

Project Name:
Manchester Airport H3 Tribe

Project Address:
T.B.C

Project Description
KITCHEN VENT PLAN

Client
AP Projects

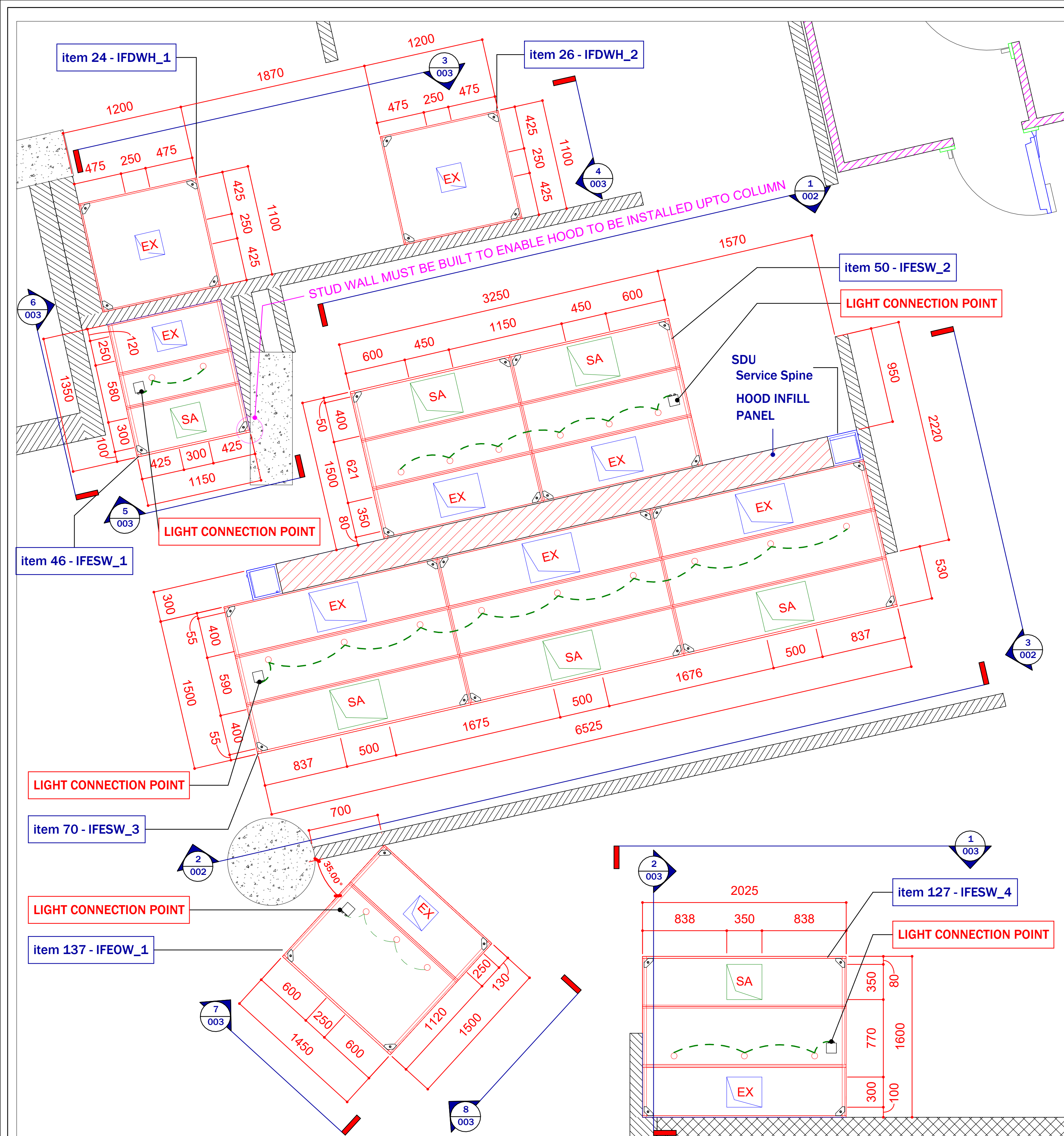
Project Number
13777



Information Involvement Influence



Revision Schedule			
Rev	Description	Date	Issued to
P01	FOR COMMENT/APPROVAL	16/08/2023	Fraser Jones
P02	REVISED TO CLIENT COMMENTS, PIZZA HOOD REMOVED	31/10/2023	Fraser Jones
P03	item 137 RE-ADDED	08/11/2023	Fraser Jones



1 001 KITCHEN VENT PLAN
1 : 25

HOOD DETAILS

Item Number	Manufacturer	Description	Number of Canopy Sections	Hood Length	Hood Depth	Front Hood Height	Hood Floor Offset	Hood Weight	Hood Notes
SIDE INFILL PANEL									
item 24 - IFDWH_1	Inox	Dish Wash Hood with Extract Spigot		1100	1200	480	2050	30.36 kg	Dish Wash Hood with extract spigot
item 26 - IFDWH_2	Inox	Dish Wash Hood with Extract Spigot		1100	1200	480	2050	30.36 kg	Dish Wash Hood with extract spigot
item 46 - IFESW_1	Inox	Wall type extract and supply air hood	1	1150	1350	480	2050	43.47 kg	
item 50 - IFESW_2	Inox	Wall type extract and supply air hood	2	3250	1500	480	2050	136.50 kg	
item 70 - IFESW_3	Inox	Wall type extract and supply air hood	3	6525	1500	480	2050	274.05 kg	
item 127 - IFESW_4	Inox	Wall type extract and supply air hood	1	2025	1600	480	2050	90.72 kg	
item 137 - IFEOW_1	Inox	Wall type extract hood	1	1450	1500	480	2000	60.90 kg	

NOTES

- ALL ELECTRICAL CONNECTIONS BY OTHERS (CANOPY LIGHTS).
- item 50 HAS BEEN SHORTENED TO ALLOW BLAST CHILLER TO BE WHEELED IN AND OUT AS AN ACCESS PANEL TO THE FRONT OF AN EXTRACT AND SUPPLY HOOD IS NOT FEASIBLE.
- DIRECT CONNECTION IS RECOMMENDED FROM PIZZA OVEN RATHER THAN EXTRCATION HOOD ABOVE AS SHOWN.
- STAINLESS STEEL WALL CLADDING REQUIRES A FLAT DRY SURFACE FOR BONDING TO (FINISHED WALLS) DO NOT WHITEROCK WALLS WHERE STAINLESS STEEL CLADDING HAS BEEN DETAILED AS IT WILL NOT BOND.
- WALLS PLASTERED USING LIME PLASTER MUST BE BOARDED OVER WITH PLY BOARD TO ALLOW THE STAINLESS STEEL TO BOND.
- CONDENSE HOOD REQUIRES FINSHED WALLS PRIOR TO INSTALLATION.
- ALL FANS AND DUCT WORK BY OTHERS.
- ALL SPIGOTS WILL BE FIXED IN POSITIONS SHOWN READY FOR FINAL CONNECTION TO MAIN DUCTS BY OTHERS.
- HOOD IS MANUFACTURED TO SUIT A MAX SUSPENDED CEILING HEIGHT OF 2500MM. HIGHER CEILINGS WILL REQUIRE A VALANCE TO TOP OF HOOD AT EXTRA COST.
- ALL HOODS ARE INSTALLED AT 2050mm FROM FINISHED FLOOR LEVEL.
- ALL HOODS ARE SUPPORTED FROM STRUCTURAL CEILING.
- A MINIMUM CLEARANCE OF 1000mm AROUND THE HOOD MUST BE LEFT TO ALLOW ENGINEERS SAFE HIGH LEVEL ACCESS.
- ALL SERVICES MUST AVOID CANOPY HANGING POINTS.
- HIGH LEVEL ACCESS TO BE PROVIDED FOR WORKS OVER 4 MTR.
- NO ALLOWANCE HAS BEEN MADE FOR: CANOPY EMERGENCY LIGHTING, POWERED ACCESS EQUIPMENT, FINAL CONNECTIONS FROM CANOPY SPIGOTS TO MAIN DUCTS, SECONDARY SUPPORT STEEL WORK, KITCHEN AREA LIGTHING, ODOUR CONTROL, ELECTRICAL WORKS.

SUSPENDED CEILING HEIGHT - 2500mm FFL - TBC
STRUCTURAL CEILING HEIGHT - 4100mm FFL - TBC

CLADDING SCHEDULE

Item Number	Manufacturer	Cladding Length	Cladding Height	Cladding Floor Offset	Number of Cladding Sheets Required	Cladding Notes
WALL CLAD_1	Inox	1150	2000	100	1.15	Edge and flatten edges
WALL CLAD_2	Inox	1350	2000	100	1.35	Edge and flatten edges
WALL CLAD_3	Inox	2025	2000	100	2.025	Edge and flatten edges
WALL CLAD_3	Inox	835	2000	100	1	Edge and flatten edges

SDU SCHEDULE

Item Number	Description	Number of Service Risers	SDU Length	SDU Width	SDU Height	SDU Riser Height	SDU Top Height
SDU	Service Spine	2	6225	300	890	2530	1200

EXTRACT VOLUME

Item Number	Extract Volume	Extract Pressure Drop	No of Extract Spigots	Extract Spigot Width	Extract Spigot Depth	Extract Spigot Velocity
item 24 - IFDWH_1	0.400 m³/s	40.0 Pa	1	250	250	6.400 m/s
item 26 - IFDWH_2	0.400 m³/s	40.0 Pa	1	250	250	6.400 m/s
item 46 - IFESW_1	0.442 m³/s	120.0 Pa	1	300	250	5.893 m/s
item 50 - IFESW_2	1.690 m³/s	120.0 Pa	2	450	350	5.365 m/s
item 70 - IFESW_3	3.268 m³/s	120.0 Pa	3	500	400	5.447 m/s
item 127 - IFESW_4	0.540 m³/s	120.0 Pa	1	350	300	5.143 m/s
item 137 - IFEOW_1	0.378 m³/s	120.0 Pa	1	250	250	6.048 m/s

SUPPLY AIR VOLUME

Item Number	Supply Air Volume	Supply Air Pressure Drop	No of Supply Air Spigots	Supply Air Spigot Width	Supply Air Spigot Depth	Supply Air Spigot Velocity
item 70 - IFESW_3	2.778 m³/s	80.0 Pa	3	500	400	4.630 m/s
item 50 - IFESW_2	1.437 m³/s	80.0 Pa	2	450	400	3.990 m/s
item 46 - IFESW_1	0.376 m³/s	80.0 Pa	1	300	300	4.174 m/s
item 127 - IFESW_4	0.459 m³/s	80.0 Pa	1	350	350	3.747 m/s



Information Involvement Influence



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P01	FOR COMMENT/APPROVAL	16/08/2023
P02	REVISED TO CLIENT COMMENTS, PIZZA HOOD REMOVED	31/10/2023
P03	item 137 RE-ADDED	08/11/2023

PROJECT NAME

Manchester Airport H3
Tribe

PROJECT ADDRESS

T.B.C

TITLE

KITCHEN VENT PLAN

CLIENT

AP Projects

PROJECT NUMBER

13777

REV

P03

DRAWING NUMBER

001

SCALE (@ A1)

1 : 25

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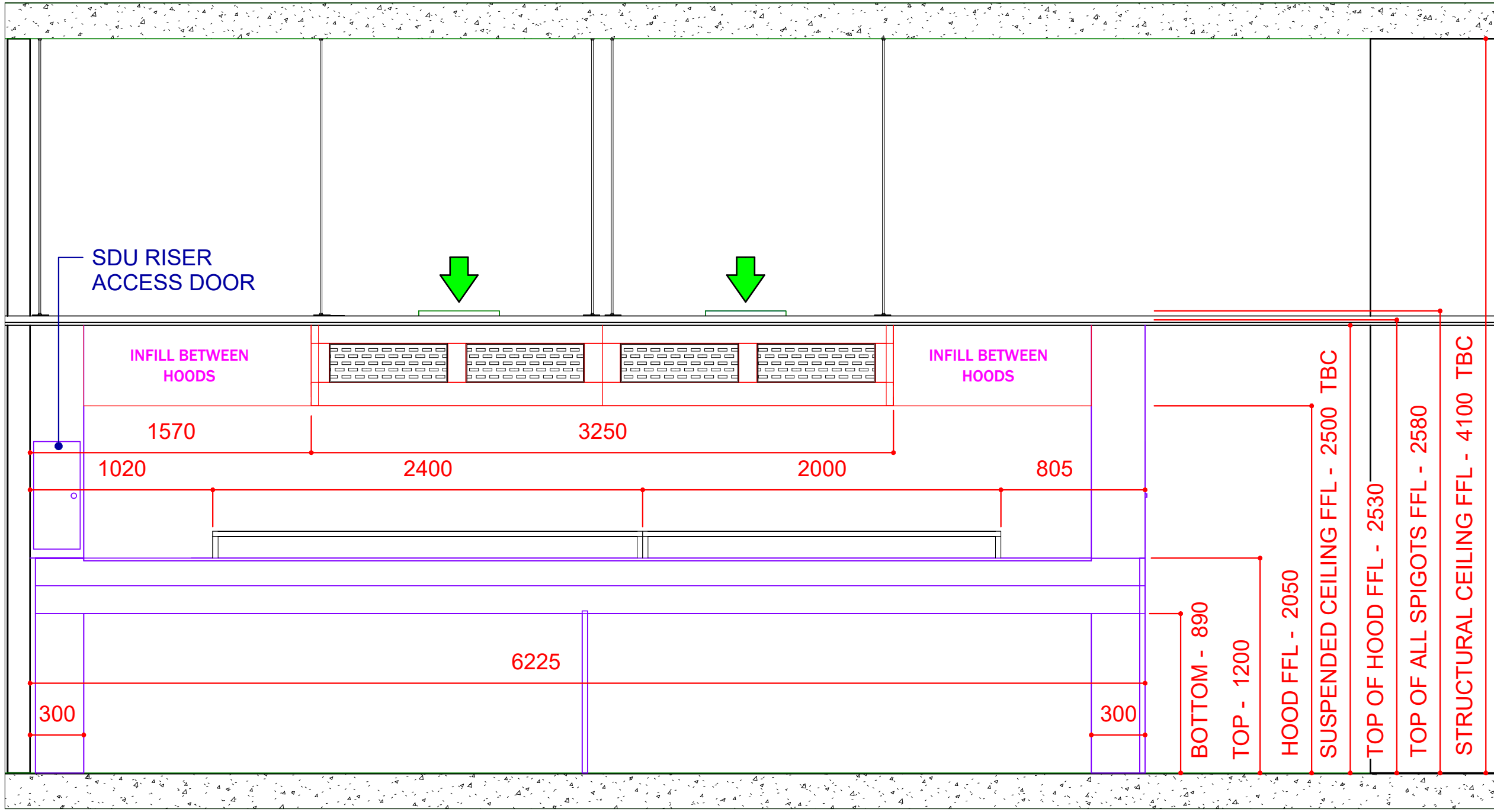
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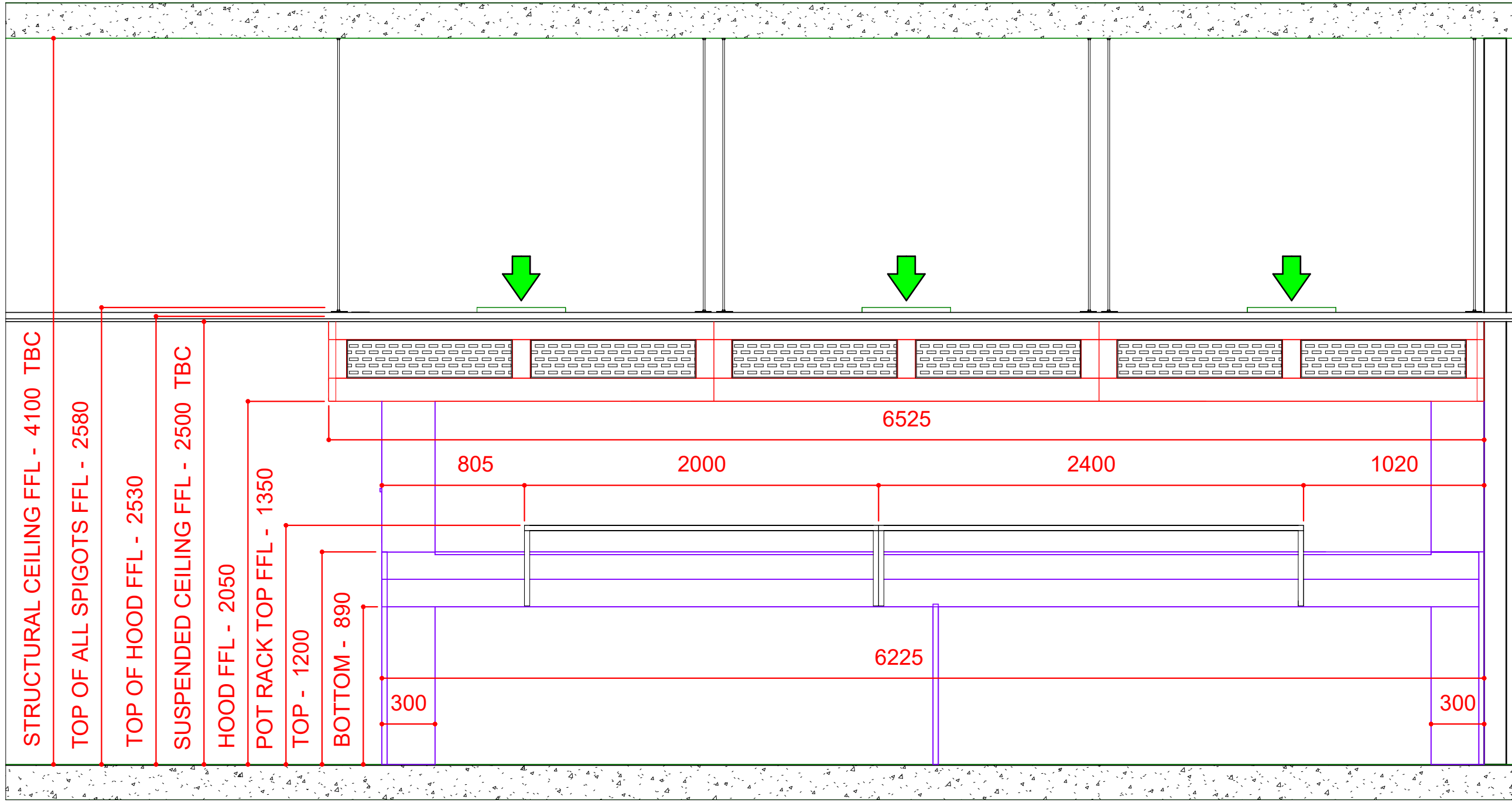
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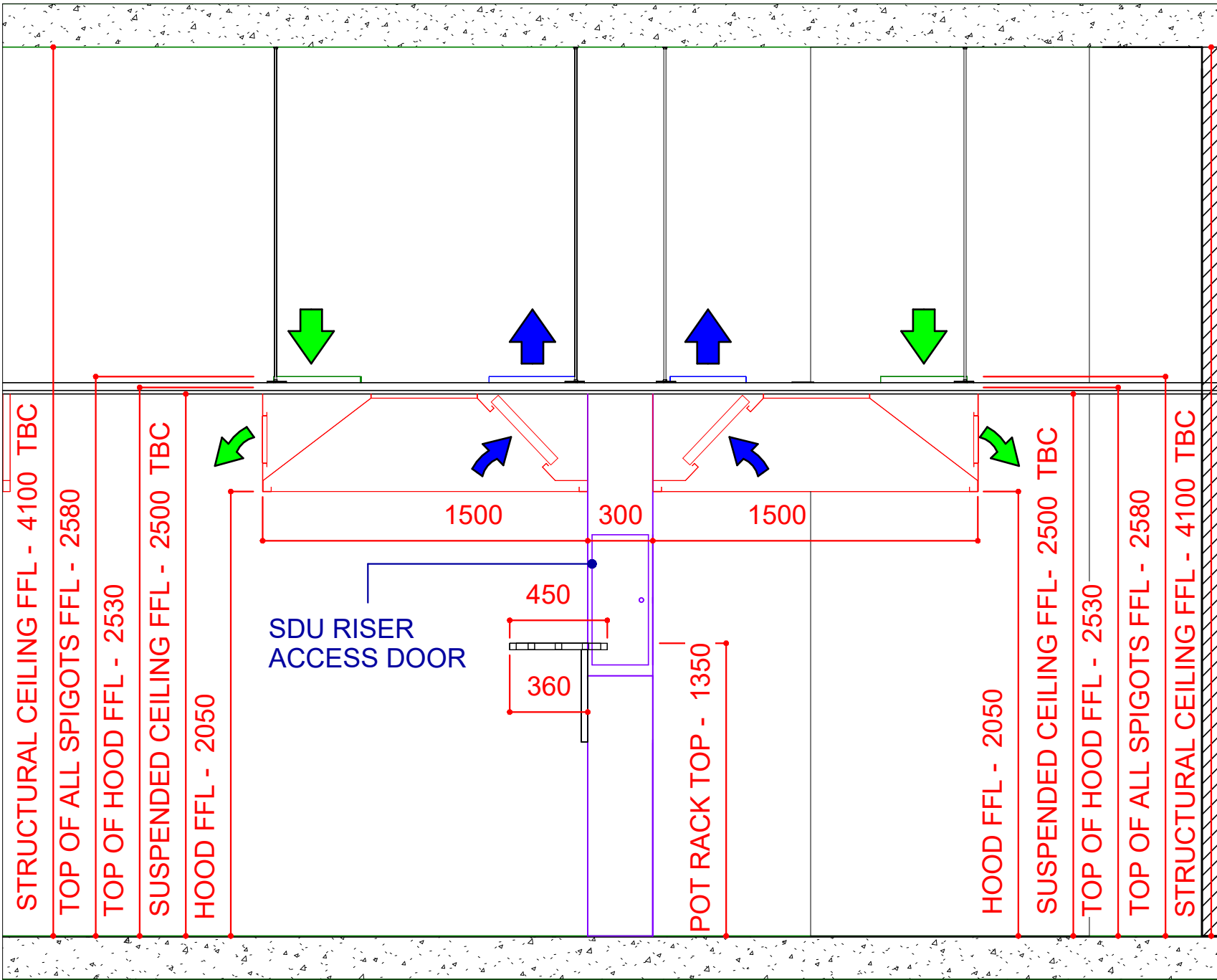
08/11/2023



1 item 50 IFESW_2 - FRONT VIEW
1 : 25



2 item 70 IFESW_3 FRONT VIEW
1 : 25



3 item 50 & 70 - SIDE VIEW
1 : 25

SUSPENDED CEILING HEIGHT - 2500mm FFL - TBC
STRUCTURAL CEILING HEIGHT - 4100mm FFL - TBC

KEY		
IMAGE	DESCRIPTION	CODE
	CANOPY HANGING POINT	HP
	CANOPY LIGHT CONNECTION POINT	CP
	LED SPOT LIGHT	SL
	INFILL PANEL	IP
N/A	SUSPENDED CEILING HEIGHT	SCH
	GALVANIZED STEEL EXTRACT SPIGOT	EX
	GALVANIZED STEEL SUPPLY AIR SPIGOT	SA
	SITE JOINT	SJ
	BOTTOM OF DUCT	BOD
	TOP OF DUCT	TOD
	ACCESS PANEL	AP

SYSTEMS KEY
1 : 20



Rev	Description	Date
P01	FOR COMMENT/APPROVAL	16/08/2023
P02	REVISED TO CLIENT COMMENTS, PIZZA HOOD REMOVED	31/10/2023
P03	Item 137 RE-ADDED	08/11/2023

PROJECT NAME
Manchester Airport H3 Tribe

PROJECT ADDRESS
T.B.C

TITLE
SECTIONS 1

CLIENT
AP Projects

PROJECT NUMBER
13777

REV
P03

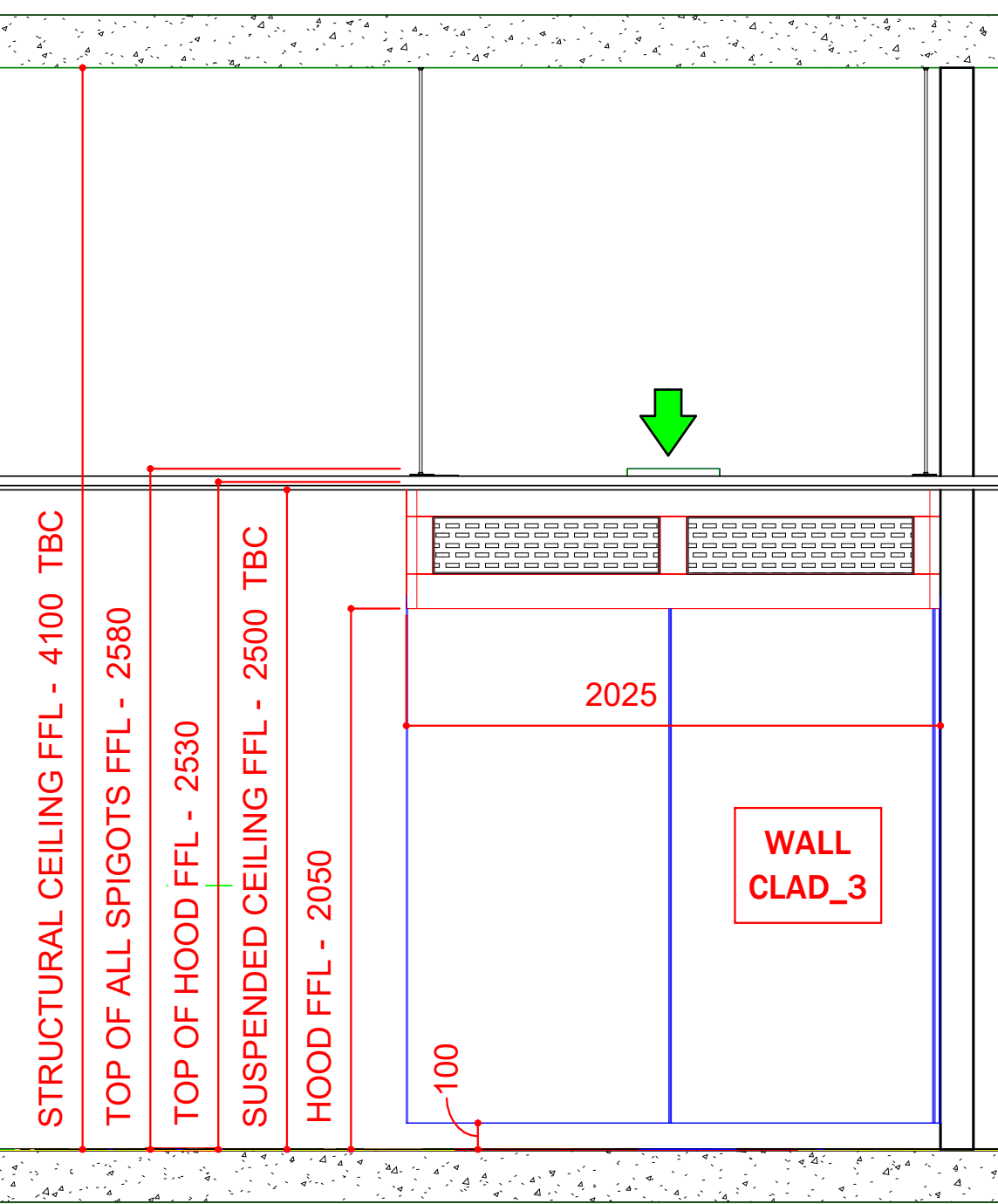
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002

SCALE (@ A1)
As indicated

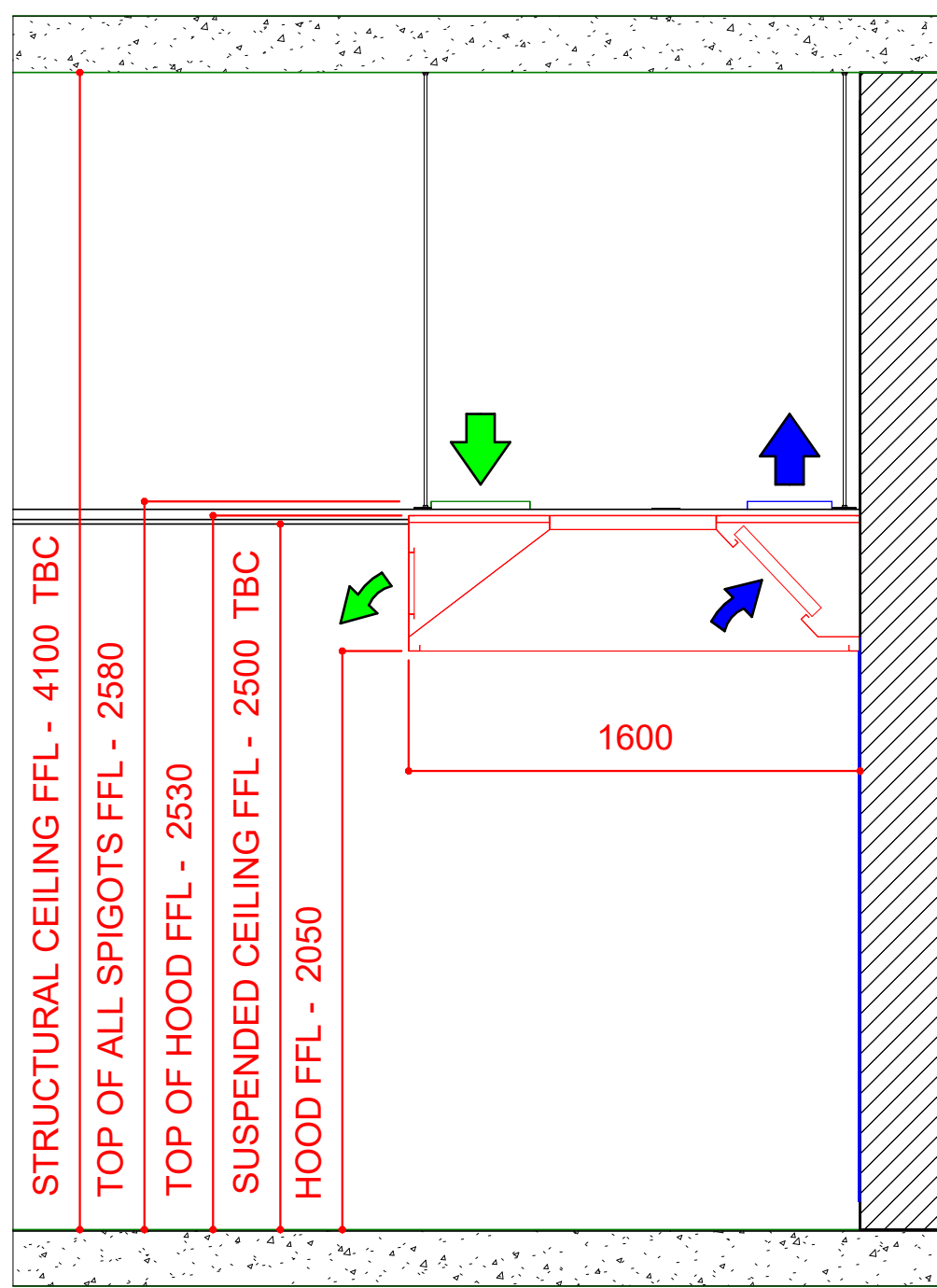
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SM

CHECKED BY
LP

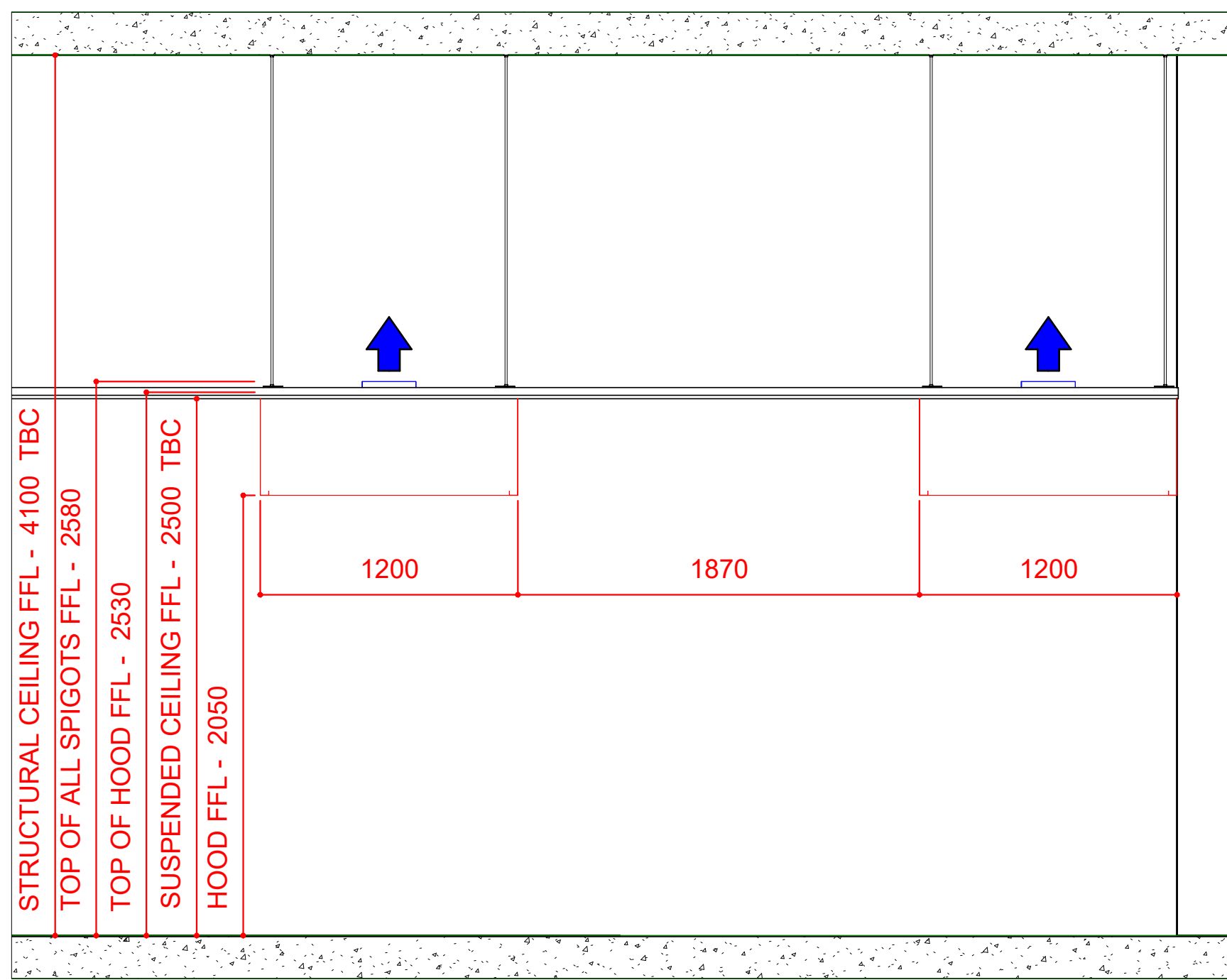
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08/11/2023



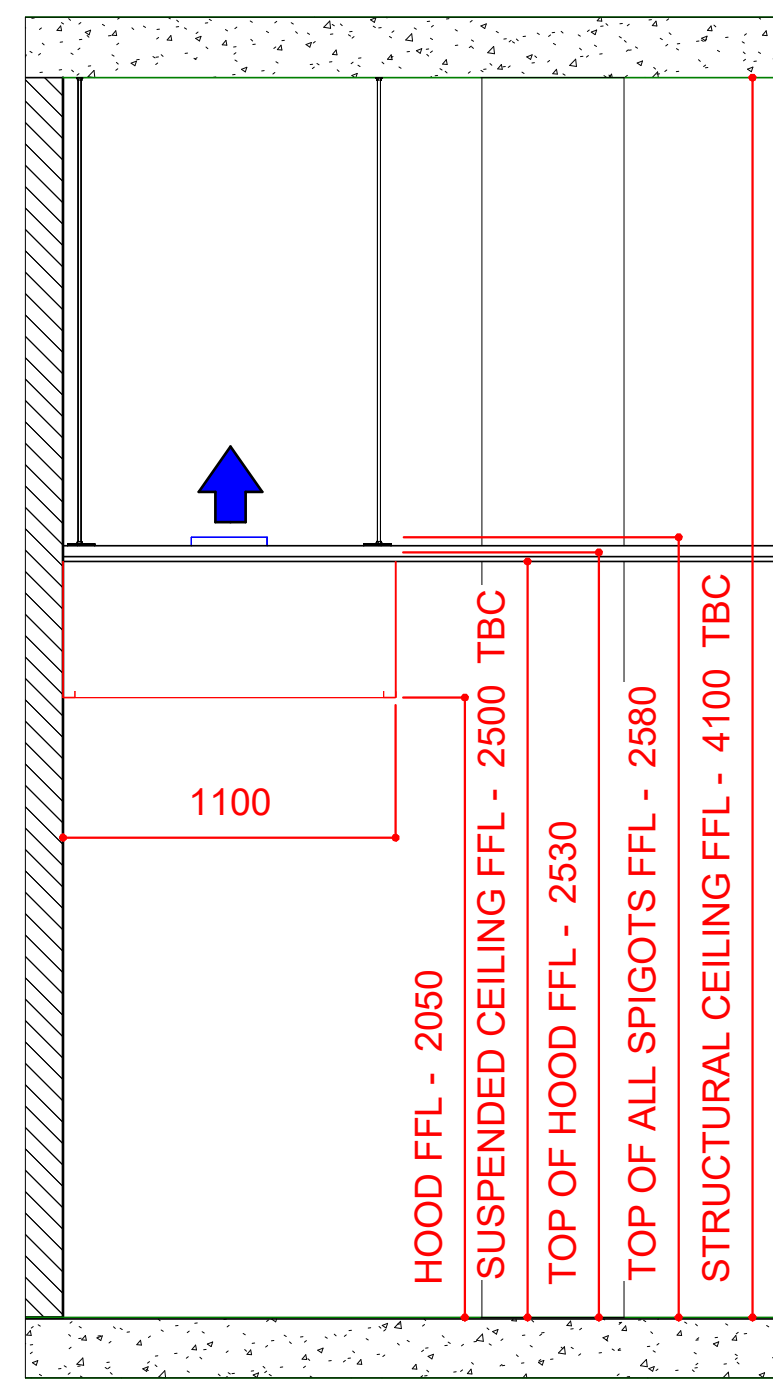
1 item 127 IFESW_4 - FRONT VIEW
1 : 25



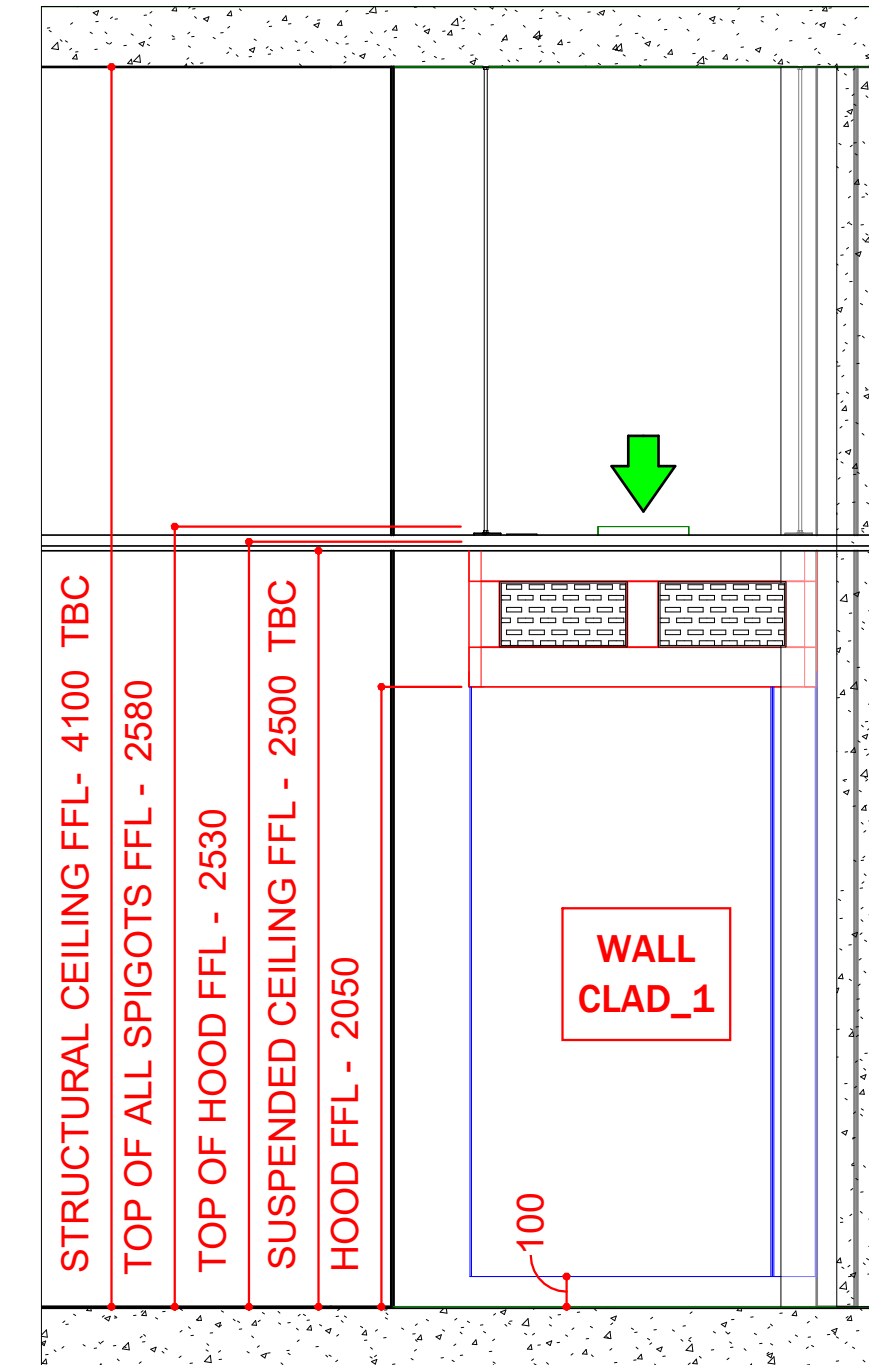
2 item 127 IFESW_4 - SIDE VIEW
1 : 25



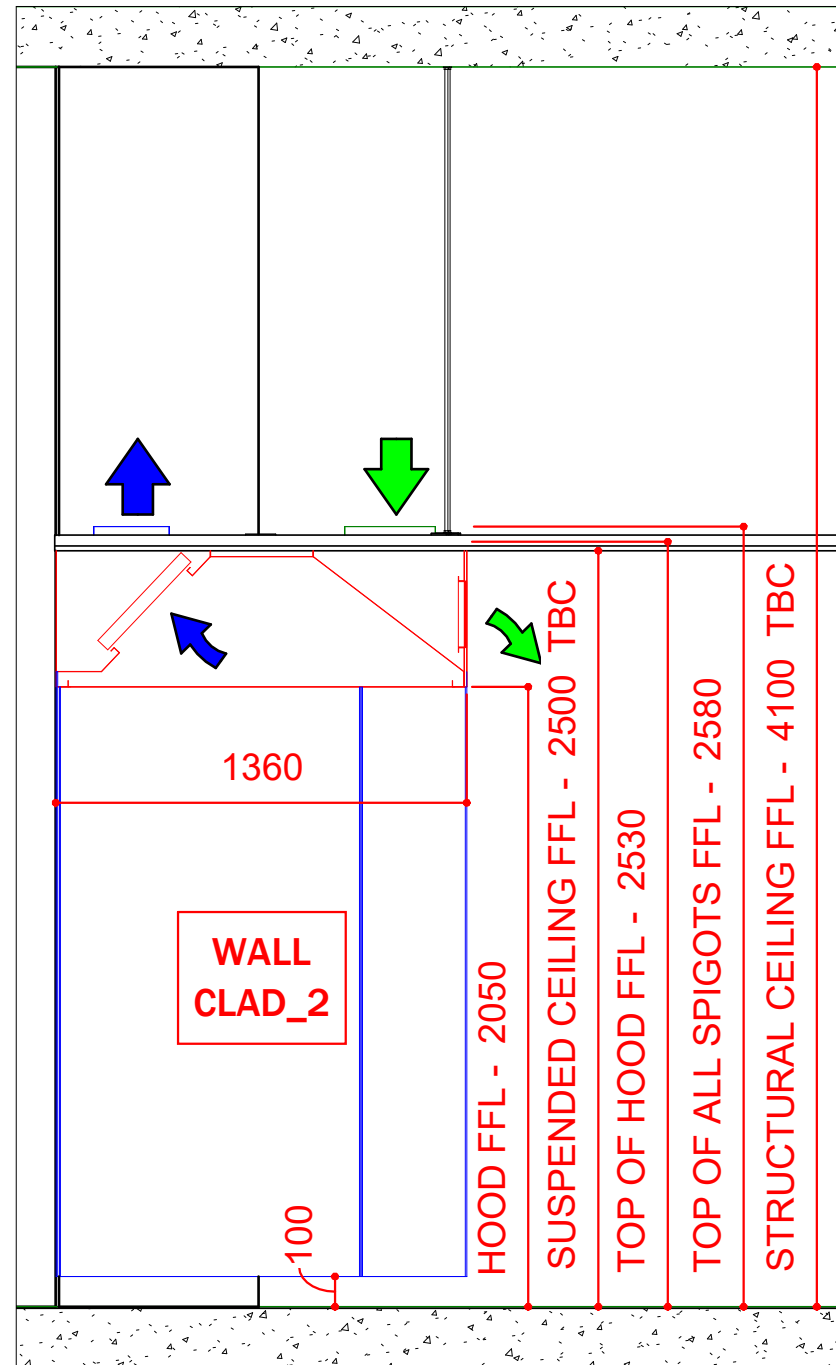
3 item 24 & 26 - FRONT VIEW
1 : 25



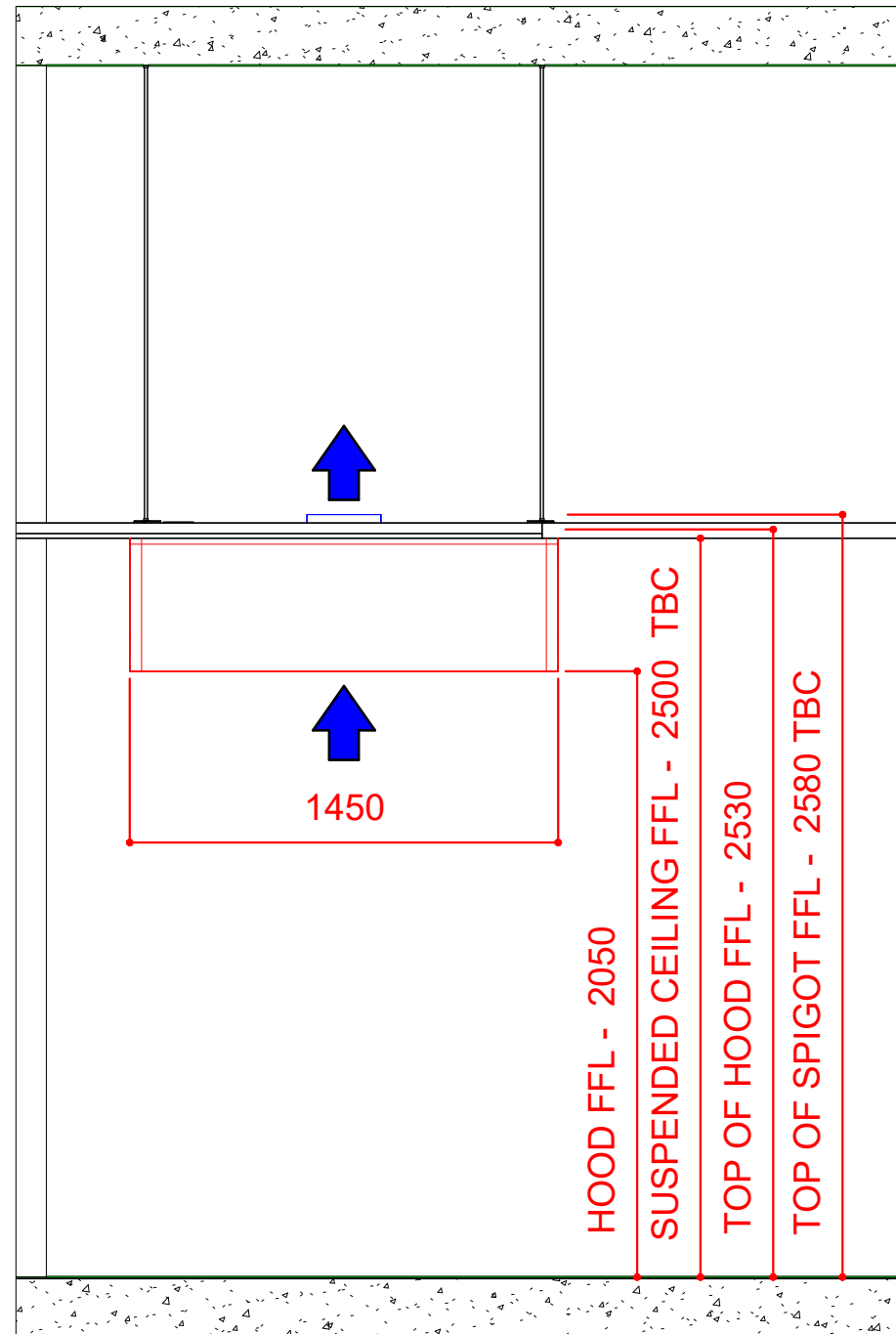
4 item 26 IFDWH_2 - SIDE VIEW
1 : 25



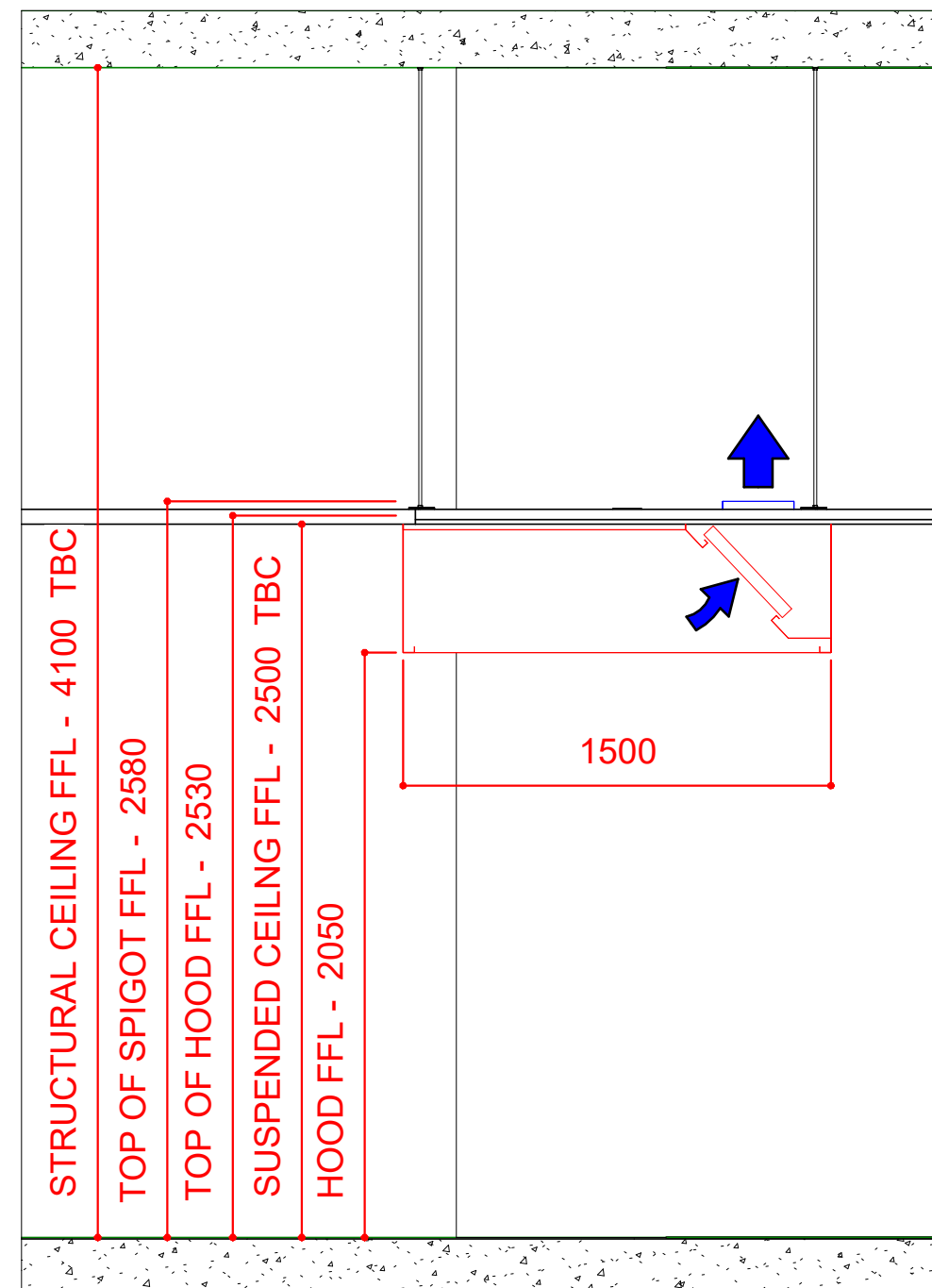
5 item 46 IFESW_1 - FRONT VIEW
1 : 25



6 item 46 IFESW_1 - SIDE VIEW
1 : 25



7 item 137 IFEOW_1 FRONT VIEW
1 : 25



8 item 137 IFEOW_1 SIDE VIEW
1 : 25

SUSPENDED CEILING HEIGHT - 2500mm FFL - TBC
STRUCTURAL CEILING HEIGHT - 4100mm FFL - TBC

KEY		
IMAGE	DESCRIPTION	CODE
	CANOPY HANGING POINT	HP
	CANOPY LIGHT CONNECTION POINT	CP
	LED SPOT LIGHT	SL
	INFILL PANEL	IP
N/A	SUSPENDED CEILING HEIGHT	SCH
	GALVANIZED STEEL EXTRACT SPIGOT	EX
	GALVANIZED STEEL SUPPLY AIR SPIGOT	SA
	SITE JOINT	SJ
	BOTTOM OF DUCT	BOD
	TOP OF DUCT	TOD
	ACCESS PANEL	AP

SYSTEMS KEY
1 : 20



Rev	Description	Date
P01	FOR COMMENT/APPROVAL	16/08/2023
P02	REVISED TO CLIENT COMMENTS, PIZZA HOOD REMOVED	31/10/2023
P03	item 137 RE-ADDED	08/11/2023

PROJECT NAME
Manchester Airport H3 Tribe

PROJECT ADDRESS
T.B.C

TITLE
SECTIONS 2

CLIENT
AP Projects

PROJECT NUMBER
13777

REV
P03

DRAWING NUMBER
003

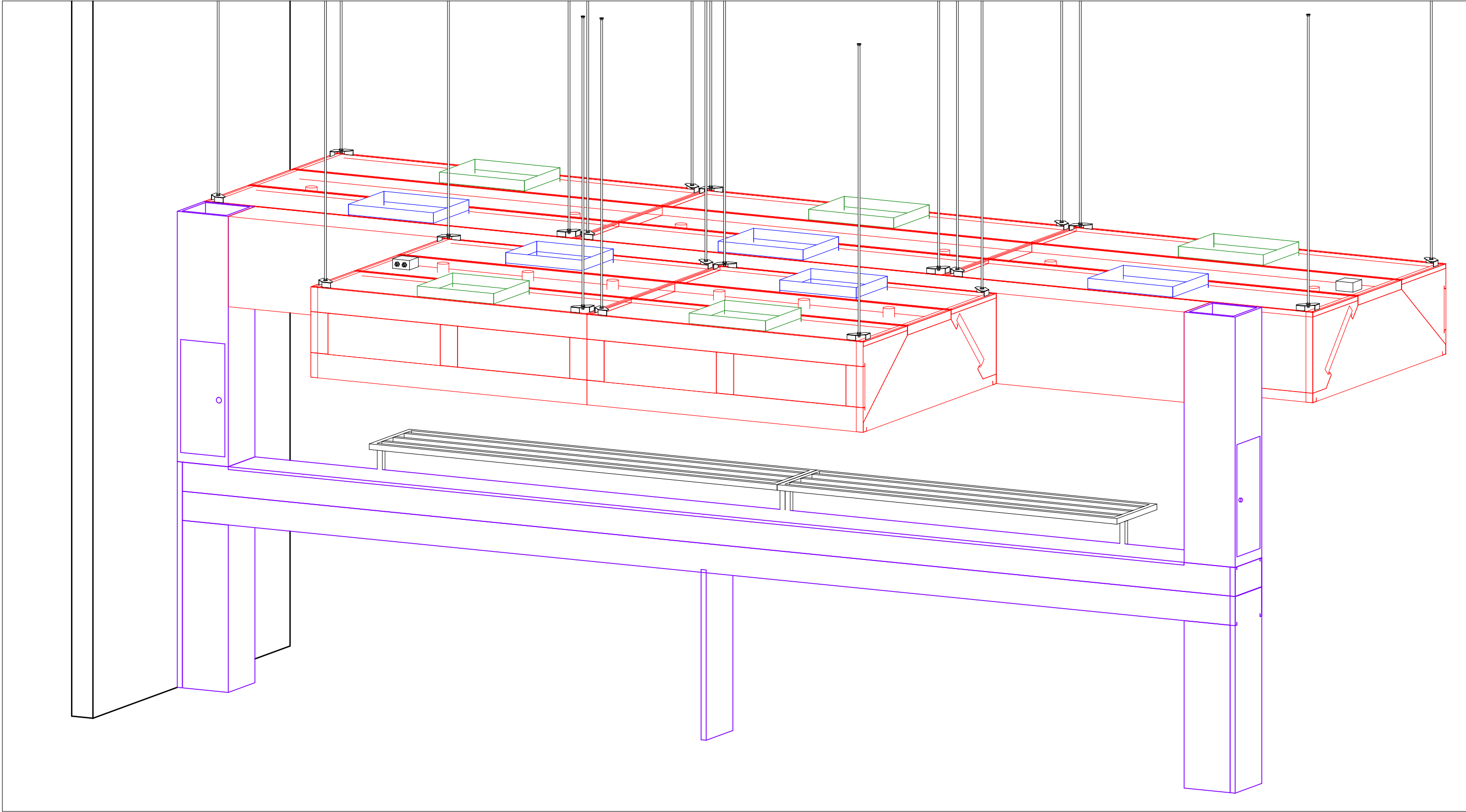
SCALE (@ A1)
As indicated

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SM

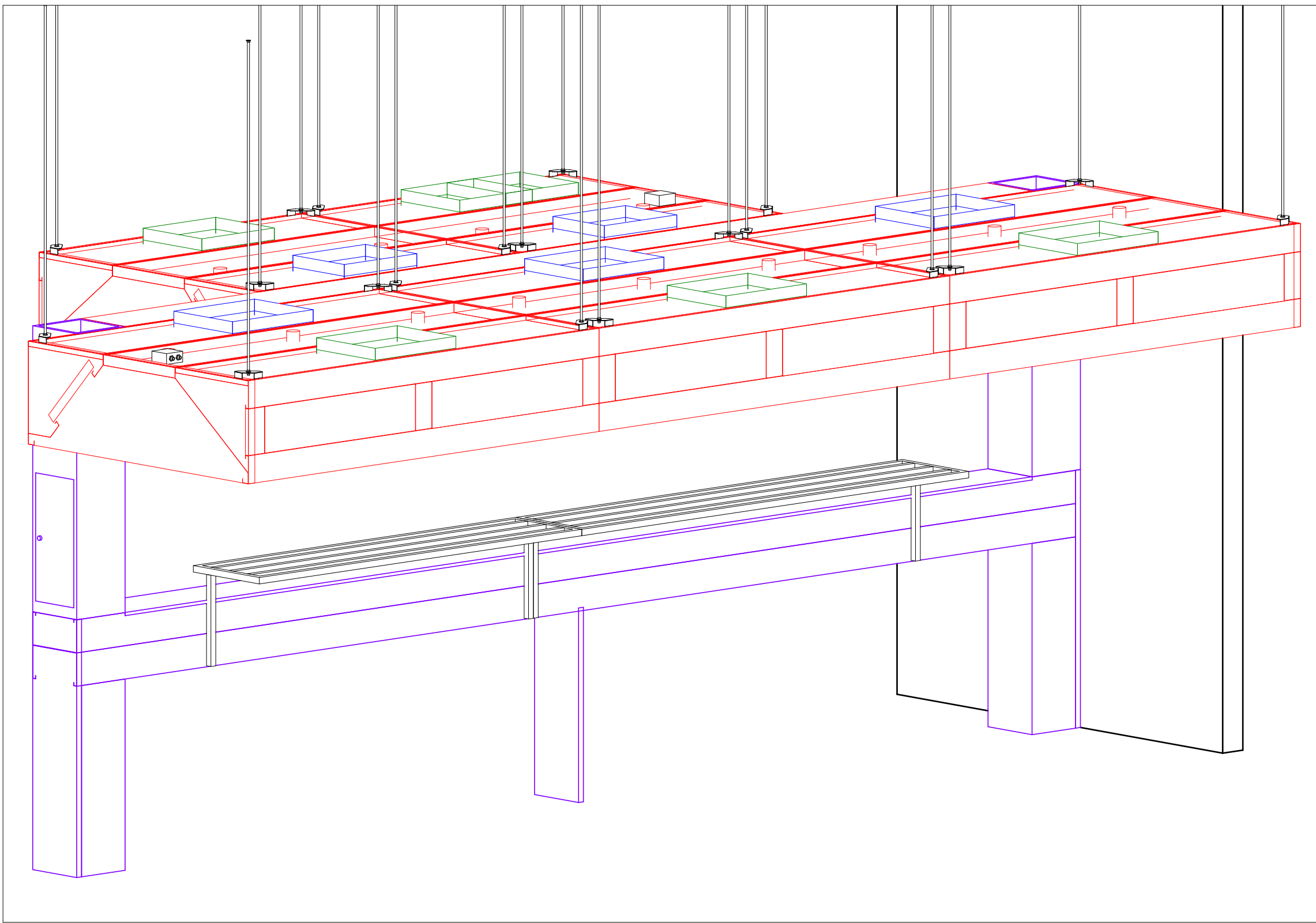
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DATE
08/11/2023

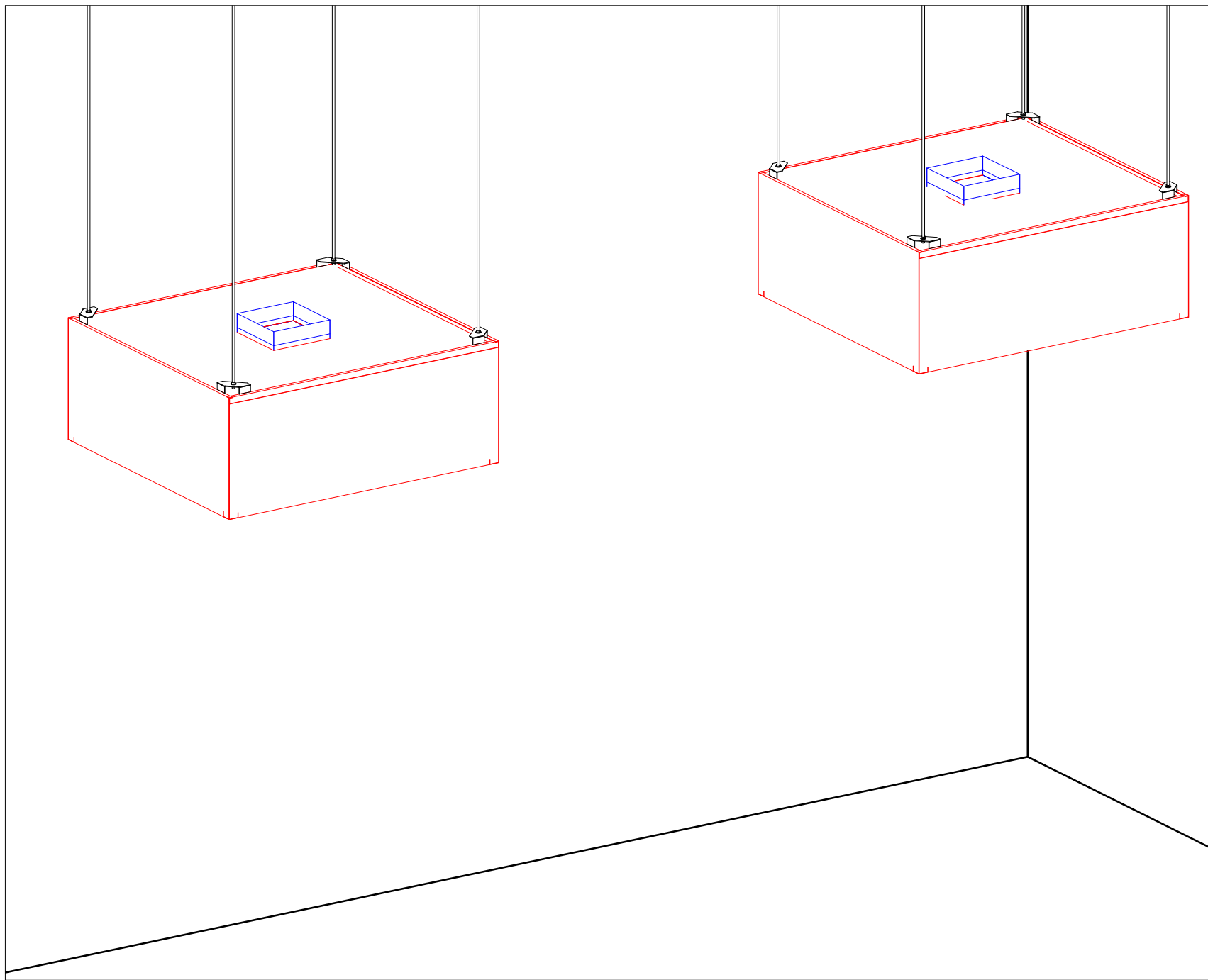
SUSPENDED CEILING HEIGHT - 2500mm FFL - TBC
STRUCTURAL CEILING HEIGHT - 4100mm FFL - TBC



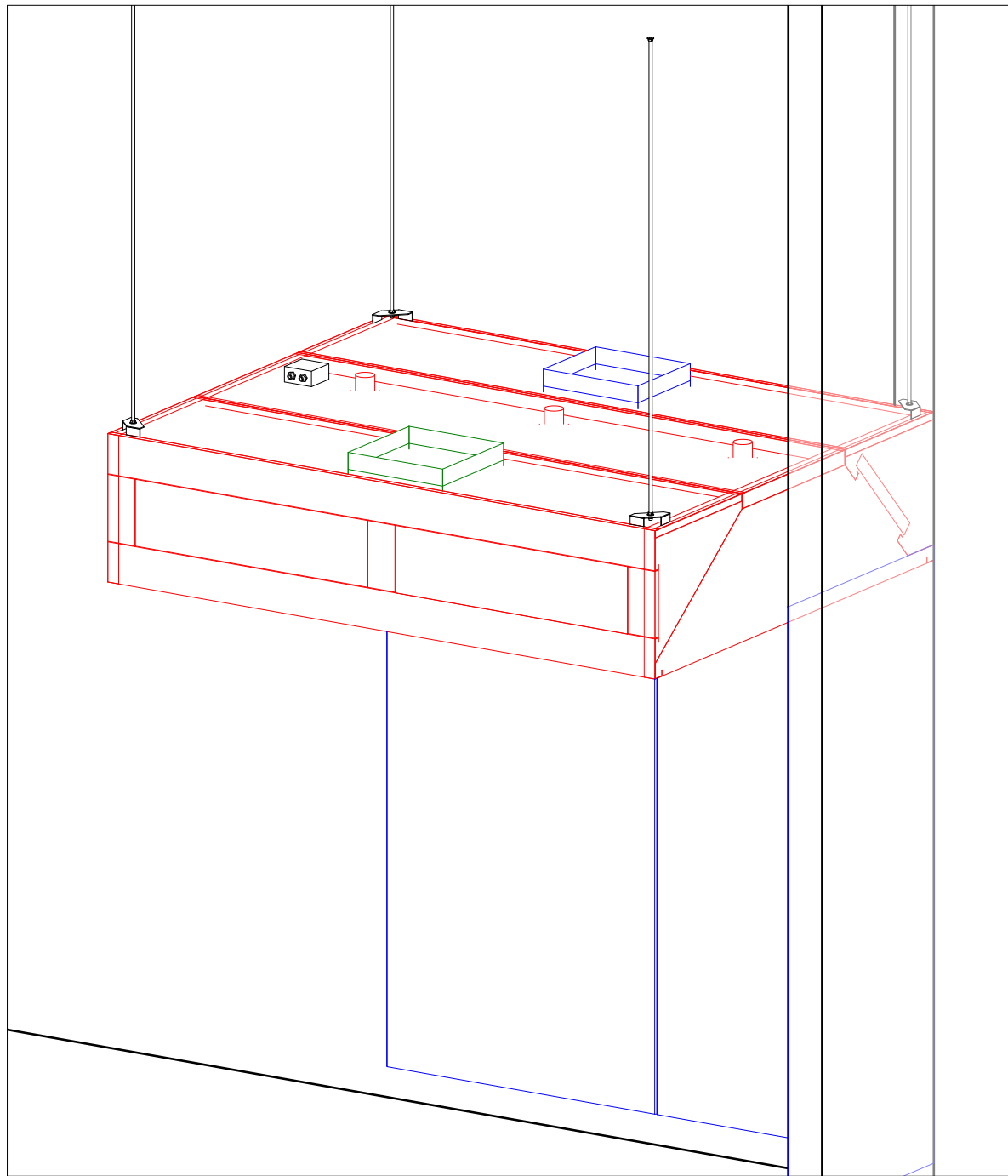
1 item 50 IFESW_2 - 3D VIEW



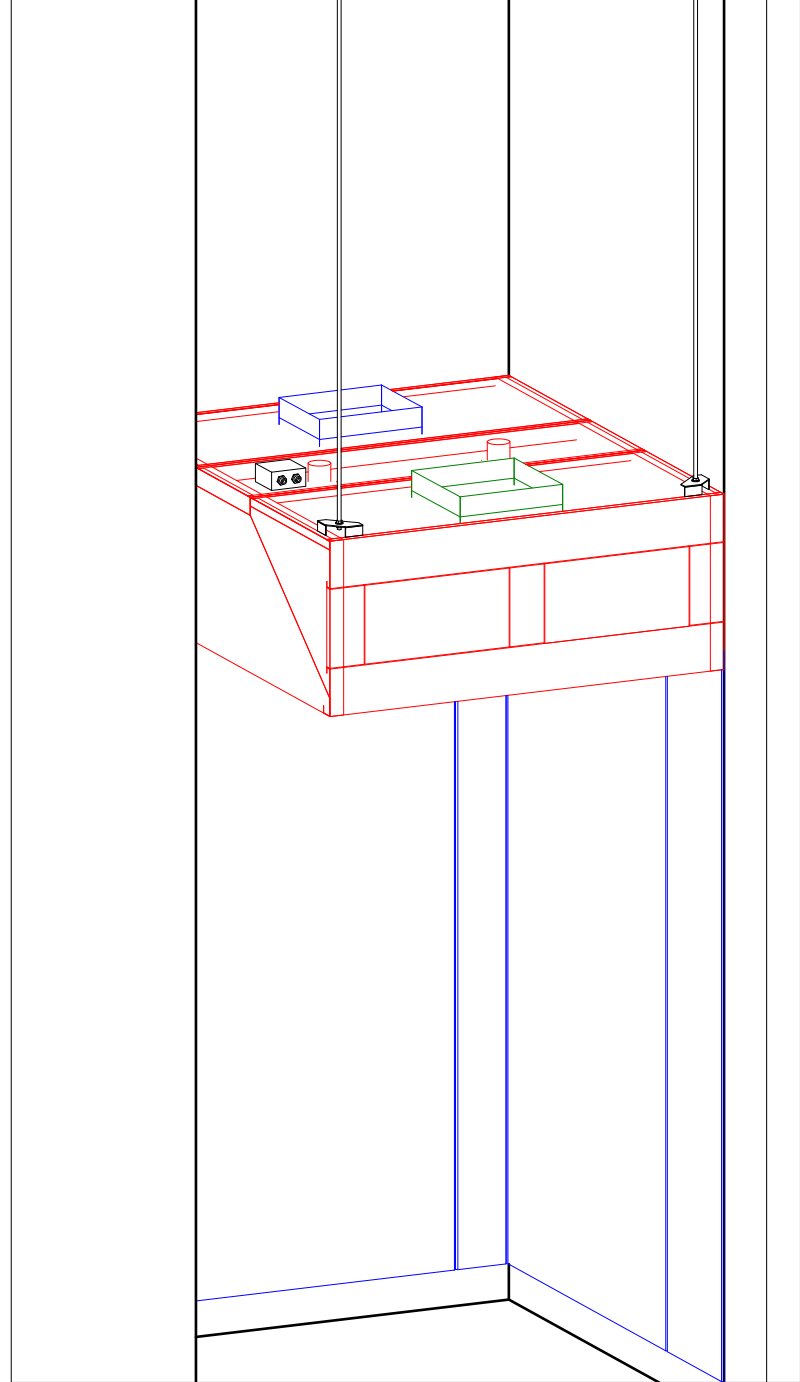
2 item 70 IFESW_1 - 3D VIEW



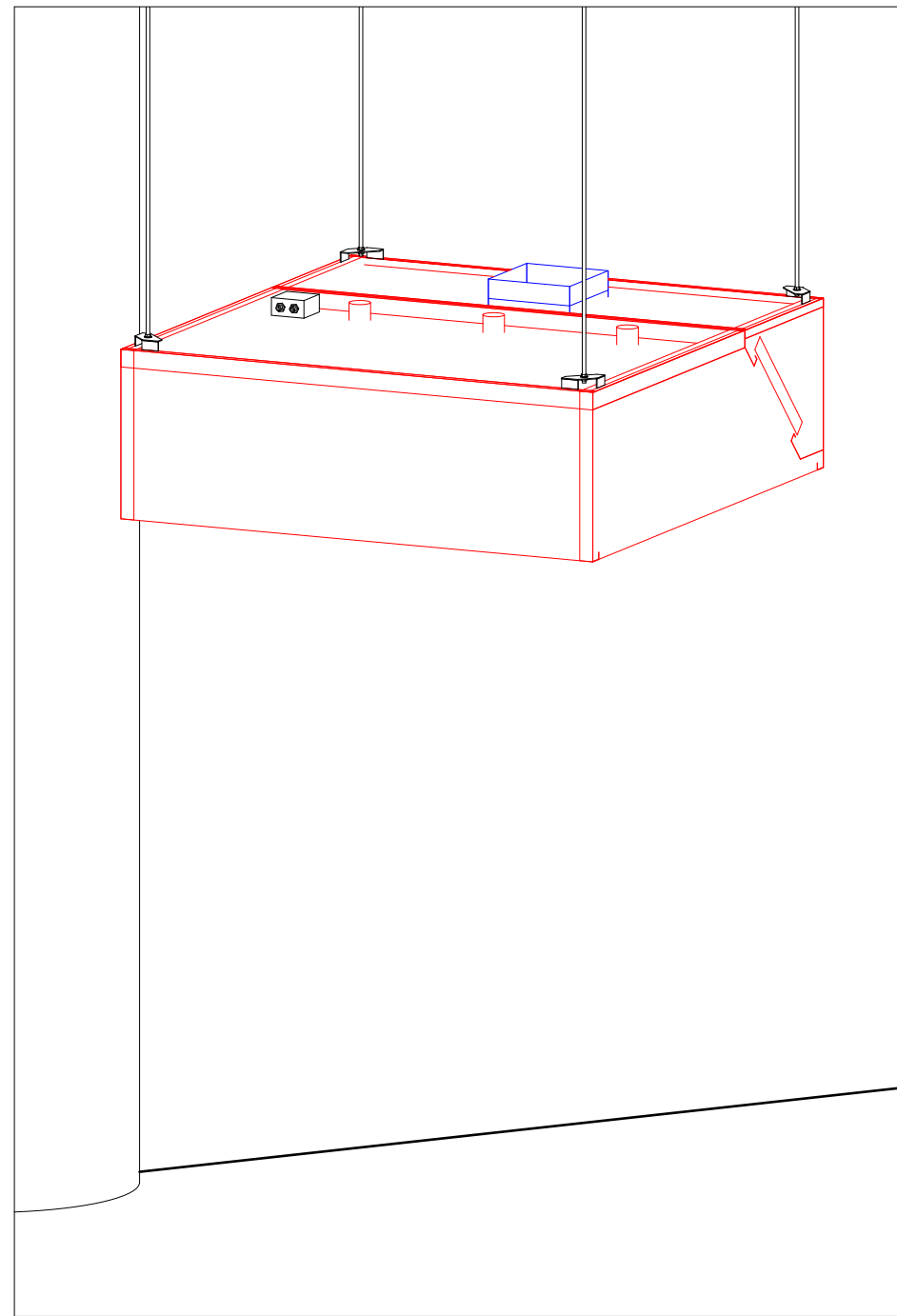
3 item 24 & 26 IFDWH - 3D VIEW



4 item 127 IFESW_4 - 3D VIEW



5 item 46 IFESW_1 - 3D VIEW



6 item 137 IFEOW_1 - 3D VIEW



Rev	Description	Date
P01	FOR COMMENT/APPROVAL	16/08/2023
P02	REVISED TO CLIENT COMMENTS, PIZZA HOOD REMOVED	31/10/2023
P03	item 137 RE-ADDED	08/11/2023

PROJECT NAME
Manchester Airport H3 Tribe

PROJECT ADDRESS
T.B.C

TITLE
3D VIEWS

CLIENT
AP Projects

PROJECT NUMBER 13777	REV P03
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DRAWING NUMBER 004	SCALE (@ A1)
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DRAWN BY SM	CHECKED BY LP	DATE 08/11/2023
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VENTILATION CANOPY FLOW RATE CALCULATION SHEET

Project:

Manchester Airport H3 Tribe

Job No:

13777

Rev

Drawing Ref

AH3-APP-H3-00-DR-X-72-1001 - item 46 IFESW_1

Date

09/08/2023

Equipment To Ventilated:

Item	Description	Width (mm)	Depth (mm)	Power	Area	TCC	Flow Rate
45	Fryer	800	920	Gas	0.74	0.5	0.3680
Theoretical extract volume required							0.3680
Canopy Factor							1.2
Extract Flow Rate M3/SEC							0.442
Supply Flow Rate (85%) M3/SEC							0.375

The above calculation is to allow ventilation of equipment under the canopy only, it does not allow for general ventilation to the kitchen, and is based on DW/172 Extract Flow Rate Calculation Method 1.

item 46 IFESW_1 - FLOW RATES

1 : 1

VENTILATION CANOPY FLOW RATE CALCULATION SHEET

Project:

Manchester Airport H3 Tribe

Job No:

13777

Rev

Drawing Ref

AH3-APP-H3-00-DR-X-72-1001 - item 127 IFESW_4

Date

09/08/2023

Equipment To Ventilated:

Item	Description	Width (mm)	Depth (mm)	Power	Area	TCC	Flow Rate
124	2 Zone Induction	450	700	Electric	0.32	0.3	0.0945
125	10 Grid Rational Combination Oven	850	842	Electric	0.72	0.32	0.2290
126	Under Counter Blast Chiller	929	777	Electric	0.72	0.15	0.1083
Theoretical extract volume required							0.4318
Canopy Factor							1.25
Extract Flow Rate M3/SEC							0.540
Supply Flow Rate (85%) M3/SEC							0.459

The above calculation is to allow ventilation of equipment under the canopy only, it does not allow for general ventilation to the kitchen, and is based on DW/172 Extract Flow Rate Calculation Method 1.

item 127 IFESW_4 - FLOW RATES

1 : 1

VENTILATION CANOPY FLOW RATE CALCULATION SHEET

Project:

Manchester Airport H3 Tribe

Job No:

13777

Rev

Drawing Ref

AH3-APP-H3-00-DR-X-72-1001 - item 50 IFESW_2

Date

09/08/2023

Equipment To Ventilated:

Item	Description	Width (mm)	Depth (mm)	Power	Area	TCC	Flow Rate
51	Bratt Pan	800	920	Gas	0.74	0.65	0.4784
52	Boiling Pan	800	920	Gas	0.74	0.35	0.2576
54	20 Grid Combination Oven	877	913	Electric	0.80	0.4	0.3203
Theoretical extract volume required							1.0563
Canopy Factor							1.6
Extract Flow Rate M3/SEC							1.690
Supply Flow Rate (85%) M3/SEC							1.437

The above calculation is to allow ventilation of equipment under the canopy only, it does not allow for general ventilation to the kitchen, and is based on DW/172 Extract Flow Rate Calculation Method 1.

item 50 IFESW_2 - FLOW RATES

1 : 1

VENTILATION CANOPY FLOW RATE CALCULATION SHEET

Project:

Manchester Airport H3 Tribe

Job No:

13777

Rev

Drawing Ref

AH3-APP-H3-00-DR-X-72-1001 - item 137 IFEOW_1

Date

09/08/2023

Equipment To Ventilated:

Item	Description	Width (mm)	Depth (mm)	Power	Area	TCC	Flow Rate
134	Single Deck pizza Oven	1450	1510	Electric	2.19	0.15	0.3284
Theoretical extract volume required							0.3284
Canopy Factor							1.15
Extract Flow Rate M3/SEC							0.378

The above calculation is to allow ventilation of equipment under the canopy only, it does not allow for general ventilation to the kitchen, and is based on DW/172 Extract Flow Rate Calculation Method 1.

item 137 IFEOW_5 - FLOW RATES

1 : 1

VENTILATION CANOPY FLOW RATE CALCULATION SHEET

Project:

Manchester Airport H3 Tribe

Job No:

13777

Rev

Drawing Ref

AH3-APP-H3-00-DR-X-72-1001 - item 70 IFESW_3

Date

09/08/2023

Equipment To Ventilated:

Item	Description	Width (mm)	Depth (mm)	Power	Area	TCC	Flow Rate
56	10 Grid Rational Combination Oven	850	842	Electric	0.72	0.32	0.2290
57	6 Grid Rational Combination Oven	850	842	Electric	0.72	0.4	0.2863
59	Work Bench	400	920	N/A	0.37	0.03	0.0110
61	Chargrill	800	920	Gas	0.74	0.95	0.6992
62	4 Zone Induction	800	920	Electric	0.74	0.3	0.2208
63	Work Bench	800	920	Electric	0.74	0.03	0.0221
64	Pot Rack	2400	450	N/A	1.08	0.03	0.0324
65	4 Burner	800	920	Gas	0.74	0.4	0.2944
66	Pasta Cooker	800	920	Gas	0.74	0.3	0.2208
67	Work Bench	800	920	N/A	0.74	0.03	0.0221
68	Rise and Fall Salamnder Grill	640	400	Electric	0.26	0.55	0.1408
Theoretical extract volume required							2.1789
Canopy Factor							1.5
Extract Flow Rate M3/SEC							3.268
Supply Flow Rate (85%) M3/SEC							2.778

The above calculation is to allow ventilation of equipment under the canopy only, it does not allow for general ventilation to the kitchen, and is based on DW/172 Extract Flow Rate Calculation Method 1.

item 70 IFESW_3 - FLOW RATES

1 : 1

DISHWASH HOODS CALCULATED AT 0.4m³/S



Rev	Description	Date
P01	FOR COMMENT/APPROVAL	16/08/2023
P02	REVISED TO CLIENT COMMENTS, PIZZA HOOD REMOVED	31/10/2023
P03	item 137 RE-ADDED	08/11/2023

PROJECT NAME

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TITLE

FLOW RATES

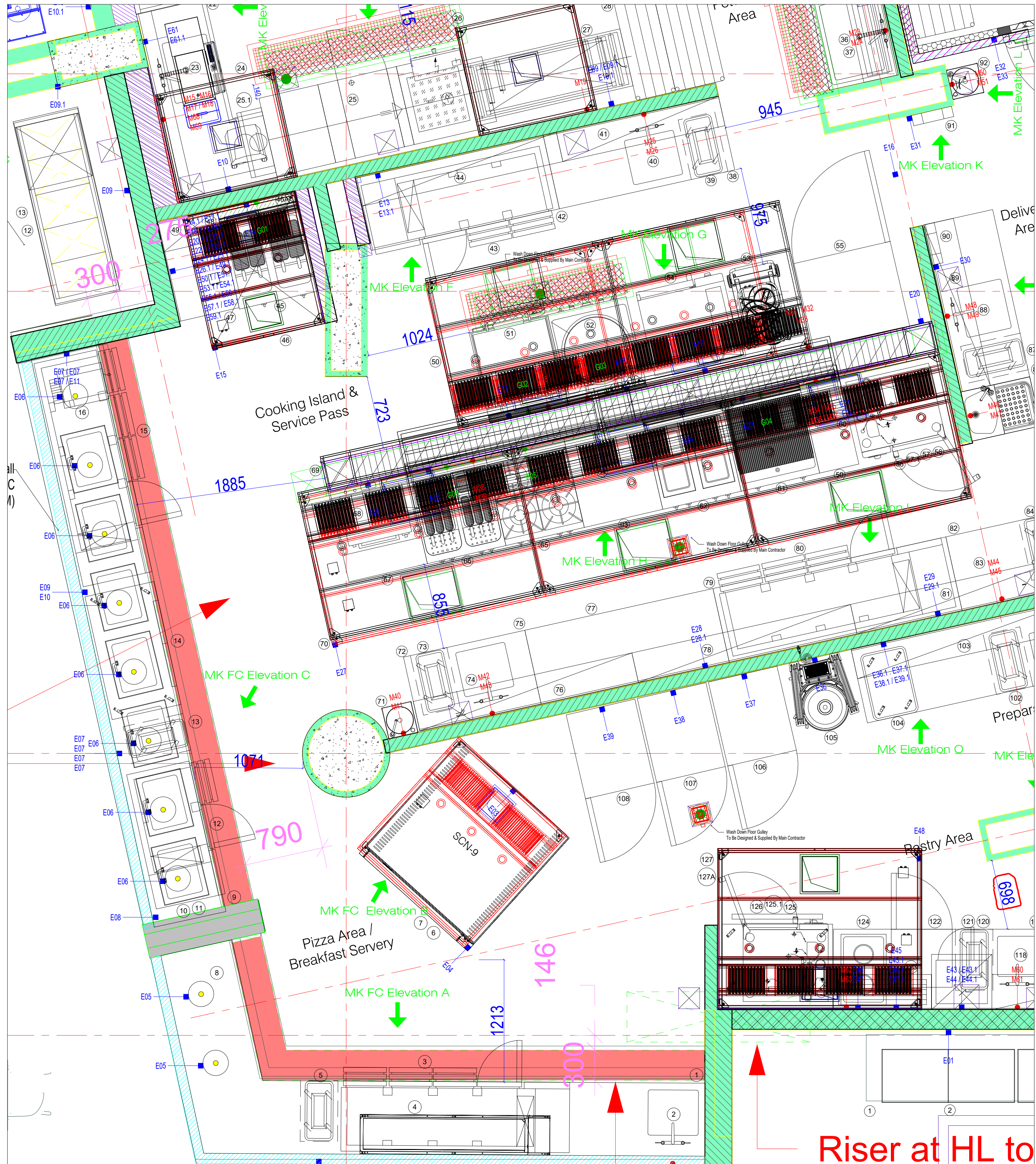
CLIENT

AP Projects

PROJECT NUMBER	REV
13777	P03

DRAWING NUMBER	SCALE (@ A1)
005	1 : 1

DRAWN BY	CHECKED BY	DATE
SM	LP	08/11/2023



1 AH3-APP-H3-00-DR-X-72-1001 Rev F
1 : 25



Rev	Description	Date
P01	FOR COMMENT/APPROVAL	16/08/2023
P02	REVISED TO CLIENT COMMENTS, PIZZA HOOD REMOVED	31/10/2023
P03	Item 137 RE-ADDED	08/11/2023

PROJECT NAME
Manchester Airport H3 Tribe

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T.B.C

TITLE
KITCHEN LAYOUT PLAN

CLIENT
AP Projects

PROJECT NUMBER	REV
13777	P03

DRAWING NUMBER	SCALE (@ A1)
006	1 : 25

DRAWN BY	CHECKED BY	DATE
AP P	LP	08/11/2023