

REFERENCE DRAWINGS & MODELS				REV
ARCHITECTURAL	CSAL-FCBS-3-22-MD-A-0001	CSAL-FCBS-3-22-MD-A-0001	CSAL-FCBS-3-22-MD-A-0001	P02
STRUCTURAL	CSAL-FCBS-3-22-MD-A-0001	CSAL-FCBS-3-22-MD-A-0001	CSAL-FCBS-3-22-MD-A-0001	P03
STRUCTURAL	CSAL-FCBS-3-22-MD-A-0001	CSAL-FCBS-3-22-MD-A-0001	CSAL-FCBS-3-22-MD-A-0001	P04

GENERAL

FA	FROM ABOVE
TA	TO ABOVE
FB	FROM BELOW
TB	TO BELOW
HL	HIGH LEVEL
LL	LOW LEVEL
ML	MID LEVEL
OTLL	DROP TO LOW LEVEL
RTLL	RISE TO HIGH LEVEL
SL	SET UP
SD	SET DOWN
FFL	FINISHED FLOOR LEVEL
SSL	STRUCTURAL SLAB LEVEL
APFL	ABOVE FINISHED FLOOR LEVEL
IL	LEVEL TO UNDERSIDE FROM FFL
CL	LEVEL TO CENTRE FROM FFL
BCD	BOTTOM OF DUCT FROM FFL
ROOT	BOTTOM OF CONTAINMENT FROM FFL

MECHANICAL

LTHW F	LOW TEMPERATURE HOT WATER FLOW
LTHW R	LOW TEMPERATURE HOT WATER RETURN
DRY R	DRY RISER
VAR F	VARIABLE REFRIGERANT FLOW
IV	ISOLATION VALVE
NRV	NON RETURN VALVE
DCV	DOUBLE CHECK VALVE
DPV	DIFFERENTIAL PRESSURE VALVE
SPMV	2 PORT MOTORISED VALVE
FCV	FIXED ORIFICE DOUBLE REGULATING VALVE
2PMV	2 PORT MOTORISED VALVE
PCV	PRESSURE INDEPENDENT CONTROL VALVE
STR	STRAINER
OP	ORIFICE PLATE/STATIONS CONTROL
CS	COMMISSIONING STATION
TP	TEST POINT
TIP	TEMPERATURE (TEMPERATURE, P-PRESSURE)
S	SENSOR
M	METER
FCU	FAN COIL UNIT
DAC	DRY AIR COOLER
AB	AIR BOTTLE
NC	NORMALLY CLOSED
FC	FLEXIBLE CONNECTION
DC	DRAIN COCK
AV	AIR VENT
HE	HEAT EXCHANGER
RHX	RADIATOR
PCV	PRESSURE CONTROL VALVE
GV	GATE VALVE
PRV	PRESSURE REDUCING VALVE
AAV	AUTOMATIC AIR VENT
MWR	MECHANICAL VENTILATION WITH HEAT RECOVERY

WATER SERVICES

BCWS	BOOSTED COLD WATER SERVICE
CAT 5	BOOSTED COLD WATER SERVICE CAT 5
HWSF	HOT WATER SERVICE FLOW
HWSR	HOT WATER SERVICE RETURN
MWWS	MIXED COLD WATER SERVICE
IV	ISOLATING VALVE
DRY	DOUBLE REGULATING VALVE FOR WWS
BRV	BRANDS (ULTRA LOW FLOW TYPE)
NRV	NON RETURN VALVE
PRV	PRESSURE REDUCING VALVE
DCV	DOUBLE CHECK VALVE
DOC	DRAIN COCK
TP	TEST & DRAIN POINT
FS	FLOW SWITCH
PS	PRESSURE GAUGE
WM	WATER METER

DRAINAGE

AAV	AUTO AIR VENT
AP	ACCESS PANEL
FG	FLOOR GULLY
RE	ROOF EYE
RWP	RAINWATER PIPE
SS	STUB STACK
SVP	SOL VENT PIPE
COV	GROUND SOL VENT PIPE
MEVP	MEZZANINE SOL VENT PIPE
RSVP	RETAIL SOL VENT PIPE
SVP	SOL VENT PIPE
VP	VENT PIPE
WP	WASTE PIPE
D	DOWN
SGD	BELOW GROUND DRAINAGE
SK	SINK
KSK	KITCHEN SINK
DS	DISH WASHER
WM	WASHING MACHINE
WHB	WASH HAND BASIN
WC	WATER CLOSET
SHR	SHOWER
BTH	BATH
XXX	FALL

GENERAL NOTE

NO SERVICES SHALL BE FIRED TO THE UNDERSIDE OF THE REMOVABLE ROOF.

C03	SERVICES UPDATED TO SUIT REVISED	BC	BH	16.03.20
C02	MAINTENANCE STRATEGY	SW	IES	06.12.19
C01	CONTRACT ISSUE	SW	IES	20.06.19
Rev	Revision Description	DRN	CHK	Date
CWC	15.03.20	MM	MM	31.08.18

CHECK PLOT

UNCONTROLLED DRAWING

A	OK	ready for transmission
B	Minor Comments	ready to be actioned then ready for transmission
C	Major Comments	ready to be actioned then returned for checking

signed: _____

date: _____

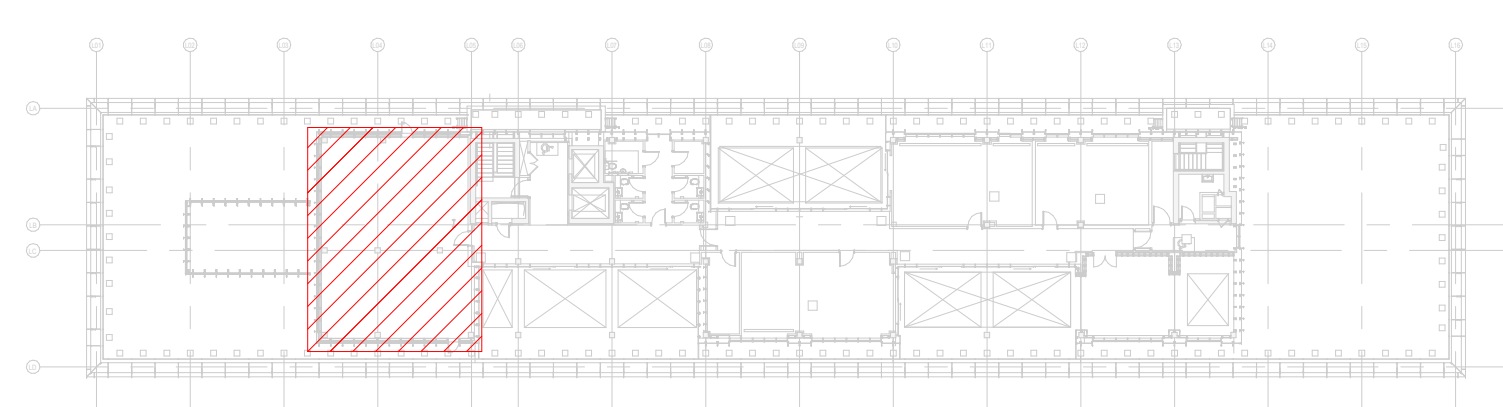
INSULATION TABLE:

SERVICE	PIPE MATERIAL	PIPE DIAMETER	INSULATION THICKNESS	INSULATION THICKNESS
LTHW FAR	COPPER	ø15	25 mm	
	STEEL	ø15	30 mm	MINERAL WOOL
		ø20-ø50	40 mm	
		ø65 & ABOVE	50 mm	
BOWS	COPPER	ø15-ø35	25 mm	
		ø40-ø54	30 mm	
		ø61-ø108	40 mm	MINERAL WOOL
		ø133-ø159	40 mm	
		ø159 & ABOVE	50 mm	
DHWS FAR	STAINL. STEEL	ø15-ø22	25 mm	
	COPPER	ø28-ø42	30 mm	MINERAL WOOL
		ø54-ø76	40 mm	
	STAINL. STEEL	ø108 & ABOVE	50 mm	

OUTSTANDING INFORMATION REQUIRED

- PUMP S&VD SPECIFICATIONS
- LOSSING POT SPECIFICATIONS
- AIRPORT SEPARATOR SPECIFICATIONS
- PRESSURISATION UNIT SPECIFICATIONS
- PARTITION WALLS LAYOUT

KEY PLAN:



Contract Issue

client approval	A: Approved	client approval, initials and date
	B: Approved with Comments	
	C: Not Approved	
client/main contractor		
consultant/structural		
project	Circle Square Affinity Living	
drawing title	Zone: 7L Level: 15 Service: Plantrooms Mechanical Services	
drawing date	15.03.20	drawing date
scale	As indicated @ A0	project number
drawing by	CWC	drawing by
checked by	MM	checked by
approved by	MM	approved by
date	31.08.18	date
CSAL-IES-7L-15-DR-Z-51744		C03