24	-1.473	1.473	34.6	43	0.260	1.733
FCU11.08 Workspace South	Jul	10:00	24	-3.182	3.182	63.4	50	0.475	3.657
FCU11.09 Workspace South	Aug	15:00	24	-3.373	3.373	27.8	121	0.209	3.582
FCU11.10 Workspace East	Aug	15:00	24	-5.514	5.514	66.7	83	0.500	6.014
FCU11.11 Workspace East	Jul	15:00	24	-1.652	1.651	26.3	63	0.197	1.848
FCU11.12 Workspace East	Jul	12:00	24	-2.422	2.422	26.1	93	0.195	2.617
FCU11.13 Workspace East	Jul	16:00	24	-2.728	2.728	31.7	86	0.238	2.966
FCU11.14 Workspace East	Aug	11:00	24	-2.488	2.488	29.4	85	0.220	2.708
FCU11.15 Workspace East	Jul	17:00	24	-2.547	2.547	24.7	103	0.185	2.732
FCU11.16 Workspace East	Jul	12:00	24	-2.250	2.250	27.2	83	0.204	2.454
FCU11.17 Workspace East	Aug	11:00	24	-3.705	3.705	35.8	104	0.268	3.973
FCU11.18 Workspace East	Jul	13:00	24	-3.357	3.357	67.0	50	0.503	3.860
FCU11.19 Workspace North	Jul	15:00	24	-1.132	1.132	23.2	49	0.174	1.306
FCU11.20 Workspace North	Aug	15:00	24	-3.140	3.140	30.5	103	0.229	3.369
FCU11.21 Workspace North	Jul	15:00	24	-1.295	1.295	28.9	45	0.216	1.511
FCU11.22 Workspace North	Jul	15:00	24	-2.915	2.915	34.6	84	0.259	3.174
FCU11.23 Workspace North	Aug	16:00	24	-1.276	1.276	30.8	41	0.231	1.507
FCU11.24 Workspace North	Aug	14:00	24	-3.165	3.165	33.7	94	0.253	3.418
FCU11.25 Workspace North	Jul	15:00	24	-1.392	1.392	30.9	45	0.232	1.624
FCU11.26 Workspace North	Jul	17:00	24	-2.197	2.197	41.8	53	0.314	2.511
FCU11.27 Workspace North	Jul	16:00	24	-0.923	0.923	23.7	39	0.178	1.101
FCU11.28 Workspace North	Jul	15:00	24	-0.754	0.754	20.7	36	0.156	0.910
FCU11.29 Workspace North	Jul	17:00	24	-2.655	2.655	28.7	93	0.215	2.870
FCU11.30 Workspace North	Jul	18:00	24	-1.224	1.224	18.4	66	0.138	1.362
FCU11.31 Workspace North	Aug	15:00	24	-2.223	2.223	41.0	54	0.307	2.530
FCU12.01 Workspace South	Aug	16:00	24	-5.265	5.265	43.3	121	0.325	5.590
FCU12.02 Workspace South	Aug	15:00	24	-2.628	2.628	25.4	103	0.190	2.818
FCU12.03 Workspace South	Aug	15:00	24	-2.662	2.662	25.6	104	0.192	2.854
FCU12.04 Workspace South	Aug	15:00	24	-3.003	3.003	30.0	100	0.225	3.228
FCU12.05 Workspace South	Jul	15:00	24	-2.126	2.126	45.8	46	0.344	2.470
FCU12.06 Workspace South	Aug	15:00	24	-1.487	1.487	35.2	42	0.264	1.751
FCU12.07 Workspace South	Jul	15:00	24	-1.484	1.484	33.7	44	0.253	1.737
FCU12.08 Workspace South	Jul	10:00	24	-3.359	3.359	62.9	53	0.472	3.831
FCU12.09 Workspace South	Jul	16:00	24	-2.727	2.727	19.5	140	0.146	2.873
FCU12.10 Rotunda East	Aug	15:00	24	-5.285	5.285	68.1	78	0.511	5.796
FCU12.11 Workspace East	Aug	11:00	24	-2.545	2.545	18.5	137	0.139	2.684
FCU12.12 Workspace East	Jul	18:00	24	-1.100	1.100	18.8	59	0.141	1.241
FCU12.13 Workspace East	Jul	18:00	24	-3.463	3.463	32.5	107	0.244	3.707
FCU12.14 Workspace East	Aug	11:00	24	-2.244	2.244	20.9	107	0.157	2.401
FCU12.15 Workspace East	Jul	16:00	24	-2.217	2.217	24.3	91	0.183	2.400
FCU12.16 Workspace East	Aug	11:00	24	-2.224	2.224	19.8	112	0.148	2.372
FCU12.17 Workspace East	Aug	10:00	24	-3.242	3.242	21.1	153	0.159	3.401
FCU12.18 Rotunda East	Aug	12:00	24	-3.428	3.428	56.4	61	0.423	3.851
FCU12.19 Workspace North	Jul	16:00	24	-1.136	1.136	18.7	61	0.140	1.276
FCU12.20 Workspace North	Aug	15:00	24	-3.176	3.176	30.7	104	0.230	3.406

FCU12.21 Workspace North	Jul	16:00	24	-1.161	1.161	22.1	53	0.166	1.327
FCU12.22 Workspace North	Aug	14:00	24	-3.241	3.241	35.3	92	0.265	3.506
FCU12.23 Workspace North	Aug	15:00	24	-1.174	1.174	23.6	50	0.177	1.351
FCU12.24 Workspace North	Aug	14:00	24	-3.171	3.171	35.0	91	0.263	3.434
FCU12.25 Workspace North	Aug	16:00	24	-1.055	1.055	23.7	45	0.178	1.233
FCU12.26 Workspace North	Jul	15:00	24	-1.430	1.430	28.0	51	0.210	1.640
FCU12.27 Workspace North	Aug	15:00	24	-2.236	2.236	46.0	49	0.345	2.581
FCU12.28 Workspace North	Jul	17:00	24	-2.773	2.773	27.8	100	0.209	2.982
FCU12.29 Workspace North	Jul	18:00	24	-1.295	1.295	18.4	70	0.138	1.433
FCU12.30 Workspace North	Aug	15:00	24	-2.350	2.350	41.9	56	0.314	2.664
FCU13.01 Workspace East South	Aug	11:00	24	-1.229	1.229	40.5	30	0.303	1.532
FCU13.02 Workspace East South	Aug	15:00	24	-1.076	1.076	22.4	48	0.168	1.244
FCU13.03 Quiet Room South	Jul	10:00	24	-1.965	1.965	7.4	265	0.278	2.243
FCU13.04 Workspace East South	Jul	16:00	24	-2.118	2.118	41.3	51	0.310	2.428
FCU13.05 Workspace East South	Jul	16:00	24	-2.193	2.192	42.5	52	0.319	2.511
FCU13.06 Workspace East South	Jul	16:00	24	-1.480	1.480	29.6	50	0.222	1.702
FCU13.07 Workspace East South	Jul	16:00	24	-1.650	1.650	29.2	57	0.219	1.869
FCU13.08 Rotunda	Jul	16:00	24	-6.620	6.620	53.4	124	0.401	7.021
FCU13.09 Teapoint Landlord	Jul	16:00	24	-2.461	2.461	35.8	69	0.000	2.461
FCU13.10 Meeting Room Landlord	Aug	12:00	24	-2.960	2.960	31.8	93	1.191	4.151
FCU13.11 Rotunda	Aug	13:00	24	-7.112	7.112	47.6	150	1.783	8.895
FCU13.12 Workspace East North	Aug	15:00	24	-3.836	3.836	39.7	97	0.297	4.133
FCU13.13 Workspace East North	Aug	15:00	24	-3.936	3.935	41.4	95	0.310	4.245
FCU13.14 Workspace East North	Aug	15:00	24	-4.259	4.259	42.2	101	0.316	4.575
FCU13.15 Workspace North	Jul	16:00	24	-1.577	1.577	25.5	62	0.191	1.768
FCU13.16 Workspace North	Jul	18:00	24	-1.467	1.467	34.6	42	0.259	1.726
FCU13.17 Workspace North	Aug	11:00	24	-3.049	3.049	28.7	106	0.215	3.264
FCU13.18 Workspace North	Aug	11:00	25	-2.542	2.542	21.8	117	0.163	2.705
FCU13.19 Meeting North	Jul	16:00	26	-1.006	1.006	6.8	149	0.253	1.259

Column1	Dry resultant temperature (°C)	External conduction gain (kW)	Internal conduction gain (kW)	Aux vent gain (kW)	Infiltration gain (kW)	Space conditioning sensible (kW)	Floor Area	Steady state heating plant load	
								(kW)2	W/m2
(01 Landlords) 01.01 Reception	21	-1.170	-0.472	0.000	-0.791	2.4335	71.6	2.434	34
(01 Landlords) 01.01 Reception Circulation	18	-1.815	-0.018	0.000	-0.662	2.4944	71.5	2.494	35
(01 Landlords) 01.03 Meeting Room	21	0.000	-0.223	0.000	0.000	3.8959	22.8	3.896	171
(01 Landlords) 01.04 Tea Point	21	0.000	-0.180	0.000	0.000	0.1802	18.0	0.180	10
00-01 WC	19	-0.022	-0.015	0.000	0.000	0.037	4.2	0.037	9
00-03 Reception	21	-2.681	-0.975	0.000	-2.186	5.8419	197.3	5.842	30
00-04-Cafe	21	-4.433	-0.336	0.000	-1.089	16.7429	93.7	16.743	179
00-04-Cafe Servery	21	-0.869	0.000	0.000	-0.188	2.9338	16.2	2.934	182
00-11-Circulation	18	-0.147	-0.017	0.000	0.000	0.1644	28.8	0.164	6
00-11-Circulation	18	-0.168	-0.007	0.000	0.000	0.1743	32.8	0.174	5
00-11-Circulation	18	-1.165	-0.002	0.000	-0.159	1.3252	17.2	1.325	77
00-11-Circulation	18	-1.218	-0.019	0.000	-0.155	1.3921	16.8	1.392	83
00-12-Stairs	18	-0.984	-0.018	0.000	-0.174	1.1758	18.8	1.176	63
00-C1 North Lift Core	18	-0.131	-0.043	0.000	0.000	0.1742	25.7	0.174	7
00-C1 North Lift Core	18	-0.213	-0.046	0.000	0.000	0.2594	41.7	0.259	6
01.05 Male WC	19	0.000	-0.037	0.000	0.000	0.0369	14.8	0.037	2
01.09 DDA WC	19	0.000	-0.017	0.000	0.000	0.0173	3.5	0.017	5
01.10 Female WC	19	0.000	-0.106	0.000	0.000	0.1055	19.9	0.106	5
01.17 Female WC	19	-0.595	-0.058	0.000	-0.137	0.7902	14.2	0.790	56
01.21 Male WC	19	-0.706	-0.028	0.000	-0.130	0.8638	13.5	0.864	64
01.23 DDA WC	19	-0.580	-0.020	0.000	-0.085	0.6855	8.8	0.686	78
01.24 Building Manager Office	21	0.000	-0.319	0.000	0.000	1.0705	23.2	1.070	46
01.26 Corridor	18	-0.899	-0.031	0.000	-0.765	1.6942	82.8	1.694	20
01.C1 North Lift Core	18	0.000	-0.015	0.000	0.000	0.0153	48.8	0.015	0
01.C1 North Lift Core	18	0.000	-0.010	0.000	0.000	0.0099	45.8	0.010	0
01.XX Atrium Seating	18	0.000	-0.562	0.000	0.000	0.5616	219.1	0.562	3
01.XX Stair Lobby	18	0.000	-0.001	0.000	0.000	0.0012	1.7	0.001	1
01.XX Stairs	18	-0.984	-0.009	0.000	-0.174	1.167	18.8	1.167	62
01.XX Tenant Occupied Space Unit A	21	-11.182	-0.746	0.000	-3.724	26.8247	326.6	26.825	82
01-14-Corridor	18	-0.299	-0.001	0.000	-0.230	0.5296	24.8	0.530	21
02.02 Corridor	18	0.000	-0.001	0.000	0.000	0.0012	9.6	0.001	0
02.03 Male WC	19	0.000	-0.084	0.000	0.000	0.0841	14.8	0.084	6
02.07 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
02.08 Female WC	19	0.000	-0.166	0.000	0.000	0.1657	19.9	0.166	8
02.13 Corridor	18	-0.299	-0.025	0.000	-0.230	0.5535	24.8	0.553	22
02.15 Female WC	19	-0.595	-0.058	0.000	-0.137	0.7902	14.2	0.790	56
02.19 Male WC	19	-0.706	-0.028	0.000	-0.130	0.8638	13.5	0.864	64
02.21 DDA WC	19	-0.580	-0.020	0.000	-0.085	0.6855	8.8	0.686	78
02.22 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
02.23 Lobby	18	0.000	0.000	0.000	0.000	0	3.4	0.000	0
02.24 Lobby	18	0.000	-0.011	0.000	0.000	0.0111	2.7	0.011	4
02.25 Lobby	18	0.000	0.000	0.000	0.000	0	3.4	0.000	0
02.C1 North Lift Core	18	0.000	-0.027	0.000	0.000	0.0268	48.3	0.027	1
02.C2 South Lift Core	18	0.000	-0.039	0.000	0.000	0.0387	44.9	0.039	1
02.XX BOH Stairs	18	-0.984	-0.013	0.000	-0.174	1.1707	18.8	1.171	62
02.XX Lobby	18	0.000	-0.001	0.000	0.000	0.0012	1.7	0.001	1

03.04 Corridor	18	0.000	0.000	0.000	0.000	0.0003	9.6	0.000	0
03.04 Corridor	18	0.000	-0.094	0.000	0.000	0.0936	14.8	0.094	6
03.05 Male WC	19	0.000	-0.247	0.000	0.000	0.2472	14.8	0.247	17
03.09 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
03.10 Female WC	19	0.000	-0.380	0.000	0.000	0.3797	19.9	0.380	19
03.22 Corridor	18	-0.299	0.000	0.000	-0.230	0.5291	24.8	0.529	21
03.24 Female WC	19	-0.595	-0.088	0.000	-0.137	0.8206	14.2	0.821	58
03.28 Male WC	19	-0.706	-0.076	0.000	-0.130	0.9118	13.5	0.912	68
03.30 DDA WC	19	-0.580	-0.065	0.000	-0.085	0.7299	8.8	0.730	83
03.40 Lobby	18	0.000	-0.005	0.000	0.000	0.0051	3.5	0.005	1
03.42 Lobby	18	0.000	-0.011	0.000	0.000	0.0111	2.7	0.011	4
03.C1 North Lift Core	18	0.000	0.000	0.000	0.000	0	3.4	0.000	0
03.C1 North Lift Core	18	0.000	-0.115	0.000	0.000	0.1152	45.8	0.115	3
03.C2 south lift core	18	0.000	-0.131	0.000	0.000	0.1311	46.8	0.131	3
03.XX Lobby	18	0.000	-0.001	0.000	0.000	0.0014	1.7	0.001	1
03.XX Stairs	18	-0.984	-0.013	0.000	-0.174	1.1717	18.8	1.172	62
06.02 Corridor	18	0.000	-0.001	0.000	0.000	0.0007	9.6	0.001	0
06.03 Male WC	19	-0.601	-0.022	0.000	-0.143	0.7667	14.8	0.767	52
06.07 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
06.08 Female WC	19	-0.799	-0.077	0.000	-0.192	1.0669	19.9	1.067	54
06.13 Corridor	18	-0.450	-0.022	0.000	-0.230	0.7018	24.8	0.702	28
06.15 Female WC	19	-0.595	-0.088	0.000	-0.137	0.8203	14.2	0.820	58
06.19 Male WC	19	-0.824	-0.073	0.000	-0.130	1.0273	13.5	1.027	76
06.21 DDA WC	19	-0.707	-0.062	0.000	-0.085	0.8534	8.8	0.853	97
06.22 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
06.23 Lobby	18	0.000	-0.002	0.000	0.000	0.0016	3.4	0.002	1
06.24 Lobby	18	0.000	-0.011	0.000	0.000	0.0111	2.7	0.011	4
06.C1 North Lift Core	18	-0.300	-0.014	0.000	-0.447	0.7606	48.3	0.761	16
06.XX BOH Stairs	18	-0.984	-0.013	0.000	-0.174	1.171	18.8	1.171	62
06.XX Lobby	18	0.000	-0.002	0.000	-0.016	0.0174	1.7	0.017	10
07.02 Corridor	18	0.000	-0.001	0.000	0.000	0.0007	9.6	0.001	0
07.03 Male WC	19	-0.601	-0.022	0.000	-0.143	0.7667	14.8	0.767	52
07.05 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
07.08 Female WC	19	-0.799	-0.077	0.000	-0.192	1.0669	19.9	1.067	54
07.14 Corridor	18	-0.450	-0.022	0.000	-0.230	0.7018	24.8	0.702	28
07.16 Female WC	19	-0.595	-0.058	0.000	-0.137	0.7899	14.2	0.790	56
07.20 Male WC	19	-0.824	-0.028	0.000	-0.130	0.9824	13.5	0.982	73
07.22 DDA WC	19	-0.707	-0.020	0.000	-0.085	0.8118	8.8	0.812	93
07.23 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
07.24 Lobby	18	0.000	-0.001	0.000	0.000	0.0013	3.4	0.001	0
07.25 Lobby	18	0.000	-0.011	0.000	0.000	0.0111	2.7	0.011	4
07.C1 North Lift Core	18	-0.300	-0.013	0.000	-0.447	0.7594	48.3	0.759	16
07.XX BOH Stairs	18	-0.984	-0.012	0.000	-0.174	1.1705	18.8	1.170	62
07.XX Lobby	18	0.000	-0.001	0.000	-0.016	0.0173	1.7	0.017	10
08.02 Corridor	18	0.000	-0.001	0.000	0.000	0.0007	9.6	0.001	0
08.03 Male WC	19	-0.601	-0.022	0.000	-0.143	0.7667	14.8	0.767	52
08.05 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
08.08 Female WC	19	-0.799	-0.077	0.000	-0.192	1.0669	19.9	1.067	54
08.14 Corridor	18	-0.450	-0.022	0.000	-0.230	0.7018	24.8	0.702	28
08.16 Female WC	19	-0.595	-0.058	0.000	-0.137	0.7899	14.2	0.790	56

08.20 Male WC	19	-0.824	-0.028	0.000	-0.130	0.9824	13.5	0.982	73
08.22 DDA WC	19	-0.707	-0.020	0.000	-0.085	0.8118	8.8	0.812	93
08.23 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
08.24 Lobby	18	0.000	-0.001	0.000	0.000	0.0013	3.4	0.001	0
08.25 Lobby	18	0.000	-0.011	0.000	0.000	0.0111	2.7	0.011	4
08.C1 North Lift Core	18	-0.300	-0.012	0.000	-0.447	0.7593	48.3	0.759	16
08.XX BOH Stairs	18	-0.984	-0.013	0.000	-0.174	1.171	18.8	1.171	62
08.XX Lobby	18	0.000	-0.002	0.000	-0.016	0.0173	1.7	0.017	10
09 C2 South Lift Core	18	-0.319	-0.015	0.000	-0.433	0.7669	46.8	0.767	16
09 C2 South Lift Core	18	-0.319	-0.015	0.000	-0.433	0.7669	46.8	0.767	16
09 C2 South Lift Core	18	-0.319	-0.015	0.000	-0.433	0.7669	46.8	0.767	16
09 C2 South Lift Core	18	-0.319	-0.015	0.000	-0.433	0.7669	46.8	0.767	16
09.02 Corridor	18	0.000	-0.001	0.000	0.000	0.0007	9.6	0.001	0
09.03 Male WC	19	-0.601	-0.022	0.000	-0.143	0.7667	14.8	0.767	52
09.05 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
09.08 Female WC	19	-0.799	-0.077	0.000	-0.192	1.0669	19.9	1.067	54
09.14 Corridor	18	-0.450	-0.022	0.000	-0.230	0.7018	24.8	0.702	28
09.16 Female WC	19	-0.595	-0.058	0.000	-0.137	0.7899	14.2	0.790	56
09.20 Male WC	19	-0.824	-0.028	0.000	-0.130	0.9824	13.5	0.982	73
09.22 DDA WC	19	-0.707	-0.020	0.000	-0.085	0.8118	8.8	0.812	93
09.23 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
09.24 Lobby	18	0.000	-0.001	0.000	0.000	0.0013	3.4	0.001	0
09.25 Lobby	18	0.000	-0.011	0.000	0.000	0.0111	2.7	0.011	4
09.C1 North Lift Core	18	-0.300	-0.012	0.000	-0.447	0.7593	48.3	0.759	16
09.XX BOH Stairs	18	-1.946	-0.025	0.000	-0.174	2.1441	18.8	2.144	114
09.XX Lobby	18	0.000	-0.003	0.000	-0.016	0.0189	1.7	0.019	11
10.03 Male WC	19	-0.601	-0.022	0.000	-0.143	0.7667	14.8	0.767	52
10.07 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
10.08 Female WC	19	-0.799	-0.085	0.000	-0.192	1.0753	19.9	1.075	54
10.13 Corridor	18	-0.299	-0.028	0.000	-0.230	0.5567	24.8	0.557	22
10.15 Female WC	19	-0.984	-0.036	0.000	-0.137	1.1574	14.2	1.157	81
10.19 Male WC	19	-0.706	-0.028	0.000	-0.130	0.8638	13.5	0.864	64
10.21 DDA WC	19	-0.580	-0.094	0.000	-0.085	0.7593	8.8	0.759	87
10.22 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
10.23 Lobby	18	0.000	-0.001	0.000	0.000	0.0012	3.4	0.001	0
10.24 Lobby	18	0.000	-0.011	0.000	0.000	0.0111	2.7	0.011	4
10.24 WC Corridor	18	0.000	-0.001	0.000	0.000	0.0007	9.6	0.001	0
10.C1 North Lift Core	18	-0.300	-0.013	0.000	-0.447	0.7594	48.3	0.759	16
10.C2 South Lift Core	18	-0.319	-0.015	0.000	-0.433	0.767	46.8	0.767	16
10.XX Stair Lobby	18	-0.092	-0.040	0.000	-0.016	0.1473	1.7	0.147	86
11.03 Male WC	19	-0.601	-0.022	0.000	-0.143	0.7667	14.8	0.767	52
11.07 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
11.08 Female WC	19	-0.799	-0.077	0.000	-0.192	1.0669	19.9	1.067	54
11.13 Corridor	18	-0.431	-0.171	0.000	-0.230	0.8314	24.8	0.831	34
11.15 Female WC	19	-0.984	-0.036	0.000	-0.137	1.1573	14.2	1.157	81
11.19 Male WC	19	-0.706	-0.182	0.000	-0.130	1.0178	13.5	1.018	75
11.22 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
11.23 Lobby	18	0.000	-0.001	0.000	0.000	0.0012	3.4	0.001	0
11.24 Lobby	18	0.000	-0.021	0.000	0.000	0.0212	2.7	0.021	8
11.24 WC Lobby	18	0.000	-0.001	0.000	0.000	0.0007	9.6	0.001	0

11.C1 North Lift Core	18	-0.300	-0.014	0.000	-0.447	0.7605	48.3	0.761	16
11.C2 South lift core	18	-0.319	-0.021	0.000	-0.433	0.773	46.8	0.773	17
11.XX Stair Lobby	18	-0.092	-0.043	0.000	-0.016	0.1501	1.7	0.150	88
12.03 Male WC	19	-0.601	-0.022	0.000	-0.143	0.7667	14.8	0.767	52
12.07 DDA WC	19	0.000	-0.019	0.000	0.000	0.0192	3.5	0.019	5
12.08 Female WC	19	-0.799	-0.079	0.000	-0.192	1.0692	19.9	1.069	54
12.12 Corridor	18	-0.431	-0.029	0.000	-0.230	0.6892	24.8	0.689	28
12.13 Female WC	19	-0.984	-0.226	0.000	-0.137	1.3474	14.2	1.347	95
12.18 Male WC	19	-0.706	-0.198	0.000	-0.130	1.0343	13.5	1.034	77
12.20 DDA WC	19	-0.580	-0.201	0.000	-0.085	0.8658	8.8	0.866	99
12.21 Lobby	18	0.000	0.000	0.000	0.000	0	2.7	0.000	0
12.22 Lobby	18	0.000	-0.004	0.000	0.000	0.004	3.4	0.004	1
12.23 Lobby	18	0.000	-0.024	0.000	0.000	0.0238	2.7	0.024	9
12.24 Lobby	18	0.000	0.000	0.000	0.000	0	3.4	0.000	0
12.C1 North Lift Core	18	-0.300	-0.023	0.000	-0.447	0.7693	48.3	0.769	16
12.C2 South lift core	18	0.000	-0.016	0.000	0.000	0.0155	43.0	0.016	0
12.C2-south lift core	18	-0.318	-0.001	0.000	-0.004	0.3226	0.4	0.323	839
12.XX Lobby	18	-0.092	-0.043	0.000	-0.016	0.1504	1.7	0.150	88
12.XX WC Lobby	18	0.000	-0.003	0.000	0.000	0.0031	9.6	0.003	0
13.07 Male WC	19	-0.587	-0.284	0.000	-0.139	1.0098	14.4	1.010	70
13.11 DDA WC	19	0.000	-0.078	0.000	0.000	0.0783	3.5	0.078	22
13.12 Female WC	19	-0.799	-0.419	0.000	-0.191	1.408	19.8	1.408	71
13.18 Corridor	18	-0.371	-1.325	0.000	-0.230	1.9251	24.8	1.925	78
13.19 Corridor	18	-5.064	-1.213	0.000	-0.625	6.9017	67.5	6.902	102
13.28 Corridor	18	-1.487	-0.319	0.000	-0.175	1.9811	18.9	1.981	105
13.29 Corridor	18	-3.479	-0.873	0.000	-0.437	4.7885	47.2	4.788	101
13.C1 North Lift Core	18	-2.302	-0.575	0.000	-0.678	3.5548	73.5	3.555	48
13.C2-south lift core	18	-2.814	-0.923	0.000	-0.789	4.5258	85.5	4.526	53
13.C2-south lift core	18	-0.318	-0.007	0.000	-0.004	0.3288	0.4	0.329	855
14-12-Lobby	18	-0.209	-0.478	0.000	-0.021	0.7086	1.7	0.709	416
14-21 Stairs	18	-0.259	-1.297	0.000	0.000	1.5556	5.1	1.556	306
14-C1 North Lift Core	18	-3.068	-4.222	0.000	-0.595	7.8844	48.3	7.884	163
14-C2-south lift core	18	-2.366	-3.395	0.000	-0.473	6.2339	38.4	6.234	162
FCU01.06 South Workspace	21	-1.560	-0.116	0.000	-0.528	3.7893	46.6	3.789	81
FCU01.07 South Workspace	21	0.000	-0.271	0.000	-0.563	2.5223	52.6	2.522	48
FCU01.08 South Workspace	21	-0.573	-0.040	0.000	-0.486	2.5582	44.2	2.558	58
FCU01.09 South Workspace	21	0.000	-0.179	0.000	-0.469	2.0536	43.8	2.054	47
FCU01.10 South Workspace	21	-0.693	-0.014	0.000	-0.503	2.7197	45.6	2.720	60
FCU01.11 South Workspace	21	0.000	-0.144	0.000	-0.372	1.6324	34.7	1.632	47
FCU01.12 South Workspace	21	-0.690	-0.016	0.000	-0.523	2.7996	47.5	2.800	59
FCU01.13 South Workspace	21	0.000	-0.290	0.000	-0.477	2.1991	44.4	2.199	50
FCU01.14 South Workspace	21	-0.704	-0.053	0.000	-0.531	2.8802	48.1	2.880	60
FCU01.15 South Workspace	21	-0.561	-0.073	0.000	-0.360	2.0741	32.5	2.074	64
FCU01.16 South Workspace	21	-0.514	-0.141	0.000	-0.347	2.0435	31.3	2.043	65
FCU01.17 South Workspace	21	-2.064	-0.064	0.000	-0.685	4.8687	59.9	4.869	81
FCU01.18 South Workspace	21	-1.228	-0.262	0.000	-0.480	3.411	42.6	3.411	80
FCU01.19 North Workspace	21	0.000	-0.201	0.000	0.000	0.8226	19.2	0.823	43
FCU01.20 North Workspace	21	0.000	-0.296	0.000	0.000	1.8064	46.9	1.806	39
FCU01.21 North Workspace	21	0.000	-0.228	0.000	0.000	1.3214	33.9	1.321	39
FCU01.22 North Workspace	21	0.000	-0.381	0.000	0.000	1.5455	36.0	1.546	43

FCU02.01 South Workspace	21	-1.566	-0.121	0.000	-0.508	3.7178	44.7	3.718	83
FCU02.02 South Workspace	21	-1.079	-0.005	0.000	-0.483	3.0138	42.6	3.014	71
FCU02.03 South Workspace	21	-1.078	-0.004	0.000	-0.482	3.0094	42.6	3.009	71
FCU02.04 South Workspace	21	-1.111	-0.007	0.000	-0.509	3.1533	45.0	3.153	70
FCU02.05 South Workspace	21	-1.139	-0.040	0.000	-0.523	3.2715	46.8	3.271	70
FCU02.06 South Workspace	21	0.000	-0.412	0.000	-0.505	2.4314	46.8	2.431	52
FCU02.07 South Workspace	21	0.000	-0.241	0.000	-0.381	1.7662	35.4	1.766	50
FCU02.08 South Workspace	21	0.000	-0.295	0.000	-0.474	2.1893	43.9	2.189	50
FCU02.09 South Workspace	21	0.000	-0.335	0.000	-0.538	2.4863	50.0	2.486	50
FCU02.10 East Workspace	21	-1.045	-0.075	0.000	0.000	2.2616	33.9	2.262	67
FCU02.11 East Workspace	21	-0.735	-0.087	0.000	0.000	1.7474	27.3	1.747	64
FCU02.12 East Workspace	21	-2.356	-0.043	0.000	0.000	4.4909	60.4	4.491	74
FCU02.13 East Workspace	21	-1.251	-0.132	0.000	0.000	3.0034	48.0	3.003	63
FCU02.14 East Workspace	21	-1.048	-0.107	0.000	0.000	2.395	36.4	2.395	66
FCU02.15 East Workspace	21	0.000	-0.314	0.000	0.000	1.3264	31.2	1.326	42
FCU02.16 East Workspace	21	-1.057	-0.049	0.000	0.000	2.5057	41.1	2.506	61
FCU02.17 East Workspace	21	0.000	-0.270	0.000	0.000	1.0354	23.6	1.035	44
FCU02.18 East Workspace	21	-1.424	-0.135	0.000	0.000	3.3504	52.7	3.350	64
FCU02.19 East Workspace	21	-1.444	-0.103	0.000	0.000	3.2637	50.5	3.264	65
FCU02.20 East Workspace	21	-1.339	0.000	0.000	0.000	2.6564	38.5	2.656	69
FCU02.21 East Workspace	21	-0.736	-0.041	0.000	0.000	1.6371	25.3	1.637	65
FCU02.22 East Workspace	21	-1.106	-0.099	0.000	0.000	2.5563	40.2	2.556	64
FCU02.23 North Workspace	21	0.000	-0.559	0.000	-0.727	3.4675	67.3	3.467	51
FCU02.24 North Workspace	21	-2.139	-0.107	0.000	-0.912	5.8933	80.8	5.893	73
FCU02.25 North Workspace	21	0.000	-0.367	0.000	-0.545	2.5445	50.4	2.545	50
FCU02.26 North Workspace	21	-1.074	-0.042	0.000	-0.476	3.0203	41.9	3.020	72
FCU02.27 North Workspace	21	-2.590	-0.025	0.000	-0.874	6.1124	76.3	6.112	80
FCU02.28 North Workspace	21	0.000	-0.099	0.000	-0.309	1.3333	28.8	1.333	46
FCU02.29 North Workspace	21	-1.066	-0.179	0.000	-0.416	2.9083	36.8	2.908	79
FCU02.30 North Workspace	21	0.000	-0.543	0.000	-0.427	2.2484	39.1	2.248	57
FCU03.01 Meeting Room South	21	-1.371	-0.233	0.000	-0.309	6.5446	26.8	6.545	244
FCU03.02 Meeting Room South	21	-1.061	-0.214	0.000	-0.275	5.6685	24.1	5.669	235
FCU03.03 Workspace South	21	-0.195	-0.418	0.000	-0.322	1.8988	29.3	1.899	65
FCU03.04 Workspace South	21	-0.723	-0.291	0.000	-0.356	2.438	31.4	2.438	78
FCU03.05 Workspace South	21	-1.074	-0.361	0.000	-0.483	3.3661	41.7	3.366	81
FCU03.06 Workspace South	21	-0.410	-0.403	0.000	-0.393	2.385	35.5	2.385	67
FCU03.07 Meeting Room South	21	-1.081	-0.210	0.000	-0.273	5.6504	23.9	5.650	237
FCU03.08 Quiet Room South	21	0.000	-0.188	0.000	0.000	0.9657	4.7	0.966	204
FCU03.08 Workspace South	21	0.000	-1.009	0.000	-0.479	2.9263	43.2	2.926	68
FCU03.09 Workspace South	21	0.000	-0.849	0.000	-0.410	2.4873	36.5	2.487	68
FCU03.10 Workspace South	21	0.000	-0.882	0.000	-0.420	2.5615	37.4	2.562	69
FCU03.11 Workspace South	21	0.000	-0.878	0.000	-0.589	3.2331	53.6	3.233	60
FCU03.12 Quiet Room South	21	0.000	-0.333	0.000	0.000	1.5776	7.4	1.578	213
FCU03.13 Meeting Room East South	21	-1.050	-0.198	0.000	-0.258	5.3752	22.6	5.375	238
FCU03.14 Meeting Room East South	21	-0.743	-0.163	0.000	-0.202	4.1349	17.8	4.135	232
FCU03.15 Workspace East South	21	-2.433	-0.947	0.000	-0.984	7.3142	86.6	7.314	84
FCU03.16 Workspace East South	21	-1.219	-0.490	0.000	-0.537	3.8575	46.9	3.857	82
FCU03.17 Workspace East South	21	-1.031	-0.378	0.000	-0.402	3.0162	35.3	3.016	85
FCU03.18 Boardroom Landlord	21	0.000	-0.830	0.000	0.000	5.377	27.2	5.377	198
FCU03.19 Workspace East North	21	-1.068	-0.409	0.000	-0.429	3.1939	37.7	3.194	85

FCU03.20 Boardroom Landlord	21	0.000	-0.655	0.000	0.000	4.0037	20.0	4.004	200
FCU03.21 Workspace East North	21	-1.035	-0.388	0.000	-0.410	3.0634	35.5	3.063	86
FCU03.22 Workspace East North	21	-1.774	-0.566	0.000	-0.669	5.016	57.8	5.016	87
FCU03.23 Workspace East North	21	-1.560	-0.810	0.000	-0.797	5.5578	70.8	5.558	79
FCU03.24 Meeting East North	21	-0.755	-0.154	0.000	-0.196	4.0369	17.2	4.037	234
FCU03.25 Meeting East North	21	-1.072	-0.211	0.000	-0.274	5.6602	24.0	5.660	236
FCU03.26 Meeting North	21	-1.073	-0.210	0.000	-0.273	5.6534	23.9	5.653	236
FCU03.27 Workspace North	21	-1.089	-0.737	0.000	-0.758	4.8566	68.0	4.857	71
FCU03.28 Meeting North	21	0.000	-0.800	0.000	0.000	5.5489	28.7	5.549	194
FCU03.29 Meeting North	21	0.000	-0.773	0.000	0.000	5.5475	28.9	5.547	192
FCU03.30 Workspace North	21	0.000	-0.814	0.000	-0.381	2.3398	34.2	2.340	68
FCU03.31 Workspace North	21	-1.061	-0.357	0.000	-0.478	3.3286	41.3	3.329	81
FCU03.32 Workspace North	21	-1.066	-0.425	0.000	-0.528	3.6046	46.3	3.605	78
FCU03.33 Meeting North	21	-1.172	-0.160	0.000	-0.215	4.7781	18.5	4.778	258
FCU03.34 Workspace North	21	0.000	-0.680	0.000	-0.479	2.5964	43.5	2.596	60
FCU03.35 Workspace North	21	-0.950	-0.280	0.000	-0.359	2.6658	31.4	2.666	85
FCU03.36 Workspace North	21	-0.462	-0.234	0.000	-0.232	1.6219	20.6	1.622	79
FCU03.37 Workspace North	21	0.000	-0.963	0.000	-0.334	2.3003	29.9	2.300	77
FCU03.38 Quiet Room North	21	0.000	-0.255	0.000	0.000	1.3537	6.6	1.354	205
FCU06.01 Tenancy South	21	-1.550	-0.123	0.000	-0.492	3.6402	43.2	3.640	84
FCU06.02 Tenancy South	21	-1.077	-0.015	0.000	-0.476	2.9947	42.0	2.995	71
FCU06.03 Tenancy South	21	-1.090	-0.021	0.000	-0.487	3.0604	43.0	3.060	71
FCU06.04 Tenancy South	21	-1.095	-0.022	0.000	-0.491	3.0805	43.3	3.081	71
FCU06.05 Tenancy South	21	-1.086	-0.038	0.000	-0.490	3.0825	43.3	3.082	71
FCU06.06 Tenancy South	21	-1.548	-0.135	0.000	-0.559	3.9187	49.1	3.919	80
FCU06.07 Tenancy South	21	-1.279	-0.001	0.000	-0.410	2.9184	35.3	2.918	83
FCU06.08 Tenancy South	21	-1.582	-0.003	0.000	-0.518	3.6559	44.7	3.656	82
FCU06.09 Tenancy South	21	-0.873	-0.217	0.000	-0.534	3.2259	48.2	3.226	67
FCU06.10 Tenancy East	21	-1.087	-0.069	0.000	-0.418	2.8287	36.9	2.829	77
FCU06.11 Tenancy East	21	-0.745	-0.082	0.000	0.000	1.7952	28.6	1.795	63
FCU06.12 Tenancy East	21	-2.346	-0.049	0.000	0.000	4.5246	61.5	4.525	74
FCU06.13 Tenancy East	21	-1.239	-0.118	0.000	0.000	2.9704	47.7	2.970	62
FCU06.14 Tenancy East	21	-1.053	-0.075	0.000	0.000	2.3765	36.7	2.376	65
FCU06.15 Tenancy East	21	-1.202	-0.046	0.000	0.000	2.2866	30.1	2.287	76
FCU06.16 Tenancy East	21	-1.063	-0.035	0.000	0.000	2.5275	42.1	2.527	60
FCU06.17 Tenancy East	21	-0.933	-0.101	0.000	0.000	1.8445	23.5	1.844	78
FCU06.18 Tenancy East	21	-1.427	-0.092	0.000	0.000	3.3272	53.3	3.327	62
FCU06.19 Tenancy East	21	-1.453	-0.112	0.000	0.000	3.3059	51.2	3.306	65
FCU06.20 Tenancy East	21	-1.736	0.000	0.000	0.000	3.112	39.4	3.112	79
FCU06.21 Tenancy East	21	-0.717	-0.049	0.000	0.000	1.5856	24.0	1.586	66
FCU06.22 Tenancy East	21	-1.052	-0.086	0.000	0.000	2.3524	36.1	2.352	65
FCU06.23 Tenancy North	21	-2.326	-0.127	0.000	-0.777	5.5615	67.8	5.561	82
FCU06.24 Tenancy North	21	-2.232	-0.100	0.000	-0.987	6.2788	87.7	6.279	72
FCU06.25 Tenancy North	21	-1.969	-0.002	0.000	-0.596	4.3559	51.2	4.356	85
FCU06.26 Tenancy North	21	-1.076	-0.036	0.000	-0.474	3.0097	41.8	3.010	72
FCU06.27 Tenancy North	21	-2.983	-0.001	0.000	-0.867	6.4521	74.7	6.452	86
FCU06.28 Tenancy North	21	0.000	-0.165	0.000	-0.316	1.43	29.3	1.430	49
FCU06.29 Tenancy North	21	-1.459	-0.145	0.000	-0.401	3.2056	34.8	3.206	92
FCU06.30 Tenancy North	21	-2.340	-0.201	0.000	-0.506	4.5638	42.7	4.564	107
FCU07.01 Workspace South	21	-1.584	-0.119	0.000	-0.523	3.7944	46.0	3.794	82

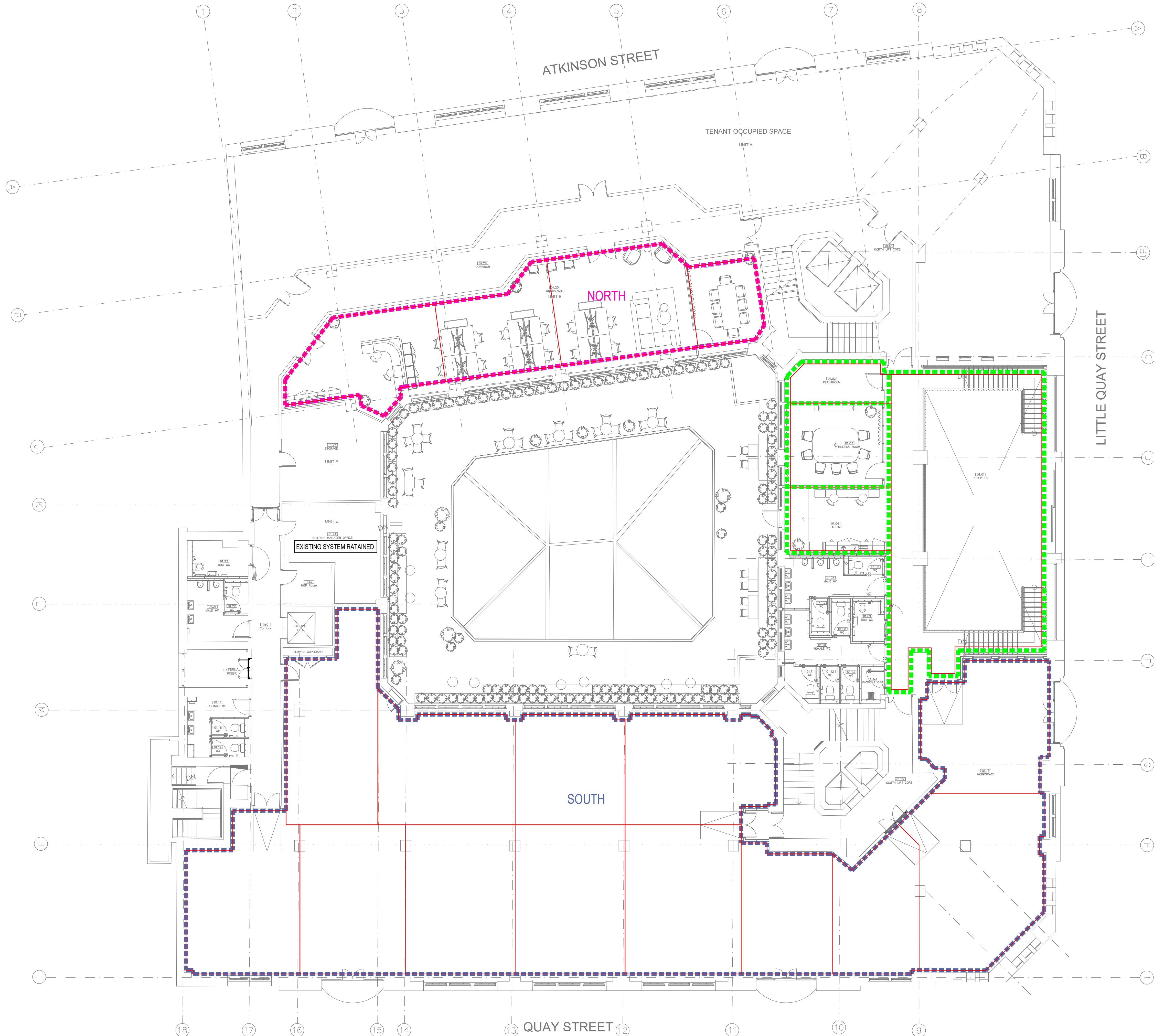
FCU07.02 Workspace South	21	-1.077	-0.006	0.000	-0.484	3.0182	42.7	3.018	71
FCU07.03 Workspace South	21	-1.096	-0.014	0.000	-0.500	3.1093	44.2	3.109	70
FCU07.04 Workspace South	21	-1.093	-0.013	0.000	-0.497	3.0945	43.9	3.094	70
FCU07.05 Workspace South	21	-1.095	-0.034	0.000	-0.501	3.132	44.3	3.132	71
FCU07.06 Workspace South	21	-1.514	-0.119	0.000	-0.526	3.7368	46.2	3.737	81
FCU07.07 Workspace South	21	-1.275	0.000	0.000	-0.399	2.8707	34.4	2.871	84
FCU07.08 Workspace South	21	-1.635	0.000	0.000	-0.511	3.68	44.1	3.680	84
FCU07.09 Workspace South	21	-0.856	-0.191	0.000	-0.543	3.219	49.1	3.219	66
FCU07.10 Workspace East	21	-1.081	-0.065	0.000	0.000	2.3866	36.5	2.387	65
FCU07.11 Workspace East	21	-0.733	-0.084	0.000	0.000	1.7849	28.6	1.785	62
FCU07.12 Workspace East	21	-2.284	-0.030	0.000	0.000	4.3212	57.9	4.321	75
FCU07.13 Workspace East	21	-1.303	-0.113	0.000	0.000	3.1334	50.9	3.133	62
FCU07.14 Workspace East	21	-1.050	-0.067	0.000	0.000	2.3582	36.5	2.358	65
FCU07.15 Workspace East	21	-1.223	-0.049	0.000	0.000	2.3937	32.6	2.394	73
FCU07.16 Workspace East	21	-1.058	-0.014	0.000	0.000	2.4556	40.7	2.456	60
FCU07.17 Workspace East	21	-0.913	-0.099	0.000	0.000	1.8076	23.1	1.808	78
FCU07.18 Workspace East	21	-1.415	-0.070	0.000	0.000	3.2342	51.5	3.234	63
FCU07.19 Workspace East	21	-1.466	-0.104	0.000	0.000	3.3371	52.0	3.337	64
FCU07.20 Workspace East	21	-1.715	0.000	0.000	0.000	3.0541	38.3	3.054	80
FCU07.21 Workspace East	21	-0.725	-0.041	0.000	0.000	1.5886	24.1	1.589	66
FCU07.22 Workspace East	21	-1.043	-0.075	0.000	0.000	2.3196	35.7	2.320	65
FCU07.23 Workspace North	21	-2.308	-0.114	0.000	-0.761	5.467	66.4	5.467	82
FCU07.24 Workspace North	21	-2.220	-0.076	0.000	-0.981	6.2209	87.3	6.221	71
FCU07.25 Workspace North	21	-1.912	-0.003	0.000	-0.589	4.2698	50.7	4.270	84
FCU07.26 Workspace North	21	-1.078	-0.027	0.000	-0.479	3.0191	42.2	3.019	72
FCU07.27 Workspace North	21	-2.998	-0.001	0.000	-0.878	6.51	75.7	6.510	86
FCU07.28 Workspace North	21	0.000	-0.135	0.000	-0.286	1.2797	26.6	1.280	48
FCU07.29 Workspace North	21	-1.462	-0.151	0.000	-0.496	3.5983	43.6	3.598	83
FCU07.30 Workspace North	21	-2.410	-0.049	0.000	-0.449	4.2547	37.6	4.255	113
FCU08.01 Workspace South	21	-1.583	-0.126	0.000	-0.523	3.802	46.0	3.802	83
FCU08.02 Workspace South	21	-1.077	-0.011	0.000	-0.484	3.0237	42.7	3.024	71
FCU08.03 Workspace South	21	-1.096	-0.019	0.000	-0.500	3.1144	44.2	3.114	70
FCU08.04 Workspace South	21	-1.093	-0.018	0.000	-0.497	3.0997	43.9	3.100	71
FCU08.05 Workspace South	21	-1.095	-0.039	0.000	-0.501	3.137	44.3	3.137	71
FCU08.06 Workspace South	21	-1.514	-0.120	0.000	-0.526	3.7369	46.2	3.737	81
FCU08.07 Workspace South	21	-1.275	0.000	0.000	-0.399	2.8707	34.4	2.871	84
FCU08.08 Workspace South	21	-1.635	0.000	0.000	-0.511	3.68	44.1	3.680	84
FCU08.09 Workspace South	21	-0.856	-0.189	0.000	-0.543	3.2168	49.1	3.217	66
FCU08.10 Workspace East	21	-1.081	-0.069	0.000	0.000	2.3912	36.5	2.391	66
FCU08.11 Workspace East	21	-0.733	-0.087	0.000	0.000	1.7883	28.6	1.788	63
FCU08.12 Workspace East	21	-2.284	-0.035	0.000	0.000	4.3262	57.9	4.326	75
FCU08.13 Workspace East	21	-1.303	-0.119	0.000	0.000	3.1399	50.9	3.140	62
FCU08.14 Workspace East	21	-1.050	-0.072	0.000	0.000	2.3638	36.5	2.364	65
FCU08.15 Workspace East	21	-1.223	-0.048	0.000	0.000	2.3927	32.6	2.393	73
FCU08.16 Workspace East	21	-1.058	-0.020	0.000	0.000	2.4623	40.7	2.462	60
FCU08.17 Workspace East	21	-0.913	-0.099	0.000	0.000	1.8073	23.1	1.807	78
FCU08.18 Workspace East	21	-1.415	-0.078	0.000	0.000	3.2424	51.5	3.242	63
FCU08.19 Workspace East	21	-1.466	-0.112	0.000	0.000	3.3452	52.0	3.345	64
FCU08.20 Workspace East	21	-1.715	-0.001	0.000	0.000	3.055	38.3	3.055	80
FCU08.21 Workspace East	21	-0.725	-0.045	0.000	0.000	1.5927	24.1	1.593	66

FCU08.22 Workspace East	21	-1.042	-0.079	0.000	0.000	2.3237	35.7	2.324	65
FCU08.23 Workspace North	21	-2.308	-0.114	0.000	-0.761	5.4671	66.4	5.467	82
FCU08.24 Workspace North	21	-2.219	-0.086	0.000	-0.982	6.2321	87.3	6.232	71
FCU08.25 Workspace North	21	-1.912	-0.002	0.000	-0.589	4.269	50.7	4.269	84
FCU08.26 Workspace North	21	-1.078	-0.033	0.000	-0.479	3.025	42.2	3.025	72
FCU08.27 Workspace North	21	-2.997	-0.014	0.000	-0.878	6.5234	75.7	6.523	86
FCU08.28 Workspace North	21	0.000	-0.134	0.000	-0.286	1.2789	26.6	1.279	48
FCU08.29 Workspace North	21	-1.462	-0.146	0.000	-0.496	3.5928	43.6	3.593	82
FCU08.30 Workspace North	21	-2.410	-0.049	0.000	-0.449	4.2547	37.6	4.255	113
FCU09.01 Workspace South	21	-2.021	-0.126	0.000	-0.532	4.2753	46.0	4.275	93
FCU09.02 Workspace South	21	-1.317	-0.011	0.000	-0.491	3.2912	42.7	3.291	77
FCU09.03 Workspace South	21	-1.344	-0.007	0.000	-0.507	3.3777	44.2	3.378	76
FCU09.04 Workspace South	21	-1.339	-0.006	0.000	-0.504	3.361	43.9	3.361	76
FCU09.05 Workspace South	21	-1.343	-0.028	0.000	-0.507	3.4006	44.3	3.401	77
FCU09.06 Workspace South	21	-1.514	-0.122	0.000	-0.526	3.7393	46.2	3.739	81
FCU09.07 Workspace South	21	-1.275	0.000	0.000	-0.399	2.8707	34.4	2.871	84
FCU09.08 Workspace South	21	-1.635	0.000	0.000	-0.511	3.68	44.1	3.680	84
FCU09.09 Workspace South	21	-0.856	-0.196	0.000	-0.543	3.2245	49.1	3.225	66
FCU09.10 Workspace East	21	-1.323	-0.061	0.000	0.000	2.6417	36.5	2.642	72
FCU09.11 Workspace East	21	-0.934	-0.079	0.000	0.000	1.9947	28.6	1.995	70
FCU09.12 Workspace East	21	-2.527	-0.029	0.000	0.000	4.581	57.9	4.581	79
FCU09.13 Workspace East	21	-1.685	-0.106	0.000	0.000	3.5347	50.9	3.535	69
FCU09.14 Workspace East	21	-1.336	-0.063	0.000	0.000	2.66	36.5	2.660	73
FCU09.15 Workspace East	21	-1.223	-0.050	0.000	0.000	2.3956	32.6	2.396	73
FCU09.16 Workspace East	21	-1.347	-0.008	0.000	0.000	2.7626	40.7	2.763	68
FCU09.17 Workspace East	21	-0.913	-0.100	0.000	0.000	1.8081	23.1	1.808	78
FCU09.18 Workspace East	21	-1.803	-0.064	0.000	0.000	3.645	51.5	3.645	71
FCU09.19 Workspace East	21	-1.911	-0.090	0.000	0.000	3.7987	52.0	3.799	73
FCU09.20 Workspace East	21	-1.763	0.000	0.000	0.000	3.105	38.3	3.105	81
FCU09.21 Workspace East	21	-0.937	-0.030	0.000	0.000	1.8049	24.1	1.805	75
FCU09.22 Workspace East	21	-1.294	-0.076	0.000	0.000	2.5867	35.7	2.587	72
FCU09.23 Workspace North	21	-2.308	-0.117	0.000	-0.761	5.4705	66.4	5.470	82
FCU09.24 Workspace North	21	-2.782	-0.067	0.000	-0.995	6.8285	87.3	6.829	78
FCU09.25 Workspace North	21	-1.912	-0.005	0.000	-0.589	4.2719	50.7	4.272	84
FCU09.26 Workspace North	21	-1.341	-0.022	0.000	-0.486	3.3063	42.2	3.306	78
FCU09.27 Workspace North	21	-3.622	0.000	0.000	-0.894	7.1966	75.7	7.197	95
FCU09.28 Workspace North	21	0.000	-0.144	0.000	-0.287	1.2905	26.6	1.291	49
FCU09.29 Workspace North	21	-1.462	-0.152	0.000	-0.496	3.5998	43.6	3.600	83
FCU09.30 Workspace North	21	-2.410	-0.049	0.000	-0.449	4.2546	37.6	4.255	113
FCU10.01 Workspace South	21	-3.128	-0.318	0.000	-0.864	6.9011	74.1	6.901	93
FCU10.02 Workspace South	21	-1.169	-0.019	0.000	-0.437	2.9367	38.1	2.937	77
FCU10.03 Workspace South	21	-1.203	-0.010	0.000	-0.452	3.0205	39.5	3.020	77
FCU10.04 Workspace South	21	-1.250	-0.045	0.000	-0.466	3.1594	41.2	3.159	77
FCU10.05 Workspace South	21	-0.713	-0.178	0.000	-0.525	2.9893	47.6	2.989	63
FCU10.06 Workspace South	21	-0.584	-0.048	0.000	-0.394	2.2079	35.6	2.208	62
FCU10.07 Workspace South	21	-0.574	-0.047	0.000	-0.381	2.1449	34.4	2.145	62
FCU10.08 Workspace South	21	-1.213	-0.224	0.000	-0.704	4.2516	63.4	4.252	67
FCU10.09 Workspace East	21	-1.115	-0.084	0.000	0.000	2.2231	30.1	2.223	74
FCU10.10 Workspace East	21	-3.167	-0.097	0.000	0.000	5.7711	71.7	5.771	80
FCU10.11 Workspace East	21	-0.901	-0.022	0.000	0.000	1.5766	18.6	1.577	85

FCU10.12 Workspace East	21	-1.103	-0.083	0.000	0.000	2.2794	31.9	2.279	71
FCU10.13 Workspace East	21	-1.063	-0.076	0.000	0.000	2.2128	31.4	2.213	71
FCU10.14 Workspace East	21	-1.209	-0.055	0.000	0.000	2.3495	31.5	2.349	75
FCU10.15 Workspace East	21	-1.087	-0.035	0.000	0.000	2.3596	36.1	2.360	65
FCU10.16 Workspace East	21	-0.927	-0.096	0.000	0.000	1.8391	23.7	1.839	77
FCU10.17 Workspace East	21	-1.073	-0.064	0.000	0.000	2.3041	34.0	2.304	68
FCU10.18 Workspace East	21	-1.810	-0.075	0.000	0.000	3.3942	43.5	3.394	78
FCU10.19 Workspace East	21	-2.747	-0.085	0.000	0.000	5.2735	70.6	5.273	75
FCU10.20 Workspace East	21	-1.232	-0.080	0.000	0.000	2.4612	33.8	2.461	73
FCU10.21 Workspace North	21	-1.046	-0.129	0.000	-0.363	2.6256	31.9	2.626	82
FCU10.22 Workspace North	21	-1.186	-0.062	0.000	-0.400	2.8469	35.2	2.847	81
FCU10.23 Workspace North	21	-1.263	-0.001	0.000	-0.409	2.9018	35.3	2.902	82
FCU10.24 Workspace North	21	-1.201	-0.010	0.000	-0.423	2.9037	36.8	2.904	79
FCU10.25 Workspace North	21	-1.264	-0.002	0.000	-0.409	2.9037	35.3	2.904	82
FCU10.26 Workspace North	21	-1.212	-0.022	0.000	-0.428	2.9439	37.1	2.944	79
FCU10.27 Workspace North	21	-2.876	-0.011	0.000	-0.714	5.7411	60.6	5.741	95
FCU10.28 Workspace North	21	-0.592	-0.058	0.000	-0.345	2.0304	30.7	2.030	66
FCU10.29 Workspace North	21	0.000	-0.092	0.000	-0.173	0.7828	16.0	0.783	49
FCU10.30 Workspace North	21	-0.726	-0.024	0.000	-0.261	1.7919	23.0	1.792	78
FCU10.31 Workspace North	21	-0.446	-0.157	0.000	-0.207	1.431	18.5	1.431	77
FCU10.32 Workspace North	21	-2.457	-0.054	0.000	-0.460	4.3491	38.6	4.349	113
FCU11.01 Workspace South	21	-3.153	-0.324	0.000	-0.699	6.2733	58.9	6.273	107
FCU11.02 Workspace South	21	-1.382	-0.010	0.000	-0.370	2.8707	31.4	2.871	92
FCU11.03 Workspace South	21	-1.406	-0.008	0.000	-0.384	2.9508	32.7	2.951	90
FCU11.04 Workspace South	21	-1.382	-0.026	0.000	-0.376	2.9102	32.0	2.910	91
FCU11.05 Workspace South	21	-1.512	-0.138	0.000	-0.534	3.7855	46.9	3.785	81
FCU11.06 Workspace South	21	-1.291	-0.010	0.000	-0.418	2.9717	36.1	2.972	82
FCU11.07 Workspace South	21	-1.273	-0.009	0.000	-0.402	2.8895	34.6	2.890	83
FCU11.08 Workspace South	21	-1.182	-0.248	0.000	-0.704	4.2455	63.4	4.246	67
FCU11.09 Workspace South	21	-1.460	-0.081	0.000	-0.322	2.83	27.8	2.830	102
FCU11.10 Workspace East	21	-5.185	-0.091	0.000	-0.790	8.4332	66.7	8.433	127
FCU11.11 Workspace East	21	-1.409	-0.061	0.000	-0.310	2.7077	26.3	2.708	103
FCU11.12 Workspace East	21	-1.385	-0.063	0.000	-0.307	2.6749	26.1	2.675	103
FCU11.13 Workspace East	21	-1.202	-0.074	0.000	-0.364	2.7324	31.7	2.732	86
FCU11.14 Workspace East	21	-1.383	-0.019	0.000	-0.348	2.792	29.4	2.792	95
FCU11.15 Workspace East	21	-0.935	-0.110	0.000	-0.283	2.1752	24.7	2.175	88
FCU11.16 Workspace East	21	-1.347	-0.043	0.000	-0.321	2.6755	27.2	2.676	98
FCU11.17 Workspace East	21	-2.276	-0.053	0.000	-0.428	4.0422	35.8	4.042	113
FCU11.18 Workspace East	21	-3.592	-0.099	0.000	-0.782	6.8199	67.0	6.820	102
FCU11.19 Workspace North	21	-1.235	-0.064	0.000	-0.268	2.3705	23.2	2.371	102
FCU11.20 Workspace North	21	-1.035	-0.132	0.000	-0.348	2.5576	30.5	2.558	84
FCU11.21 Workspace North	21	-1.336	-0.044	0.000	-0.338	2.7333	28.9	2.733	95
FCU11.22 Workspace North	21	-1.266	-0.007	0.000	-0.401	2.8777	34.6	2.878	83
FCU11.23 Workspace North	21	-1.321	-0.007	0.000	-0.363	2.7791	30.8	2.779	90
FCU11.24 Workspace North	21	-1.257	-0.006	0.000	-0.392	2.8308	33.7	2.831	84
FCU11.25 Workspace North	21	-1.328	-0.018	0.000	-0.364	2.8011	30.9	2.801	91
FCU11.26 Workspace North	21	-2.407	-0.004	0.000	-0.503	4.4208	41.8	4.421	106
FCU11.27 Workspace North	21	-0.601	-0.037	0.000	-0.269	1.7147	23.7	1.715	72
FCU11.28 Workspace North	21	0.000	-0.135	0.000	-0.224	1.0327	20.7	1.033	50
FCU11.29 Workspace North	21	-1.543	-0.013	0.000	-0.337	2.9045	28.7	2.904	101

FCU11.30 Workspace North	21	-0.597	-0.144	0.000	-0.209	1.5758	18.4	1.576	86
FCU11.31 Workspace North	21	-2.502	-0.058	0.000	-0.487	4.5084	41.0	4.508	110
FCU12.01 Workspace South	21	-2.719	-0.379	0.000	-0.520	5.1777	43.3	5.178	119
FCU12.02 Workspace South	21	-1.466	-0.017	0.000	-0.307	2.7105	25.4	2.710	107
FCU12.03 Workspace South	21	-1.474	-0.017	0.000	-0.309	2.7281	25.6	2.728	107
FCU12.04 Workspace South	21	-1.649	-0.046	0.000	-0.360	3.1327	30.0	3.133	104
FCU12.05 Workspace South	21	-1.504	-0.158	0.000	-0.523	3.7531	45.8	3.753	82
FCU12.06 Workspace South	21	-1.286	-0.022	0.000	-0.409	2.9426	35.2	2.943	84
FCU12.07 Workspace South	21	-1.261	-0.020	0.000	-0.393	2.8512	33.7	2.851	84
FCU12.08 Workspace South	21	-1.230	-0.253	0.000	-0.701	4.285	62.9	4.285	68
FCU12.09 Workspace South	21	-1.598	-0.076	0.000	-0.233	2.6069	19.5	2.607	134
FCU12.10 Rotunda East	21	-4.539	-0.154	0.000	-0.804	7.9103	68.1	7.910	116
FCU12.11 Workspace East	21	-1.357	-0.072	0.000	-0.222	2.3171	18.5	2.317	125
FCU12.12 Workspace East	21	-1.370	-0.078	0.000	-0.226	2.3503	18.8	2.350	125
FCU12.13 Workspace East	21	-1.208	-0.085	0.000	-0.374	2.7897	32.5	2.790	86
FCU12.14 Workspace East	21	-1.327	-0.024	0.000	-0.256	2.3729	20.9	2.373	113
FCU12.15 Workspace East	21	-0.927	-0.117	0.000	-0.279	2.1603	24.3	2.160	89
FCU12.16 Workspace East	21	-1.334	-0.055	0.000	-0.239	2.3459	19.8	2.346	119
FCU12.17 Workspace East	21	-1.918	-0.059	0.000	-0.259	3.0121	21.1	3.012	142
FCU12.18 Rotunda East	21	-4.121	-0.105	0.000	-0.669	6.9034	56.4	6.903	122
FCU12.19 Workspace North	21	-1.321	-0.083	0.000	-0.220	2.2841	18.7	2.284	122
FCU12.20 Workspace North	21	-1.030	-0.145	0.000	-0.349	2.5722	30.7	2.572	84
FCU12.21 Workspace North	21	-1.382	-0.055	0.000	-0.265	2.4967	22.1	2.497	113
FCU12.22 Workspace North	21	-1.263	-0.028	0.000	-0.410	2.9304	35.3	2.930	83
FCU12.23 Workspace North	21	-1.383	-0.018	0.000	-0.285	2.543	23.6	2.543	108
FCU12.24 Workspace North	21	-1.258	-0.023	0.000	-0.406	2.9061	35.0	2.906	83
FCU12.25 Workspace North	21	-1.399	-0.020	0.000	-0.287	2.5654	23.7	2.565	108
FCU12.26 Workspace North	21	-1.846	-0.021	0.000	-0.341	3.2301	28.0	3.230	115
FCU12.27 Workspace North	21	-0.610	-0.164	0.000	-0.512	2.8213	46.0	2.821	61
FCU12.28 Workspace North	21	-1.759	-0.040	0.000	-0.332	3.1259	27.8	3.126	112
FCU12.29 Workspace North	21	-0.611	-0.164	0.000	-0.209	1.6112	18.4	1.611	87
FCU12.30 Workspace North	21	-2.481	-0.063	0.000	-0.497	4.5306	41.9	4.531	108
FCU13.01 Workspace East South	21	0.000	-1.056	0.000	-0.453	2.8663	40.5	2.866	71
FCU13.02 Workspace East South	21	-0.621	-0.537	0.000	-0.260	2.199	22.4	2.199	98
FCU13.03 Quiet Room South	21	-0.615	-0.191	0.000	-0.089	2.2297	7.4	2.230	300
FCU13.04 Workspace East South	21	-1.268	-0.892	0.000	-0.481	4.0847	41.3	4.085	99
FCU13.05 Workspace East South	21	-1.280	-0.929	0.000	-0.495	4.1904	42.5	4.190	99
FCU13.06 Workspace East South	21	-0.924	-0.630	0.000	-0.352	2.9603	29.6	2.960	100
FCU13.07 Workspace East South	21	-0.574	-0.761	0.000	-0.335	2.676	29.2	2.676	92
FCU13.08 Rotunda	21	-4.818	-0.935	0.000	-0.674	8.4507	53.4	8.451	158
FCU13.09 Teapoint Landlord	21	-1.195	-0.824	0.000	-0.413	2.432	35.8	2.432	68
FCU13.10 Meeting Room Landlord	21	-0.973	-0.789	0.000	-0.365	7.6018	31.8	7.602	239
FCU13.11 Rotunda	21	-4.363	-0.786	0.000	-0.596	14.6857	47.6	14.686	309
FCU13.12 Workspace East North	21	-1.033	-0.949	0.000	-0.461	3.8248	39.7	3.825	96
FCU13.13 Workspace East North	21	-1.255	-0.878	0.000	-0.490	4.0947	41.4	4.095	99
FCU13.14 Workspace East North	21	-1.280	-0.918	0.000	-0.492	4.1645	42.2	4.164	99
FCU13.15 Workspace North	21	-0.571	-0.573	0.000	-0.292	2.3129	25.5	2.313	91
FCU13.16 Workspace North	21	0.000	-0.908	0.000	-0.387	2.4563	34.6	2.456	71
FCU13.17 Workspace North	21	-1.230	-0.626	0.000	-0.346	3.238	28.7	3.238	113
FCU13.18 Workspace North	21	-0.636	-0.624	0.000	-0.251	2.2642	21.8	2.264	104

FCU13.19 Meeting North	21	-0.565	-0.140	0.000	-0.080	1.9907	6.8	1.991	295
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ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-01-DR-A-05101 (C01)
LEVEL 01 PLAN
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D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

P03	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED	DB	BW
P02	17.05.24	ARCHITECTURAL BACKGROUND UPDATED.	DB	SH
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

**FOR
INFORMATION**

Commercial Services Design Ltd
Unit 5
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Clayton Wood Rise
Leeds
LS15 6RF
Tel: 0113 3223190
Web: www.csdesign.co.uk



CLIENT
G&H BUILDING SERVICES

PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 1

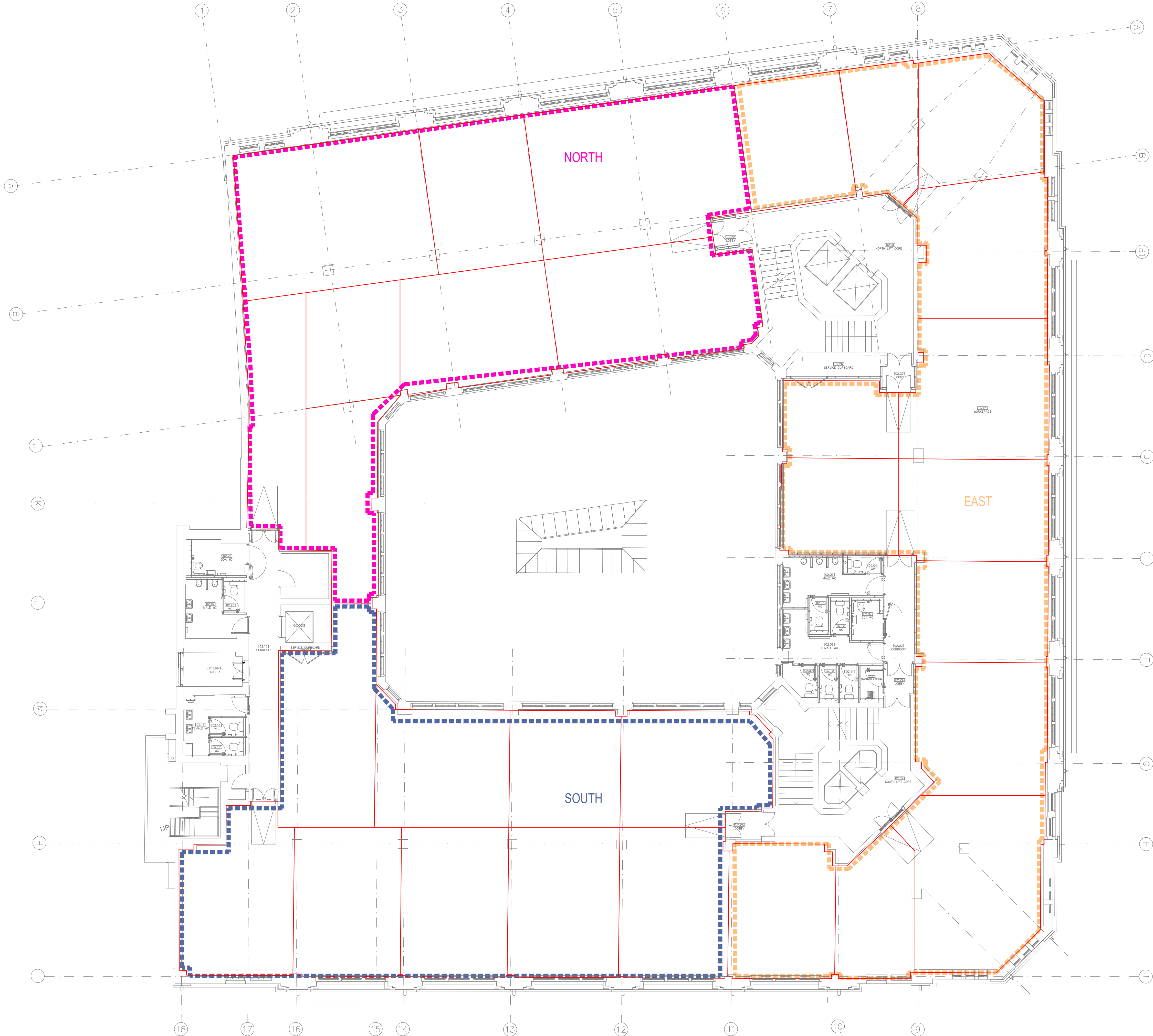
STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN 24
STARTED:	MAR 24	APPROVED:	BW
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DRAWING NO:
1298-CSD-XX-01-DR-SK-10001

REV
P03

Project-Originator-Volume-Level-Type-Discipline-Classification-Number

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D1 - SUITABLE FOR COSTING
D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

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LS16 6RF
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PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 02

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN 24
STARTED:	MAR 24	APPROVED:	BW
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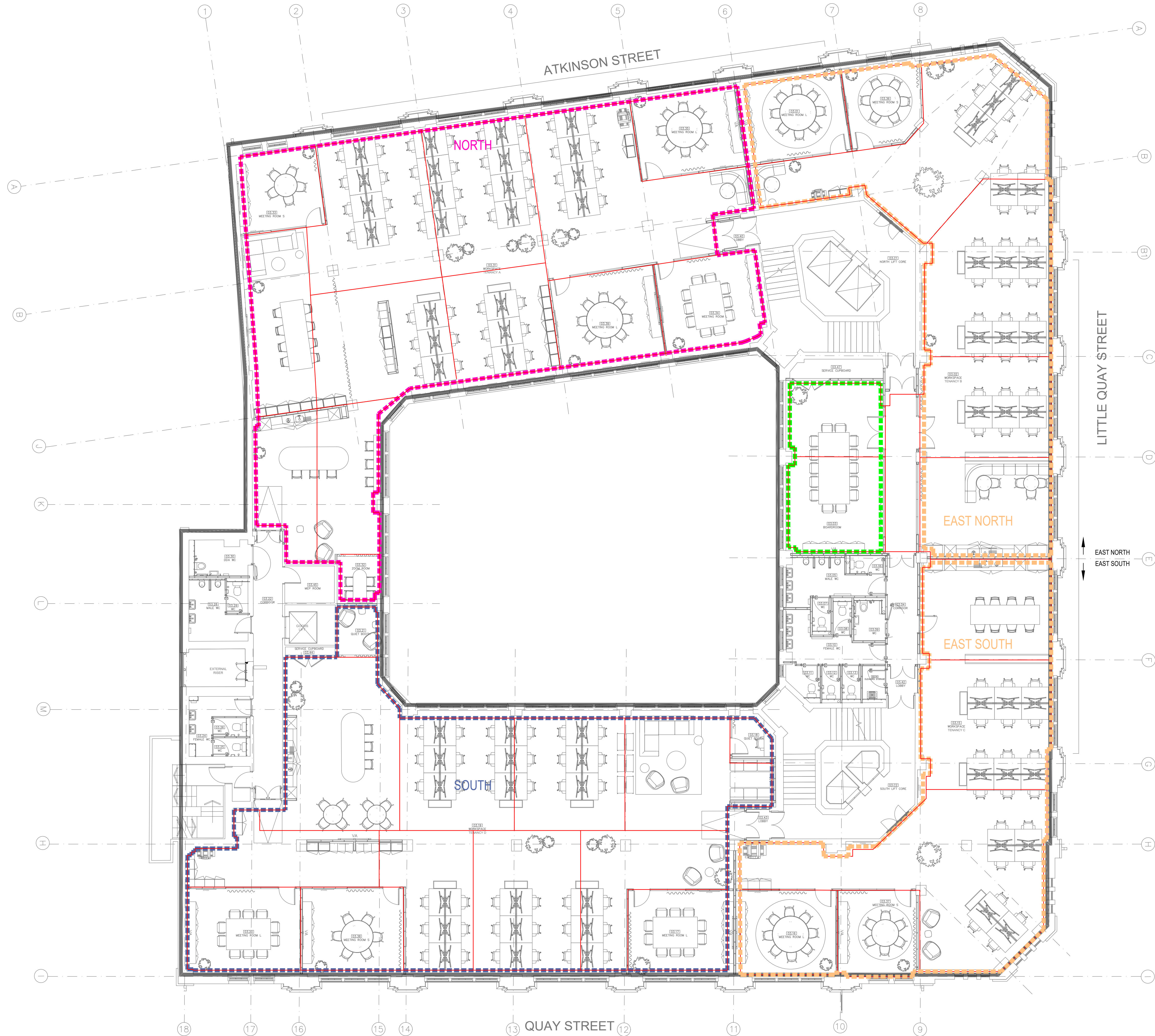
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Project-Originator-Volume-Level-Type-Discipline-Classification-Number

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LEVEL 02 PLAN
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D1 - SUITABLE FOR COSTING
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D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

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REV	DATE	AMENDMENTS	BY	CHK

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PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

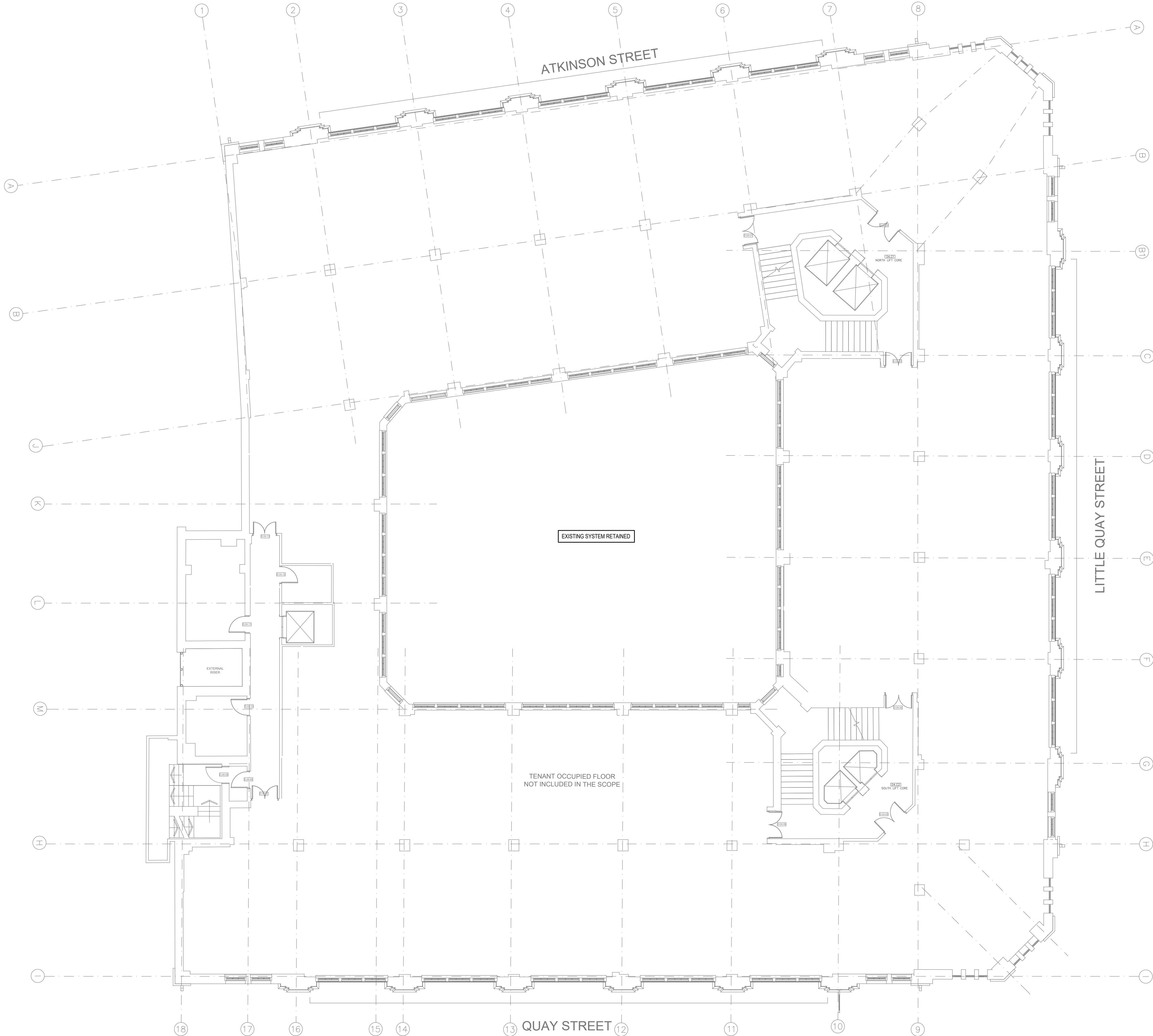
TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 03

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
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DRAWN:	MW	ISSUED:	JUN 24
STARTED:	MAR 24	APPROVED:	BW
CHECKED:	DB		

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Project-Originator-Volume-Level-Type-Discipline-Classification-Number

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LEVEL 04 PLAN
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D1 - SUITABLE FOR COSTING
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LEGEND:
 HEATING & COOLING
FAN COIL UNIT ZONE
 LANDLORDS
 NORTH TENANT
 SOUTH TENANT
 EAST TENANT
(SPLIT DEMISE ON L03 & L13)

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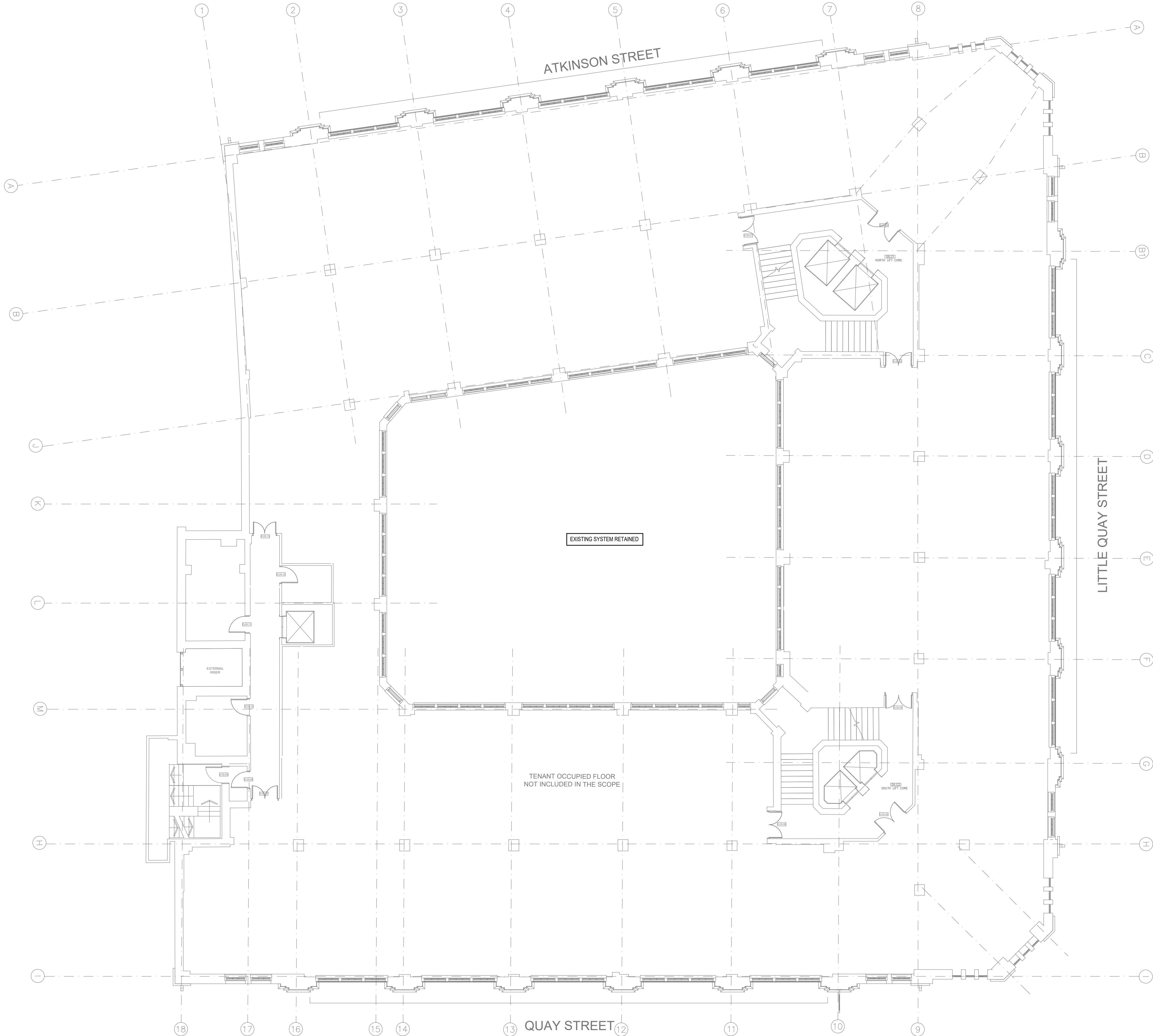
PROJECT
**SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP**

TITLE
**MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 04**

STATUS:	S2 - SUITABLE FOR INFORMATION	CSD REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN '24
STARTED:	MAR '24	APPROVED:	BW
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HEATING & COOLING
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PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

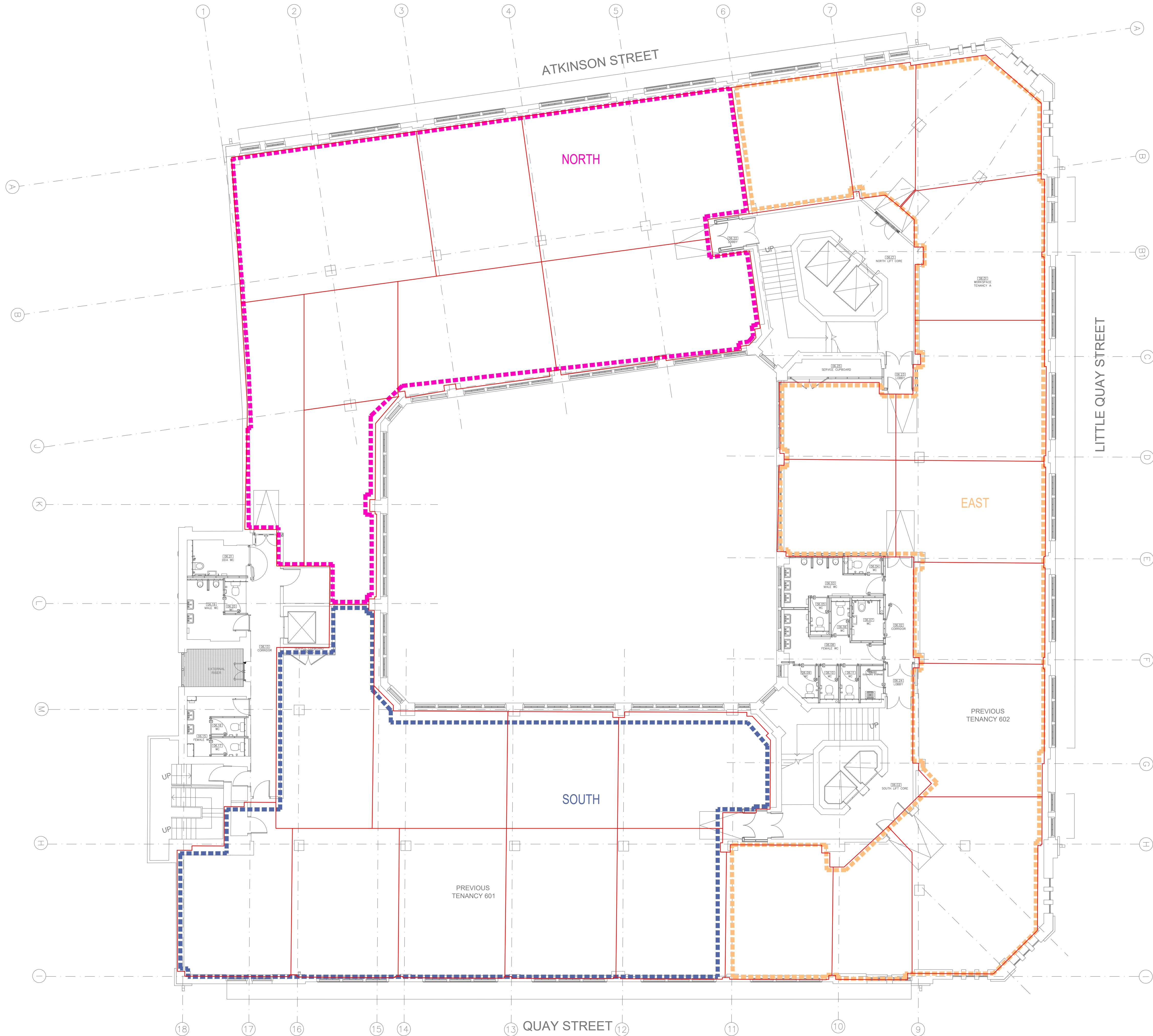
TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 05

STATUS:	S2 - SUITABLE FOR INFORMATION	CSD REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN '24
STARTED:	MAR '24	APPROVED:	BW
CHECKED:	DB	REV	P02

DRAWING NO: SLH-CSD-XX-05-DR-SK-10001 P02
Project-Originator-Volume-Level-Type-Discipline-Classification-Number

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DRAWING No. SLH-AND-PO-05-DR-A-05105 (C01)
LEVEL 05 PLAN
RECEIVED 03.06.2024



ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-06-DR-A-05106 (C01)
LEVEL 06 PLAN
RECEIVED 03.06.2024

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CDM REGULATIONS			
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ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

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S4 - SUITABLE FOR STAGE APPROVAL
S5 - SUITABLE FOR REVIEW & ACCEPTANCE
S6 - SUITABLE FOR PIM AUTHORISATION
S7 - SUITABLE FOR AIM AUTHORISATION
D1 - SUITABLE FOR COSTING
D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:
[Red solid line] HEATING & COOLING FAN COIL UNIT ZONE
[Green dashed line] LANDLORDS
[Pink dashed line] NORTH TENANT
[Blue dashed line] SOUTH TENANT
[Orange dashed line] EAST TENANT (SPLIT DEMISE ON L03 & L13)

P02	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED	DB	BW
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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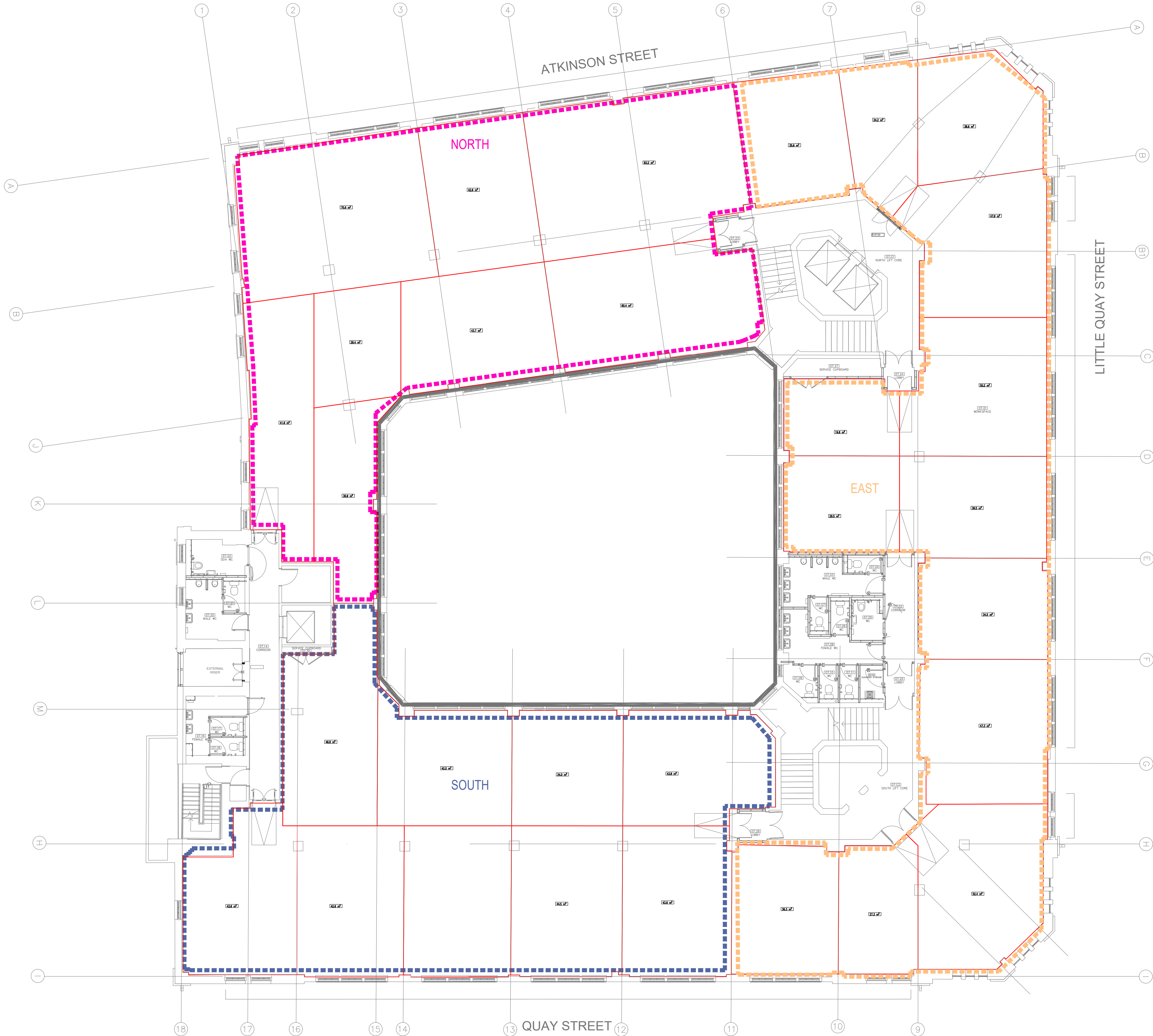
CLIENT
G&H BUILDING SERVICES

PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 6

STATUS: S2 - SUITABLE FOR INFORMATION	
SCALE @ A1: 1:100	CSD REF: CSD 1298
DRAWN: MW	ENGINEER: DB
STARTED: MAR '24	ISSUED: JUN '24
CHECKED: DB	APPROVED: BW
DRAWING NO: 1298-CSD-XX-06-DR-SK-10001	REV: P02
Project-Originator-Volume-Level-Type-Discipline-Classification-Number	

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NORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE
ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

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S4 - SUITABLE FOR STAGE APPROVAL
S5 - SUITABLE FOR REVIEW & ACCEPTANCE
S6 - SUITABLE FOR PIM AUTHORISATION
S7 - SUITABLE FOR AIM AUTHORISATION
D1 - SUITABLE FOR COSTING
D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

P02	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED & AREAS ADDED TO EACH ZONE.	DB	BW
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 7

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN 24
STARTED:	MAR 24	APPROVED:	BW
CHECKED:	DB	REV	

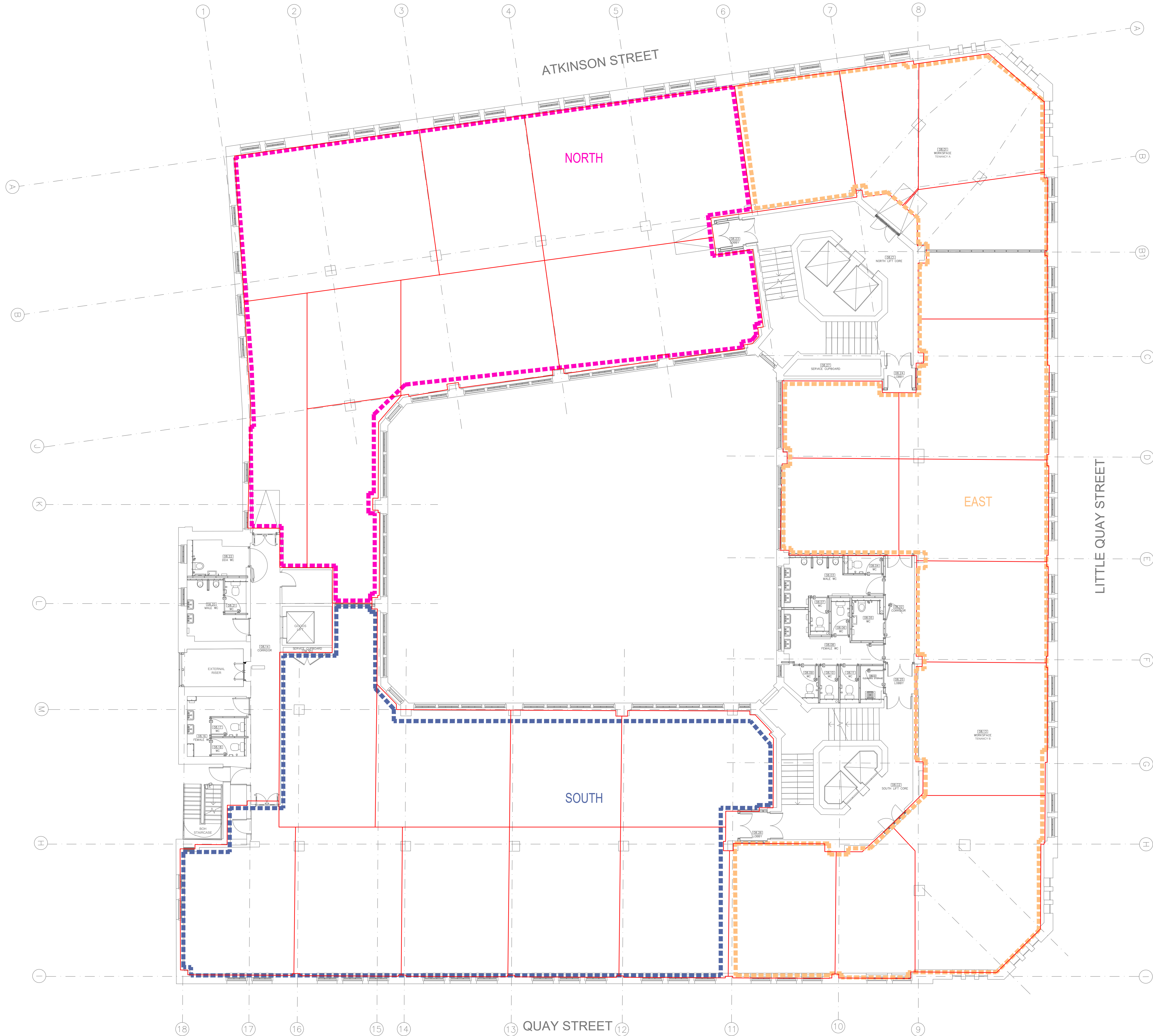
DRAWING NO:
1298-CSD-XX-07-DR-SK-10001

Project-Originator-Volume-Level-Type-Discipline-Classification-Number

P02

ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-07-DR-A-05107 (C01)
LEVEL 07 PLAN
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ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-08-DR-A-05108 (C01)
LEVEL 08 PLAN
RECEIVED 03.06.2024

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CDM REGULATIONS			
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ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

DRAWING SUITABILITY CODES:
S0 - WORK IN PROGRESS
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S4 - SUITABLE FOR STAGE APPROVAL
S5 - SUITABLE FOR REVIEW & ACCEPTANCE
S6 - SUITABLE FOR PIM AUTHORISATION
S7 - SUITABLE FOR AIM AUTHORISATION
D1 - SUITABLE FOR COSTING
D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:
HEATING & COOLING
FAN COIL UNIT ZONE
LANDLORDS
NORTH TENANT
SOUTH TENANT
EAST TENANT
(SPLIT DEMISE ON L03 & L13)

P02	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED	DB	BW
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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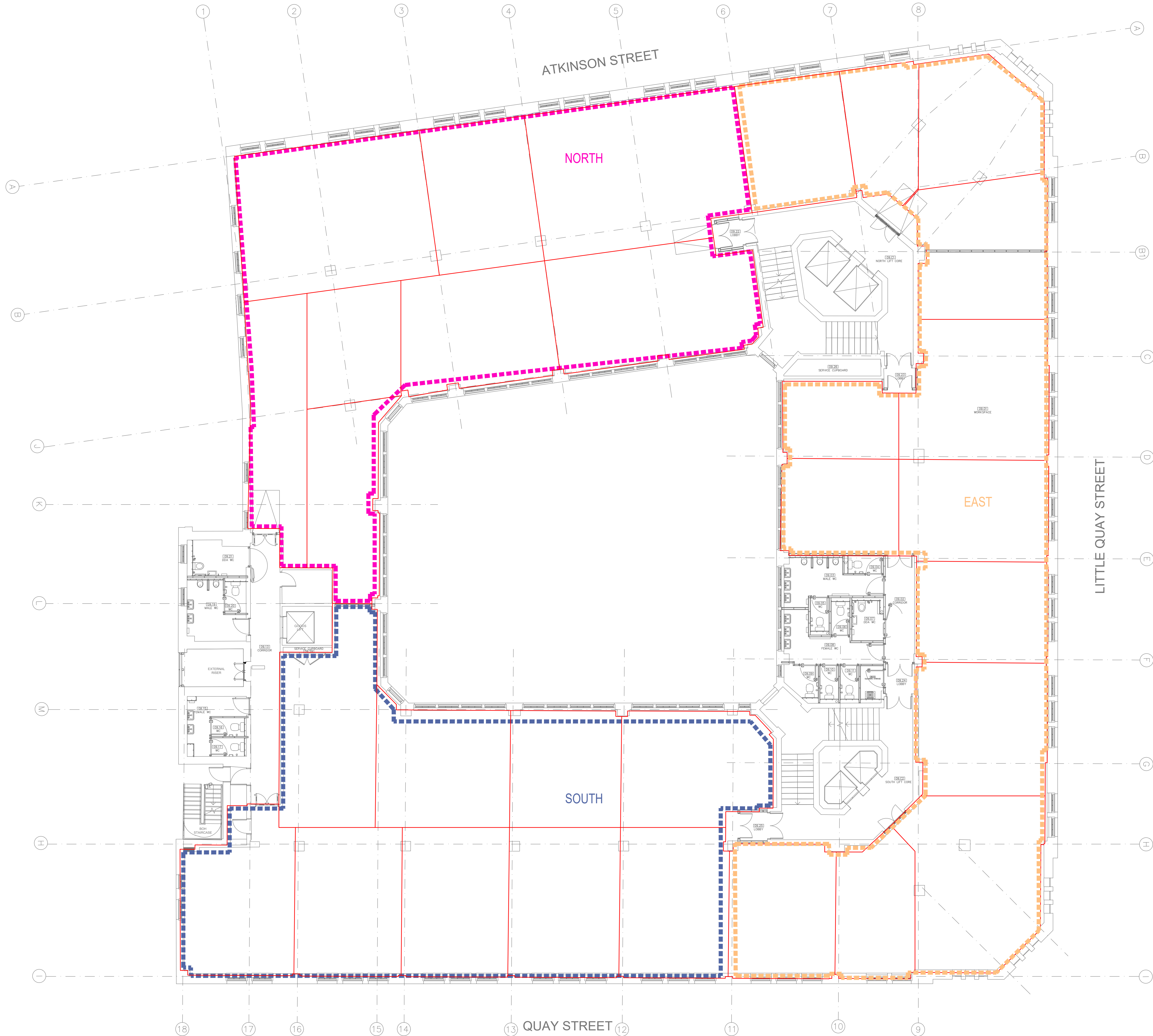


G&H
GROUP OF COMPANIES

CLIENT
G&H BUILDING SERVICES
PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP
TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 8

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN '24
STARTED:	MAR '24	APPROVED:	BW
CHECKED:	DB	REV	
DRAWING NO:	1298-CSD-XX-08-DR-SK-10001	P02	
Project-Originator-Volume-Level-Type-Discipline-Classification-Number			

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CDM REGULATIONS			
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ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

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S7 - SUITABLE FOR AIM AUTHORISATION
D1 - SUITABLE FOR COSTING
D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

P02	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED	DB	BW
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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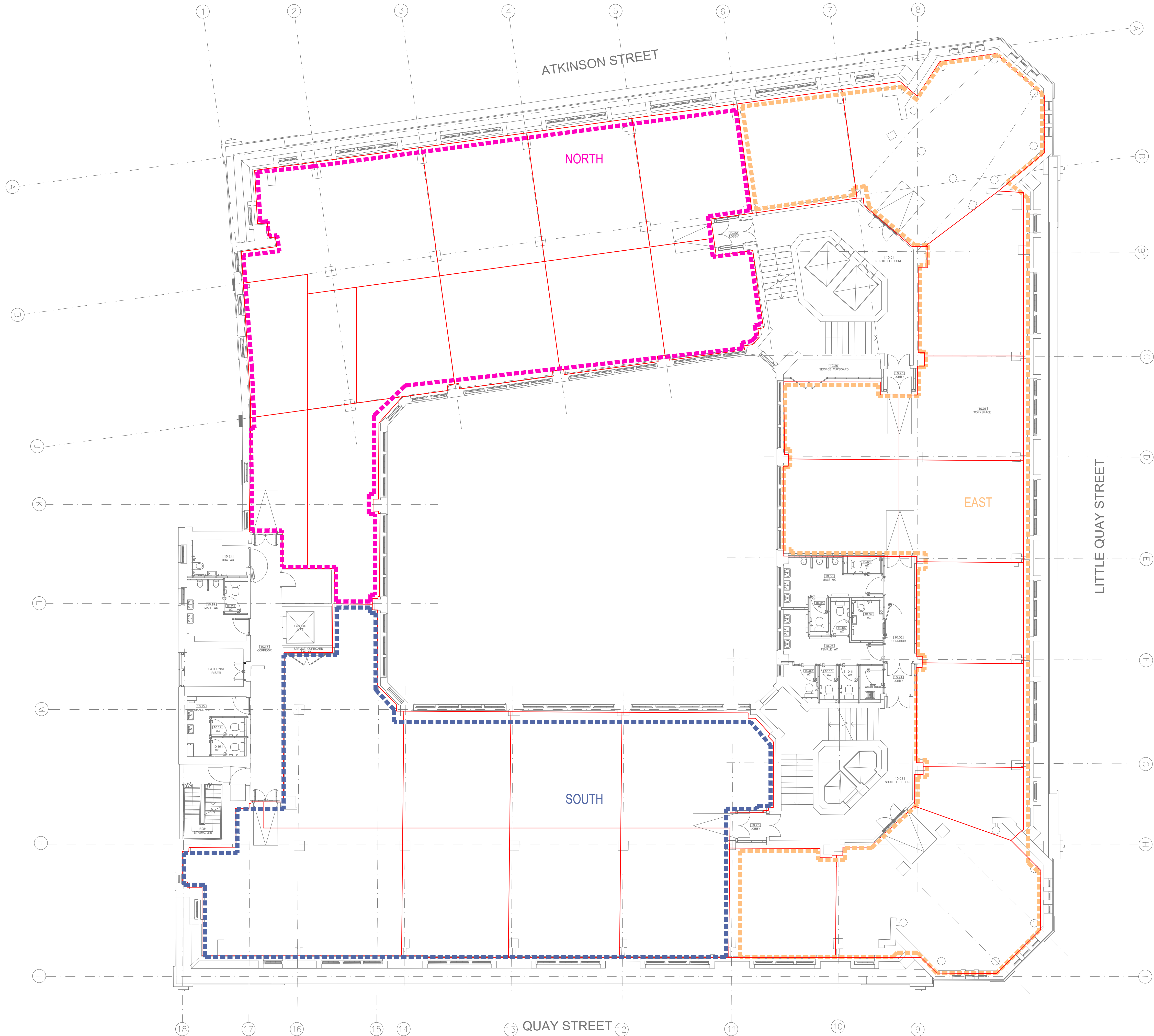
PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 9

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN '24
STARTED:	MAR '24	APPROVED:	BW
CHECKED:	DB	REV	P02
DRAWING NO:	1298-CSD-XX-09-DR-SK-10001		
Project-Originator:Volume-Level-Type-Discipline-Classification:Number			

ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-09-DR-A-0509 (C01)
LEVEL 09 PLAN
RECEIVED 03.06.2024

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ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-10-DR-A-05110 (C01)
LEVEL 10 PLAN
RECEIVED 03.06.2024

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CDM REGULATIONS			
NORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE
ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

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S4 - SUITABLE FOR STAGE APPROVAL
S5 - SUITABLE FOR REVIEW & ACCEPTANCE
S6 - SUITABLE FOR PIM AUTHORISATION
S7 - SUITABLE FOR AIM AUTHORISATION
D1 - SUITABLE FOR COSTING
D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

P02	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED	DB	BW
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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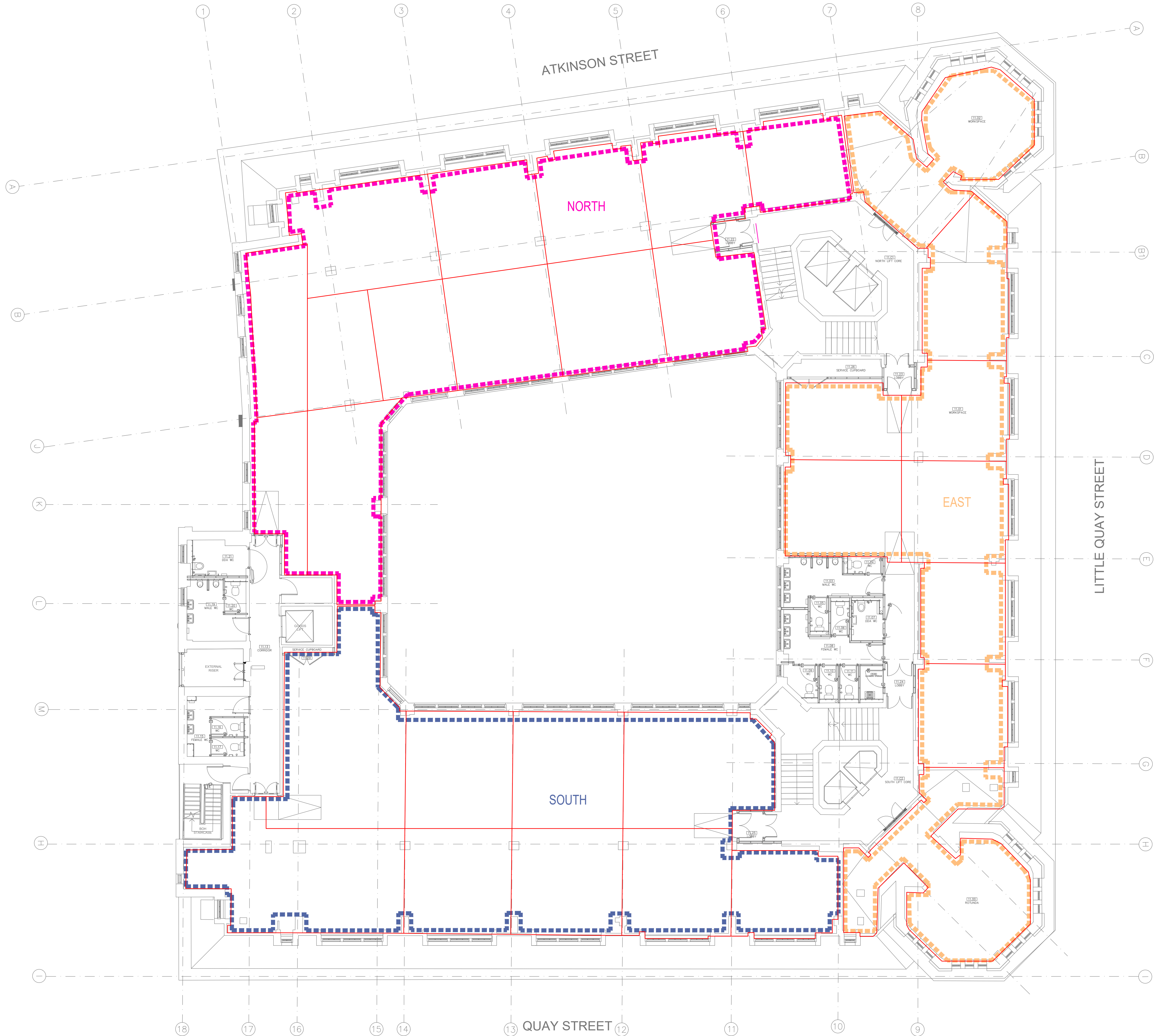
CLIENT
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PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 10

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	ENGINEER:	DB
DRAWN:	MW	ISSUED:	JUN '24
STARTED:	MAR '24	APPROVED:	BW
CHECKED:	DB	REV	P02
DRAWING NO:	1298-CSD-XX-10-DR-SK-10001		
Project-Originator-Volume-Level-Type-Discipline-Classification-Number			

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ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-11-DR-A-05111 (C01)
LEVEL 11 PLAN
RECEIVED 03.06.2024

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CDM REGULATIONS			
NORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE
ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

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D1 - SUITABLE FOR COSTING
D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

P02	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED	DB	BW
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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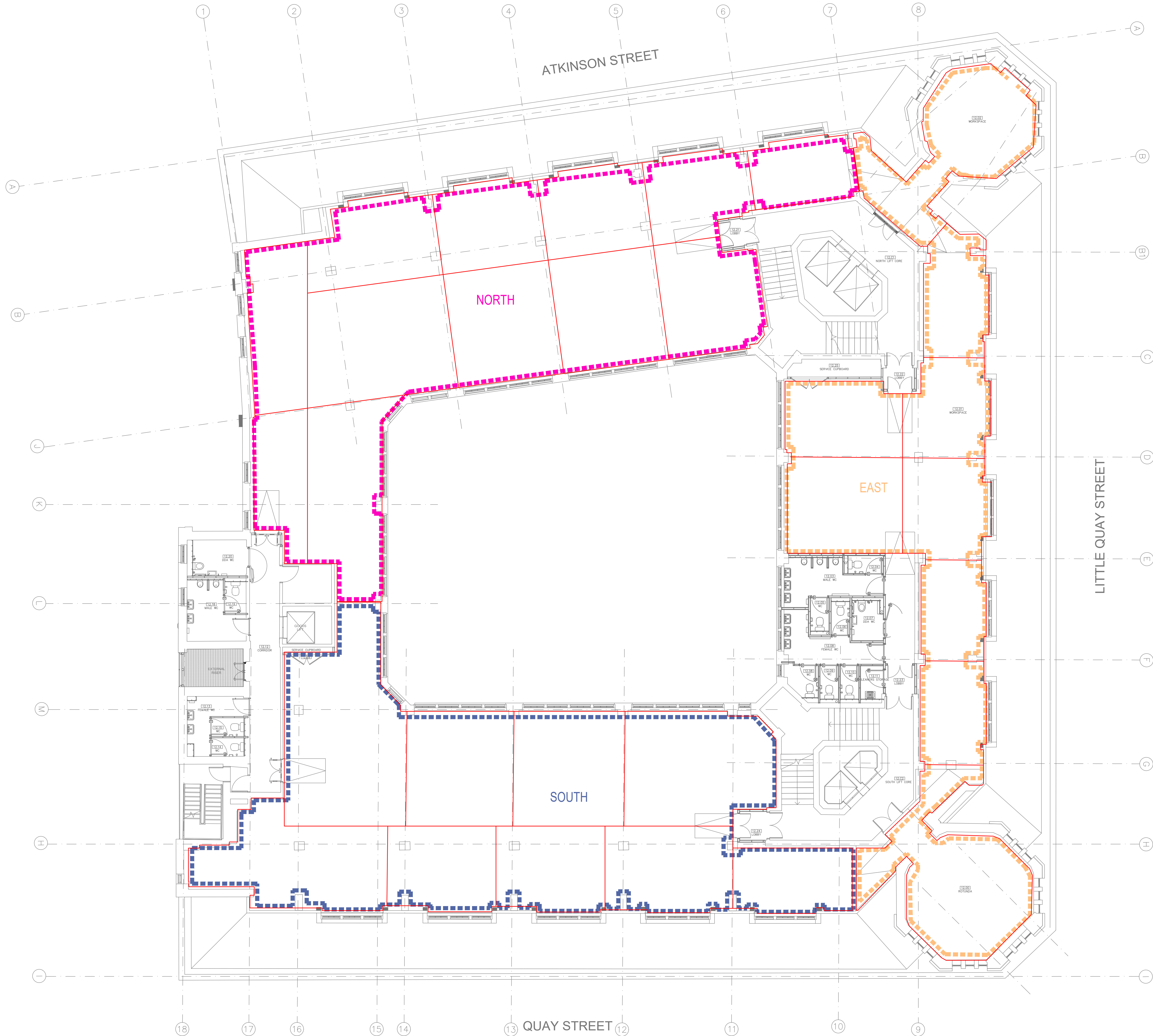
PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 11

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	DRAWN:	MW
DRAWN:	MW	ENGINEER:	DB
STARTED:	MAR '24	ISSUED:	JUN '24
CHECKED:	DB	APPROVED:	BW

DRAWING NO: 1298-CSD-XX-11-DR-SK-10001 P02
Project-Originator-Volume-Level-Type-Discipline-Classification-Number

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ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-12-DR-A-05122 (C01)
LEVEL 12 PLAN
RECEIVED 03.06.2024

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CDM REGULATIONS			
NORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE
ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

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D2 - SUITABLE FOR TENDER
D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

PO2	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED	DB	BW
PO1	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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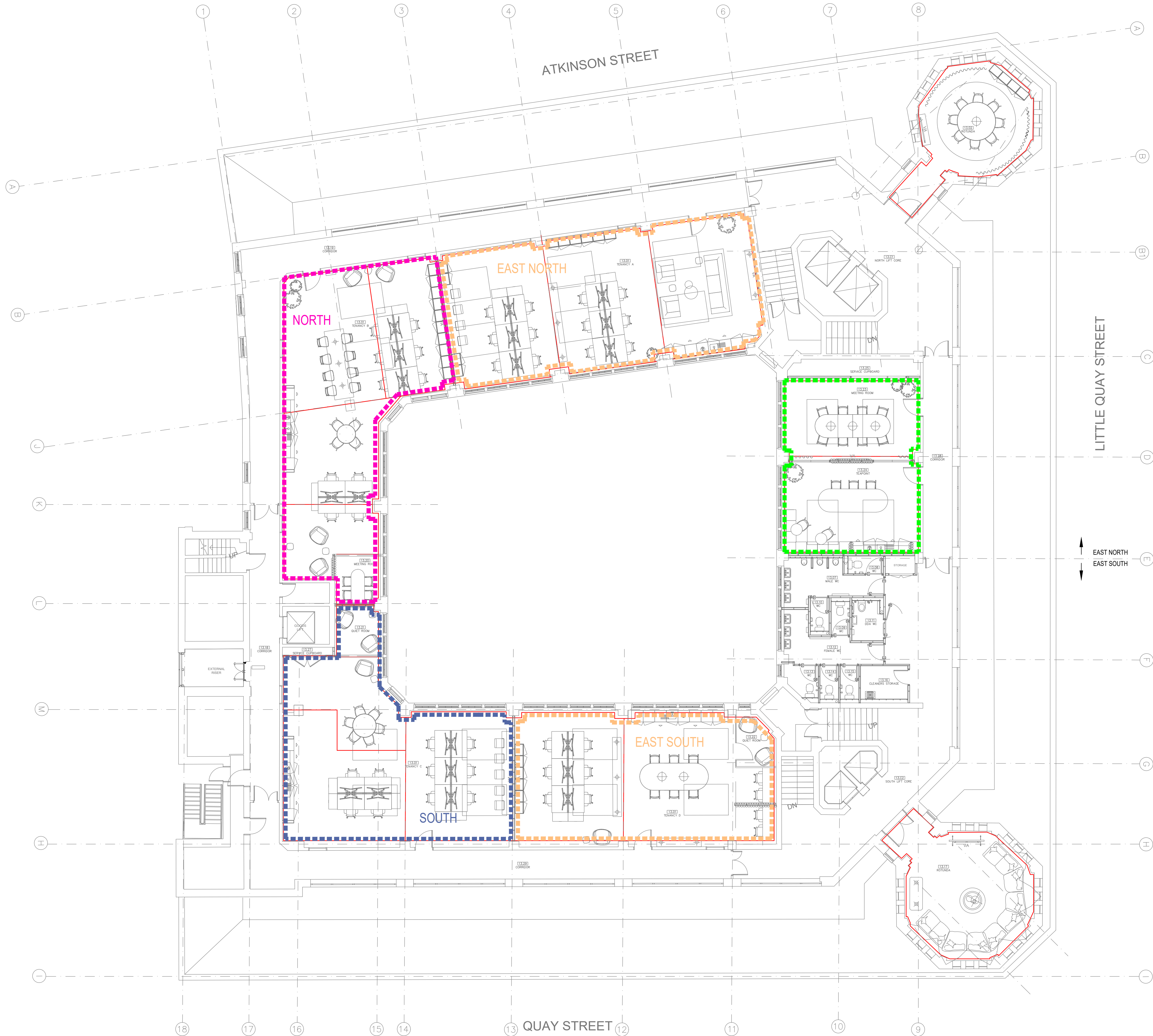
PROJECT
SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP

TITLE
MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 12

STATUS:	S2 - SUITABLE FOR INFORMATION	CDM REF:	CSD 1298
SCALE @ A1:	1:100	DRAWN:	MW
DRAWN:	MW	ENGINEER:	DB
STARTED:	MAR '24	ISSUED:	JUN '24
CHECKED:	DB	APPROVED:	BW

DRAWING NO: 1298-CSD-XX-12-DR-SK-10001 P02
Project-Originator-Volume-Level-Type-Discipline-Classification-Number

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CDM REGULATIONS			
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ABNORMAL HAZARDS	DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE

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D3 - SUITABLE FOR CONTRACTOR DESIGN
D4 - SUITABLE FOR MANUFACTURE / PROCUREMENT

LEGEND:

HEATING & COOLING
FAN COIL UNIT ZONE

LANDLORDS

NORTH TENANT

SOUTH TENANT

EAST TENANT
(SPLIT DEMISE ON L03 & L13)

P03	04.06.24	FINAL COMMENTS INCORPORATED. CONSTRUCTION ISSUE ARCHITECTURE APPLIED.	DB	BW
P02	17.05.24	ARCHITECTURAL BACKGROUND UPDATED.	DB	BW
P01	17.04.24	ISSUED FOR INFORMATION.	DB	SH
REV	DATE	AMENDMENTS	BY	CHK

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Tel: 0113 3223190
Web: www.csdesign.uk.com



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GROUP OF COMPANIES

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G&H BUILDING SERVICES

PROJECT
**SUNLIGHT HOUSE
LITTLE QUAY STREET
MANCHESTER M3 3HP**

TITLE
**MECHANICAL SERVICES
FAN COIL UNIT ZONING
LEVEL 13**

STATUS:		S2 - SUITABLE FOR INFORMATION	
SCALE @ A1:	1:100	CSD REF:	CSD 1298
DRAWN:	MW	ENGINEER:	DB
STARTED:	MAR '24	ISSUED:	JUN '24
CHECKED:	DB	APPROVED:	BW
DRAWING NO:		REV:	
1298-CSD-XX-13-DR-SK-10001		P03	

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ARCHITECTURE IS BASED ON ANOMALY DESIGN ARCHITECTS
DRAWING No. SLH-AND-PO-13-DR-A-05113 (C01)
LEVEL 13 PLAN
RECEIVED 03.06.2024



VRV Selection

Project Report

Report details

Produced on: 7/8/2024

Application version: 2024.7.4.1

Project details

Project name: Sunlight House (shared)

Solution name: 5.7.24 - Full

Client Name: Temperature Control Ltd

Customer reference: 1298-CSD-ZZ-ZZ-SH-M-56013 REV0

Quotation reference:

Project number: 1439867/1774765

The output of the VRV Xpress software is based on Daikin-genuine capacity tables that relate to the Japanese Industry Standard. The VRV Xpress software provides a selection of outdoor and indoor units with optimal efficiency to fit cooling and heating load requirements.

Material list

Model	Quantity	Description
REYA8A	2	REYA-A (VRV 5 Heat Recovery)
REYA10A	1	REYA-A (VRV 5 Heat Recovery)
REYA14A	8	REYA-A (VRV 5 Heat Recovery)
REYA16A	5	REYA-A (VRV 5 Heat Recovery)
REYA18A	7	REYA-A (VRV 5 Heat Recovery)
REYA20A	10	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	11	Branch selector unit
BS8A14AV1B	7	Branch selector unit
BS10A14AV1B	21	Branch selector unit
BS12A14AV1B	5	Branch selector unit
FXAA15A	5	FXAA-A - Wall mounted unit
FXAA20A	3	FXAA-A - Wall mounted unit
FXAA32A	1	FXAA-A - Wall mounted unit
FXAA40A	4	FXAA-A - Wall mounted unit
FXAA63A	3	FXAA-A - Wall mounted unit
FXSA15A	19	FXSA-A - Concealed ceiling unit with medium ESP
FXSA20A	20	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	45	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	53	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	34	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	84	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	31	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	20	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	7	FXSA-A - Concealed ceiling unit with medium ESP
CYAM200DK100FBN	1	Unified Biddle air curtain, wall mounted
KHRQ23M29T9	1	Refnet branch piping kit
KHRQ23M64T	10	Refnet branch piping kit
KHRQ23M75T	1	Refnet branch piping kit
DCM601B51	2	Intelligent Touch Manager
DMS502A51	2	BACnet Interface - integrated control system connecting VRV system with BMS system
5041183	22	R32 Multi BS box pipe closing kit (spare part)
BHFQ23P907A	1	Outdoor unit multi connection piping kit for 2 modules HR
BRC1H52W	330	Remote controller (white)
DAM411B51	2	Adds 2 ports to the DIII-NET communication port by installing it on the BACnet Gateway
DCM002A51	2	iTM Power Proportional Distribution (PPD) Software
DGE601A52	2	DIII plus adapter
DGE601A53	3	DIII plus adapter slot

Piping	Liquid	Suction	Discharge	Total
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	m	m	m	m
1/4"	4,834.2	0.0	0.0	4,834.2
3/8"	288.0	2,233.2	0.0	2,521.2
1/2"	711.5	2,601.0	11.0	3,323.5
5/8"	1,448.5	177.5	265.5	1,891.5
3/4"	0.0	265.5	1,013.5	1,279.0
7/8"	0.0	1,013.5	991.5	2,005.0
1 1/8"	0.0	991.5	0.0	991.5



Indoor unit details

Table of abbreviations

Abbreviation	Description
Name	Logical name of the device
FCU	Device model name
Tmp C	Indoor conditions in cooling
Rq TC	Required total cooling capacity
Max TC	Available total cooling capacity
Rq SC	Required sensible cooling capacity
Tevap	Evaporating temperature of indoor unit coil
Max SC	Available sensible cooling capacity
PIC	Power input in cooling mode @ 50Hz
Tmp H	Indoor temperature in heating
Rq HC	Required heating capacity
Max HC	Available heating capacity
PIH	Power input in heating mode @ 50Hz
Sound	Sound pressure level low and high
PS	Power supply (voltage and phases)
MCA	Minimum Circuit Amps
MFA	Maximum Fuse Amps
WxHxD	WidthxHeightxD
Weight	Weight of the device

Capacity data at conditions and connection ratio (100) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
Air Curtain	CYAM200DK100FBN	n/a	n/a	n/a	n/a	6.0	n/a	
WM1	FXAA63A	24.0/50%	4.1	5.8	3.6	6.0	4.4	0.050
WM2	FXAA63A	24.0/50%	4.1	5.8	3.6	6.0	4.4	0.050
WM3	FXAA63A	24.0/50%	4.1	5.8	3.6	6.0	4.4	0.050
FCU1	FXSA50A	24.0/50%	3.5	4.7	3.0	6.0	3.5	0.096
FS1	FXAA40A	24.0/50%	3.0	3.6	2.5	6.0	2.7	0.025
FS2	FXAA40A	24.0/50%	3.0	3.6	2.5	6.0	2.7	0.025
FS3	FXAA40A	24.0/50%	3.0	3.6	2.5	6.0	2.7	0.025
FS4	FXAA40A	24.0/50%	3.0	3.6	2.5	6.0	2.7	0.025
			27.8					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
Air Curtain	CYAM200DK100FBN	20.0	n/a	n/a	
WM1	FXAA63A	21.0	6.0	7.7	0.060
WM2	FXAA63A	21.0	6.0	7.7	0.060
WM3	FXAA63A	21.0	6.0	7.7	0.060
FCU1	FXSA50A	21.0	2.5	6.0	0.096
FS1	FXAA40A	21.0	1.5	4.8	0.030
FS2	FXAA40A	21.0	1.5	4.8	0.030
FS3	FXAA40A	21.0	1.5	4.8	0.030
FS4	FXAA40A	21.0	1.5	4.8	0.030
			26.5		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	
Air Curtain	CYAM200DK100FBN		-	230V 1ph			2,000 x 270 x 590	94.0
WM1	FXAA63A	Cafe	39 - 47	230V 1ph	0.7	Factory Std	1,050 x 290 x 269	15.0
WM2	FXAA63A	Cafe	39 - 47	230V 1ph	0.7	Factory Std	1,050 x 290 x 269	15.0
WM3	FXAA63A	Cafe	39 - 47	230V 1ph	0.7	Factory Std	1,050 x 290 x 269	15.0
FCU1	FXSA50A	reception	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FS1	FXAA40A	open plan	34 - 37	230V 1ph	0.4	Factory Std	1,050 x 290 x 269	15.0
FS2	FXAA40A	open plan	34 - 37	230V 1ph	0.4	Factory Std	1,050 x 290 x 269	15.0
FS3	FXAA40A	open plan	34 - 37	230V 1ph	0.4	Factory Std	1,050 x 290 x 269	15.0
FS4	FXAA40A	open plan	34 - 37	230V 1ph	0.4	Factory Std	1,050 x 290 x 269	15.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 39.9kW for heating. However, the outdoor unit selection uses reduced load values for heating of 27.9kW (=70%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.



Outdoor vs. indoor position

Outdoor unit placed 42.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Ground Floor	A	-	5.54	A < 103.70 m ²	224.00 m ²
	B	Cafe	6.97	103.70 m ² ≤ A < 207.40 m ²	
	C	Cafe	7.55	207.40 m ² ≤ A	
	D	Cafe	7.94		
	E	reception	4.18		
	F	open plan	5.57		
	G	open plan	5.86		
	H	open plan	6.05		
	I	open plan	6.63		

Rooms

Room	Indoor units	Measures
-	Air Curtain	Minimum room area: 5.54 m ²
Cafe	WM1	Minimum room area: 6.97 m ²
Cafe	WM2	Minimum room area: 7.55 m ²
Cafe	WM3	Minimum room area: 7.94 m ²
open plan	FS1	Minimum room area: 5.57 m ²
open plan	FS2	Minimum room area: 5.86 m ²
open plan	FS3	Minimum room area: 6.05 m ²
open plan	FS4	Minimum room area: 6.63 m ²
reception	FCU1	Minimum room area: 4.18 m ²

Only units connected to outdoor unit Ground Floor. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

First Floor Tenancy D. - REYA16A

Capacity data at conditions and connection ratio (101) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU-01-06	FXSA50A	24.0/50%	3.5	4.7	3.2	6.0	3.5	0.096
FCU-01-07	FXSA25A	24.0/50%	1.9	2.4	1.5	6.0	1.7	0.046



Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU-01-08	FXSA32A	24.0/50%	2.2	3.0	1.8	6.0	2.2	0.049
FCU-01-09	FXSA20A	24.0/50%	1.5	1.8	1.1	6.0	1.4	0.046
FCU-01-10	FXSA32A	24.0/50%	2.2	3.0	1.8	6.0	2.2	0.049
FCU-01-11	FXSA15A	24.0/50%	1.2	1.4	0.9	6.0	1.1	0.046
FCU-01-12	FXSA32A	24.0/50%	2.2	3.0	1.9	6.0	2.2	0.049
FCU-01-13	FXSA20A	24.0/50%	1.6	1.8	1.3	6.0	1.4	0.046
FCU-01-14	FXSA32A	24.0/50%	2.4	3.0	2.0	6.0	2.2	0.049
FCU01-15	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU01-18	FXSA50A	24.0/50%	3.8	4.7	3.4	6.0	3.5	0.096
FCU01-17	FXSA50A	24.0/50%	4.0	4.7	3.5	6.0	3.5	0.096
FCU01-16	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
			29.9					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU-01-06	FXSA50A	21.0	3.8	6.0	0.096
FCU-01-07	FXSA25A	21.0	2.5	3.1	0.046
FCU-01-08	FXSA32A	21.0	2.6	3.8	0.049
FCU-01-09	FXSA20A	21.0	2.1	2.4	0.046
FCU-01-10	FXSA32A	21.0	2.7	3.8	0.049
FCU-01-11	FXSA15A	21.0	1.7	1.8	0.046
FCU-01-12	FXSA32A	21.0	2.8	3.8	0.049
FCU-01-13	FXSA20A	21.0	2.2	2.4	0.046
FCU-01-14	FXSA32A	21.0	2.9	3.8	0.049
FCU01-15	FXSA25A	21.0	2.0	3.1	0.046
FCU01-18	FXSA50A	21.0	3.4	6.0	0.096
FCU01-17	FXSA50A	21.0	4.9	6.0	0.096
FCU01-16	FXSA25A	21.0	2.0	3.1	0.046
			35.6		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU-01-06	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU-01-07	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU-01-08	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU-01-09	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU-01-10	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU-01-11	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU-01-12	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU-01-13	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU-01-14	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU01-15	FXSA25A	Unit C	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU01-18	FXSA50A	Unit C	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU01-17	FXSA50A	Unit C	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU01-16	FXSA25A	Unit C	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 32.4kW for cooling and 35.6kW for heating. However, the outdoor unit selection uses reduced load values for cooling of 29.1kW (=90%) and for heating of 17.8kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 39.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
First Floor	A	open plan	5.06	A < 93.86 m ²	Ventilation enclosure	234.00 m ²
	B	open plan	3.67	93.86 m ² ≤ A < 187.71 m ²	External alarm	
	C	open plan	4.96	187.71 m ² ≤ A	No measures	
	D	open plan	3.51			
	E	open plan	4.48			
	F	open plan	4.15			
	G	open plan	5.13			
	H	open plan	4.79			
	I	open plan	5.77			
BS 607	A	Unit C	2.95	A < 110.92 m ²	Ventilation enclosure	
	B	Unit C	4.68	110.92 m ² ≤ A < 221.84 m ²	External alarm	
	C	Unit C	4.87	221.84 m ² ≤ A	No measures	
	D	Unit C	3.75			

Rooms

Room	Indoor units	Measures
open plan	FCU-01-06	Minimum room area: 5.06 m ²
open plan	FCU-01-07	Minimum room area: 3.67 m ²
open plan	FCU-01-08	Minimum room area: 4.96 m ²
open plan	FCU-01-09	Minimum room area: 3.51 m ²
open plan	FCU-01-10	Minimum room area: 4.48 m ²
open plan	FCU-01-11	Minimum room area: 4.15 m ²

Room	Indoor units	Measures
open plan	FCU-01-12	Minimum room area: 5.13 m ²
open plan	FCU-01-13	Minimum room area: 4.79 m ²
open plan	FCU-01-14	Minimum room area: 5.77 m ²
Unit C	FCU01-15	Minimum room area: 2.95 m ²
Unit C	FCU01-18	Minimum room area: 4.68 m ²
Unit C	FCU01-17	Minimum room area: 4.87 m ²
Unit C	FCU01-16	Minimum room area: 3.75 m ²

Only units connected to outdoor unit First Floor Tenancy D. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

First Floor CU2/3. - REYA8A

Capacity data at conditions and connection ratio (108) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU01-22	FXAA20A	24.0/50%	1.3	1.8	1.1	6.0	1.3	0.019
FCU01-21	FXAA15A	24.0/50%	1.1	1.4	0.9	6.0	1.0	0.017
FCU01-20	FXAA20A	24.0/50%	1.6	1.8	1.2	6.0	1.3	0.019
FCU01-19	FXAA15A	24.0/50%	0.8	1.4	0.6	6.0	1.0	0.017
FCU01-01	FXSA32A	24.0/50%	2.5	3.0	2.0	6.0	2.2	0.049
FCU01-02	FXSA32A	24.0/50%	2.5	3.0	2.0	6.0	2.2	0.049
FCU01-03	FXSA32A	24.0/50%	2.5	3.0	2.0	6.0	2.2	0.049
FCU01-04	FXSA32A	24.0/50%	3.0	3.0	2.1	6.0	2.2	0.049
FCU01-05	FXSA20A	24.0/50%	0.4	1.8	0.4	6.0	1.4	0.046
			15.7					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU01-22	FXAA20A	21.0	1.6	2.4	0.029
FCU01-21	FXAA15A	21.0	1.3	1.8	0.025
FCU01-20	FXAA20A	21.0	1.8	2.4	0.029
FCU01-19	FXAA15A	21.0	0.9	1.8	0.025
FCU01-01	FXSA32A	21.0	2.0	3.8	0.049
FCU01-02	FXSA32A	21.0	2.0	3.8	0.049
FCU01-03	FXSA32A	21.0	2.0	3.8	0.049
FCU01-04	FXSA32A	21.0	3.2	3.8	0.049
FCU01-05	FXSA20A	21.0	2.0	2.4	0.046
			16.8		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	
FCU01-22	FXAA20A	open plan	29 - 33	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU01-21	FXAA15A	open plan	29 - 32	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU01-20	FXAA20A	open plan	29 - 33	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU01-19	FXAA15A	Meeting room	29 - 32	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU01-01	FXSA32A	Reception void	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0



Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU01-02	FXSA32A	Reception void	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU01-03	FXSA32A	Reception void	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU01-04	FXSA32A	Meeting room	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU01-05	FXSA20A	Tea Point	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 16.8kW for heating. However, the outdoor unit selection uses reduced load values for heating of 8.4kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 39.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed		
				Measure		Actual BS(SV) Box room area
First Floor	A	open plan	6.22	A < 68.55 m ²	Ventilation enclosure	144.00 m ²
	B	open plan	5.69	68.55 m ² ≤ A < 137.11 m ²	External alarm	
	C	open plan	5.05	137.11 m ² ≤ A	No measures	
	D	Meeting room	4.36			
First Floor	A	Reception void	3.84	A < 68.55 m ²	Ventilation enclosure	224.00 m ²
	B	Reception void	4.16	68.55 m ² ≤ A < 137.11 m ²	External alarm	
	C	Reception void	4.64	137.11 m ² ≤ A	No measures	
	D	Meeting room	4.00			
	E	Tea Point	3.75			

Rooms

Room	Indoor units	Measures
Meeting room	FCU01-19	Minimum room area: 4.36 m ²
Meeting room	FCU01-04	Minimum room area: 4.00 m ²
open plan	FCU01-22	Minimum room area: 6.22 m ²
open plan	FCU01-21	Minimum room area: 5.69 m ²
open plan	FCU01-20	Minimum room area: 5.05 m ²
Reception void	FCU01-01	Minimum room area: 3.84 m ²
Reception void	FCU01-02	Minimum room area: 4.16 m ²

Room	Indoor units	Measures
Reception void	FCU01-03	Minimum room area: 4.64 m ²
Tea Point	FCU01-05	Minimum room area: 3.75 m ²

Only units connected to outdoor unit First Floor CU2/3. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Second Floor CU1/2. - REYA14A

Capacity data at conditions and connection ratio (93) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU02-01	FXSA50A	24.0/50%	3.7	4.7	3.4	6.0	3.5	0.096
FCU02-09	FXSA25A	24.0/50%	1.9	2.4	1.5	6.0	1.7	0.046
FCU02-02	FXSA50A	24.0/50%	3.4	4.7	3.0	6.0	3.5	0.096
FCU02-08	FXSA20A	24.0/50%	1.6	1.8	1.3	6.0	1.4	0.046
FCU02-03	FXSA50A	24.0/50%	3.5	4.7	3.1	6.0	3.5	0.096
FCU02-07	FXSA15A	24.0/50%	1.3	1.4	1.0	6.0	1.1	0.046
FCU02-04	FXSA50A	24.0/50%	3.6	4.7	3.2	6.0	3.5	0.096
FCU02-06	FXSA25A	24.0/50%	1.8	2.4	1.5	6.0	1.7	0.046
FCU02-05	FXSA40A	24.0/50%	3.9	3.7	3.5	6.0	2.8	0.094
			24.7					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU02-01	FXSA50A	21.0	3.7	6.0	0.096
FCU02-09	FXSA25A	21.0	2.5	3.1	0.046
FCU02-02	FXSA50A	21.0	3.0	6.0	0.096
FCU02-08	FXSA20A	21.0	2.2	2.4	0.046
FCU02-03	FXSA50A	21.0	3.0	6.0	0.096
FCU02-07	FXSA15A	21.0	1.8	1.8	0.046
FCU02-04	FXSA50A	21.0	3.2	6.0	0.096
FCU02-06	FXSA25A	21.0	2.5	3.1	0.046
FCU02-05	FXSA40A	21.0	3.3	4.8	0.094
			25.2		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD	Weight
							mm	kg
FCU02-01	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU02-09	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-02	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU02-08	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-03	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU02-07	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-04	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU02-06	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-05	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 26.7kW for heating. However, the outdoor unit selection uses reduced load values for heating of 13.4kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 36.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Second Floor	A	open plan	4.96	$A < 70.28 \text{ m}^2$ Ventilation enclosure	312.00 m ²
	B	open plan	3.75	$70.28 \text{ m}^2 \leq A < 140.55 \text{ m}^2$ External alarm	
	C	open plan	5.52	$140.55 \text{ m}^2 \leq A$ No measures	
	D	open plan	4.23		
	E	open plan	6.09		
	F	open plan	4.71		
	G	open plan	6.65		
	H	open plan	5.03		
	I	open plan	6.11		

Rooms

Room	Indoor units	Measures
open plan	FCU02-01	Minimum room area: 4.96 m ²
open plan	FCU02-09	Minimum room area: 3.75 m ²
open plan	FCU02-02	Minimum room area: 5.52 m ²
open plan	FCU02-08	Minimum room area: 4.23 m ²
open plan	FCU02-03	Minimum room area: 6.09 m ²
open plan	FCU02-07	Minimum room area: 4.71 m ²
open plan	FCU02-04	Minimum room area: 6.65 m ²
open plan	FCU02-06	Minimum room area: 5.03 m ²
open plan	FCU02-05	Minimum room area: 6.11 m ²



Only units connected to outdoor unit Second Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Second Floor CU3/4. - REYA20A

Capacity data at conditions and connection ratio (106) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU02-22	FXSA25A	24.0/50%	1.8	2.4	1.5	6.0	1.7	0.046
FCU02-21	FXSA15A	24.0/50%	1.1	1.4	0.9	6.0	1.1	0.046
FCU02-20	FXSA32A	24.0/50%	2.2	3.0	1.9	6.0	2.2	0.049
FCU02-19	FXSA63A	24.0/50%	4.1	5.8	3.8	6.0	4.4	0.106
FCU02-18	FXSA63A	24.0/50%	4.3	5.8	3.9	6.0	4.4	0.106
FCU02-17	FXSA15A	24.0/50%	0.9	1.4	0.8	6.0	1.1	0.046
FCU02-16	FXSA40A	24.0/50%	3.0	3.7	2.7	6.0	2.8	0.094
FCU02-15	FXSA15A	24.0/50%	1.2	1.4	0.9	6.0	1.1	0.046
FCU02-14	FXSA50A	24.0/50%	3.2	4.7	2.9	6.0	3.5	0.096
FCU02-13	FXSA50A	24.0/50%	3.8	4.7	3.5	6.0	3.5	0.096
FCU02-12	FXSA80A	24.0/50%	5.0	7.5	4.5	6.0	5.5	0.143
FCU02-11	FXSA32A	24.0/50%	2.3	3.0	2.1	6.0	2.2	0.049
FCU02-10	FXSA50A	24.0/50%	3.5	4.7	3.2	6.0	3.5	0.096
			36.4					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU02-22	FXSA25A	21.0	2.6	3.1	0.046
FCU02-21	FXSA15A	21.0	1.7	1.8	0.046
FCU02-20	FXSA32A	21.0	2.7	3.8	0.049
FCU02-19	FXSA63A	21.0	3.3	7.7	0.106
FCU02-18	FXSA63A	21.0	3.4	7.7	0.106
FCU02-17	FXSA15A	21.0	1.0	1.8	0.046
FCU02-16	FXSA40A	21.0	2.5	4.8	0.094
FCU02-15	FXSA15A	21.0	1.4	1.8	0.046
FCU02-14	FXSA50A	21.0	2.4	6.0	0.096
FCU02-13	FXSA50A	21.0	3.0	6.0	0.096
FCU02-12	FXSA80A	21.0	4.5	9.6	0.143
FCU02-11	FXSA32A	21.0	1.8	3.8	0.049
FCU02-10	FXSA50A	21.0	2.3	6.0	0.096
			32.6		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU02-22	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-21	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-20	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU02-19	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU02-18	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU02-17	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-16	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU02-15	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU02-14	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU02-13	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU02-12	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU02-11	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU02-10	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 32.6kW for heating. However, the outdoor unit selection uses reduced load values for heating of 16.3kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 36.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed	
				Measure	Actual BS(SV) Box room area
BS 12	A	open plan	3.83	A < 106.91 m ² Ventilation enclosure	320.00 m ²
				106.91 m ² ≤ A < 213.83 m ² External alarm	
	B	open plan	3.67	213.83 m ² ≤ A No measures	
	C	open plan	4.00		
	D	open plan	4.50		
	E	open plan	4.50		
Second Floor	F	open plan	3.35		320.00 m ²
	A	open plan	3.59	A < 106.91 m ² Ventilation enclosure	
				106.91 m ² ≤ A < 213.83 m ² External alarm	
	B	open plan	2.87	213.83 m ² ≤ A No measures	
	C	open plan	4.31		
	D	open plan	5.06		
	E	open plan	7.43		
	F	open plan	5.21		
	G	open plan	6.83		

Room	Indoor units	Measures
open plan	FCU02-22	Minimum room area: 3.83 m ²
open plan	FCU02-21	Minimum room area: 3.67 m ²
open plan	FCU02-20	Minimum room area: 4.00 m ²
open plan	FCU02-19	Minimum room area: 4.50 m ²
open plan	FCU02-18	Minimum room area: 4.50 m ²
open plan	FCU02-17	Minimum room area: 3.35 m ²
open plan	FCU02-16	Minimum room area: 3.59 m ²
open plan	FCU02-15	Minimum room area: 2.87 m ²
open plan	FCU02-14	Minimum room area: 4.31 m ²
open plan	FCU02-13	Minimum room area: 5.06 m ²
open plan	FCU02-12	Minimum room area: 7.43 m ²
open plan	FCU02-11	Minimum room area: 5.21 m ²
open plan	FCU02-10	Minimum room area: 6.83 m ²

Only units connected to outdoor unit Second Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Second Floor CU5/6. - REYA14A

Capacity data at conditions and connection ratio (74) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU02-30	FXSA20A	24.0/50%	1.4	1.8	1.1	6.0	1.4	0.046
FCU02-29	FXSA32A	24.0/50%	2.3	3.0	2.0	6.0	2.2	0.049
FCU02-28	FXSA15A	24.0/50%	1.0	1.4	0.8	6.0	1.1	0.046
FCU02-27	FXSA63A	24.0/50%	3.7	5.8	3.1	6.0	4.4	0.106
FCU02-25	FXSA25A	24.0/50%	1.7	2.4	1.3	6.0	1.7	0.046
FCU02-26	FXSA25A	24.0/50%	1.8	2.4	1.5	6.0	1.7	0.046
FCU02-24	FXSA50A	24.0/50%	3.5	4.7	2.9	6.0	3.5	0.096
FCU02-23	FXSA32A	24.0/50%	2.4	3.0	1.9	6.0	2.2	0.049
			17.8					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU02-30	FXSA20A	21.0	2.3	2.4	0.046
FCU02-29	FXSA32A	21.0	2.9	3.8	0.049
FCU02-28	FXSA15A	21.0	1.4	1.8	0.046
FCU02-27	FXSA63A	21.0	6.1	7.7	0.106
FCU02-25	FXSA25A	21.0	2.6	3.1	0.046
FCU02-26	FXSA25A	21.0	3.0	3.1	0.046
FCU02-24	FXSA50A	21.0	5.9	6.0	0.096
FCU02-23	FXSA32A	21.0	3.5	3.8	0.049
			27.7		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU02-30	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-29	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU02-28	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-27	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU02-25	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-26	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU02-24	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU02-23	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 27.7kW for heating. However, the outdoor unit selection uses reduced load values for heating of 24.9kW (=90%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 36.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed		Actual BS(SV) Box room area
				Measure		
Second Floor	A	open plan	2.95	$A < 82.44 \text{ m}^2$	Ventilation enclosure	325.00 m ²
	B	open plan	4.00	$82.44 \text{ m}^2 \leq A < 164.88 \text{ m}^2$	External alarm	
	C	open plan	3.51	$164.88 \text{ m}^2 \leq A$	No measures	
	D	open plan	5.53			
	E	open plan	4.23			
	F	open plan	4.47			
	G	open plan	6.46			
	H	open plan	5.77			

Rooms

Room	Indoor units	Measures
open plan	FCU02-30	Minimum room area: 2.95 m ²
open plan	FCU02-29	Minimum room area: 4.00 m ²

Room	Indoor units	Measures
open plan	FCU02-28	Minimum room area: 3.51 m ²
open plan	FCU02-27	Minimum room area: 5.53 m ²
open plan	FCU02-25	Minimum room area: 4.23 m ²
open plan	FCU02-26	Minimum room area: 4.47 m ²
open plan	FCU02-24	Minimum room area: 6.46 m ²
open plan	FCU02-23	Minimum room area: 5.77 m ²

Only units connected to outdoor unit Second Floor CU5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Third Floor CU1/2. - REYA20A

Capacity data at conditions and connection ratio (107) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU03-06	FXSA32A	24.0/50%	2.4	3.0	2.1	6.0	2.2	0.049
FCU03-08	FXSA40A	24.0/50%	2.4	3.7	1.9	6.0	2.8	0.094
FCU03-07	FXSA80A	24.0/50%	5.6	7.5	4.7	6.0	5.5	0.143
FCU3.17 - ?	FXAA15A	24.0/50%	0.9	1.4	0.7	6.0	1.0	0.017
FCU03-04	FXSA40A	24.0/50%	2.6	3.7	2.4	6.0	2.8	0.094
FCU03-10	FXSA25A	24.0/50%	1.5	2.4	1.2	6.0	1.7	0.046
FCU03-05	FXSA50A	24.0/50%	3.4	4.7	3.0	6.0	3.5	0.096
FCU03-09	FXSA25A	24.0/50%	1.4	2.4	1.2	6.0	1.7	0.046
FCU03-12	FXAA15A	24.0/50%	1.0	1.4	0.7	6.0	1.0	0.017
FCU03-03	FXSA20A	24.0/50%	1.5	1.8	1.3	6.0	1.4	0.046
FCU03-01	FXSA80A	24.0/50%	5.4	7.5	4.4	6.0	5.5	0.143
FCU03-02	FXSA80A	24.0/50%	5.6	7.5	4.7	6.0	5.5	0.143
FCU03-11	FXSA32A	24.0/50%	2.1	3.0	1.7	6.0	2.2	0.049
			35.8					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU03-06	FXSA32A	21.0	2.4	3.8	0.049
FCU03-08	FXSA40A	21.0	3.9	4.8	0.094
FCU03-07	FXSA80A	21.0	5.7	9.6	0.143
FCU3.17 - ?	FXAA15A	21.0	1.6	1.8	0.025
FCU03-04	FXSA40A	21.0	2.4	4.8	0.094
FCU03-10	FXSA25A	21.0	2.6	3.1	0.046
FCU03-05	FXSA50A	21.0	3.4	6.0	0.096
FCU03-09	FXSA25A	21.0	2.5	3.1	0.046
FCU03-12	FXAA15A	21.0	1.6	1.8	0.025
FCU03-03	FXSA20A	21.0	1.9	2.4	0.046
FCU03-01	FXSA80A	21.0	6.6	9.6	0.143
FCU03-02	FXSA80A	21.0	5.7	9.6	0.143
FCU03-11	FXSA32A	21.0	3.2	3.8	0.049
			43.5		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU03-06	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU03-08	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU03-07	FXSA80A	meeting room	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU3.17 - ?	FXAA15A	meeting room	29 - 32	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU03-04	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU03-10	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU03-05	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-09	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU03-12	FXAA15A	Client room	29 - 32	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU03-03	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU03-01	FXSA80A	Meeting room	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU03-02	FXSA80A	meeting room	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU03-11	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0

Remarks

Under capacity

The sum of the required indoor unit capacities is 39.2kW for heating. However, the selected outdoor unit has a heating capacity of 38.0kW (= -3.0%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Reduced operational load

The sum of the required indoor unit capacities is 43.5kW for heating. However, the outdoor unit selection uses reduced load values for heating of 39.2kW (=90%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 33.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed		
				Measure		Actual BS(SV) Box room area
Third Floor	A	open plan	5.04	A < 80.30 m ²	Ventilation enclosure	216.00 m ²
	B	open plan	5.46	80.30 m ² ≤ A < 160.60 m ²	External alarm	
	C	meeting room	8.64	160.60 m ² ≤ A	No measures	
	D	meeting room	6.19			
	E	open plan	4.15			
	F	open plan	3.83			
	G	open plan	5.62			
	H	open plan	4.23			
	A	Client room	4.61			216.00 m ²

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure	Actual BS(SV) Box room area	
Third Floor	B	open plan	3.03	A < 94.90 m ²	Ventilation enclosure	
	C	Meeting room	6.59	94.90 m ² ≤ A < 189.81 m ²	External alarm	
	D	meeting room	6.96	189.81 m ² ≤ A	No measures	
	E	open plan	4.16			

Rooms

Room	Indoor units	Measures
Client room	FCU03-12	Minimum room area: 4.61 m ²
Meeting room	FCU03-01	Minimum room area: 6.59 m ²
meeting room	FCU03-07	Minimum room area: 8.64 m ²
meeting room	FCU3.17 - ?	Minimum room area: 6.19 m ²
meeting room	FCU03-02	Minimum room area: 6.96 m ²
open plan	FCU03-06	Minimum room area: 5.04 m ²
open plan	FCU03-08	Minimum room area: 5.46 m ²
open plan	FCU03-04	Minimum room area: 4.15 m ²
open plan	FCU03-10	Minimum room area: 3.83 m ²
open plan	FCU03-05	Minimum room area: 5.62 m ²
open plan	FCU03-09	Minimum room area: 4.23 m ²
open plan	FCU03-03	Minimum room area: 3.03 m ²
open plan	FCU03-11	Minimum room area: 4.16 m ²

Only units connected to outdoor unit Third Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Third Floor CU3/4. - REYA24A = REYA16A + REYA8A

Capacity data at conditions and connection ratio (123) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU03-25	FXSA50A	24.0/50%	3.3	4.7	2.4	6.0	3.5	0.096
FCU03-24	FXSA40A	24.0/50%	2.4	3.7	1.7	6.0	2.8	0.094
FCU03-23	FXSA50A	24.0/50%	3.9	4.7	3.3	6.0	3.5	0.096
FCU03-22	FXSA80A	24.0/50%	5.2	7.5	4.8	6.0	5.5	0.143
FCU03-21	FXSA50A	24.0/50%	3.2	4.7	3.0	6.0	3.5	0.096
FCU03-20	FXSA40A	24.0/50%	2.5	3.7	1.8	6.0	2.8	0.094
FCU03-19	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU03-18	FXSA50A	24.0/50%	3.4	4.7	2.4	6.0	3.5	0.096
FCU03-17	FXSA50A	24.0/50%	3.4	4.7	3.2	6.0	3.5	0.096
FCU03-16	FXSA50A	24.0/50%	3.8	4.7	3.5	6.0	3.5	0.096
FCU03-15	FXSA100A	24.0/50%	6.8	9.3	6.2	6.0	7.0	0.176
FCU03-14	FXSA50A	24.0/50%	4.0	4.7	3.3	6.0	3.5	0.096
FCU03-13	FXSA80A	24.0/50%	5.5	7.5	4.6	6.0	5.5	0.143
			51.0					



Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU03-25	FXSA50A	21.0	5.7	6.0	0.096
FCU03-24	FXSA40A	21.0	4.0	4.8	0.094
FCU03-23	FXSA50A	21.0	5.6	6.0	0.096
FCU03-22	FXSA80A	21.0	5.0	9.6	0.143
FCU03-21	FXSA50A	21.0	3.0	6.0	0.096
FCU03-20	FXSA40A	21.0	4.0	4.8	0.094
FCU03-19	FXSA50A	21.0	3.2	6.0	0.096
FCU03-18	FXSA50A	21.0	5.4	6.0	0.096
FCU03-17	FXSA50A	21.0	3.0	6.0	0.096
FCU03-16	FXSA50A	21.0	3.9	6.0	0.096
FCU03-15	FXSA100A	21.0	7.3	12.0	0.176
FCU03-14	FXSA50A	21.0	4.1	6.0	0.096
FCU03-13	FXSA80A	21.0	5.4	9.6	0.143
			59.6		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU03-25	FXSA50A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-24	FXSA40A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU03-23	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-22	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU03-21	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-20	FXSA40A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU03-19	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-18	FXSA50A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-17	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-16	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-15	FXSA100A	open plan	31 - 36	220V 1ph	2.4	Factory Std	1,400 x 245 x 800	46.0
FCU03-14	FXSA50A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-13	FXSA80A	Meeting room	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 55.1kW for cooling and 59.6kW for heating. However, the outdoor unit selection uses reduced load values for cooling of 41.3kW (=75%) and for heating of 29.8kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 33.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Third Floor	A	Meeting room	5.43	A < 141.25 m ²	Ventilation enclosure	168.00 m ² External alarm required (*)
	B	Meeting room	4.25	141.25 m ² ≤ A < 250.00 m ²	External alarm	
	C	open plan	4.96	250.00 m ² ≤ A	No measures	
	D	open plan	5.84			
	E	open plan	4.40			
	F	Meeting room	3.78			
	G	open plan	4.96			
	H	Meeting room	5.15			
Third Floor	A	open plan	4.31	A < 119.52 m ²	Ventilation enclosure	140.00 m ² External alarm required (*)
	B	open plan	5.24	119.52 m ² ≤ A < 239.05 m ²	External alarm	
	C	open plan	9.61	239.05 m ² ≤ A	No measures	
	D	Meeting room	6.09			
	E	Meeting room	8.08			

(*) When the BS(SV) Box is installed in a room where people are restricted in their movement, an external alarm is not enough as safety measure. In this case a ventilation enclosure is required.

Rooms

Room	Indoor units	Measures
Meeting room	FCU03-25	Minimum room area: 5.43 m ²
Meeting room	FCU03-24	Minimum room area: 4.25 m ²
Meeting room	FCU03-20	Minimum room area: 3.78 m ²
Meeting room	FCU03-18	Minimum room area: 5.15 m ²
Meeting room	FCU03-14	Minimum room area: 6.09 m ²
Meeting room	FCU03-13	Minimum room area: 8.08 m ²
open plan	FCU03-23	Minimum room area: 4.96 m ²
open plan	FCU03-22	Minimum room area: 5.84 m ²
open plan	FCU03-21	Minimum room area: 4.40 m ²
open plan	FCU03-19	Minimum room area: 4.96 m ²
open plan	FCU03-17	Minimum room area: 4.31 m ²
open plan	FCU03-16	Minimum room area: 5.24 m ²
open plan	FCU03-15	Minimum room area: 9.61 m ²

Only units connected to outdoor unit Third Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Third Floor CU5/6. - REYA20A

Capacity data at conditions and connection ratio (85) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU03-38	FXAA15A	24.0/50%	0.9	1.4	0.6	6.0	1.0	0.017



Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU03-27	FXSA20A	24.0/50%	1.2	1.8	0.9	6.0	1.4	0.046
FCU03-36	FXSA20A	24.0/50%	1.2	1.8	1.1	6.0	1.4	0.046
FCU03-35	FXSA32A	24.0/50%	2.1	3.0	1.8	6.0	2.2	0.049
FCU03-34	FXSA25A	24.0/50%	1.6	2.4	1.3	6.0	1.7	0.046
FCU03-33	FXSA40A	24.0/50%	2.9	3.7	2.2	6.0	2.8	0.094
FCU03-32	FXSA32A	24.0/50%	2.0	3.0	1.7	6.0	2.2	0.049
FCU03-30	FXSA20A	24.0/50%	1.3	1.8	1.0	6.0	1.4	0.046
FCU03-31	FXSA32A	24.0/50%	1.8	3.0	1.5	6.0	2.2	0.049
FCU03-29	FXSA50A	24.0/50%	3.5	4.7	2.4	6.0	3.5	0.096
FCU03-27	FXSA40A	24.0/50%	2.9	3.7	2.4	6.0	2.8	0.094
FCU03-28	FXSA50A	24.0/50%	3.6	4.7	2.5	6.0	3.5	0.096
FCU03-40	FXSA50A	24.0/50%	3.3	4.7	2.4	6.0	3.5	0.096
			28.3					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU03-38	FXAA15A	21.0	1.4	1.8	0.025
FCU03-27	FXSA20A	21.0	2.3	2.4	0.046
FCU03-36	FXSA20A	21.0	1.6	2.4	0.046
FCU03-35	FXSA32A	21.0	2.7	3.8	0.049
FCU03-34	FXSA25A	21.0	2.6	3.1	0.046
FCU03-33	FXSA40A	21.0	4.8	4.8	0.094
FCU03-32	FXSA32A	21.0	3.6	3.8	0.049
FCU03-30	FXSA20A	21.0	2.3	2.4	0.046
FCU03-31	FXSA32A	21.0	3.3	3.8	0.049
FCU03-29	FXSA50A	21.0	5.6	6.0	0.096
FCU03-27	FXSA40A	21.0	4.8	4.8	0.094
FCU03-28	FXSA50A	21.0	5.6	6.0	0.096
FCU03-40	FXSA50A	21.0	5.7	6.0	0.096
			46.3		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU03-38	FXAA15A	Zoom room	29 - 32	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU03-27	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU03-36	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU03-35	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU03-34	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU03-33	FXSA40A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU03-32	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU03-30	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU03-31	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU03-29	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-27	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU03-28	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU03-40	FXSA50A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 46.3kW for heating. However, the outdoor unit selection uses reduced load values for heating of 37.0kW (=80%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 33.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Third Floor	A	Zoom room	3.94	$A < 78.91 \text{ m}^2$ Ventilation enclosure	260.00 m ²
	B	open plan	2.95	$78.91 \text{ m}^2 \leq A < 157.83 \text{ m}^2$ External alarm	
	C	open plan	3.03	$157.83 \text{ m}^2 \leq A$ No measures	
	D	open plan	4.00		
	E	open plan	3.51		
	F	Meeting room	4.71		
Third Floor	B	open plan	3.84	$A < 78.91 \text{ m}^2$ Ventilation enclosure	260.00 m ²
	C	open plan	3.43	$78.91 \text{ m}^2 \leq A < 157.83 \text{ m}^2$ External alarm	
	D	open plan	4.32	$157.83 \text{ m}^2 \leq A$ No measures	
	E	open plan	5.43		
	F	open plan	4.81		
	G	open plan	5.99		
	H	Meeting room	6.18		

Rooms

Room	Indoor units	Measures
Meeting room	FCU03-33	Minimum room area: 4.71 m ²
Meeting room	FCU03-40	Minimum room area: 6.18 m ²
open plan	FCU03-27	Minimum room area: 2.95 m ²
open plan	FCU03-36	Minimum room area: 3.03 m ²
open plan	FCU03-35	Minimum room area: 4.00 m ²
open plan	FCU03-34	Minimum room area: 3.51 m ²
open plan	FCU03-32	Minimum room area: 3.84 m ²
open plan	FCU03-30	Minimum room area: 3.43 m ²
open plan	FCU03-31	Minimum room area: 4.32 m ²
open plan	FCU03-29	Minimum room area: 5.43 m ²
open plan	FCU03-27	Minimum room area: 4.81 m ²
open plan	FCU03-28	Minimum room area: 5.99 m ²

Room	Indoor units	Measures
Zoom room	FCU03-38	Minimum room area: 3.94 m ²

Only units connected to outdoor unit Third Floor CU5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Sixth floor CU2/3. - REYA16A

Capacity data at conditions and connection ratio (104) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU06-30	FXSA40A	24.0/50%	2.5	3.7	2.2	6.0	2.8	0.094
FCU06-29	FXSA50A	24.0/50%	3.0	4.7	2.8	6.0	3.5	0.096
FCU06-28	FXSA15A	24.0/50%	1.2	1.4	0.9	6.0	1.1	0.046
FCU06-27	FXSA80A	24.0/50%	5.0	7.5	4.4	6.0	5.5	0.143
FCU06-25	FXSA63A	24.0/50%	4.0	5.8	3.6	6.0	4.4	0.106
FCU06-26	FXSA25A	24.0/50%	1.9	2.4	1.6	6.0	1.7	0.046
FCU06-23	FXSA80A	24.0/50%	5.6	7.5	5.0	6.0	5.5	0.143
FCU06-24	FXSA63A	24.0/50%	3.9	5.8	3.3	6.0	4.4	0.106
			27.1					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU06-30	FXSA40A	21.0	4.6	4.8	0.094
FCU06-29	FXSA50A	21.0	3.2	6.0	0.096
FCU06-28	FXSA15A	21.0	1.4	1.8	0.046
FCU06-27	FXSA80A	21.0	6.5	9.6	0.143
FCU06-25	FXSA63A	21.0	4.4	7.7	0.106
FCU06-26	FXSA25A	21.0	3.0	3.1	0.046
FCU06-23	FXSA80A	21.0	5.6	9.6	0.143
FCU06-24	FXSA63A	21.0	6.3	7.7	0.106
			35.0		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	
FCU06-30	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU06-29	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-28	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU06-27	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU06-25	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU06-26	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU06-23	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU06-24	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 28.2kW for cooling and 35.0kW for heating. However, the outdoor unit selection uses reduced load values for cooling of 25.3kW (=90%) and for heating of 28.0kW (=80%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 24.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Sixth Floor	A	open plan	3.50	A < 54.66 m ²	338.00 m ²
	B	open plan	4.87	54.66 m ² ≤ A < 109.33 m ²	
	C	open plan	3.51	109.33 m ² ≤ A	
	D	open plan	6.77		
	G	open plan	6.00		
	H	open plan	4.47		
	I	open plan	7.99		
	J	open plan	6.74		
				Ventilation enclosure	
				External alarm	
				No measures	

Rooms

Room	Indoor units	Measures
open plan	FCU06-30	Minimum room area: 3.50 m ²
open plan	FCU06-29	Minimum room area: 4.87 m ²
open plan	FCU06-28	Minimum room area: 3.51 m ²
open plan	FCU06-27	Minimum room area: 6.77 m ²
open plan	FCU06-25	Minimum room area: 6.00 m ²
open plan	FCU06-26	Minimum room area: 4.47 m ²
open plan	FCU06-23	Minimum room area: 7.99 m ²
open plan	FCU06-24	Minimum room area: 6.74 m ²

Only units connected to outdoor unit Sixth floor CU2/3. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Capacity data at conditions and connection ratio (110) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU06-22	FXSA25A	24.0/50%	1.7	2.4	1.4	6.0	1.7	0.046
FCU06-21	FXSA15A	24.0/50%	1.1	1.4	0.9	6.0	1.1	0.046
FCU06-20	FXSA32A	24.0/50%	2.4	3.0	2.1	6.0	2.2	0.049
FCU06-19	FXSA63A	24.0/50%	4.3	5.8	3.9	6.0	4.4	0.106
FCU06-18	FXSA63A	24.0/50%	4.4	5.8	4.0	6.0	4.4	0.106
FCU06-17	FXSA15A	24.0/50%	1.2	1.4	1.0	6.0	1.1	0.046
FCU06-16	FXSA50A	24.0/50%	3.2	4.7	2.9	6.0	3.5	0.096
FCU06-15	FXSA25A	24.0/50%	1.6	2.4	1.4	6.0	1.7	0.046
FCU06-14	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU06-13	FXSA50A	24.0/50%	3.9	4.7	3.5	6.0	3.5	0.096
FCU06-12	FXSA80A	24.0/50%	5.3	7.5	4.9	6.0	5.5	0.143
FCU06-11	FXSA32A	24.0/50%	2.4	3.0	2.2	6.0	2.2	0.049
FCU06-10	FXSA50A	24.0/50%	3.5	4.7	3.3	6.0	3.5	0.096
			38.3					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU06-22	FXSA25A	21.0	2.4	3.1	0.046
FCU06-21	FXSA15A	21.0	1.6	1.8	0.046
FCU06-20	FXSA32A	21.0	3.1	3.8	0.049
FCU06-19	FXSA63A	21.0	3.3	7.7	0.106
FCU06-18	FXSA63A	21.0	3.3	7.7	0.106
FCU06-17	FXSA15A	21.0	1.8	1.8	0.046
FCU06-16	FXSA50A	21.0	2.5	6.0	0.096
FCU06-15	FXSA25A	21.0	2.3	3.1	0.046
FCU06-14	FXSA50A	21.0	2.4	6.0	0.096
FCU06-13	FXSA50A	21.0	3.0	6.0	0.096
FCU06-12	FXSA80A	21.0	4.5	9.6	0.143
FCU06-11	FXSA32A	21.0	1.8	3.8	0.049
FCU06-10	FXSA50A	21.0	2.8	6.0	0.096
			34.8		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD	Weight
							mm	kg
FCU06-22	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU06-21	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU06-20	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU06-19	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU06-18	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU06-17	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU06-16	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-15	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU06-14	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-13	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-12	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU06-11	FXSA32A		26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU06-10	FXSA50A		29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 42.7kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 38.5kW (=90%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 24.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Sixth Floor	A	open plan	3.83	A < 92.20 m ²	Ventilation	192.00 m ²
	B	open plan	3.67	92.20 m ² ≤ A < 184.39 m ²	enclosure	
	C	open plan	4.08	184.39 m ² ≤ A	External alarm	
	D	open plan	4.50		No measures	
	E	open plan	4.41			
	F	open plan	3.19			
	G	open plan	4.96			
	H	open plan	3.59			
Sixth Floor *tenancy 602*	A	open plan	4.50	A < 92.20 m ²	Ventilation	98.00 m ² External alarm required (*)
	B	open plan	5.06	92.20 m ² ≤ A < 184.39 m ²	enclosure	
	C	open plan	6.96	184.39 m ² ≤ A	External alarm	
	D	-	4.48		No measures	
	E	-	5.43			

(*) When the BS(SV) Box is installed in a room where people are restricted in their movement, an external alarm is not enough as safety measure. In this case a ventilation enclosure is required.

Room	Indoor units	Measures
-	FCU06-11	Minimum room area: 4.48 m ²
-	FCU06-10	Minimum room area: 5.43 m ²
open plan	FCU06-22	Minimum room area: 3.83 m ²
open plan	FCU06-21	Minimum room area: 3.67 m ²
open plan	FCU06-20	Minimum room area: 4.08 m ²
open plan	FCU06-19	Minimum room area: 4.50 m ²
open plan	FCU06-18	Minimum room area: 4.41 m ²
open plan	FCU06-17	Minimum room area: 3.19 m ²
open plan	FCU06-16	Minimum room area: 4.96 m ²
open plan	FCU06-15	Minimum room area: 3.59 m ²
open plan	FCU06-14	Minimum room area: 4.50 m ²
open plan	FCU06-13	Minimum room area: 5.06 m ²
open plan	FCU06-12	Minimum room area: 6.96 m ²

Only units connected to outdoor unit Sixth floor CU1/1B *tenancy 602 incl budget*. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Sixth floor CU4/5. - REYA14A

Capacity data at conditions and connection ratio (108) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU06-01	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU06-02	FXSA50A	24.0/50%	3.4	4.7	3.1	6.0	3.5	0.096
FCU06-03	FXSA50A	24.0/50%	3.6	4.7	3.2	6.0	3.5	0.096
FCU06-04	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU06-05	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU06-06	FXSA40A	24.0/50%	2.5	3.7	2.2	6.0	2.8	0.094
FCU06-07	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU06-08	FXSA32A	24.0/50%	2.2	3.0	1.8	6.0	2.2	0.049
FCU06-09	FXSA32A	24.0/50%	2.3	3.0	1.9	6.0	2.2	0.049
			26.5					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU06-01	FXSA50A	21.0	3.6	6.0	0.096
FCU06-02	FXSA50A	21.0	3.0	6.0	0.096
FCU06-03	FXSA50A	21.0	3.1	6.0	0.096
FCU06-04	FXSA50A	21.0	3.1	6.0	0.096
FCU06-05	FXSA50A	21.0	3.1	6.0	0.096
FCU06-06	FXSA40A	21.0	3.9	4.8	0.094
FCU06-07	FXSA25A	21.0	2.9	3.1	0.046
FCU06-08	FXSA32A	21.0	3.7	3.8	0.049
FCU06-09	FXSA32A	21.0	3.2	3.8	0.049



Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
			29.6		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU06-01	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-02	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-03	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-04	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-05	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU06-06	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU06-07	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU06-08	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU06-09	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 29.1kW for cooling and 29.6kW for heating. However, the outdoor unit selection uses reduced load values for cooling of 26.2kW (=90%) and for heating of 25.2kW (=85%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 24.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m²	Measure	Actual BS(SV) Box room area	
Sixth Floor	A	open plan	5.24	A < 66.89 m² 66.89 m² ≤ A < 133.78 m²	Ventilation enclosure External alarm	312.00 m²
	B	open plan	5.62	133.78 m² ≤ A	No measures	
	C	open plan	5.99			
	D	open plan	6.18			
	E	open plan	6.55			
	F	open plan	5.83			
	G	open plan	5.28			

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
	H	open plan	6.09		
	I	open plan	6.41		

Rooms

Room	Indoor units	Measures
open plan	FCU06-01	Minimum room area: 5.24 m ²
open plan	FCU06-02	Minimum room area: 5.62 m ²
open plan	FCU06-03	Minimum room area: 5.99 m ²
open plan	FCU06-04	Minimum room area: 6.18 m ²
open plan	FCU06-05	Minimum room area: 6.55 m ²
open plan	FCU06-06	Minimum room area: 5.83 m ²
open plan	FCU06-07	Minimum room area: 5.28 m ²
open plan	FCU06-08	Minimum room area: 6.09 m ²
open plan	FCU06-09	Minimum room area: 6.41 m ²

Only units connected to outdoor unit Sixth floor CU4/5. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Seventh Floor CU1/2. - REYA14A

Capacity data at conditions and connection ratio (108) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU07-01	FXSA50A	24.0/50%	3.8	4.7	3.5	6.0	3.5	0.096
FCU07-09	FXSA40A	24.0/50%	2.7	3.7	2.4	6.0	2.8	0.094
FCU07-02	FXSA50A	24.0/50%	3.4	4.7	3.1	6.0	3.5	0.096
FCU07-08	FXSA32A	24.0/50%	2.2	3.0	1.8	6.0	2.2	0.049
FCU07-03	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU07-07	FXSA25A	24.0/50%	1.7	2.4	1.4	6.0	1.7	0.046
FCU07-04	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU07-06	FXSA32A	24.0/50%	2.4	3.0	2.1	6.0	2.2	0.049
FCU07-05	FXSA50A	24.0/50%	3.7	4.7	3.3	6.0	3.5	0.096
			27.1					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU07-01	FXSA50A	21.0	3.8	6.0	0.096
FCU07-09	FXSA40A	21.0	3.2	4.8	0.094
FCU07-02	FXSA50A	21.0	3.0	6.0	0.096
FCU07-08	FXSA32A	21.0	3.7	3.8	0.049
FCU07-03	FXSA50A	21.0	3.1	6.0	0.096
FCU07-07	FXSA25A	21.0	2.9	3.1	0.046
FCU07-04	FXSA50A	21.0	3.1	6.0	0.096

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU07-06	FXSA32A	21.0	3.7	3.8	0.049
FCU07-05	FXSA50A	21.0	3.1	6.0	0.096
			29.6		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU07-01	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU07-09	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU07-02	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU07-08	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU07-03	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU07-07	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU07-04	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU07-06	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU07-05	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Under capacity

The sum of the required indoor unit capacities is 29.6kW for heating. However, the selected outdoor unit has a heating capacity of 27.3kW (= -7.7%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 21.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Seventh Floor	A	open plan	4.40	A < 53.08 m ²	Ventilation enclosure	286.00 m ²
				53.08 m ² ≤ A < 106.16 m ²	External alarm	
	B	open plan	3.87	106.16 m ² ≤ A	No measures	
	C	open plan	4.96			
	D	open plan	4.32			
	E	open plan	5.43			
	F	open plan	4.07			

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
	G	open plan	5.90		
	H	open plan	5.04		
	I	open plan	6.27		

Rooms

Room	Indoor units	Measures
open plan	FCU07-01	Minimum room area: 4.40 m ²
open plan	FCU07-09	Minimum room area: 3.87 m ²
open plan	FCU07-02	Minimum room area: 4.96 m ²
open plan	FCU07-08	Minimum room area: 4.32 m ²
open plan	FCU07-03	Minimum room area: 5.43 m ²
open plan	FCU07-07	Minimum room area: 4.07 m ²
open plan	FCU07-04	Minimum room area: 5.90 m ²
open plan	FCU07-06	Minimum room area: 5.04 m ²
open plan	FCU07-05	Minimum room area: 6.27 m ²

Only units connected to outdoor unit Seventh Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Seventh Floor CU3/4. - REYA20A

Capacity data at conditions and connection ratio (113) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU07-22	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU07-21	FXSA15A	24.0/50%	1.1	1.4	0.9	6.0	1.1	0.046
FCU07-20	FXSA32A	24.0/50%	2.4	3.0	2.1	6.0	2.2	0.049
FCU07-19	FXSA63A	24.0/50%	4.4	5.8	4.0	6.0	4.4	0.106
FCU07-18	FXSA63A	24.0/50%	4.4	5.8	4.0	6.0	4.4	0.106
FCU07-17	FXSA20A	24.0/50%	1.3	1.8	1.2	6.0	1.4	0.046
FCU07-16	FXSA50A	24.0/50%	3.1	4.7	2.8	6.0	3.5	0.096
FCU07-15	FXSA25A	24.0/50%	1.7	2.4	1.4	6.0	1.7	0.046
FCU07-14	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU07-13	FXSA63A	24.0/50%	4.1	5.8	3.7	6.0	4.4	0.106
FCU07-12	FXSA80A	24.0/50%	4.9	7.5	4.5	6.0	5.5	0.143
FCU07-11	FXSA32A	24.0/50%	2.4	3.0	2.2	6.0	2.2	0.049
FCU07-10	FXSA50A	24.0/50%	3.5	4.7	3.2	6.0	3.5	0.096
			38.3					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU07-22	FXSA25A	21.0	2.3	3.1	0.046



Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU07-21	FXSA15A	21.0	1.6	1.8	0.046
FCU07-20	FXSA32A	21.0	3.1	3.8	0.049
FCU07-19	FXSA63A	21.0	3.3	7.7	0.106
FCU07-18	FXSA63A	21.0	3.2	7.7	0.106
FCU07-17	FXSA20A	21.0	1.8	2.4	0.046
FCU07-16	FXSA50A	21.0	2.5	6.0	0.096
FCU07-15	FXSA25A	21.0	2.4	3.1	0.046
FCU07-14	FXSA50A	21.0	2.4	6.0	0.096
FCU07-13	FXSA63A	21.0	3.1	7.7	0.106
FCU07-12	FXSA80A	21.0	4.3	9.6	0.143
FCU07-11	FXSA32A	21.0	1.8	3.8	0.049
FCU07-10	FXSA50A	21.0	2.4	6.0	0.096
			34.2		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD	Weight
							mm	kg
FCU07-22	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU07-21	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU07-20	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU07-19	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU07-18	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU07-17	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU07-16	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU07-15	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU07-14	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU07-13	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU07-12	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU07-11	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU07-10	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 41.8kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 20.9kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 21.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Seventh Floor	A	open plan	3.83	$A < 92.37 \text{ m}^2$ Ventilation enclosure $92.37 \text{ m}^2 \leq A < 184.74 \text{ m}^2$ External alarm $184.74 \text{ m}^2 \leq A$ No measures		252.00 m ²
	B	open plan	3.51			
	C	open plan	4.00			
	D	open plan	4.50			
	E	open plan	4.41			
	F	open plan	3.19			
	G	open plan	4.96			
	H	open plan	3.59			
Seventh Floor	A	open plan	4.31	$A < 92.37 \text{ m}^2$ Ventilation enclosure $92.37 \text{ m}^2 \leq A < 184.74 \text{ m}^2$ External alarm $184.74 \text{ m}^2 \leq A$ No measures		252.00 m ²
	B	open plan	5.15			
	C	open plan	7.24			
	D	open plan	5.04			
	E	open plan	6.55			

Rooms

Room	Indoor units	Measures
open plan	FCU07-22	Minimum room area: 3.83 m ²
open plan	FCU07-21	Minimum room area: 3.51 m ²
open plan	FCU07-20	Minimum room area: 4.00 m ²
open plan	FCU07-19	Minimum room area: 4.50 m ²
open plan	FCU07-18	Minimum room area: 4.41 m ²
open plan	FCU07-17	Minimum room area: 3.19 m ²
open plan	FCU07-16	Minimum room area: 4.96 m ²
open plan	FCU07-15	Minimum room area: 3.59 m ²
open plan	FCU07-14	Minimum room area: 4.31 m ²
open plan	FCU07-13	Minimum room area: 5.15 m ²
open plan	FCU07-12	Minimum room area: 7.24 m ²
open plan	FCU07-11	Minimum room area: 5.04 m ²
open plan	FCU07-10	Minimum room area: 6.55 m ²

Only units connected to outdoor unit Seventh Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Seventh Floor CU5/6. - REYA18A

Capacity data at conditions and connection ratio (102) as entered



Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU07-30	FXSA63A	24.0/50%	3.9	5.8	3.6	6.0	4.4	0.106
FCU07-29	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU07-28	FXSA15A	24.0/50%	1.0	1.4	0.9	6.0	1.1	0.046
FCU07-27	FXSA80A	24.0/50%	5.0	7.5	4.4	6.0	5.5	0.143
FCU07-25	FXSA63A	24.0/50%	4.3	5.8	3.9	6.0	4.4	0.106
FCU07-24	FXSA63A	24.0/50%	4.1	5.8	3.5	6.0	4.4	0.106
FCU07-23	FXSA100A	24.0/50%	6.0	9.3	5.6	6.0	7.0	0.176
FCU07-26	FXSA25A	24.0/50%	1.9	2.4	1.6	6.0	1.7	0.046
			29.5					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU07-30	FXSA63A	21.0	4.3	7.7	0.106
FCU07-29	FXSA50A	21.0	3.6	6.0	0.096
FCU07-28	FXSA15A	21.0	1.3	1.8	0.046
FCU07-27	FXSA80A	21.0	6.5	9.6	0.143
FCU07-25	FXSA63A	21.0	4.3	7.7	0.106
FCU07-24	FXSA63A	21.0	6.2	7.7	0.106
FCU07-23	FXSA100A	21.0	5.5	12.0	0.176
FCU07-26	FXSA25A	21.0	3.0	3.1	0.046
			34.7		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU07-30	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU07-29	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU07-28	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU07-27	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU07-25	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU07-24	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU07-23	FXSA100A	open plan	31 - 36	220V 1ph	2.4	Factory Std	1,400 x 245 x 800	46.0
FCU07-26	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Remarks

Under capacity

The sum of the required indoor unit capacities is 34.7kW for heating. However, the selected outdoor unit has a heating capacity of 34.1kW (= -1.8%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Reduced operational load

The sum of the required indoor unit capacities is 30.4kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 28.9kW (=95%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.



Outdoor vs. indoor position

Outdoor unit placed 21.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
BS 606	A	open plan	4.59	A < 63.50 m ²	312.00 m ²
	B	open plan	4.87	63.50 m ² ≤ A < 127.00 m ²	
	C	open plan	3.51	127.00 m ² ≤ A	
	D	open plan	6.77		
	E	open plan	6.18		
	F	open plan	6.93		
	G	open plan	11.38		
	H	open plan	4.55		
				Ventilation enclosure External alarm No measures	

Rooms

Room	Indoor units	Measures
open plan	FCU07-30	Minimum room area: 4.59 m ²
open plan	FCU07-29	Minimum room area: 4.87 m ²
open plan	FCU07-28	Minimum room area: 3.51 m ²
open plan	FCU07-27	Minimum room area: 6.77 m ²
open plan	FCU07-25	Minimum room area: 6.18 m ²
open plan	FCU07-24	Minimum room area: 6.93 m ²
open plan	FCU07-23	Minimum room area: 11.38 m ²
open plan	FCU07-26	Minimum room area: 4.55 m ²

Only units connected to outdoor unit Seventh Floor CU5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Eighth Floor CU1/2. - REYA14A

Capacity data at conditions and connection ratio (108) as entered



Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU08-02	FXSA50A	24.0/50%	3.4	4.7	3.1	6.0	3.5	0.096
FCU08-08	FXSA32A	24.0/50%	2.2	3.0	1.8	6.0	2.2	0.049
FCU08-03	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU08-04	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU08-07	FXSA25A	24.0/50%	1.7	2.4	1.4	6.0	1.7	0.046
FCU08-05	FXSA50A	24.0/50%	3.7	4.7	3.3	6.0	3.5	0.096
FCU08-06	FXSA32A	24.0/50%	2.4	3.0	2.1	6.0	2.2	0.049
FCU08-01	FXSA50A	24.0/50%	3.8	4.7	3.5	6.0	3.5	0.096
FCU08-09	FXSA40A	24.0/50%	2.7	3.7	2.4	6.0	2.8	0.094
			27.1					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU08-02	FXSA50A	21.0	3.0	6.0	0.096
FCU08-08	FXSA32A	21.0	3.7	3.8	0.049
FCU08-03	FXSA50A	21.0	3.1	6.0	0.096
FCU08-04	FXSA50A	21.0	3.1	6.0	0.096
FCU08-07	FXSA25A	21.0	2.9	3.1	0.046
FCU08-05	FXSA50A	21.0	3.1	6.0	0.096
FCU08-06	FXSA32A	21.0	3.7	3.8	0.049
FCU08-01	FXSA50A	21.0	3.8	6.0	0.096
FCU08-09	FXSA40A	21.0	3.2	4.8	0.094
			29.6		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD	Weight kg
							mm	
FCU08-02	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-08	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU08-03	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-04	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-07	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU08-05	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-06	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU08-01	FXSA50A		29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-09	FXSA40A		29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5

Remarks

Under capacity

The sum of the required indoor unit capacities is 29.6kW for heating. However, the selected outdoor unit has a heating capacity of 27.4kW (= -7.5%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 18.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Eighth Floor	A	open plan	4.68	A < 53.86 m ²	Ventilation enclosure	312.00 m ²
	B	open plan	4.00	53.86 m ² ≤ A < 107.72 m ²	External alarm	
	C	open plan	5.24	107.72 m ² ≤ A	No measures	
	D	open plan	5.62			
	E	open plan	4.23			
	F	open plan	6.18			
	G	open plan	5.29			
	H	-	6.37			
	I	-	5.46			

Rooms

Room	Indoor units	Measures
-	FCU08-01	Minimum room area: 6.37 m ²
-	FCU08-09	Minimum room area: 5.46 m ²
open plan	FCU08-02	Minimum room area: 4.68 m ²
open plan	FCU08-08	Minimum room area: 4.00 m ²
open plan	FCU08-03	Minimum room area: 5.24 m ²
open plan	FCU08-04	Minimum room area: 5.62 m ²
open plan	FCU08-07	Minimum room area: 4.23 m ²
open plan	FCU08-05	Minimum room area: 6.18 m ²
open plan	FCU08-06	Minimum room area: 5.29 m ²

Only units connected to outdoor unit Eighth Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Eighth Floor CU3/4. - REYA20A

Capacity data at conditions and connection ratio (114) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU08-19	FXSA63A	24.0/50%	4.4	5.8	4.0	6.0	4.4	0.106
FCU08-18	FXSA63A	24.0/50%	4.4	5.8	4.0	6.0	4.4	0.106
FCU08-17	FXSA25A	24.0/50%	1.8	2.4	1.6	6.0	1.7	0.046



Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU08-16	FXSA50A	24.0/50%	3.2	4.7	2.8	6.0	3.5	0.096
FCU08-15	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU08-22	FXSA25A	24.0/50%	1.8	2.4	1.5	6.0	1.7	0.046
FCU08-21	FXSA15A	24.0/50%	1.1	1.4	1.0	6.0	1.1	0.046
FCU08-20	FXSA32A	24.0/50%	2.5	3.0	2.2	6.0	2.2	0.049
FCU08-14	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU08-13	FXSA63A	24.0/50%	4.1	5.8	3.7	6.0	4.4	0.106
FCU08-12	FXSA80A	24.0/50%	4.9	7.5	4.5	6.0	5.5	0.143
FCU08-11	FXSA32A	24.0/50%	2.4	3.0	2.2	6.0	2.2	0.049
FCU08-10	FXSA50A	24.0/50%	3.5	4.7	3.2	6.0	3.5	0.096
			39.1					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU08-19	FXSA63A	21.0	3.3	7.7	0.106
FCU08-18	FXSA63A	21.0	3.2	7.7	0.106
FCU08-17	FXSA25A	21.0	1.8	3.1	0.046
FCU08-16	FXSA50A	21.0	2.5	6.0	0.096
FCU08-15	FXSA25A	21.0	2.4	3.1	0.046
FCU08-22	FXSA25A	21.0	2.3	3.1	0.046
FCU08-21	FXSA15A	21.0	1.6	1.8	0.046
FCU08-20	FXSA32A	21.0	3.0	3.8	0.049
FCU08-14	FXSA50A	21.0	2.4	6.0	0.096
FCU08-13	FXSA63A	21.0	3.1	7.7	0.106
FCU08-12	FXSA80A	21.0	4.3	9.6	0.143
FCU08-11	FXSA32A	21.0	1.8	3.8	0.049
FCU08-10	FXSA50A	21.0	2.4	6.0	0.096
			34.1		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD	Weight
							mm	kg
FCU08-19	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU08-18	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU08-17	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU08-16	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-15	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU08-22	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU08-21	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU08-20	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU08-14	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-13	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU08-12	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU08-11	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU08-10	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 34.1kW for heating. However, the outdoor unit selection uses reduced load values for heating of 17.1kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 18.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Eighth Floor	A	open plan	4.41	A < 92.84 m ²	240.00 m ²
	B	open plan	4.41	92.84 m ² ≤ A < 185.68 m ²	
	C	open plan	3.19	185.68 m ² ≤ A	
	D	open plan	4.87		
	E	open plan	3.51		
	F	open plan	4.31		
	G	open plan	3.91		
	H	open plan	4.32		
Eighth Floor	A	open plan	4.31	A < 109.72 m ²	240.00 m ²
	B	open plan	5.15	109.72 m ² ≤ A < 219.44 m ²	
	C	open plan	6.96	219.44 m ² ≤ A	
	D	open plan	4.64		
	E	open plan	6.27		

Rooms

Room	Indoor units	Measures
open plan	FCU08-19	Minimum room area: 4.41 m ²
open plan	FCU08-18	Minimum room area: 4.41 m ²
open plan	FCU08-17	Minimum room area: 3.19 m ²

Room	Indoor units	Measures
open plan	FCU08-16	Minimum room area: 4.87 m ²
open plan	FCU08-15	Minimum room area: 3.51 m ²
open plan	FCU08-22	Minimum room area: 4.31 m ²
open plan	FCU08-21	Minimum room area: 3.91 m ²
open plan	FCU08-20	Minimum room area: 4.32 m ²
open plan	FCU08-14	Minimum room area: 4.31 m ²
open plan	FCU08-13	Minimum room area: 5.15 m ²
open plan	FCU08-12	Minimum room area: 6.96 m ²
open plan	FCU08-11	Minimum room area: 4.64 m ²
open plan	FCU08-10	Minimum room area: 6.27 m ²

Only units connected to outdoor unit Eighth Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Eighth Floor CU5/6. - REYA18A

Capacity data at conditions and connection ratio (103) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU08-30	FXSA63A	24.0/50%	3.9	5.8	3.6	6.0	4.4	0.106
FCU08-29	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU08-28	FXSA15A	24.0/50%	1.1	1.4	0.9	6.0	1.1	0.046
FCU08-27	FXSA80A	24.0/50%	5.0	7.5	4.4	6.0	5.5	0.143
FCU08-25	FXSA63A	24.0/50%	4.5	5.8	4.1	6.0	4.4	0.106
FCU08-26	FXSA32A	24.0/50%	2.0	3.0	1.7	6.0	2.2	0.049
FCU08-23	FXSA100A	24.0/50%	6.2	9.3	5.7	6.0	7.0	0.176
FCU08-24	FXSA63A	24.0/50%	4.2	5.8	3.5	6.0	4.4	0.106
			30.2					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU08-30	FXSA63A	21.0	4.3	7.7	0.106
FCU08-29	FXSA50A	21.0	3.6	6.0	0.096
FCU08-28	FXSA15A	21.0	1.3	1.8	0.046
FCU08-27	FXSA80A	21.0	6.5	9.6	0.143
FCU08-25	FXSA63A	21.0	4.3	7.7	0.106
FCU08-26	FXSA32A	21.0	3.0	3.8	0.049
FCU08-23	FXSA100A	21.0	5.5	12.0	0.176
FCU08-24	FXSA63A	21.0	6.2	7.7	0.106
			34.7		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU08-30	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU08-29	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU08-28	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU08-27	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU08-25	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU08-26	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU08-23	FXSA100A	open plan	31 - 36	220V 1ph	2.4	Factory Std	1,400 x 245 x 800	46.0
FCU08-24	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 38.6kW for heating. However, the outdoor unit selection uses reduced load values for heating of 30.9kW (=80%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 18.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Eighth Floor	A	open plan	4.59	A < 64.16 m ² Ventilation enclosure	338.00 m ²
	B	open plan	4.78	64.16 m ² ≤ A < 128.32 m ² External alarm	
	C	open plan	3.51	128.32 m ² ≤ A No measures	
	E	open plan	7.33		
	F	open plan	6.18		
	G	open plan	5.21		
	H	open plan	11.60		
	I	open plan	6.93		

Rooms

Room	Indoor units	Measures
open plan	FCU08-30	Minimum room area: 4.59 m ²
open plan	FCU08-29	Minimum room area: 4.78 m ²
open plan	FCU08-28	Minimum room area: 3.51 m ²
open plan	FCU08-27	Minimum room area: 7.33 m ²
open plan	FCU08-25	Minimum room area: 6.18 m ²
open plan	FCU08-26	Minimum room area: 5.21 m ²

Room	Indoor units	Measures
open plan	FCU08-23	Minimum room area: 11.60 m ²
open plan	FCU08-24	Minimum room area: 6.93 m ²

Only units connected to outdoor unit Eighth Floor CU5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Ninth Floor CU1/2. - REYA14A

Capacity data at conditions and connection ratio (108) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU09-02	FXSA50A	24.0/50%	3.4	4.7	3.1	6.0	3.5	0.096
FCU09-09	FXSA40A	24.0/50%	2.8	3.7	2.4	6.0	2.8	0.094
FCU09-03	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU09-08	FXSA32A	24.0/50%	2.2	3.0	1.8	6.0	2.2	0.049
FCU09-04	FXSA50A	24.0/50%	3.6	4.7	3.3	6.0	3.5	0.096
FCU09-07	FXSA25A	24.0/50%	1.7	2.4	1.4	6.0	1.7	0.046
FCU09-05	FXSA50A	24.0/50%	3.7	4.7	3.3	6.0	3.5	0.096
FCU09-06	FXSA32A	24.0/50%	2.4	3.0	2.1	6.0	2.2	0.049
FCU09-01	FXSA50A	24.0/50%	3.7	4.7	3.4	6.0	3.5	0.096
			27.1					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU09-02	FXSA50A	21.0	3.3	6.0	0.096
FCU09-09	FXSA40A	21.0	3.2	4.8	0.094
FCU09-03	FXSA50A	21.0	3.4	6.0	0.096
FCU09-08	FXSA32A	21.0	3.7	3.8	0.049
FCU09-04	FXSA50A	21.0	3.4	6.0	0.096
FCU09-07	FXSA25A	21.0	2.9	3.1	0.046
FCU09-05	FXSA50A	21.0	3.4	6.0	0.096
FCU09-06	FXSA32A	21.0	3.7	3.8	0.049
FCU09-01	FXSA50A	21.0	4.3	6.0	0.096
			31.3		

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD	Weight
							mm	kg
FCU09-02	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU09-09	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU09-03	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU09-08	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU09-04	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU09-07	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU09-05	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU09-06	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU09-01	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 30.1kW for cooling and 31.3kW for heating. However, the outdoor unit selection uses reduced load values for cooling of 28.6kW (=95%) and for heating of 25.0kW (=80%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 15.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Ninth Floor	A	open plan	4.59	A < 51.98 m ²	299.00 m ²
	B	open plan	3.87	51.98 m ² ≤ A < 103.97 m ²	
	C	open plan	5.06	103.97 m ² ≤ A	
	D	open plan	4.32		
	E	open plan	5.52		
	F	open plan	4.07		
	G	open plan	5.99		
	H	open plan	5.13		
	I	open plan	6.55		
				Ventilation enclosure	
				External alarm	
				No measures	

Rooms

Room	Indoor units	Measures
open plan	FCU09-02	Minimum room area: 4.59 m ²
open plan	FCU09-09	Minimum room area: 3.87 m ²
open plan	FCU09-03	Minimum room area: 5.06 m ²
open plan	FCU09-08	Minimum room area: 4.32 m ²
open plan	FCU09-04	Minimum room area: 5.52 m ²
open plan	FCU09-07	Minimum room area: 4.07 m ²
open plan	FCU09-05	Minimum room area: 5.99 m ²
open plan	FCU09-06	Minimum room area: 5.13 m ²
open plan	FCU09-01	Minimum room area: 6.55 m ²



Only units connected to outdoor unit Ninth Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Ninth Floor CU3/4. - REYA20A

Capacity data at conditions and connection ratio (117) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU09-22	FXSA25A	24.0/50%	1.8	2.4	1.5	6.0	1.7	0.046
FCU09-21	FXSA15A	24.0/50%	1.2	1.4	1.0	6.0	1.1	0.046
FCU09-20	FXSA32A	24.0/50%	2.4	3.0	2.2	6.0	2.2	0.049
FCU09-19	FXSA63A	24.0/50%	4.4	5.8	4.0	6.0	4.4	0.106
FCU09-18	FXSA63A	24.0/50%	4.3	5.8	3.9	6.0	4.4	0.106
FCU09-17	FXSA32A	24.0/50%	2.0	3.0	1.8	6.0	2.2	0.049
FCU09-16	FXSA50A	24.0/50%	3.1	4.7	2.8	6.0	3.5	0.096
FCU09-15	FXSA25A	24.0/50%	1.8	2.4	1.6	6.0	1.7	0.046
FCU09-14	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU09-13	FXSA63A	24.0/50%	4.2	5.8	3.8	6.0	4.4	0.106
FCU09-12	FXSA80A	24.0/50%	5.0	7.5	4.6	6.0	5.5	0.143
FCU09-11	FXSA40A	24.0/50%	2.5	3.7	2.3	6.0	2.8	0.094
FCU09-10	FXSA50A	24.0/50%	3.6	4.7	3.4	6.0	3.5	0.096
			39.6					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU09-22	FXSA25A	21.0	2.6	3.1	0.046
FCU09-21	FXSA15A	21.0	1.8	1.8	0.046
FCU09-20	FXSA32A	21.0	3.1	3.8	0.049
FCU09-19	FXSA63A	21.0	3.8	7.7	0.106
FCU09-18	FXSA63A	21.0	3.6	7.7	0.106
FCU09-17	FXSA32A	21.0	1.8	3.8	0.049
FCU09-16	FXSA50A	21.0	2.8	6.0	0.096
FCU09-15	FXSA25A	21.0	2.4	3.1	0.046
FCU09-14	FXSA50A	21.0	2.7	6.0	0.096
FCU09-13	FXSA63A	21.0	3.5	7.7	0.106
FCU09-12	FXSA80A	21.0	4.6	9.6	0.143
FCU09-11	FXSA40A	21.0	2.0	4.8	0.094
FCU09-10	FXSA50A	21.0	2.6	6.0	0.096
			37.3		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU09-22	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU09-21	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU09-20	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU09-19	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU09-18	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU09-17	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU09-16	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU09-15	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU09-14	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU09-13	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU09-12	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU09-11	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU09-10	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Under capacity

The sum of the required indoor unit capacities is 37.3kW for heating. However, the selected outdoor unit has a heating capacity of 36.9kW (= -1.1%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Reduced operational load

The sum of the required indoor unit capacities is 43.4kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 21.7kW (=50%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 15.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed		
				Measure		Actual BS(SV) Box room area
Ninth Floor	A	open plan	3.99	A < 95.09 m ²	Ventilation enclosure	315.00 m ²
				95.09 m ² ≤ A < 190.19 m ²	External alarm	
	B	open plan	3.75	190.19 m ² ≤ A	No measures	
	C	open plan	4.24			
	D	open plan	4.59			
	E	open plan	4.50			
	F	open plan	4.08			
	G	open plan	5.15			
	H	open plan	3.83			
Ninth Floor	A	open plan	4.40			315.00 m ²

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure	Actual BS(SV) Box room area	
	B	open plan	5.15	A < 95.09 m ²	Ventilation enclosure	
	C	open plan	7.33	95.09 m ² ≤ A < 190.19 m ²	External alarm	
	D	open plan	5.09	190.19 m ² ≤ A	No measures	
	E	open plan	6.18			

Rooms

Room	Indoor units	Measures
open plan	FCU09-22	Minimum room area: 3.99 m ²
open plan	FCU09-21	Minimum room area: 3.75 m ²
open plan	FCU09-20	Minimum room area: 4.24 m ²
open plan	FCU09-19	Minimum room area: 4.59 m ²
open plan	FCU09-18	Minimum room area: 4.50 m ²
open plan	FCU09-17	Minimum room area: 4.08 m ²
open plan	FCU09-16	Minimum room area: 5.15 m ²
open plan	FCU09-15	Minimum room area: 3.83 m ²
open plan	FCU09-14	Minimum room area: 4.40 m ²
open plan	FCU09-13	Minimum room area: 5.15 m ²
open plan	FCU09-12	Minimum room area: 7.33 m ²
open plan	FCU09-11	Minimum room area: 5.09 m ²
open plan	FCU09-10	Minimum room area: 6.18 m ²

Only units connected to outdoor unit Ninth Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Ninth Floor CU5/6. - REYA20A

Capacity data at conditions and connection ratio (96) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU09-30	FXSA80A	24.0/50%	4.8	7.5	4.5	6.0	5.5	0.143
FCU09-29	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU09-28	FXSA15A	24.0/50%	1.1	1.4	0.9	6.0	1.1	0.046
FCU09-27	FXSA80A	24.0/50%	5.2	7.5	4.7	6.0	5.5	0.143
FCU09-25	FXSA63A	24.0/50%	4.7	5.8	4.3	6.0	4.4	0.106
FCU09-26	FXSA32A	24.0/50%	2.0	3.0	1.7	6.0	2.2	0.049
FCU09-23	FXSA100A	24.0/50%	6.6	9.3	6.1	6.0	7.0	0.176
FCU09-24	FXSA63A	24.0/50%	4.2	5.8	3.6	6.0	4.4	0.106
			31.9					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU09-30	FXSA80A	21.0	4.3	9.6	0.143
FCU09-29	FXSA50A	21.0	3.6	6.0	0.096
FCU09-28	FXSA15A	21.0	1.3	1.8	0.046
FCU09-27	FXSA80A	21.0	7.2	9.6	0.143
FCU09-25	FXSA63A	21.0	4.3	7.7	0.106
FCU09-26	FXSA32A	21.0	3.3	3.8	0.049
FCU09-23	FXSA100A	21.0	5.5	12.0	0.176
FCU09-24	FXSA63A	21.0	6.8	7.7	0.106
			36.3		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU09-30	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU09-29	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU09-28	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU09-27	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU09-25	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU09-26	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU09-23	FXSA100A	open plan	31 - 36	220V 1ph	2.4	Factory Std	1,400 x 245 x 800	46.0
FCU09-24	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 34.6kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 31.1kW (=90%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 15.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure	Actual BS(SV) Box room area	
Ninth Floor	A	open plan	6.03	A < 62.28 m ²	Ventilation enclosure External alarm No measures	364.00 m ²
	B	open plan	4.78	62.28 m ² ≤ A < 124.56 m ²		
	C	open plan	3.51	124.56 m ² ≤ A		
	D	open plan	6.82			

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
	G	open plan	6.32		
	H	open plan	5.33		
	I	open plan	11.94		
	J	open plan	7.07		

Rooms

Room	Indoor units	Measures
open plan	FCU09-30	Minimum room area: 6.03 m ²
open plan	FCU09-29	Minimum room area: 4.78 m ²
open plan	FCU09-28	Minimum room area: 3.51 m ²
open plan	FCU09-27	Minimum room area: 6.82 m ²
open plan	FCU09-25	Minimum room area: 6.32 m ²
open plan	FCU09-26	Minimum room area: 5.33 m ²
open plan	FCU09-23	Minimum room area: 11.94 m ²
open plan	FCU09-24	Minimum room area: 7.07 m ²

Only units connected to outdoor unit Ninth Floor CU5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Tenth Floor CU1/2. - REYA14A

Capacity data at conditions and connection ratio (93) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU10-08	FXSA50A	24.0/50%	3.5	4.7	3.0	6.0	3.5	0.096
FCU10-01	FXSA100A	24.0/50%	6.0	9.3	5.5	6.0	7.0	0.176
FCU10-07	FXSA20A	24.0/50%	1.3	1.8	1.1	6.0	1.4	0.046
FCU10-02	FXSA40A	24.0/50%	2.6	3.7	2.3	6.0	2.8	0.094
FCU10-06	FXSA20A	24.0/50%	1.4	1.8	1.1	6.0	1.4	0.046
FCU10-03	FXSA40A	24.0/50%	2.7	3.7	2.4	6.0	2.8	0.094
FCU10-05	FXSA25A	24.0/50%	2.0	2.4	1.6	6.0	1.7	0.046
FCU10-04	FXSA32A	24.0/50%	2.2	3.0	1.9	6.0	2.2	0.049
			21.7					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU10-08	FXSA50A	21.0	4.3	6.0	0.096
FCU10-01	FXSA100A	21.0	6.9	12.0	0.176
FCU10-07	FXSA20A	21.0	2.1	2.4	0.046
FCU10-02	FXSA40A	21.0	3.0	4.8	0.094
FCU10-06	FXSA20A	21.0	2.2	2.4	0.046



Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU10-03	FXSA40A	21.0	3.0	4.8	0.094
FCU10-05	FXSA25A	21.0	3.0	3.1	0.046
FCU10-04	FXSA32A	21.0	3.2	3.8	0.049
			27.7		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU10-08	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU10-01	FXSA100A	open plan	31 - 36	220V 1ph	2.4	Factory Std	1,400 x 245 x 800	46.0
FCU10-07	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-02	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU10-06	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-03	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU10-05	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-04	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0

Remarks

Under capacity

The sum of the required indoor unit capacities is 27.7kW for heating. However, the selected outdoor unit has a heating capacity of 27.3kW (= -1.5%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 12.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Tenth Floor	A	open plan	4.59	A < 50.39 m ²	Ventilation enclosure	312.50 m ²
	B	open plan	7.39	50.39 m ² ≤ A < 100.78 m ²	External alarm	
	C	open plan	3.57	100.78 m ² ≤ A	No measures	
	D	open plan	4.48			
	E	open plan	4.02			
	F	open plan	5.00			

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
	G	open plan	4.47		
	H	open plan	5.34		

Rooms

Room	Indoor units	Measures
open plan	FCU10-08	Minimum room area: 4.59 m ²
open plan	FCU10-01	Minimum room area: 7.39 m ²
open plan	FCU10-07	Minimum room area: 3.57 m ²
open plan	FCU10-02	Minimum room area: 4.48 m ²
open plan	FCU10-06	Minimum room area: 4.02 m ²
open plan	FCU10-03	Minimum room area: 5.00 m ²
open plan	FCU10-05	Minimum room area: 4.47 m ²
open plan	FCU10-04	Minimum room area: 5.34 m ²

Only units connected to outdoor unit Tenth Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Tenth Floor CU3/4. - REYA20A

Capacity data at conditions and connection ratio (91) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU10-19	FXSA50A	24.0/50%	3.5	4.7	2.9	6.0	3.5	0.096
FCU10-18	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU10-17	FXSA32A	24.0/50%	2.3	3.0	2.0	6.0	2.2	0.049
FCU10-16	FXSA32A	24.0/50%	2.3	3.0	2.1	6.0	2.2	0.049
FCU10-15	FXSA32A	24.0/50%	2.3	3.0	2.0	6.0	2.2	0.049
FCU10-14	FXSA40A	24.0/50%	2.6	3.7	2.4	6.0	2.8	0.094
FCU10-13	FXSA32A	24.0/50%	2.3	3.0	2.1	6.0	2.2	0.049
FCU10-12	FXSA32A	24.0/50%	2.4	3.0	2.1	6.0	2.2	0.049
FCU10-11	FXSA20A	24.0/50%	1.4	1.8	1.3	6.0	1.4	0.046
FCU10-10	FXSA80A	24.0/50%	5.5	7.5	4.9	6.0	5.5	0.143
FCU10-09	FXSA32A	24.0/50%	1.9	3.0	1.7	6.0	2.2	0.049
FCU10-20	FXSA25A	24.0/50%	1.6	2.4	1.3	6.0	1.7	0.046
			31.4					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU10-19	FXSA50A	21.0	5.3	6.0	0.096
FCU10-18	FXSA50A	21.0	3.4	6.0	0.096
FCU10-17	FXSA32A	21.0	2.3	3.8	0.049
FCU10-16	FXSA32A	21.0	1.8	3.8	0.049
FCU10-15	FXSA32A	21.0	2.4	3.8	0.049



Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU10-14	FXSA40A	21.0	2.3	4.8	0.094
FCU10-13	FXSA32A	21.0	2.2	3.8	0.049
FCU10-12	FXSA32A	21.0	2.3	3.8	0.049
FCU10-11	FXSA20A	21.0	1.6	2.4	0.046
FCU10-10	FXSA80A	21.0	5.8	9.6	0.143
FCU10-09	FXSA32A	21.0	2.2	3.8	0.049
FCU10-20	FXSA25A	21.0	2.5	3.1	0.046
			34.1		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU10-19	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU10-18	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU10-17	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU10-16	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU10-15	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU10-14	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU10-13	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU10-12	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU10-11	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-10	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU10-09	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU10-20	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 34.4kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 31.0kW (=90%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 12.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Tenth Floor	A	open plan	5.22	A < 92.70 m ²	Ventilation enclosure	270.00 m ²
	B	open plan	4.75	92.70 m ² ≤ A < 185.41 m ²	External alarm	
				185.41 m ² ≤ A	No measures	

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
	C	open plan	3.68		
	D	open plan	3.91		
	E	open plan	4.06		
	F	open plan	4.29		
	G	open plan	4.64		
	H	open plan	5.19		
	I	open plan	4.97		
	J	open plan	8.48		
	K	open plan	6.33		
	L	open plan	4.07		

Rooms

Room	Indoor units	Measures
open plan	FCU10-19	Minimum room area: 5.22 m ²
open plan	FCU10-18	Minimum room area: 4.75 m ²
open plan	FCU10-17	Minimum room area: 3.68 m ²
open plan	FCU10-16	Minimum room area: 3.91 m ²
open plan	FCU10-15	Minimum room area: 4.06 m ²
open plan	FCU10-14	Minimum room area: 4.29 m ²
open plan	FCU10-13	Minimum room area: 4.64 m ²
open plan	FCU10-12	Minimum room area: 5.19 m ²
open plan	FCU10-11	Minimum room area: 4.97 m ²
open plan	FCU10-10	Minimum room area: 8.48 m ²
open plan	FCU10-09	Minimum room area: 6.33 m ²
open plan	FCU10-20	Minimum room area: 4.07 m ²

Only units connected to outdoor unit Tenth Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Tenth Floor CU5/6. - REYA18A

Capacity data at conditions and connection ratio (97) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU10-32	FXSA80A	24.0/50%	5.0	7.5	4.7	6.0	5.5	0.143
FCU10-31	FXSA15A	24.0/50%	1.1	1.4	1.0	6.0	1.1	0.046
FCU10-30	FXSA20A	24.0/50%	1.4	1.8	1.3	6.0	1.4	0.046

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU10-29	FXSA15A	24.0/50%	0.6	1.4	0.5	6.0	1.1	0.046
FCU10-27	FXSA50A	24.0/50%	3.6	4.7	3.1	6.0	3.5	0.096
FCU10-28	FXSA32A	24.0/50%	2.0	3.0	1.8	6.0	2.2	0.049
FCU10-26	FXSA25A	24.0/50%	1.7	2.4	1.4	6.0	1.7	0.046
FCU10-25	FXSA50A	24.0/50%	3.4	4.7	3.1	6.0	3.5	0.096
FCU10-24	FXSA25A	24.0/50%	1.7	2.4	1.4	6.0	1.7	0.046
FCU10-23	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU10-22	FXSA25A	24.0/50%	1.6	2.4	1.4	6.0	1.7	0.046
FCU10-21	FXSA50A	24.0/50%	3.4	4.7	3.2	6.0	3.5	0.096
			28.8					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU10-32	FXSA80A	21.0	4.3	9.6	0.143
FCU10-31	FXSA15A	21.0	1.4	1.8	0.046
FCU10-30	FXSA20A	21.0	1.8	2.4	0.046
FCU10-29	FXSA15A	21.0	0.8	1.8	0.046
FCU10-27	FXSA50A	21.0	5.7	6.0	0.096
FCU10-28	FXSA32A	21.0	2.0	3.8	0.049
FCU10-26	FXSA25A	21.0	2.9	3.1	0.046
FCU10-25	FXSA50A	21.0	2.9	6.0	0.096
FCU10-24	FXSA25A	21.0	2.9	3.1	0.046
FCU10-23	FXSA50A	21.0	2.9	6.0	0.096
FCU10-22	FXSA25A	21.0	2.8	3.1	0.046
FCU10-21	FXSA50A	21.0	2.6	6.0	0.096
			33.0		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	
FCU10-32	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU10-31	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-30	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-29	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-27	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU10-28	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU10-26	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-25	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU10-24	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-23	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU10-22	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU10-21	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 31.2kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 26.5kW (=85%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor unit placed 12.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Tenth Floor	B	open plan	5.89	A < 66.00 m ²	Ventilation enclosure	325.00 m ²
	C	open plan	3.05	66.00 m ² ≤ A < 132.00 m ²	External alarm	
	D	open plan	3.34	132.00 m ² ≤ A	No measures	
	E	open plan	3.58			
	F	open plan	5.54			
Tenth Floor	A	open plan	4.80	A < 66.00 m ²	Ventilation enclosure	325.00 m ²
	B	open plan	4.36	66.00 m ² ≤ A < 132.00 m ²	External alarm	
	C	open plan	6.23	132.00 m ² ≤ A	No measures	
	D	open plan	4.74			
	E	open plan	6.76			
	F	open plan	5.18			
	G	open plan	7.27			

Rooms

Room	Indoor units	Measures
open plan	FCU10-32	Minimum room area: 5.89 m ²
open plan	FCU10-31	Minimum room area: 3.05 m ²
open plan	FCU10-30	Minimum room area: 3.34 m ²
open plan	FCU10-29	Minimum room area: 3.58 m ²
open plan	FCU10-27	Minimum room area: 5.54 m ²
open plan	FCU10-28	Minimum room area: 4.80 m ²
open plan	FCU10-26	Minimum room area: 4.36 m ²
open plan	FCU10-25	Minimum room area: 6.23 m ²
open plan	FCU10-24	Minimum room area: 4.74 m ²
open plan	FCU10-23	Minimum room area: 6.76 m ²
open plan	FCU10-22	Minimum room area: 5.18 m ²
open plan	FCU10-21	Minimum room area: 7.27 m ²



Only units connected to outdoor unit Tenth Floor CU5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Eleventh Floor CU1/2. - REYA18A

Capacity data at conditions and connection ratio (92) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU11-08	FXSA50A	24.0/50%	3.7	4.7	3.2	6.0	3.5	0.096
FCU11-01	FXSA100A	24.0/50%	6.4	9.3	5.9	6.0	7.0	0.176
FCU11-07	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU11-02	FXSA32A	24.0/50%	2.0	3.0	1.8	6.0	2.2	0.049
FCU11-06	FXSA25A	24.0/50%	1.8	2.4	1.5	6.0	1.7	0.046
FCU11-03	FXSA50A	24.0/50%	3.3	4.7	3.1	6.0	3.5	0.096
FCU11-05	FXSA32A	24.0/50%	2.5	3.0	2.1	6.0	2.2	0.049
FCU11-04	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU11-09	FXSA50A	24.0/50%	3.6	4.7	3.4	6.0	3.5	0.096
			28.3					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU11-08	FXSA50A	21.0	4.2	6.0	0.096
FCU11-01	FXSA100A	21.0	6.3	12.0	0.176
FCU11-07	FXSA25A	21.0	2.9	3.1	0.046
FCU11-02	FXSA32A	21.0	2.9	3.8	0.049
FCU11-06	FXSA25A	21.0	3.0	3.1	0.046
FCU11-03	FXSA50A	21.0	3.0	6.0	0.096
FCU11-05	FXSA32A	21.0	3.8	3.8	0.049
FCU11-04	FXSA50A	21.0	2.9	6.0	0.096
FCU11-09	FXSA50A	21.0	2.8	6.0	0.096
			31.8		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU11-08	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU11-01	FXSA100A	open plan	31 - 36	220V 1ph	2.4	Factory Std	1,400 x 245 x 800	46.0
FCU11-07	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-02	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU11-06	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-03	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU11-05	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU11-04	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU11-09	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 30.9kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 29.4kW (=95%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 9.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed	
				Measure	Actual BS(SV) Box room area
Eleventh Floor	A	open plan	4.59	A < 59.60 m ² Ventilation enclosure	275.00 m ²
	B	open plan	7.39	59.60 m ² ≤ A < 119.21 m ² External alarm	
	C	open plan	3.59	119.21 m ² ≤ A No measures	
	D	open plan	4.48		
	E	open plan	4.07		
	F	open plan	5.99		
	G	open plan	5.21		
	H	open plan	6.55		
	I	open plan	7.21		

Rooms

Room	Indoor units	Measures
open plan	FCU11-08	Minimum room area: 4.59 m ²
open plan	FCU11-01	Minimum room area: 7.39 m ²
open plan	FCU11-07	Minimum room area: 3.59 m ²
open plan	FCU11-02	Minimum room area: 4.48 m ²
open plan	FCU11-06	Minimum room area: 4.07 m ²
open plan	FCU11-03	Minimum room area: 5.99 m ²
open plan	FCU11-05	Minimum room area: 5.21 m ²
open plan	FCU11-04	Minimum room area: 6.55 m ²
open plan	FCU11-09	Minimum room area: 7.21 m ²



Only units connected to outdoor unit Eleventh Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Eleventh Floor CU3/4. - REYA18A

Capacity data at conditions and connection ratio (101) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU11-18	FXSA63A	24.0/50%	3.9	5.8	3.4	6.0	4.4	0.106
FCU11-17	FXSA63A	24.0/50%	4.0	5.8	3.7	6.0	4.4	0.106
FCU11-16	FXSA40A	24.0/50%	2.5	3.7	2.3	6.0	2.8	0.094
FCU11-15	FXSA40A	24.0/50%	2.7	3.7	2.5	6.0	2.8	0.094
FCU11-14	FXSA40A	24.0/50%	2.7	3.7	2.5	6.0	2.8	0.094
FCU11-13	FXSA40A	24.0/50%	3.0	3.7	2.7	6.0	2.8	0.094
FCU11-12	FXSA40A	24.0/50%	2.6	3.7	2.4	6.0	2.8	0.094
FCU11-11	FXSA32A	24.0/50%	1.8	3.0	1.7	6.0	2.2	0.049
FCU11-10	FXSA100A	24.0/50%	6.0	9.3	5.5	6.0	7.0	0.176
			29.2					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU11-18	FXSA63A	21.0	6.8	7.7	0.106
FCU11-17	FXSA63A	21.0	4.0	7.7	0.106
FCU11-16	FXSA40A	21.0	2.7	4.8	0.094
FCU11-15	FXSA40A	21.0	2.2	4.8	0.094
FCU11-14	FXSA40A	21.0	2.8	4.8	0.094
FCU11-13	FXSA40A	21.0	2.7	4.8	0.094
FCU11-12	FXSA40A	21.0	2.7	4.8	0.094
FCU11-11	FXSA32A	21.0	2.7	3.8	0.049
FCU11-10	FXSA100A	21.0	8.4	12.0	0.176
			35.0		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	
FCU11-18	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU11-17	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU11-16	FXSA40A		29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-15	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-14	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-13	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-12	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-11	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU11-10	FXSA100A	open plan	31 - 36	220V 1ph	2.4	Factory Std	1,400 x 245 x 800	46.0

Remarks

Under capacity

The sum of the required indoor unit capacities is 35.0kW for heating. However, the selected outdoor unit has a heating capacity of 33.1kW (= -5.5%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 9.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Eleventh Floor	A	open plan	5.43	A < 84.19 m ² Ventilation enclosure	192.00 m ²
	B	open plan	4.50	84.19 m ² ≤ A < 168.39 m ² External alarm	
	C	-	3.97	168.39 m ² ≤ A No measures	
	D	open plan	3.73		
	E	open plan	3.92		
	F	open plan	4.20		
	G	open plan	4.62		
	H	open plan	5.04		
	I	open plan	12.94		

Rooms

Room	Indoor units	Measures
-	FCU11-16	Minimum room area: 3.97 m ²
open plan	FCU11-18	Minimum room area: 5.43 m ²
open plan	FCU11-17	Minimum room area: 4.50 m ²
open plan	FCU11-15	Minimum room area: 3.73 m ²
open plan	FCU11-14	Minimum room area: 3.92 m ²
open plan	FCU11-13	Minimum room area: 4.20 m ²
open plan	FCU11-12	Minimum room area: 4.62 m ²
open plan	FCU11-11	Minimum room area: 5.04 m ²
open plan	FCU11-10	Minimum room area: 12.94 m ²



Only units connected to outdoor unit Eleventh Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Eleventh Floor CU5/6. - REYA18A

Capacity data at conditions and connection ratio (92) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU11-31	FXSA40A	24.0/50%	2.5	3.7	2.2	6.0	2.8	0.094
FCU11-30	FXSA20A	24.0/50%	1.4	1.8	1.2	6.0	1.4	0.046
FCU11-29	FXSA40A	24.0/50%	2.9	3.7	2.7	6.0	2.8	0.094
FCU11-28	FXSA15A	24.0/50%	0.9	1.4	0.8	6.0	1.1	0.046
FCU11-26	FXSA40A	24.0/50%	2.5	3.7	2.2	6.0	2.8	0.094
FCU11-27	FXSA15A	24.0/50%	1.1	1.4	0.9	6.0	1.1	0.046
FCU11-25	FXSA25A	24.0/50%	1.6	2.4	1.4	6.0	1.7	0.046
FCU11-24	FXSA50A	24.0/50%	3.4	4.7	3.2	6.0	3.5	0.096
FCU11-23	FXSA25A	24.0/50%	1.5	2.4	1.3	6.0	1.7	0.046
FCU11-22	FXSA50A	24.0/50%	3.2	4.7	2.9	6.0	3.5	0.096
FCU11-21	FXSA25A	24.0/50%	1.5	2.4	1.3	6.0	1.7	0.046
FCU11-20	FXSA50A	24.0/50%	3.4	4.7	3.1	6.0	3.5	0.096
FCU11-19	FXSA20A	24.0/50%	1.3	1.8	1.1	6.0	1.4	0.046
			27.2					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU11-31	FXSA40A	21.0	4.5	4.8	0.094
FCU11-30	FXSA20A	21.0	1.6	2.4	0.046
FCU11-29	FXSA40A	21.0	2.9	4.8	0.094
FCU11-28	FXSA15A	21.0	1.0	1.8	0.046
FCU11-26	FXSA40A	21.0	4.4	4.8	0.094
FCU11-27	FXSA15A	21.0	1.7	1.8	0.046
FCU11-25	FXSA25A	21.0	2.8	3.1	0.046
FCU11-24	FXSA50A	21.0	2.8	6.0	0.096
FCU11-23	FXSA25A	21.0	2.8	3.1	0.046
FCU11-22	FXSA50A	21.0	2.9	6.0	0.096
FCU11-21	FXSA25A	21.0	2.7	3.1	0.046
FCU11-20	FXSA50A	21.0	2.6	6.0	0.096
FCU11-19	FXSA20A	21.0	2.4	2.4	0.046
			35.1		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU11-31	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-30	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-29	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-28	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-26	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU11-27	FXSA15A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-25	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-24	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU11-23	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-22	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU11-21	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU11-20	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU11-19	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 28.8kW for cooling and 35.1kW for heating. However, the outdoor unit selection uses reduced load values for cooling of 26.0kW (=90%) and for heating of 31.6kW (=90%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 9.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed		Actual BS(SV) Box room area
				Measure		
Eleventh Floor	B	open plan	3.40	A < 67.29 m ²	Ventilation enclosure	286.00 m ²
	C	open plan	3.03	67.29 m ² ≤ A < 134.59 m ²	External alarm	
	D	open plan	3.87	134.59 m ² ≤ A	No measures	
	E	open plan	3.51			
Eleventh Floor	A	open plan	4.53	A < 67.29 m ²	Ventilation enclosure	286.00 m ²
	B	open plan	4.07	67.29 m ² ≤ A < 134.59 m ²	External alarm	
	C	open plan	4.31	134.59 m ² ≤ A	No measures	
	D	open plan	6.27			
	E	open plan	4.79			
	F	open plan	6.74			
	G	open plan	5.20			
	H	open plan	7.11			
	I	open plan	5.76			

Room	Indoor units	Measures
open plan	FCU11-31	Minimum room area: 3.40 m ²
open plan	FCU11-30	Minimum room area: 3.03 m ²
open plan	FCU11-29	Minimum room area: 3.87 m ²
open plan	FCU11-28	Minimum room area: 3.51 m ²
open plan	FCU11-26	Minimum room area: 4.53 m ²
open plan	FCU11-27	Minimum room area: 4.07 m ²
open plan	FCU11-25	Minimum room area: 4.31 m ²
open plan	FCU11-24	Minimum room area: 6.27 m ²
open plan	FCU11-23	Minimum room area: 4.79 m ²
open plan	FCU11-22	Minimum room area: 6.74 m ²
open plan	FCU11-21	Minimum room area: 5.20 m ²
open plan	FCU11-20	Minimum room area: 7.11 m ²
open plan	FCU11-19	Minimum room area: 5.76 m ²

Only units connected to outdoor unit Eleventh Floor CU5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Twelfth Floor CU1/2. - REYA14A

Capacity data at conditions and connection ratio (109) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU12-05	FXSA32A	24.0/50%	2.5	3.0	2.1	6.0	2.2	0.049
FCU12-08	FXSA50A	24.0/50%	3.8	4.7	3.4	6.0	3.5	0.096
FCU12-02	FXSA40A	24.0/50%	2.8	3.7	2.6	6.0	2.8	0.094
FCU12-07	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU12-03	FXSA40A	24.0/50%	2.9	3.7	2.7	6.0	2.8	0.094
FCU12-06	FXSA25A	24.0/50%	1.8	2.4	1.5	6.0	1.7	0.046
FCU12-04	FXSA50A	24.0/50%	3.2	4.7	3.0	6.0	3.5	0.096
FCU12-01	FXSA80A	24.0/50%	5.6	7.5	5.3	6.0	5.5	0.143
FCU12-09	FXSA40A	24.0/50%	2.9	3.7	2.7	6.0	2.8	0.094
			27.2					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU12-05	FXSA32A	21.0	3.8	3.8	0.049
FCU12-08	FXSA50A	21.0	4.3	6.0	0.096
FCU12-02	FXSA40A	21.0	2.7	4.8	0.094
FCU12-07	FXSA25A	21.0	2.9	3.1	0.046
FCU12-03	FXSA40A	21.0	2.7	4.8	0.094
FCU12-06	FXSA25A	21.0	2.9	3.1	0.046
FCU12-04	FXSA50A	21.0	3.1	6.0	0.096
FCU12-01	FXSA80A	21.0	5.2	9.6	0.143
FCU12-09	FXSA40A	21.0	2.6	4.8	0.094
			30.2		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA		A		mm	kg
FCU12-05	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU12-08	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-02	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU12-07	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU12-03	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU12-06	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU12-04	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-01	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5
FCU12-09	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5

Remarks

Under capacity

The sum of the required indoor unit capacities is 30.2kW for heating. However, the selected outdoor unit has a heating capacity of 27.4kW (= -9.3%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 6.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Twelfth Floor	A	open plan	3.76	A < 51.20 m ²	Ventilation enclosure	240.00 m ²
	B	open plan	4.78	51.20 m ² ≤ A < 102.41 m ²	External alarm	
	C	open plan	4.15	102.41 m ² ≤ A	No measures	
	D	open plan	3.67			
	E	open plan	4.62			
	F	open plan	4.07			
	G	open plan	5.99			
	H	open plan	7.71			
	I	open plan	6.11			

Room	Indoor units	Measures
open plan	FCU12-05	Minimum room area: 3.76 m ²
open plan	FCU12-08	Minimum room area: 4.78 m ²
open plan	FCU12-02	Minimum room area: 4.15 m ²
open plan	FCU12-07	Minimum room area: 3.67 m ²
open plan	FCU12-03	Minimum room area: 4.62 m ²
open plan	FCU12-06	Minimum room area: 4.07 m ²
open plan	FCU12-04	Minimum room area: 5.99 m ²
open plan	FCU12-01	Minimum room area: 7.71 m ²
open plan	FCU12-09	Minimum room area: 6.11 m ²

Only units connected to outdoor unit Twelfth Floor CU1/2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Twelfth Floor CU3/4. - REYA16A

Capacity data at conditions and connection ratio (99) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU12-18	FXSA63A	24.0/50%	3.9	5.8	3.4	6.0	4.4	0.106
FCU12-17	FXSA50A	24.0/50%	3.4	4.7	3.2	6.0	3.5	0.096
FCU12-16	FXSA32A	24.0/50%	2.4	3.0	2.2	6.0	2.2	0.049
FCU12-15	FXSA32A	24.0/50%	2.4	3.0	2.2	6.0	2.2	0.049
FCU12-14	FXSA32A	24.0/50%	2.4	3.0	2.2	6.0	2.2	0.049
FCU12-13	FXSA50A	24.0/50%	3.7	4.7	3.5	6.0	3.5	0.096
FCU12-12	FXSA20A	24.0/50%	1.2	1.8	1.1	6.0	1.4	0.046
FCU12-11	FXSA40A	24.0/50%	2.7	3.7	2.5	6.0	2.8	0.094
FCU12-10	FXSA80A	24.0/50%	5.8	7.5	5.3	6.0	5.5	0.143
			27.9					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU12-18	FXSA63A	21.0	6.9	7.7	0.106
FCU12-17	FXSA50A	21.0	3.0	6.0	0.096
FCU12-16	FXSA32A	21.0	2.3	3.8	0.049
FCU12-15	FXSA32A	21.0	2.2	3.8	0.049
FCU12-14	FXSA32A	21.0	2.4	3.8	0.049
FCU12-13	FXSA50A	21.0	2.8	6.0	0.096
FCU12-12	FXSA20A	21.0	2.4	2.4	0.046
FCU12-11	FXSA40A	21.0	2.3	4.8	0.094
FCU12-10	FXSA80A	21.0	7.9	9.6	0.143
			32.2		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU12-18	FXSA63A	open plan	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5

Name	FCU	Room	Sound dBA	PS	MCA A	MFA	WxHxD mm	Weight kg
FCU12-17	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-16	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU12-15	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU12-14	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU12-13	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-12	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU12-11	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU12-10	FXSA80A	open plan	29 - 35	220V 1ph	1.9	Factory Std	1,000 x 245 x 800	36.5

Remarks

Under capacity

The sum of the required indoor unit capacities is 32.2kW for heating. However, the selected outdoor unit has a heating capacity of 29.1kW (= -9.7%). Be aware that an undersized system may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 6.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area m ²	Additional measures depending on the room area (A) where the BS(SV) box is installed		Actual BS(SV) Box room area
				Measure		
Twelfth Floor	A	open plan	5.62	A < 77.51 m ²	Ventilation enclosure	213.00 m ²
	B	open plan	4.59	77.51 m ² ≤ A < 155.02 m ²	External alarm	
	C	open plan	3.60	155.02 m ² ≤ A	No measures	
	D	open plan	3.84			
	E	open plan	4.00			
	F	open plan	5.15			
	G	open plan	4.07			
	H	open plan	5.46			
	I	open plan	8.83			

Room	Indoor units	Measures
open plan	FCU12-18	Minimum room area: 5.62 m ²
open plan	FCU12-17	Minimum room area: 4.59 m ²
open plan	FCU12-16	Minimum room area: 3.60 m ²
open plan	FCU12-15	Minimum room area: 3.84 m ²
open plan	FCU12-14	Minimum room area: 4.00 m ²
open plan	FCU12-13	Minimum room area: 5.15 m ²
open plan	FCU12-12	Minimum room area: 4.07 m ²
open plan	FCU12-11	Minimum room area: 5.46 m ²
open plan	FCU12-10	Minimum room area: 8.83 m ²

Only units connected to outdoor unit Twelfth Floor CU3/4. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Twelfth Floor 5/6. - REYA18A

Capacity data at conditions and connection ratio (93) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU12-29	FXSA20A	24.0/50%	1.4	1.8	1.3	6.0	1.4	0.046
FCU12-30	FXSA40A	24.0/50%	2.7	3.7	2.4	6.0	2.8	0.094
FCU12-28	FXSA50A	24.0/50%	3.0	4.7	2.8	6.0	3.5	0.096
FCU12-26	FXSA32A	24.0/50%	1.6	3.0	1.4	6.0	2.2	0.049
FCU12-27	FXSA32A	24.0/50%	2.6	3.0	2.2	6.0	2.2	0.049
FCU12-25	FXSA25A	24.0/50%	1.2	2.4	1.1	6.0	1.7	0.046
FCU12-24	FXSA50A	24.0/50%	3.4	4.7	3.2	6.0	3.5	0.096
FCU12-22	FXSA50A	24.0/50%	3.5	4.7	3.2	6.0	3.5	0.096
FCU12-23	FXSA25A	24.0/50%	1.4	2.4	1.2	6.0	1.7	0.046
FCU12-20	FXSA50A	24.0/50%	3.4	4.7	3.2	6.0	3.5	0.096
FCU12-19	FXSA20A	24.0/50%	1.3	1.8	1.1	6.0	1.4	0.046
FCU12-21	FXSA25A	24.0/50%	1.3	2.4	1.2	6.0	1.7	0.046
			26.8					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU12-29	FXSA20A	21.0	1.6	2.4	0.046
FCU12-30	FXSA40A	21.0	4.5	4.8	0.094
FCU12-28	FXSA50A	21.0	3.1	6.0	0.096
FCU12-26	FXSA32A	21.0	3.2	3.8	0.049
FCU12-27	FXSA32A	21.0	2.8	3.8	0.049
FCU12-25	FXSA25A	21.0	2.6	3.1	0.046
FCU12-24	FXSA50A	21.0	2.9	6.0	0.096
FCU12-22	FXSA50A	21.0	2.9	6.0	0.096
FCU12-23	FXSA25A	21.0	2.5	3.1	0.046
FCU12-20	FXSA50A	21.0	2.6	6.0	0.096
FCU12-19	FXSA20A	21.0	2.3	2.4	0.046
FCU12-21	FXSA25A	21.0	2.5	3.1	0.046



Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
			33.5		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU12-29	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU12-30	FXSA40A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU12-28	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-26	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU12-27	FXSA32A	open plan	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0
FCU12-25	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU12-24	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-22	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-23	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU12-20	FXSA50A	open plan	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU12-19	FXSA20A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU12-21	FXSA25A	open plan	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5

Remarks

Outdoor vs. indoor position

Outdoor unit placed 6.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure	Actual BS(SV) Box room area	
Twelfth Floor	A	open plan	2.87	A < 61.87 m ²	Ventilation enclosure External alarm No measures	325.00 m ²
	B	open plan	3.59	61.87 m ² ≤ A < 123.73 m ²		
	C	open plan	4.78	123.73 m ² ≤ A		
	D	open plan	4.48			
	E	open plan	4.72			
	F	open plan	4.31			
	G	open plan	6.27			
	H	open plan	6.55			
	I	open plan	5.03			

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
	J	open plan	7.21		
	K	open plan	5.84		
	L	open plan	4.71		

Rooms

Room	Indoor units	Measures
open plan	FCU12-29	Minimum room area: 2.87 m ²
open plan	FCU12-30	Minimum room area: 3.59 m ²
open plan	FCU12-28	Minimum room area: 4.78 m ²
open plan	FCU12-26	Minimum room area: 4.48 m ²
open plan	FCU12-27	Minimum room area: 4.72 m ²
open plan	FCU12-25	Minimum room area: 4.31 m ²
open plan	FCU12-24	Minimum room area: 6.27 m ²
open plan	FCU12-22	Minimum room area: 6.55 m ²
open plan	FCU12-23	Minimum room area: 5.03 m ²
open plan	FCU12-20	Minimum room area: 7.21 m ²
open plan	FCU12-19	Minimum room area: 5.84 m ²
open plan	FCU12-21	Minimum room area: 4.71 m ²

Only units connected to outdoor unit Twelfth Floor 5/6. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Thirteenth Floor CU1. - REYA16A

Capacity data at conditions and connection ratio (113) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU13-19	FXAA20A	24.0/50%	1.3	1.8	1.0	6.0	1.3	0.019
FCU13-18	FXSA40A	24.0/50%	2.7	3.7	2.5	6.0	2.8	0.094
FCU13-17	FXSA50A	24.0/50%	3.3	4.7	3.0	6.0	3.5	0.096
FCU13-16	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU13-15	FXSA25A	24.0/50%	1.8	2.4	1.6	6.0	1.7	0.046
FCU13-14	FXSA63A	24.0/50%	4.6	5.8	4.3	6.0	4.4	0.106
FCU13-13	FXSA63A	24.0/50%	4.2	5.8	4.0	6.0	4.4	0.106
FCU13-12	FXSA63A	24.0/50%	4.1	5.8	3.8	6.0	4.4	0.106
FCU13-10	FXSA63A	24.0/50%	4.2	5.8	3.0	6.0	4.4	0.106
FCU13-09	FXSA40A	24.0/50%	2.5	3.7	2.5	6.0	2.8	0.094
			30.4					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU13-19	FXAA20A	21.0	2.0	2.4	0.029



Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU13-18	FXSA40A	21.0	2.3	4.8	0.094
FCU13-17	FXSA50A	21.0	3.2	6.0	0.096
FCU13-16	FXSA25A	21.0	2.5	3.1	0.046
FCU13-15	FXSA25A	21.0	2.3	3.1	0.046
FCU13-14	FXSA63A	21.0	4.2	7.7	0.106
FCU13-13	FXSA63A	21.0	4.1	7.7	0.106
FCU13-12	FXSA63A	21.0	3.8	7.7	0.106
FCU13-10	FXSA63A	21.0	7.6	7.7	0.106
FCU13-09	FXSA40A	21.0	2.4	4.8	0.094
			34.4		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU13-19	FXAA20A	meeting room	29 - 33	230V 1ph	0.3	Factory Std	795 x 290 x 266	12.0
FCU13-18	FXSA40A	meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU13-17	FXSA50A	meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	29.0
FCU13-16	FXSA25A	meeting room	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU13-15	FXSA25A	meeting room	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU13-14	FXSA63A	meeting room	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU13-13	FXSA63A	meeting room	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU13-12	FXSA63A	meeting room	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU13-10	FXSA63A	Meeting room	27 - 33	220V 1ph	1.6	Factory Std	1,000 x 245 x 800	35.5
FCU13-09	FXSA40A	Meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 34.2kW for cooling and 34.4kW for heating. However, the outdoor unit selection uses reduced load values for cooling of 17.1kW (=50%) and for heating of 27.5kW (=80%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 3.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
Thirteenth Floor	A	meeting room	4.38	A < 62.85 m ²	Ventilation enclosure	112.00 m ²
	B	meeting room	3.78	62.85 m ² ≤ A < 125.69 m ²	External alarm	External alarm required (*)
				125.69 m ² ≤ A	No measures	

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
	C	meeting room	4.40		
	D	meeting room	3.11		
	E	meeting room	3.43		
	F	meeting room	5.62		
	G	meeting room	6.18		
	H	meeting room	6.65		
	J	Meeting room	7.49		
	K	Meeting room	6.95		

(*) When the BS(SV) Box is installed in a room where people are restricted in their movement, an external alarm is not enough as safety measure. In this case a ventilation enclosure is required.

Rooms

Room	Indoor units	Measures
Meeting room	FCU13-10	Minimum room area: 7.49 m ²
Meeting room	FCU13-09	Minimum room area: 6.95 m ²
meeting room	FCU13-19	Minimum room area: 4.38 m ²
meeting room	FCU13-18	Minimum room area: 3.78 m ²
meeting room	FCU13-17	Minimum room area: 4.40 m ²
meeting room	FCU13-16	Minimum room area: 3.11 m ²
meeting room	FCU13-15	Minimum room area: 3.43 m ²
meeting room	FCU13-14	Minimum room area: 5.62 m ²
meeting room	FCU13-13	Minimum room area: 6.18 m ²
meeting room	FCU13-12	Minimum room area: 6.65 m ²

Only units connected to outdoor unit Thirteenth Floor CU1. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Thirteenth Floor CU2. - REYA10A

Capacity data at conditions and connection ratio (85) as entered

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
FCU13-03	FXAA32A	24.0/50%	2.2	2.9	2.0	6.0	2.1	0.030
FCU13-02	FXSA20A	24.0/50%	1.2	1.8	1.1	6.0	1.4	0.046
FCU13-01	FXSA25A	24.0/50%	1.5	2.4	1.2	6.0	1.7	0.046
FCU13-04	FXSA40A	24.0/50%	2.4	3.7	2.1	6.0	2.8	0.094
FCU13-05	FXSA40A	24.0/50%	2.5	3.7	2.2	6.0	2.8	0.094
FCU13-06	FXSA25A	24.0/50%	1.7	2.4	1.5	6.0	1.7	0.046
FCU13-07	FXSA32A	24.0/50%	1.9	3.0	1.7	6.0	2.2	0.049

Name	FCU	Cooling						
		Tmp C	Rq TC	Max TC	Rq SC	Tevap	Max SC	PIC
		°C (DBT/RH)	kW	kW	kW	°C	kW	kW
			13.4					

Name	FCU	Heating			
		Tmp H	Rq HC	Max HC	PIH
		°C	kW	kW	kW
FCU13-03	FXAA32A	21.0	2.2	3.8	0.035
FCU13-02	FXSA20A	21.0	2.2	2.4	0.046
FCU13-01	FXSA25A	21.0	2.9	3.1	0.046
FCU13-04	FXSA40A	21.0	4.1	4.8	0.094
FCU13-05	FXSA40A	21.0	4.2	4.8	0.094
FCU13-06	FXSA25A	21.0	3.0	3.1	0.046
FCU13-07	FXSA32A	21.0	2.2	3.8	0.049
			20.8		

Name	FCU	Room	Sound	PS	MCA	MFA	WxHxD	Weight
			dBA				mm	kg
FCU13-03	FXAA32A	meeting room	29 - 38	230V 1ph	0.4	Factory Std	795 x 290 x 266	12.0
FCU13-02	FXSA20A	meeting room	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU13-01	FXSA25A	meeting room	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU13-04	FXSA40A	meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU13-05	FXSA40A	meeting room	29 - 35	220V 1ph	1.1	Factory Std	700 x 245 x 800	28.5
FCU13-06	FXSA25A	meeting room	25 - 30	220V 1ph	0.8	Factory Std	550 x 245 x 800	23.5
FCU13-07	FXSA32A	meeting room	26 - 31	220V 1ph	0.8	Factory Std	550 x 245 x 800	24.0

Remarks

Reduced operational load

The sum of the required indoor unit capacities is 14.1kW for cooling. However, the outdoor unit selection uses reduced load values for cooling of 13.4kW (=95%). Be aware that unrealistic reductions may lead to reduced comfort levels, different noise levels or increased wear and tear.

Outdoor vs. indoor position

Outdoor unit placed 3.0m above the indoor units.

Minimum room area

Room area checks are compliant to IEC 60335-2-40:2018 (Ed. 6).

Additional multi-BS(SV) box measures

Minimum area to meet lower flammability limit for rooms is determined per BS box port.

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed	
			m ²	Measure	Actual BS(SV) Box room area
Thirteenth Floor	A	meeting room	4.10	A < 34.57 m ² 34.57 m ² ≤ A < 69.14	84.00 m ²

Name	Port	Room	Min. room area	Additional measures depending on the room area (A) where the BS(SV) box is installed		
			m ²	Measure		Actual BS(SV) Box room area
	B	meeting room	2.87	m ² 69.14 m ² ≤ A	Ventilation enclosure External alarm No measures	
	C	meeting room	3.11			
	D	meeting room	4.25			
	E	meeting room	4.81			
	F	meeting room	4.47			
	G	meeting room	5.45			

Rooms

Room	Indoor units	Measures
meeting room	FCU13-03	Minimum room area: 4.10 m ²
meeting room	FCU13-02	Minimum room area: 2.87 m ²
meeting room	FCU13-01	Minimum room area: 3.11 m ²
meeting room	FCU13-04	Minimum room area: 4.25 m ²
meeting room	FCU13-05	Minimum room area: 4.81 m ²
meeting room	FCU13-06	Minimum room area: 4.47 m ²
meeting room	FCU13-07	Minimum room area: 5.45 m ²

Only units connected to outdoor unit Thirteenth Floor CU2. are considered for the minimum room areas displayed here. If other outdoor units serve the same room(s), check the minimum room areas there as well and only consider the largest one.

Outdoor unit details

Table of abbreviations

Abbreviation	Description
Name	Logical name of the device
Model	Device model name
▼	Optimized selection: Smaller outdoor model selected than standard proposed model
CR	Connection ratio
Tmp C	Outdoor conditions in cooling
WFR	Water flow per outdoor unit module
CC	Available cooling capacity
Rq CC	Required cooling capacity
PIC	Power input in cooling mode
InC	Water inlet temperature in cooling mode
OutC	Water outlet temperature in cooling mode
Tmp H	Outdoor conditions in heating (dry bulb temp. / RH)
HC	Available heating capacity (integrated heating capacity)
Rq HC	Required heating capacity
PIH	Power input in heating mode
InH	Water inlet temperature in heating mode
OutH	Water outlet temperature in heating mode
Piping	Largest distance from indoor unit to outdoor unit
Bse Refr	Standard factory refrigerant charge (16.4ft actual piping length) excluding extra refrigerant charge. For calculation of extra refrigerant charge refer to the databook
Ex Refr	Extra refrigerant charge
PS	Power supply (voltage and phases)
MCA	Minimum Circuit Amps
MFA	Maxium Fuse Amps
FLA	Fan Motor Input
RLA	Nominal Running Amps
WxHxD	WidthxHeightxD
Weight	Weight of the device
EER	EER value at nominal condition
EER2	EER2 value at nominal condition
IEER	IEER value at nominal condition
COP47	COP value at nominal condition and at ambient temperature of 8°C
COP17	COP value at nominal condition and at ambient temperature of -8°C

Outdoor details

Name	Model	CR	Cooling			Heating			Piping
			Tmp C °C	CC kW	Rq CC kW	Tmp H °C (DBT/RH)	HC kW	Rq HC kW	
Ground Floor.	REYA20A	99.5	35.0	42.5	28.9	-5.0/100%	35.8	27.9	174.8
First Floor Tenancy D.	REYA16A ▼	101.3	35.0	33.3	29.1	-5.0/100%	28.9	17.8	141.8
First Floor CU2/3.	REYA8A	107.5	35.0	17.4	15.8	-5.0/100%	16.4	8.4	163.7
Second Floor CU1/2.	REYA14A ▼	92.9	35.0	30.3	26.1	-5.0/100%	26.6	13.4	104.6
Second Floor CU3/4.	REYA20A	105.5	35.0	43.2	39.9	-5.0/100%	36.0	16.3	169.9
Second Floor CU5/6.	REYA14A ▼	74.3	35.0	30.2	18.1	-5.0/100%	26.6	24.9	108.5
Third Floor CU1/2.	REYA20A	106.5	35.0	46.0	36.8	-5.0/100%	38.0	39.2	100.9
Third Floor CU3/4.	REYA24A	123.3	35.0	57.3	41.3	-5.0/100%	45.6	29.8	158.9
Third Floor CU5/6.	REYA20A	84.8	35.0	43.2	28.3	-5.0/100%	37.8	37.0	104.8
Sixth floor CU2/3.	REYA16A ▼	103.8	35.0	35.3	25.3	-5.0/100%	30.2	28.0	84.6
Sixth floor CU1/1B *tenancy 602 incl budget*.	REYA20A	109.5	35.0	46.4	38.5	-5.0/100%	37.2	34.8	127.8
Sixth floor CU4/5.	REYA14A ▼	107.9	35.0	32.6	26.2	-5.0/100%	26.9	25.2	95.6
Seventh Floor CU1/2.	REYA14A ▼	107.9	35.0	32.4	30.3	-5.0/100%	27.3	29.6	77.6
Seventh Floor CU3/4.	REYA20A	113.0	35.0	46.7	20.9	-5.0/100%	37.0	34.2	137.8
Seventh Floor CU5/6.	REYA18A ▼	101.7	35.0	36.5	28.9	-5.0/100%	34.1	34.7	88.3
Eighth Floor CU1/2.	REYA14A ▼	107.9	35.0	32.6	30.3	-5.0/100%	27.4	29.6	75.6
Eighth Floor CU3/4.	REYA20A	114.0	35.0	47.1	43.1	-5.0/100%	37.0	17.1	135.8

Name	Model	CR	Cooling			Heating			Piping
			Tmp C °C	CC kW	Rq CC kW	Tmp H °C (DBT/RH)	HC kW	Rq HC kW	
Eighth Floor CU5/6.	REYA18A ▼	103.1	35.0	36.9	34.0	-5.0/100%	34.1	30.9	89.3
Ninth Floor CU1/2.	REYA14A ▼	107.9	35.0	32.7	28.6	-5.0/100%	27.4	25.0	74.6
Ninth Floor CU3/4.	REYA20A	117.0	35.0	47.5	21.7	-5.0/100%	36.9	37.3	141.8
Ninth Floor CU5/6.	REYA20A	96.3	35.0	42.9	31.1	-5.0/100%	38.3	36.3	87.8
Tenth Floor CU1/2.	REYA14A ▼	93.2	35.0	30.5	22.0	-5.0/100%	27.3	27.7	74.3
Tenth Floor CU3/4.	REYA20A	90.5	35.0	41.7	31.0	-5.0/100%	36.4	34.1	152.6
Tenth Floor CU5/6.	REYA18A ▼	96.9	35.0	36.1	26.5	-5.0/100%	34.1	33.0	88.1
Eleventh Floor CU1/2.	REYA18A ▼	91.7	35.0	36.8	29.4	-5.0/100%	34.3	31.8	78.6
Eleventh Floor CU3/4.	REYA18A ▼	101.4	35.0	36.3	30.9	-5.0/100%	33.1	35.0	125.3
Eleventh Floor CU5/6.	REYA18A ▼	92.2	35.0	36.2	26.0	-5.0/100%	34.1	31.6	87.1
Twelfth Floor CU1/2.	REYA14A ▼	108.9	35.0	33.0	31.8	-5.0/100%	27.4	30.2	75.6
Twelfth Floor CU3/4.	REYA16A ▼	99.1	35.0	33.6	32.7	-5.0/100%	29.1	32.2	132.6
Twelfth Floor 5/6.	REYA18A ▼	92.8	35.0	36.9	29.1	-5.0/100%	34.3	33.5	77.6
Thirteenth Floor CU1.	REYA16A ▼	112.5	35.0	38.2	17.1	-5.0/100%	30.0	27.5	98.3
Thirteenth Floor CU2.	REYA10A	85.0	35.0	22.1	13.4	-5.0/100%	21.6	20.8	60.5

Name	Model	PS	MCA	MFA	RLA	FLA	WxHxD mm	Weight kg
			A	A	A	A		
Ground Floor.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Ground Floor	BS12A14AV1B	230V 1ph	1.1	6.0			1,400 x 275 x 843	90.0
First Floor Tenancy D.	REYA16A	400V 3Nph	31.0	40.0	21.0		1,240 x 1,685 x 765	296.0
First Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0

Name	Model	PS	MCA	MFA	RLA	FLA	WxHxD mm	Weight kg
			A	A	A	A		
BS 607	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
First Floor CU2/3.	REYA8A	400V 3Nph	16.1	20.0	10.5		930 x 1,685 x 765	213.0
First Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
First Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Second Floor CU1/2.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Second Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Second Floor CU3/4.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
BS 12	BS8A14AV1B	230V 1ph	0.8	6.0			1,000 x 275 x 843	65.0
Second Floor	BS8A14AV1B	230V 1ph	0.8	6.0			1,000 x 275 x 843	65.0
Second Floor CU5/6.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Second Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Third Floor CU1/2.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Third Floor	BS8A14AV1B	230V 1ph	0.8	6.0			1,000 x 275 x 843	65.0
Third Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Third Floor CU3/4.	REYA24A	400V 3Nph						
A	- REYA16A		31.0	40.0	21.0		1,240 x 1,685 x 765	296.0
B	- REYA8A		16.1	20.0	10.5		930 x 1,685 x 765	213.0
Third Floor	BS8A14AV1B	230V 1ph	0.8	6.0			1,000 x 275 x 843	65.0
Third Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Third Floor CU5/6.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Third Floor	BS8A14AV1B	230V 1ph	0.8	6.0			1,000 x 275 x 843	65.0
Third Floor	BS8A14AV1B	230V 1ph	0.8	6.0			1,000 x 275 x 843	65.0
Sixth floor CU2/3.	REYA16A	400V 3Nph	31.0	40.0	21.0		1,240 x 1,685 x 765	296.0
Sixth Floor	BS12A14AV1B	230V 1ph	1.1	6.0			1,400 x 275 x 843	90.0
Sixth floor CU1/1B *tenancy 602 incl budget*.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Sixth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0

Name	Model	PS	MCA	MFA	RLA	FLA	WxHxD mm	Weight kg
			A	A	A	A		
Sixth Floor *tenancy 602*	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Sixth floor CU4/5.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Sixth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Seventh Floor CU1/2.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Seventh Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Seventh Floor CU3/4.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Seventh Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Seventh Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Seventh Floor CU5/6.	REYA18A	400V 3Nph	35.0	40.0	27.8		1,240 x 1,685 x 765	319.0
BS 606	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Eighth Floor CU1/2.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Eighth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Eighth Floor CU3/4.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Eighth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Eighth Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Eighth Floor CU5/6.	REYA18A	400V 3Nph	35.0	40.0	27.8		1,240 x 1,685 x 765	319.0
Eighth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Ninth Floor CU1/2.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Ninth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Ninth Floor CU3/4.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Ninth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Ninth Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Ninth Floor CU5/6.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0
Ninth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Tenth Floor CU1/2.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Tenth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Tenth Floor CU3/4.	REYA20A	400V 3Nph	42.0	50.0	32.8		1,240 x 1,685 x 765	319.0

Name	Model	PS	MCA	MFA	RLA	FLA	WxHxD mm	Weight kg
			A	A	A	A		
Tenth Floor	BS12A14AV1B	230V 1ph	1.1	6.0			1,400 x 275 x 843	90.0
Tenth Floor CU5/6.	REYA18A	400V 3Nph	35.0	40.0	27.8		1,240 x 1,685 x 765	319.0
Tenth Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Tenth Floor	BS8A14AV1B	230V 1ph	0.8	6.0			1,000 x 275 x 843	65.0
Eleventh Floor CU1/2.	REYA18A	400V 3Nph	35.0	40.0	27.8		1,240 x 1,685 x 765	319.0
Eleventh Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Eleventh Floor CU3/4.	REYA18A	400V 3Nph	35.0	40.0	27.8		1,240 x 1,685 x 765	319.0
Eleventh Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Eleventh Floor CU5/6.	REYA18A	400V 3Nph	35.0	40.0	27.8		1,240 x 1,685 x 765	319.0
Eleventh Floor	BS6A14AV1B	230V 1ph	0.6	6.0			1,000 x 275 x 843	60.0
Eleventh Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Twelfth Floor CU1/2.	REYA14A	400V 3Nph	27.0	32.0	18.5		1,240 x 1,685 x 765	296.0
Twelfth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Twelfth Floor CU3/4.	REYA16A	400V 3Nph	31.0	40.0	21.0		1,240 x 1,685 x 765	296.0
Twelfth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0
Twelfth Floor 5/6.	REYA18A	400V 3Nph	35.0	40.0	27.8		1,240 x 1,685 x 765	319.0
Twelfth Floor	BS12A14AV1B	230V 1ph	1.1	6.0			1,400 x 275 x 843	90.0
Thirteenth Floor CU1.	REYA16A	400V 3Nph	31.0	40.0	21.0		1,240 x 1,685 x 765	296.0
Thirteenth Floor	BS12A14AV1B	230V 1ph	1.1	6.0			1,400 x 275 x 843	90.0
Thirteenth Floor CU2.	REYA10A	400V 3Nph	22.0	25.0	13.0		930 x 1,685 x 765	213.0
Thirteenth Floor	BS10A14AV1B	230V 1ph	1.0	6.0			1,400 x 275 x 843	85.0

Sound Data

Name	Model	Sound Power		Sound Pressure	
		Cooling	Heating	Cooling	Heating
		dBA	dBA	dBA	dBA
Ground Floor.	REYA20A	88	90	67	-
First Floor Tenancy D.	REYA16A	84	86	61	-
First Floor CU2/3.	REYA8A	78	79	56	-
Second Floor CU1/2.	REYA14A	79	83	58	-
Second Floor CU3/4.	REYA20A	88	90	67	-
Second Floor CU5/6.	REYA14A	79	83	58	-
Third Floor CU1/2.	REYA20A	88	90	67	-
Third Floor CU3/4.	REYA24A	85	87	63	-
Third Floor CU5/6.	REYA20A	88	90	67	-
Sixth floor CU2/3.	REYA16A	84	86	61	-
Sixth floor CU1/1B *tenancy 602 incl budget*.	REYA20A	88	90	67	-
Sixth floor CU4/5.	REYA14A	79	83	58	-
Seventh Floor CU1/2.	REYA14A	79	83	58	-
Seventh Floor CU3/4.	REYA20A	88	90	67	-
Seventh Floor CU5/6.	REYA18A	83	85	63	-
Eighth Floor CU1/2.	REYA14A	79	83	58	-
Eighth Floor CU3/4.	REYA20A	88	90	67	-
Eighth Floor CU5/6.	REYA18A	83	85	63	-
Ninth Floor CU1/2.	REYA14A	79	83	58	-
Ninth Floor CU3/4.	REYA20A	88	90	67	-
Ninth Floor CU5/6.	REYA20A	88	90	67	-
Tenth Floor CU1/2.	REYA14A	79	83	58	-
Tenth Floor CU3/4.	REYA20A	88	90	67	-

Name	Model	Sound Power		Sound Pressure	
		Cooling	Heating	Cooling	Heating
		dBA	dBA	dBA	dBA
Tenth Floor CU5/6.	REYA18A	83	85	63	-
Eleventh Floor CU1/2.	REYA18A	83	85	63	-
Eleventh Floor CU3/4.	REYA18A	83	85	63	-
Eleventh Floor CU5/6.	REYA18A	83	85	63	-
Twelfth Floor CU1/2.	REYA14A	79	83	58	-
Twelfth Floor CU3/4.	REYA16A	84	86	61	-
Twelfth Floor 5/6.	REYA18A	83	85	63	-
Thirteenth Floor CU1.	REYA16A	84	86	61	-
Thirteenth Floor CU2.	REYA10A	79	81	58	-

Seasonal Efficiency

Name	Model	$\eta_{s,h}$ heating	$\eta_{s,c}$ cooling	SCOP	SEER	CSPF
		%	%			
Ground Floor.	REYA20A	162.7	262.2	4.14	6.63	-
First Floor Tenancy D.	REYA16A	167.5	281.0	4.26	7.10	-
First Floor CU2/3.	REYA8A	161.5	290.8	4.11	7.35	-
Second Floor CU1/2.	REYA14A	168.3	306.1	4.28	7.73	-
Second Floor CU3/4.	REYA20A	162.7	262.2	4.14	6.63	-
Second Floor CU5/6.	REYA14A	168.3	306.1	4.28	7.73	-
Third Floor CU1/2.	REYA20A	162.7	262.2	4.14	6.63	-
Third Floor CU3/4.	REYA24A	165.2	283.4	4.20	7.16	-
Third Floor CU5/6.	REYA20A	162.7	262.2	4.14	6.63	-
Sixth floor CU2/3.	REYA16A	167.5	281.0	4.26	7.10	-
Sixth floor CU1/1B *tenancy 602 incl budget*.	REYA20A	162.7	262.2	4.14	6.63	-
Sixth floor CU4/5.	REYA14A	168.3	306.1	4.28	7.73	-
Seventh Floor CU1/2.	REYA14A	168.3	306.1	4.28	7.73	-

Name	Model	$\eta_{s,h}$ heating	$\eta_{s,c}$ cooling	SCOP	SEER	CSPF
		%	%			
Seventh Floor CU3/4.	REYA20A	162.7	262.2	4.14	6.63	-
Seventh Floor CU5/6.	REYA18A	172.5	280.6	4.39	7.09	-
Eighth Floor CU1/2.	REYA14A	168.3	306.1	4.28	7.73	-
Eighth Floor CU3/4.	REYA20A	162.7	262.2	4.14	6.63	-
Eighth Floor CU5/6.	REYA18A	172.5	280.6	4.39	7.09	-
Ninth Floor CU1/2.	REYA14A	168.3	306.1	4.28	7.73	-
Ninth Floor CU3/4.	REYA20A	162.7	262.2	4.14	6.63	-
Ninth Floor CU5/6.	REYA20A	162.7	262.2	4.14	6.63	-
Tenth Floor CU1/2.	REYA14A	168.3	306.1	4.28	7.73	-
Tenth Floor CU3/4.	REYA20A	162.7	262.2	4.14	6.63	-
Tenth Floor CU5/6.	REYA18A	172.5	280.6	4.39	7.09	-
Eleventh Floor CU1/2.	REYA18A	172.5	280.6	4.39	7.09	-
Eleventh Floor CU3/4.	REYA18A	172.5	280.6	4.39	7.09	-
Eleventh Floor CU5/6.	REYA18A	172.5	280.6	4.39	7.09	-
Twelfth Floor CU1/2.	REYA14A	168.3	306.1	4.28	7.73	-
Twelfth Floor CU3/4.	REYA16A	167.5	281.0	4.26	7.10	-
Twelfth Floor 5/6.	REYA18A	172.5	280.6	4.39	7.09	-
Thirteenth Floor CU1.	REYA16A	167.5	281.0	4.26	7.10	-
Thirteenth Floor CU2.	REYA10A	170.2	282.6	4.33	7.14	-

For more information go to: <https://energylabel.daikin.eu/>.

Refrigerant information

Name	Model	Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
Ground Floor.	REYA20A	R32	675	10.60	30.79	41.39	27.94
First Floor Tenancy D.	REYA16A	R32	675	10.60	26.86	37.46	25.28
First Floor CU2/3.	REYA8A	R32	675	9.00	18.36	27.36	18.47

Second Floor CU1/2.	REYA14A	R32	675	10.60	17.45	28.05	18.93
Second Floor CU3/4.	REYA20A	R32	675	10.60	32.07	42.67	28.80
Second Floor CU5/6.	REYA14A	R32	675	10.60	17.24	27.84	18.79
Third Floor CU1/2.	REYA20A	R32	675	10.60	21.45	32.05	21.63
Third Floor CU3/4.	REYA24A	R32	675	19.60	28.10	47.70	32.20
Third Floor CU5/6.	REYA20A	R32	675	10.60	20.89	31.49	21.26
Sixth floor CU2/3.	REYA16A	R32	675	10.60	11.22	21.82	14.73
Sixth floor CU1/1B *tenancy 602 incl budget*.	REYA20A	R32	675	10.60	26.20	36.80	24.84
Sixth floor CU4/5.	REYA14A	R32	675	10.60	16.10	26.70	18.02
Seventh Floor CU1/2.	REYA14A	R32	675	10.60	10.58	21.18	14.30
Seventh Floor CU3/4.	REYA20A	R32	675	10.60	26.27	36.87	24.88
Seventh Floor CU5/6.	REYA18A	R32	675	10.60	14.74	25.34	17.11
Eighth Floor CU1/2.	REYA14A	R32	675	10.60	10.90	21.50	14.51
Eighth Floor CU3/4.	REYA20A	R32	675	10.60	26.45	37.05	25.01
Eighth Floor CU5/6.	REYA18A	R32	675	10.60	15.01	25.61	17.28
Ninth Floor CU1/2.	REYA14A	R32	675	10.60	10.15	20.75	14.00
Ninth Floor CU3/4.	REYA20A	R32	675	10.60	27.35	37.95	25.62
Ninth Floor CU5/6.	REYA20A	R32	675	10.60	14.26	24.86	16.78
Tenth Floor CU1/2.	REYA14A	R32	675	10.60	9.51	20.11	13.57
Tenth Floor CU3/4.	REYA20A	R32	675	10.60	26.40	37.00	24.97
Tenth Floor CU5/6.	REYA18A	R32	675	10.60	15.74	26.34	17.78
Eleventh Floor CU1/2.	REYA18A	R32	675	10.60	13.19	23.79	16.06
Eleventh Floor CU3/4.	REYA18A	R32	675	10.60	23.00	33.60	22.68
Eleventh Floor CU5/6.	REYA18A	R32	675	10.60	16.26	26.86	18.13
Twelfth Floor CU1/2.	REYA14A	R32	675	10.60	9.84	20.44	13.79
Twelfth Floor CU3/4.	REYA16A	R32	675	10.60	20.33	30.93	20.88
Twelfth Floor 5/6.	REYA18A	R32	675	10.60	14.09	24.69	16.67

Thirteenth Floor CU1.	REYA16A	R32	675	10.60	14.48	25.08	16.93
Thirteenth Floor CU2.	REYA10A	R32	675	9.00	4.80	13.80	9.31

The system(s) contain fluorinated greenhouse gases.

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Ground Floor. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS12A14AV1B	1	Branch selector unit
FXAA40A	4	FXAA-A - Wall mounted unit
FXAA63A	3	FXAA-A - Wall mounted unit
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
CYAM200DK100FBN	1	Unified Biddle air curtain, wall mounted
5041183	2	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	144.0	0.0	0.0	144.0
3/8"	18.0	0.0	0.0	18.0
1/2"	0.0	144.0	0.0	144.0
5/8"	125.0	18.0	0.0	143.0
7/8"	0.0	0.0	125.0	125.0
1 1/8"	0.0	125.0	0.0	125.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	30.79*)	41.39	27.94

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = 4.3 (B) + 1.7 (C) + 1.04 × [125.0 m (ø5/8 ") × 0.16 + 18.0 m (ø3/8 ") × 0.053 + 144.0 m (ø1/4 ") × 0.02] = 30.8kg

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.



Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	40.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	40.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	50.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	40.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	50.0m
Maximum height difference between indoor units	15.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	40.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

First Floor Tenancy D. - REYA16A

Model	Quantity	Description
REYA16A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA20A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	4	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	3	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	192.0	0.0	0.0	192.0
3/8"	10.0	168.0	0.0	178.0
1/2"	34.0	24.0	0.0	58.0
5/8"	87.0	0.0	44.0	131.0
3/4"	0.0	44.0	87.0	131.0
7/8"	0.0	87.0	0.0	87.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	26.86*)	37.46	25.28

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.3 (B) + 2.5 (C) + 1.04 \times [87.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 34.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 10.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 192.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 26.9\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

First Floor CU2/3. - REYA8A

Model	Quantity	Description
REYA8A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	2	Branch selector unit
FXAA15A	2	FXAA-A - Wall mounted unit
FXAA20A	2	FXAA-A - Wall mounted unit
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	4	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M29T9	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	131.0	0.0	0.0	131.0
3/8"	10.0	131.0	0.0	141.0
1/2"	121.0	0.0	10.0	131.0
5/8"	0.0	10.0	121.0	131.0
3/4"	0.0	121.0	0.0	121.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	9.00	18.36*)	27.36	18.47

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 2.0 (C) + 1.04 \times [121.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 10.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 131.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 18.4\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	1/2"x3/4"x5/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	1/2" (liquid) x 3/4" (gas) x 5/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Second Floor CU1/2. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	4	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	189.0	0.0	0.0	189.0
3/8"	0.0	86.0	0.0	86.0
1/2"	0.0	103.0	0.0	103.0
5/8"	65.0	0.0	0.0	65.0
3/4"	0.0	0.0	65.0	65.0
7/8"	0.0	65.0	0.0	65.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	17.45*)	28.05	18.93

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $1.2 (B) + 1.5 (C) + 1.04 \times [65.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 189.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 17.4 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Second Floor CU3/4. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS8A14AV1B	2	Branch selector unit
FXSA15A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	137.0	0.0	0.0	137.0
3/8"	1.0	67.0	0.0	68.0
1/2"	0.0	70.0	0.0	70.0
5/8"	132.0	0.0	1.0	133.0
3/4"	0.0	1.0	15.0	16.0
7/8"	0.0	15.0	117.0	132.0
1 1/8"	0.0	117.0	0.0	117.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	32.07*)	42.67	28.80

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 2.4 (C) + 1.04 \times [132.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 1.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 137.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 32.1 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Second Floor CU5/6. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	1	FXSA-A - Concealed ceiling unit with medium ESP
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	8	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	131.0	0.0	0.0	131.0
3/8"	0.0	92.0	0.0	92.0
1/2"	0.0	39.0	0.0	39.0
5/8"	71.0	0.0	0.0	71.0
3/4"	0.0	0.0	71.0	71.0
7/8"	0.0	71.0	0.0	71.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	17.24*)	27.84	18.79

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $1.2 (B) + 1.5 (C) + 1.04 \times [71.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 131.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 17.2\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Third Floor CU1/2. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS8A14AV1B	1	Branch selector unit
FXAA15A	2	FXAA-A - Wall mounted unit
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	3	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	215.0	0.0	0.0	215.0
3/8"	1.0	109.0	0.0	110.0
1/2"	1.0	106.0	0.0	107.0
5/8"	59.0	0.0	1.0	60.0
3/4"	0.0	1.0	1.0	2.0
7/8"	0.0	1.0	59.0	60.0
1 1/8"	0.0	59.0	0.0	59.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	21.45*)	32.05	21.63

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 2.2 (C) + 1.04 \times [59.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 1.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 1.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 215.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 21.4\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Third Floor CU3/4. - REYA24A = REYA16A + REYA8A

Model	Quantity	Description
REYA16A	1	REYA-A (VRV 5 Heat Recovery)
REYA8A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS8A14AV1B	1	Branch selector unit
FXSA40A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	8	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	1	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M75T	1	Refnet branch piping kit
BHFQ23P907A	1	Outdoor unit multi connection piping kit for 2 modules HR
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	126.0	0.0	0.0	126.0
3/8"	18.0	0.0	0.0	18.0
1/2"	13.0	126.0	0.0	139.0
5/8"	112.0	18.0	0.0	130.0
3/4"	0.0	0.0	13.0	13.0
7/8"	0.0	13.0	112.0	125.0
1 1/8"	0.0	112.0	0.0	112.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	19.60	28.10*)	47.70	32.20

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $1.0 (A) + 1.3 (B) + 2.2 (C) + 1.04 \times [112.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 13.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 18.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 126.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 28.1 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Remarks

Sufficient distance should be respected between the modules according to the service & operation space rules as mentioned in the databook.

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Third Floor CU5/6. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS8A14AV1B	2	Branch selector unit
FXAA15A	1	FXAA-A - Wall mounted unit
FXSA20A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	3	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	144.0	0.0	0.0	144.0
3/8"	13.0	55.0	0.0	68.0
1/2"	0.0	89.0	0.0	89.0
5/8"	63.0	0.0	13.0	76.0
3/4"	0.0	13.0	0.0	13.0
7/8"	0.0	0.0	63.0	63.0
1 1/8"	0.0	63.0	0.0	63.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	20.89*)	31.49	21.26

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $4.3 (B) + 2.4 (C) + 1.04 \times [63.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 13.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 144.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 20.9\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Sixth floor CU2/3. - REYA16A

Model	Quantity	Description
REYA16A	1	REYA-A (VRV 5 Heat Recovery)
BS12A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	2	FXSA-A - Concealed ceiling unit with medium ESP
5041183	3	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	8	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	126.0	0.0	0.0	126.0
3/8"	0.0	32.0	0.0	32.0
1/2"	49.0	94.0	0.0	143.0
3/4"	0.0	0.0	49.0	49.0
7/8"	0.0	49.0	0.0	49.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	11.22*)	21.82	14.73

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.3 (B) + 1.7 (C) + 1.04 \times [49.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 126.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 11.2 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Sixth floor CU1/1B *tenancy 602 incl budget*. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS10A14AV1B	1	Branch selector unit
FXSA15A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	4	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	122.0	0.0	0.0	122.0
3/8"	13.0	66.0	0.0	79.0
1/2"	0.0	56.0	0.0	56.0
5/8"	94.0	0.0	13.0	107.0
3/4"	0.0	13.0	0.0	13.0
7/8"	0.0	0.0	94.0	94.0
1 1/8"	0.0	94.0	0.0	94.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	26.20*)	36.80	24.84

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 2.5 (C) + 1.04 \times [94.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 13.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 122.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 26.2 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Sixth floor CU4/5. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	5	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	228.0	0.0	0.0	228.0
3/8"	0.0	104.0	0.0	104.0
1/2"	0.0	124.0	0.0	124.0
5/8"	49.0	0.0	0.0	49.0
3/4"	0.0	0.0	49.0	49.0
7/8"	0.0	49.0	0.0	49.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	16.10*)	26.70	18.02

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.2 (B) + 1.5 (C) + 1.04 \times [49.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 228.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 16.1 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO₂ equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Seventh Floor CU1/2. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	5	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	125.0	0.0	0.0	125.0
3/8"	0.0	50.0	0.0	50.0
1/2"	46.0	75.0	0.0	121.0
3/4"	0.0	0.0	46.0	46.0
7/8"	0.0	46.0	0.0	46.0

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	10.58*)	21.18	14.30

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.2 (B) + 1.5 (C) + 1.04 \times [46.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 125.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 10.6 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Remarks

Chosen outdoor unit size differs from default proposed size. Be aware that this might lead to reduced comfort levels, increased noise levels, wear and tear. In case of doubt, contact your sales representative.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Seventh Floor CU3/4. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	139.0	0.0	0.0	139.0
3/8"	12.0	70.0	0.0	82.0
1/2"	1.0	69.0	0.0	70.0
5/8"	92.0	0.0	12.0	104.0
3/4"	0.0	12.0	1.0	13.0
7/8"	0.0	1.0	92.0	93.0



1 1/8"	0.0	92.0	0.0	92.0
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Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	26.27*)	36.87	24.88

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 2.5 (C) + 1.04 \times [92.0 \text{ m } (\varnothing 5/8 ") \times 0.16 + 1.0 \text{ m } (\varnothing 1/2 ") \times 0.1 + 12.0 \text{ m } (\varnothing 3/8 ") \times 0.053 + 139.0 \text{ m } (\varnothing 1/4 ") \times 0.02] = 26.3\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Seventh Floor CU5/6. - REYA18A

Model	Quantity	Description
REYA18A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	1	FXSA-A - Concealed ceiling unit with medium ESP
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	8	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	107.0	0.0	0.0	107.0
3/8"	26.0	33.0	0.0	59.0
1/2"	46.0	74.0	0.0	120.0
5/8"	0.0	26.0	0.0	26.0
3/4"	0.0	0.0	46.0	46.0
7/8"	0.0	46.0	0.0	46.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	14.74*)	25.34	17.11

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 1.5 (C) + 1.04 \times [46.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 26.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 107.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 14.7\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Eighth Floor CU1/2. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	5	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	155.0	0.0	0.0	155.0
3/8"	0.0	51.0	0.0	51.0
1/2"	43.0	104.0	0.0	147.0
3/4"	0.0	0.0	43.0	43.0
7/8"	0.0	43.0	0.0	43.0

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	10.90*)	21.50	14.51

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.2 (B) + 1.5 (C) + 1.04 \times [43.0 \text{ m } (\varnothing 1/2 ") \times 0.1 + 155.0 \text{ m } (\varnothing 1/4 ") \times 0.02] = 10.9 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Remarks

Chosen outdoor unit size differs from default proposed size. Be aware that this might lead to reduced comfort levels, increased noise levels, wear and tear. In case of doubt, contact your sales representative.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Eighth Floor CU3/4. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	140.0	0.0	0.0	140.0
3/8"	12.0	79.0	0.0	91.0
1/2"	1.0	61.0	0.0	62.0
5/8"	93.0	0.0	12.0	105.0
3/4"	0.0	12.0	1.0	13.0
7/8"	0.0	1.0	93.0	94.0
1 1/8"	0.0	93.0	0.0	93.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	26.45*)	37.05	25.01

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 2.5 (C) + 1.04 \times [93.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 1.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 12.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 140.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 26.5\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Eighth Floor CU5/6. - REYA18A

Model	Quantity	Description
REYA18A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	1	FXSA-A - Concealed ceiling unit with medium ESP
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	8	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	112.0	0.0	0.0	112.0
3/8"	27.0	33.0	0.0	60.0
1/2"	47.0	79.0	0.0	126.0
5/8"	0.0	27.0	0.0	27.0
3/4"	0.0	0.0	47.0	47.0
7/8"	0.0	47.0	0.0	47.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	15.01*)	25.61	17.28

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 1.5 (C) + 1.04 \times [47.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 27.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 112.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 15.0\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Ninth Floor CU1/2. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	5	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	134.0	0.0	0.0	134.0
3/8"	0.0	51.0	0.0	51.0
1/2"	40.0	83.0	0.0	123.0
3/4"	0.0	0.0	40.0	40.0
7/8"	0.0	40.0	0.0	40.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	10.15*)	20.75	14.00

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.2 (B) + 1.5 (C) + 1.04 \times [40.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 134.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 10.1 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO₂ equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Ninth Floor CU3/4. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	154.0	0.0	0.0	154.0
3/8"	17.0	63.0	0.0	80.0
1/2"	1.0	91.0	0.0	92.0
5/8"	95.0	0.0	17.0	112.0
3/4"	0.0	17.0	1.0	18.0
7/8"	0.0	1.0	95.0	96.0



1 1/8"	0.0	95.0	0.0	95.0
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Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	27.35*)	37.95	25.62

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 2.5 (C) + 1.04 \times [95.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 1.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 17.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 154.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 27.4\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Ninth Floor CU5/6. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA15A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	1	FXSA-A - Concealed ceiling unit with medium ESP
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	8	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	111.0	0.0	0.0	111.0
3/8"	28.5	34.5	0.0	63.0
1/2"	44.0	76.5	0.0	120.5
5/8"	0.0	28.5	0.0	28.5
7/8"	0.0	0.0	44.0	44.0
1 1/8"	0.0	44.0	0.0	44.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	14.26*)	24.86	16.78

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $4.3 (B) + 1.5 (C) + 1.04 \times [44.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 28.5 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 111.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 14.3\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Tenth Floor CU1/2. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA20A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	1	FXSA-A - Concealed ceiling unit with medium ESP
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	8	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	111.2	0.0	0.0	111.2
3/8"	8.0	73.6	0.0	81.6
1/2"	39.0	37.6	0.0	76.6
5/8"	0.0	8.0	0.0	8.0
3/4"	0.0	0.0	39.0	39.0
7/8"	0.0	39.0	0.0	39.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	9.51*)	20.11	13.57

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $1.2 (B) + 1.5 (C) + 1.04 \times [39.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 8.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 111.2 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02]$
= 9.5kg

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Remarks

Chosen outdoor unit size differs from default proposed size. Be aware that this might lead to reduced comfort levels, increased noise levels, wear and tear. In case of doubt, contact your sales representative.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Tenth Floor CU3/4. - REYA20A

Model	Quantity	Description
REYA20A	1	REYA-A (VRV 5 Heat Recovery)
BS12A14AV1B	1	Branch selector unit
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	6	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	12	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	200.7	0.0	0.0	200.7
3/8"	0.0	140.5	0.0	140.5
1/2"	0.0	60.2	0.0	60.2
5/8"	97.5	0.0	0.0	97.5
7/8"	0.0	0.0	97.5	97.5
1 1/8"	0.0	97.5	0.0	97.5



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	26.40*)	37.00	24.97

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $4.3 (B) + 1.7 (C) + 1.04 \times [97.5 \text{ m } (\phi 5/8 \text{ "}) \times 0.16 + 200.7 \text{ m } (\phi 1/4 \text{ "}) \times 0.02] = 26.4 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x1 1/8"x7/8"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 1 1/8" (gas) x 7/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFINET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFINET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Tenth Floor CU5/6. - REYA18A

Model	Quantity	Description
REYA18A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS8A14AV1B	1	Branch selector unit
FXSA15A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	4	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
BRC1H52W	12	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	219.8	0.0	0.0	219.8
3/8"	4.5	117.6	0.0	122.1
1/2"	42.5	102.2	0.0	144.7
5/8"	0.0	0.0	4.5	4.5
3/4"	0.0	4.5	42.5	47.0
7/8"	0.0	42.5	0.0	42.5

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	15.74*)	26.34	17.78

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $4.3 (B) + 2.2 (C) + 1.04 \times [42.5 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 4.5 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 219.8 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02]$
= 15.7kg

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Eleventh Floor CU1/2. - REYA18A

Model	Quantity	Description
REYA18A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	4	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	1	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	149.0	0.0	0.0	149.0
3/8"	8.0	65.0	0.0	73.0
1/2"	37.0	84.0	0.0	121.0
5/8"	0.0	8.0	0.0	8.0
3/4"	0.0	0.0	37.0	37.0
7/8"	0.0	37.0	0.0	37.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	13.19*)	23.79	16.06

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $4.3 (B) + 1.5 (C) + 1.04 \times [37.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 8.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 149.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02]$
= 13.2kg

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Eleventh Floor CU3/4. - REYA18A

Model	Quantity	Description
REYA18A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA32A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	5	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA100A	1	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	83.5	0.0	0.0	83.5
3/8"	33.0	21.0	0.0	54.0
1/2"	0.0	62.5	0.0	62.5
5/8"	79.0	33.0	0.0	112.0
3/4"	0.0	0.0	79.0	79.0
7/8"	0.0	79.0	0.0	79.0

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	23.00*)	33.60	22.68

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 4.3 (B) + 1.5 (C) + 1.04 \times [79.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 33.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 83.5 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 23.0\text{kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Remarks

Chosen outdoor unit size differs from default proposed size. Be aware that this might lead to reduced comfort levels, increased noise levels, wear and tear. In case of doubt, contact your sales representative.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Eleventh Floor CU5/6. - REYA18A

Model	Quantity	Description
REYA18A	1	REYA-A (VRV 5 Heat Recovery)
BS6A14AV1B	1	Branch selector unit
BS10A14AV1B	1	Branch selector unit
FXSA15A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA20A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	3	FXSA-A - Concealed ceiling unit with medium ESP
KHRQ23M64T	1	Refnet branch piping kit
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	13	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	252.0	0.0	0.0	252.0
3/8"	1.0	146.0	0.0	147.0
1/2"	40.0	106.0	1.0	147.0
5/8"	0.0	1.0	0.0	1.0
3/4"	0.0	0.0	40.0	40.0
7/8"	0.0	40.0	0.0	40.0

Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	16.26*)	26.86	18.13

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $4.3 (B) + 2.5 (C) + 1.04 \times [40.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 1.0 \text{ m } (\varnothing 3/8 \text{ "}) \times 0.053 + 252.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02]$
= 16.3kg

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Twelfth Floor CU1/2. - REYA14A

Model	Quantity	Description
REYA14A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	139.0	0.0	0.0	139.0
3/8"	0.0	34.0	0.0	34.0
1/2"	36.0	105.0	0.0	141.0
3/4"	0.0	0.0	36.0	36.0
7/8"	0.0	36.0	0.0	36.0

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	9.84*)	20.44	13.79

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.2 (B) + 1.5 (C) + 1.04 \times [36.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 139.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 9.8 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Remarks

Chosen outdoor unit size differs from default proposed size. Be aware that this might lead to reduced comfort levels, increased noise levels, wear and tear. In case of doubt, contact your sales representative.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Twelfth Floor CU3/4. - REYA16A

Model	Quantity	Description
REYA16A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA80A	1	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	9	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	123.0	0.0	0.0	123.0
3/8"	0.0	34.0	0.0	34.0
1/2"	0.0	89.0	0.0	89.0
5/8"	90.0	0.0	0.0	90.0
3/4"	0.0	0.0	90.0	90.0
7/8"	0.0	90.0	0.0	90.0

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	20.33*)	30.93	20.88

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $1.3 (B) + 1.5 (C) + 1.04 \times [90.0 \text{ m } (\phi 5/8 \text{ "}) \times 0.16 + 123.0 \text{ m } (\phi 1/4 \text{ "}) \times 0.02] = 20.3 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Remarks

Chosen outdoor unit size differs from default proposed size. Be aware that this might lead to reduced comfort levels, increased noise levels, wear and tear. In case of doubt, contact your sales representative.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Twelfth Floor 5/6. - REYA18A

Model	Quantity	Description
REYA18A	1	REYA-A (VRV 5 Heat Recovery)
BS12A14AV1B	1	Branch selector unit
FXSA20A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	3	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	4	FXSA-A - Concealed ceiling unit with medium ESP
BRC1H52W	12	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	239.0	0.0	0.0	239.0
3/8"	0.0	146.0	0.0	146.0
1/2"	30.0	93.0	0.0	123.0
3/4"	0.0	0.0	30.0	30.0
7/8"	0.0	30.0	0.0	30.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	14.09*)	24.69	16.67

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $4.3 (B) + 1.7 (C) + 1.04 \times [30.0 \text{ m } (\varnothing 1/2 \text{ "}) \times 0.1 + 239.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 14.1 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFINET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFINET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Thirteenth Floor CU1. - REYA16A

Model	Quantity	Description
REYA16A	1	REYA-A (VRV 5 Heat Recovery)
BS12A14AV1B	1	Branch selector unit
FXAA20A	1	FXAA-A - Wall mounted unit
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA50A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA63A	4	FXSA-A - Concealed ceiling unit with medium ESP
5041183	1	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	10	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	168.0	0.0	0.0	168.0
3/8"	0.0	22.0	0.0	22.0
1/2"	0.0	146.0	0.0	146.0
5/8"	45.0	0.0	0.0	45.0
3/4"	0.0	0.0	45.0	45.0
7/8"	0.0	45.0	0.0	45.0



Refrigerant information

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	10.60	14.48*)	25.08	16.93

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $0.5 (A) + 1.3 (B) + 1.7 (C) + 1.04 \times [45.0 \text{ m } (\varnothing 5/8 \text{ "}) \times 0.16 + 168.0 \text{ m } (\varnothing 1/4 \text{ "}) \times 0.02] = 14.5 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	5/8"x7/8"x3/4"

Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	5/8" (liquid) x 7/8" (gas) x 3/4" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Thirteenth Floor CU2. - REYA10A

Model	Quantity	Description
REYA10A	1	REYA-A (VRV 5 Heat Recovery)
BS10A14AV1B	1	Branch selector unit
FXAA32A	1	FXAA-A - Wall mounted unit
FXSA20A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA25A	2	FXSA-A - Concealed ceiling unit with medium ESP
FXSA32A	1	FXSA-A - Concealed ceiling unit with medium ESP
FXSA40A	2	FXSA-A - Concealed ceiling unit with medium ESP
5041183	2	R32 Multi BS box pipe closing kit (spare part)
BRC1H52W	7	Remote controller (white)

Piping	Liquid m	Suction m	Discharge m	Total m
1/4"	87.0	0.0	0.0	87.0
3/8"	27.0	59.0	0.0	86.0
1/2"	0.0	28.0	0.0	28.0
5/8"	0.0	0.0	27.0	27.0
3/4"	0.0	27.0	0.0	27.0

Refrigerant type	GWP	Base charge kg	Extra charge kg	Total refrigerant charge kg	Total CO2 equivalent tonnes
R32	675	9.00	4.80*)	13.80	9.31

The system(s) contain fluorinated greenhouse gases.

*) Extra refrigerant charge = $1.5 (C) + 1.04 \times [27.0 \text{ m } (\phi 3/8 \text{ "}) \times 0.053 + 87.0 \text{ m } (\phi 1/4 \text{ "}) \times 0.02] = 4.8 \text{ kg}$

The extra charge is calculated based on the pipe lengths specified. This may differ from the actual pipe lengths on site and therefore also from the real extra charge and the real TCO2 equivalent.

Pipe capacities

Maximum Connection Index	Diameters
149.9	3/8"x5/8"x1/2"
289.9	3/8"x3/4"x5/8"
449.9	1/2"x7/8"x3/4"
619.9	1/2"x1 1/8"x7/8"
689.9	5/8"x1 1/8"x7/8"
869.9	5/8"x1 1/8"x1 1/8"
1179.9	5/8"x1 3/8"x1 1/8"
> 1179.9	3/4"x1 3/8"x1 1/8"
Main pipe size up	1/2"x3/4"x5/8"

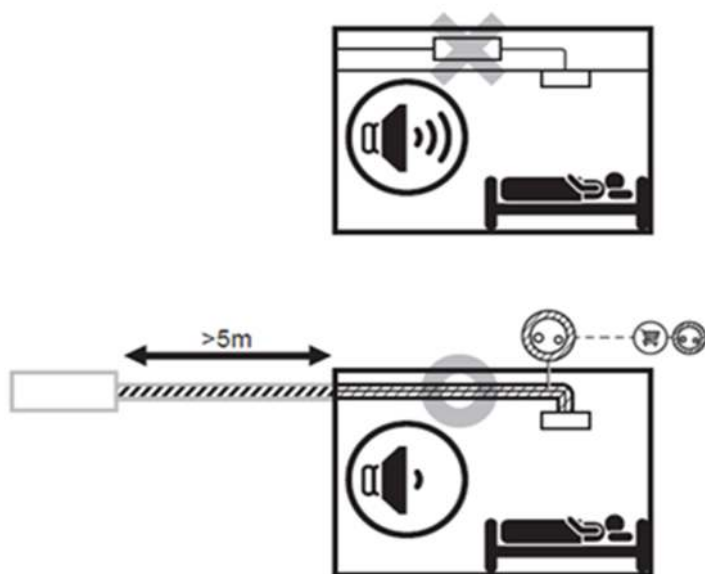
Piping limitations

Description	Value
Maximum total length	1,000.0m
Maximum longest actual length	165.0m
Maximum longest equivalent length	190.0m
Maximum main pipe length (size up of main pipe required if longer)	-
Maximum length first branch to indoor unit(size up of intermediate pipes required if longer)	40.0m
Maximum length first branch to indoor unit	90.0m
Maximum length of indoor units to nearest branch	40.0m
Maximum length difference between longest and shortest distance to indoor units	40.0m
Maximum height difference, outdoor unit below indoor units	90.0m
Minimum connection ratio, outdoor unit below indoor units	-
Maximum height difference, outdoor unit above indoor units	90.0m
Minimum connection ratio, outdoor unit above indoor units	-
Maximum height difference in technical cooling, outdoor unit below indoor units	90.0m
Maximum height difference in technical cooling, outdoor unit above indoor units	90.0m
Maximum height difference between indoor units	30.0m
Connection ratio range	50.0% - 130.0%
Refrigerant pipe diameters	1/2" (liquid) x 3/4" (gas) x 5/8" (discharge)
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET (size up of intermediate pipes required if longer)	-
Maximum equivalent length from BP unit or VRV indoor to VRV REFNET	90.0m
Maximum actual length between CM and HM	-
Maximum height difference between CM and HM	-

Best Practices

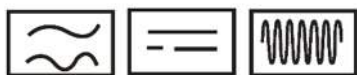
Multi BS-box

- Install the multi BS-box on a location where the refrigerant noise cannot disturb the room occupants
- To avoid that refrigerant noise disturbs the people in the room, keep at least 5m piping length between the occupied room and the multi BS unit (See figure)
- If there is no false ceiling in the occupied room, please add sound insulation around the piping between the multi BS-box and indoor unit, or keep much longer length between multi BS-box unit and occupied room (See figure)



Residual Current Circuit Breaker

For better protection of installations against the risk of fire, power supply of indoor and outdoor units must be protected with a Residual Current Circuit Breaker. For protection against fire, we recommend a sensitivity of 300mA. The selected RCCB should be of the type B, suitable for inverter devices and indicated by the symbols here below. Further electrical characteristics of the RCCB must be selected in accordance with local regulation.



For a complete list of all required safety precautions, warnings and attention points, please consult the “general safety precautions manual” delivered with the unit.