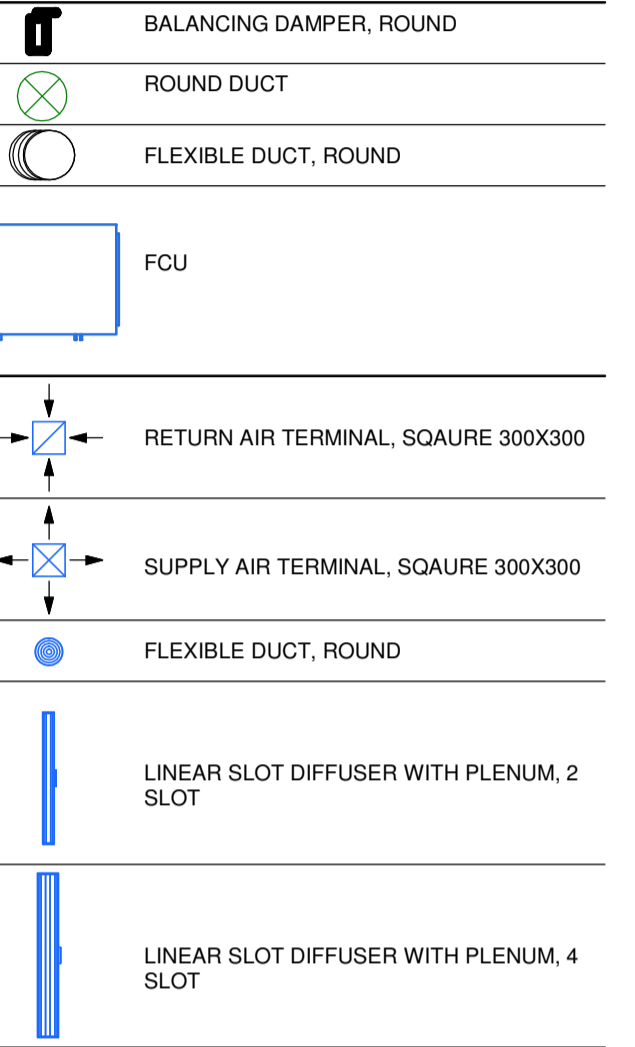


INTERIOR DESIGNER

HVAC Legend



MORE INFORMATION

| No | Date | Description | Iss. to | Iss. by |
|----|----------|---------------------------------------|---------|---------|
| 6 | 15/12/20 | FDS to Mall | Hanna | Zahr |
| 5 | 07/12/20 | Final Submittal to Client | Yahya | Zahr |
| 4 | 30/08/20 | Second Submittal to MOO | Hanna | Zahr |
| 3 | 24/06/20 | First Submittal to MOO | Hanna | Zahr |
| 2 | 21/06/20 | Ceiling and Wall Shell Revised | Yahya | Zahr |
| 1 | 20/06/20 | Revised Concept Design | Yahya | Zahr |
| 0 | 11/08/20 | First Concept Presentation For Client | Yahya | Zahr |

REVISIONS

Design

Drawing Status

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GENERAL NOTES

RAYDAN PERFUMES UNIT N18, MALL OF OMAN

PROJECT

AZZOMORRODA ENTERPRISES

CLIENT

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Drawing Title

HVAC Layout

Drawn : ZAH Date : Issue Date

Checked : Approved : Approver

Scale : As indicated

File :

| Project No. | Type | Drawing No. | Rev. |
|-------------|------|-------------|------|
| 143 | | M101 | 6 |

CHILLED WATER PIPE WORK: (F & B) AND ANCHOR UNITS.

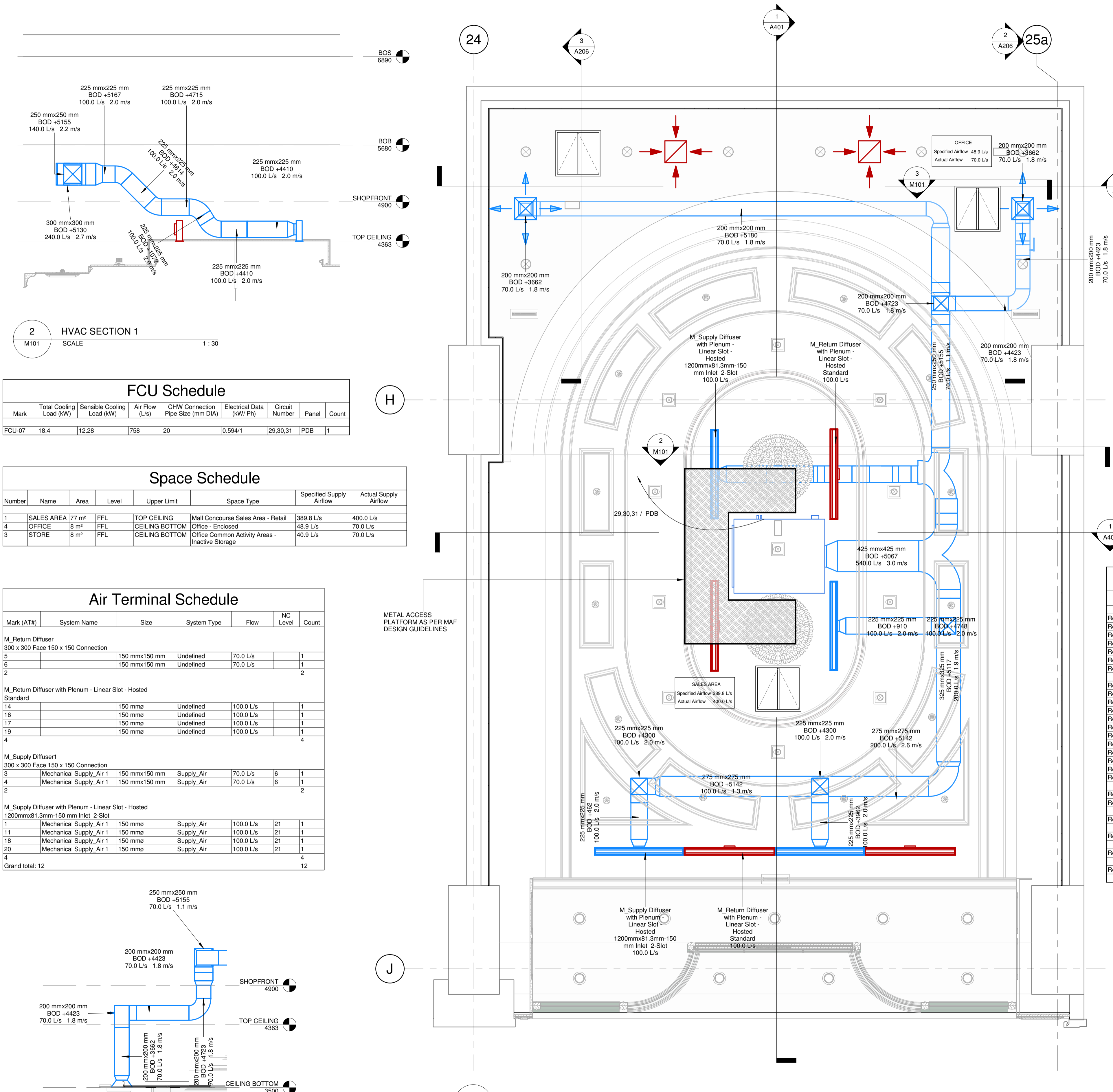
- TENANTS INSTALLED CHILLED WATER PIPE WORK SHALL BE FORMED IN MEDIUM GRADE BLACK STEEL ERW, SCH40, ASTM A53, AND GRADE 8 USE WELDED OR GROVE PIPE FITTINGS.
- CHILLED WATER INSULATION (F & B) AND ANCHOR UNITS, SHALL HAVE A THERMAL CONDUCTIVITY OF AT MOST 0.018 W/M K AT 10 °C MEAN TEMPERATURE AND NOMINAL DENSITY OF 35 KG/M³. MINIMUM THICKNESS IS 30 MM WITH A SUITABLE VAPOUR BARRIER COATING OR FACING SHALL BE PROVIDED.
- 25 MM THICK (48 KG/M³ IN THE PLANT ROOM) 24 KG/M³ DENSITY, GLASS FIBRE PIPE SHAPED INSULATION WITH FACTORY APPLIED VAPOUR BARRIER REINFORCED ALUMINIUM FACING OR CROSS LINKED CLOSED CELL POLYOLEFIN FOAM (DENSITY 45-50 KG/M³) OR AS AN ALTERNATIVE:
- GFC AND HCFC FREE, FLEXIBLE CLOSED CELL ELASTOMERIC SHEET INSULATION OR CROSS LINKED CLOSED CELL POLYOLEFIN FOAM (DENSITY 45-50 KG/M³) WITH MINIMUM OF 12 MM (25 MM FOR PLANT ROOM AND OUTSIDE AREAS) THICKNESS. ELASTOMERIC INSULATION MUST BE FM APPROVED. DENSITY: 60 - 70 KG/M³ WITH SUITABLE VAPOUR BARRIER COATING SHALL BE PROVIDED WITH ALUGLASS / ALUPET SILVER COLOR FOIL.
- IF THE PIPES ARE EXPOSED TO ATMOSPHERE WITH NO FALSE CEILING AREAS INSIDE THE UNIT, THE INSULATION SHALL BE COVERED COTTON CLOTH AND COATED SUITABLE VAPOUR BARRIER AND FINISHED WITH 0.8 MM THICKNESS ALUMINIUM CLADDING (PLAIN OR EMBOSSED) OR ALUGLASS / ALUCAD FACING.
- CONDENSATE DRAINAGE MUST BE PIPED TO THE NEAREST CONDENSATE DRAINAGE CONNECTION WITHIN THE UNIT DEMISE.
- TESTING, COMMISSIONING AND BALANCING.
- THE TENANT HAS TO APPOINT SPECIALIST COMMISSIONING CONTRACTOR TO CARRY OUT HVAC SYSTEM TESTING, COMMISSIONING AND BALANCING. TENANT IS TO SUBMIT COMMISSIONING AND BALANCING REPORT (AIR DISTRIBUTION AND CHILLED WATER NETWORK) TO MAJID AL FUTTAIM RETAIL DESIGN MANAGEMENT BEFORE UNIT OPEN TO TRADE.
- ENSURE ALL MATERIALS USED IN THE FIT-OUT ARE COMPLIANT WITH MEP SPECIFICATIONS.
- ENSURE ALL HVAC INSTALLATIONS ARE COMPLIANT WITH HVAC TYPICAL INSTALLATION DETAILS 1.2 AND 3.
- REFER PROCESS FLOW CHART 4.5 AND 15 FOR TESTING AND COMMISSIONING OF THE HVAC SYSTEM.
- TENANT TO INSTALL SMOKE EXTRACT AND MAKE UP AIR SYSTEM ACCORDING TO AUTHORITY HAVING JURISDICTION (AHJ) AND PROJECT'S FIRE STRATEGY.
- PHENOLIC PRE-INSULATED DUCT MAY BE USED FOR FCU DUCTING. PRE-INSULATED DUCT MADE OF POLYISOCYANURATE AND POLYURETHANE ARE NOT APPROVED.

DUCT WORK:

- THE AIR CONDITIONING DUCTING SHALL BE MANUFACTURED WITH MINIMUM 24 GA- GALVANIZED SHEET METAL OR ALTERNATE PRE-INSULATED PHENOLIC FOAM.
- DUCT SHALL BE HOT DIPPED GALVANIZED STEEL SHEET LOCK FORMING QUALITY.
- HOT-DIP GALVANIZED STEEL WITH G90 (2.275 G/MP) COATING.
- DUCT CONSTRUCTION AND INSTALLATION SHALL BE AS PER SMACNA OR DW144 STANDARDS.
- THE PRE-INSULATED DUCT WORK SHALL BE PHENOLIC FOAM TYPE WITH DENSITY OF 65 KG/M³. THERMAL CONDUCTIVITY SHALL NOT BE MORE THAN 0.024 W/(M.K @10 DEG C)

DUCT INSULATION:

- 25 MM THICK (48 KG/M³ IN THE PLANT ROOM) 24 KG/M³ DENSITY, GLASS FIBRE BLANKET INSULATION WITH FACTORY APPLIED VAPOUR BARRIER REINFORCED ALUMINIUM FACING.
- OR CROSS LINKED CLOSED CELL POLYOLEFIN FOAM (DENSITY 45-50 KG/M³)
- GFC & HCFC FREE, 60 - 70 KG/M³ DENSITY FLEXIBLE CLOSED CELL ELASTOMERIC SHEET FACTORY FACING ALUGLASS / ALUGLASS INSULATION WITH MINIMUM THICKNESS OF 19 MM (25 MM FOR PLANT ROOM AND OUT DOOR AREAS) WITH PVC JACKETING OR ALU CLADDING FACING.
- IF THE DUCT IS EXPOSED TO ATMOSPHERE (ROOF), THE DUCTS ARE INSULATED WITH GLASS FIBRE COVERED WITH COTTON CLOTH, COATED WITH VAPOUR BARRIER AND FINALLY FINISHED WITH 0.8 MM THICK ALUMINIUM CLADDING (PLAIN / EMBOSSED).



HVAC SECTION 1

M101 SCALE 1:30

FCU Schedule

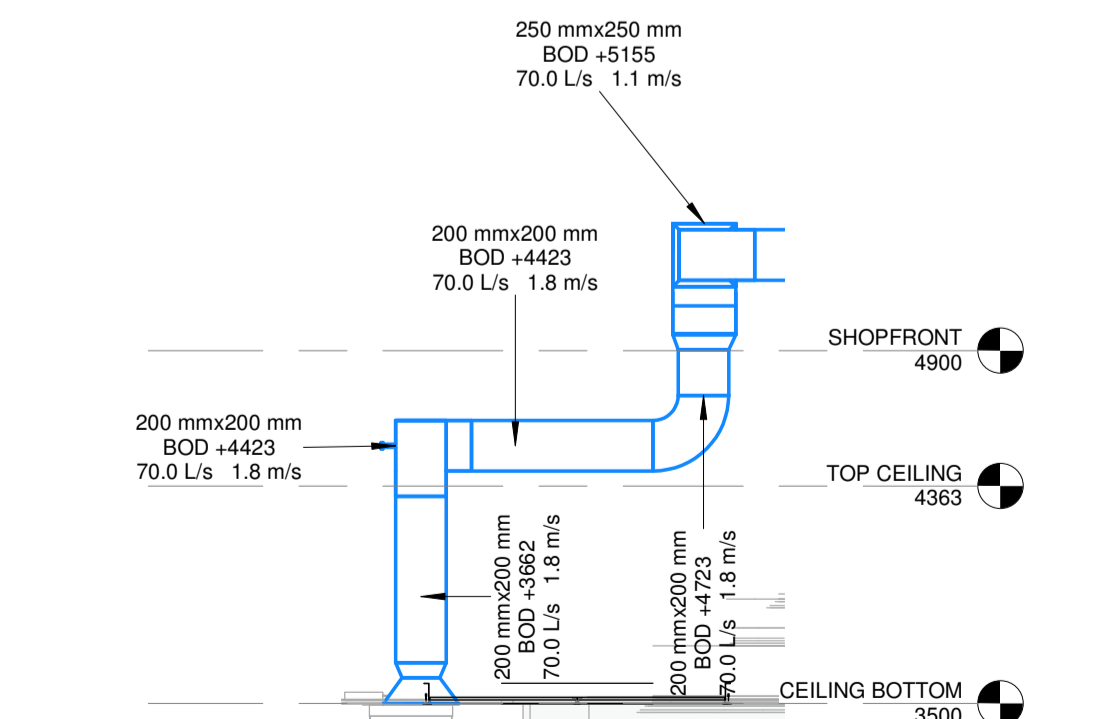
| Mark | Total Cooling Load (kW) | Sensible Cooling Load (kW) | Air Flow (L/s) | CHW Connection Pipe Size (mm DIA) | Electrical Data (kW/Ph) | Circuit Number | Panel | Count |
|--------|-------------------------|----------------------------|----------------|-----------------------------------|-------------------------|----------------|-------|-------|
| FCU-07 | 18.4 | 12.28 | 758 | 20 | 0.594/1 | 29,30,31 | PDB | 1 |

Space Schedule

| Number | Name | Area | Level | Upper Limit | Space Type | Specified Supply Airflow | Actual Supply Airflow |
|--------|------------|-------------------|-------|----------------|---|--------------------------|-----------------------|
| 1 | SALES AREA | 77 m ² | FFL | TOP CEILING | Mall Concourse Sales Area - Retail | 389.8 L/s | 400.0 L/s |
| 4 | OFFICE | 8 m ² | FFL | CEILING BOTTOM | Office - Enclosed | 48.9 L/s | 70.0 L/s |
| 3 | STORE | 8 m ² | FFL | CEILING BOTTOM | Office Common Activity Areas - Inactive Storage | 40.9 L/s | 70.0 L/s |

Air Terminal Schedule

| Mark (AT#) | System Name | Size | System Type | Flow | NC Level | Count |
|--|-------------------------|---------------|-------------|-----------|----------|-------|
| M. Return Diffuser | | | | | | |
| 300 x 300 Face 150 x 150 Connection | | | | | | |
| 5 | | 150 mmx150 mm | Undefined | 70.0 L/s | | 1 |
| 6 | | 150 mmx150 mm | Undefined | 70.0 L/s | | 1 |
| 2 | | | | | | 2 |
| M. Return Diffuser with Plenum - Linear Slot - Hosted Standard | | | | | | |
| 14 | | 150 mm | Undefined | 100.0 L/s | | 1 |
| 16 | | 150 mm | Undefined | 100.0 L/s | | 1 |
| 17 | | 150 mm | Undefined | 100.0 L/s | | 1 |
| 19 | | 150 mm | Undefined | 100.0 L/s | | 1 |
| 4 | | | | | | 4 |
| M. Supply Diffuser1 | | | | | | |
| 300 x 300 Face 150 x 150 Connection | | | | | | |
| 3 | Mechanical Supply_Air 1 | 150 mmx150 mm | Supply_Air | 70.0 L/s | 6 | 1 |
| 4 | Mechanical Supply_Air 1 | 150 mmx150 mm | Supply_Air | 70.0 L/s | 6 | 1 |
| 2 | | | | | | 2 |
| M. Supply Diffuser with Plenum - Linear Slot - Hosted 1200mmx81.3mm-150 mm Inlet 2-Slot | | | | | | |
| 1 | Mechanical Supply_Air 1 | 150 mm | Supply_Air | 100.0 L/s | 21 | 1 |
| 11 | Mechanical Supply_Air 1 | 150 mm | Supply_Air | 100.0 L/s | 21 | 1 |
| 18 | Mechanical Supply_Air 1 | 150 mm | Supply_Air | 100.0 L/s | 21 | 1 |
| 20 | Mechanical Supply_Air 1 | 150 mm | Supply_Air | 100.0 L/s | 21 | 1 |
| 4 | | | | | | 4 |
| Grand total: 12 | | | | | | |



HVAC SECTION 2

M101 SCALE 1:30

02-HVAC LAYOUT

M101 SCALE 1:30

Duct Schedule

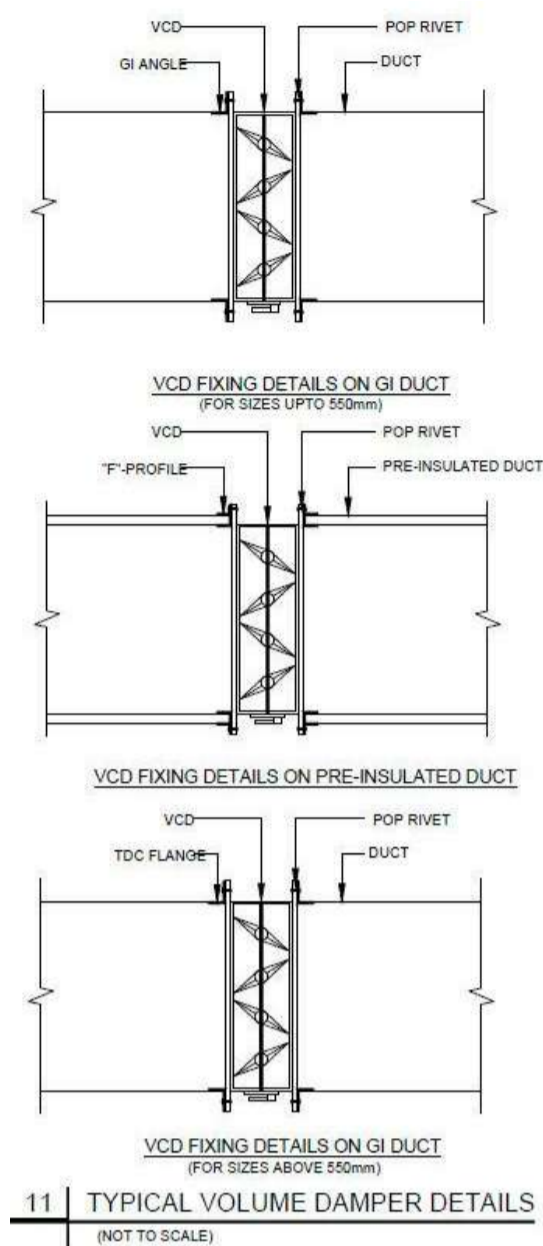
| Family and Type | Overall Size | Flow | Insulation Thickness | Insulation Type | Lining Thickness | Lining Type | Velocity | Length (MM) | Count |
|----------------------------|---------------|-----------|----------------------|-----------------|------------------|-------------|----------|-------------|-------|
| Rectangular Duct: Standard | 200 mmx200 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.8 m/s | 5292 | 1 |
| Rectangular Duct: Standard | 200 mmx200 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.8 m/s | 1418 | 1 |
| Rectangular Duct: Standard | 200 mmx200 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.8 m/s | 407 | 1 |
| Rectangular Duct: Standard | 200 mmx200 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.8 m/s | 661 | 1 |
| Rectangular Duct: Standard | 200 mmx200 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.8 m/s | 721 | 1 |
| Rectangular Duct: Standard | 200 mmx200 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.8 m/s | 181 | 1 |
| Rectangular Duct: Standard | 200 mmx200 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.8 m/s | 243 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 504 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 741 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 504 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 755 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 1170 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 268 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 548 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 104 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 353 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 378 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 172 | 1 |
| Rectangular Duct: Standard | 225 mmx225 mm | 100.0 L/s | 0 mm | | 0 mm | | 2.0 m/s | 452 | 1 |
| Rectangular Duct: Standard | 250 mmx250 mm | 70.0 L/s | 0 mm | | 0 mm | | 1.1 m/s | 752 | 1 |
| Rectangular Duct: Standard | 250 mmx250 mm | 140.0 L/s | 0 mm | | 0 mm | | 2.2 m/s | 1692 | 1 |
| Rectangular Duct: Standard | 275 mmx275 mm | 200.0 L/s | 0 mm | | 0 mm | | 2.6 m/s | 3685 | 1 |
| Rectangular Duct: Standard | 300 mmx300 mm | 240.0 L/s | 0 mm | | 0 mm | | 2.7 m/s | 199 | 1 |
| Rectangular Duct: Standard | 325 mmx325 mm | 300.0 L/s | 0 mm | | 0 mm | | 2.8 m/s | 2243 | 1 |
| Rectangular Duct: Standard | 425 mmx425 mm | 540.0 L/s | 0 mm | | 0 mm | | 3.0 m/s | 1114 | 1 |
| | | | | | | | | 24555 | 25 |

Duct Fitting Schedule

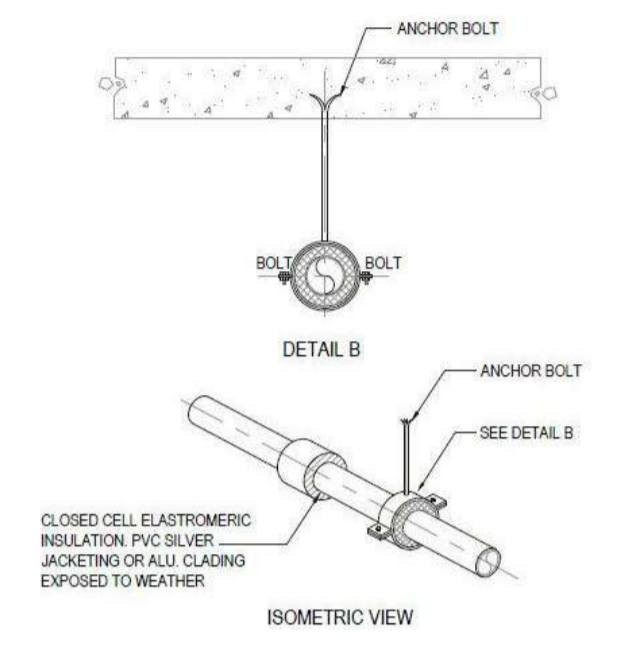
| Family and Type | Free Size | Count |
|--|---|-------|
| M Rectangular Transition - Angle: 45 Degree | 200 mmx200 mm-150 mmx150 mm | 2 |
| M Rectangular to Round Transition - Angle: 45 Degree | 200 mmx200 mm-200 mmx200 mm | 5 |
| M Rectangular Transition - Angle: 45 Degree | 200 mmx250 mm-200 mmx200 mm | 1 |
| M Rectangular to Round Transition - Angle: 45 Degree | 225 mmx225 mm-150 mm | 4 |
| M Rectangular Transition - Angle: 45 Degree | 225 mmx225 mm-225 mmx225 mm | 11 |
| M Rectangular Transition - Angle: 45 Degree | 225 mmx300 mm-225 mmx225 mm | 1 |
| M Rectangular Transition - Angle: 45 Degree | 250 mmx250 mm-200 mmx200 mm | 1 |
| M Rectangular Wye - Curved - Transition: Standard | 250 mmx250 mm-250 mmx250 mm-200 mmx250 mm | 1 |
| M Rectangular Transition - Angle: 45 Degree | 250 mmx300 mm-250 mmx250 mm | 1 |
| M Rectangular Transition - Angle: 45 Degree | 275 mmx275 mm-225 mmx225 mm | 1 |
| M Rectangular Elbow - Radius: 1 W | 275 mmx275 mm-275 mmx275 mm | 1 |
| M Rectangular Wye - Curved - Transition: Standard | 300 mmx300 mm-250 mmx300 mm-225 mmx300 mm | 1 |
| M Rectangular Transition - Angle: 45 Degree | 300 mmx425 mm-300 mmx300 mm | 1 |
| M Rectangular Transition - Angle: 45 Degree | 325 mmx325 mm-275 mmx275 mm | 1 |
| M Rectangular Transition - Angle: 45 Degree | 325 mmx425 mm-325 mmx325 mm | 1 |
| M Rectangular Transition - Angle: 45 Degree | 425 mmx425 mm-300 mmx300 mm | 1 |
| M Rectangular Wye - Curved - Transition: Standard | 425 mmx425 mm-300 mmx425 mm-325 mmx425 mm | 1 |
| | | 37 |

Duct Accessory Schedule

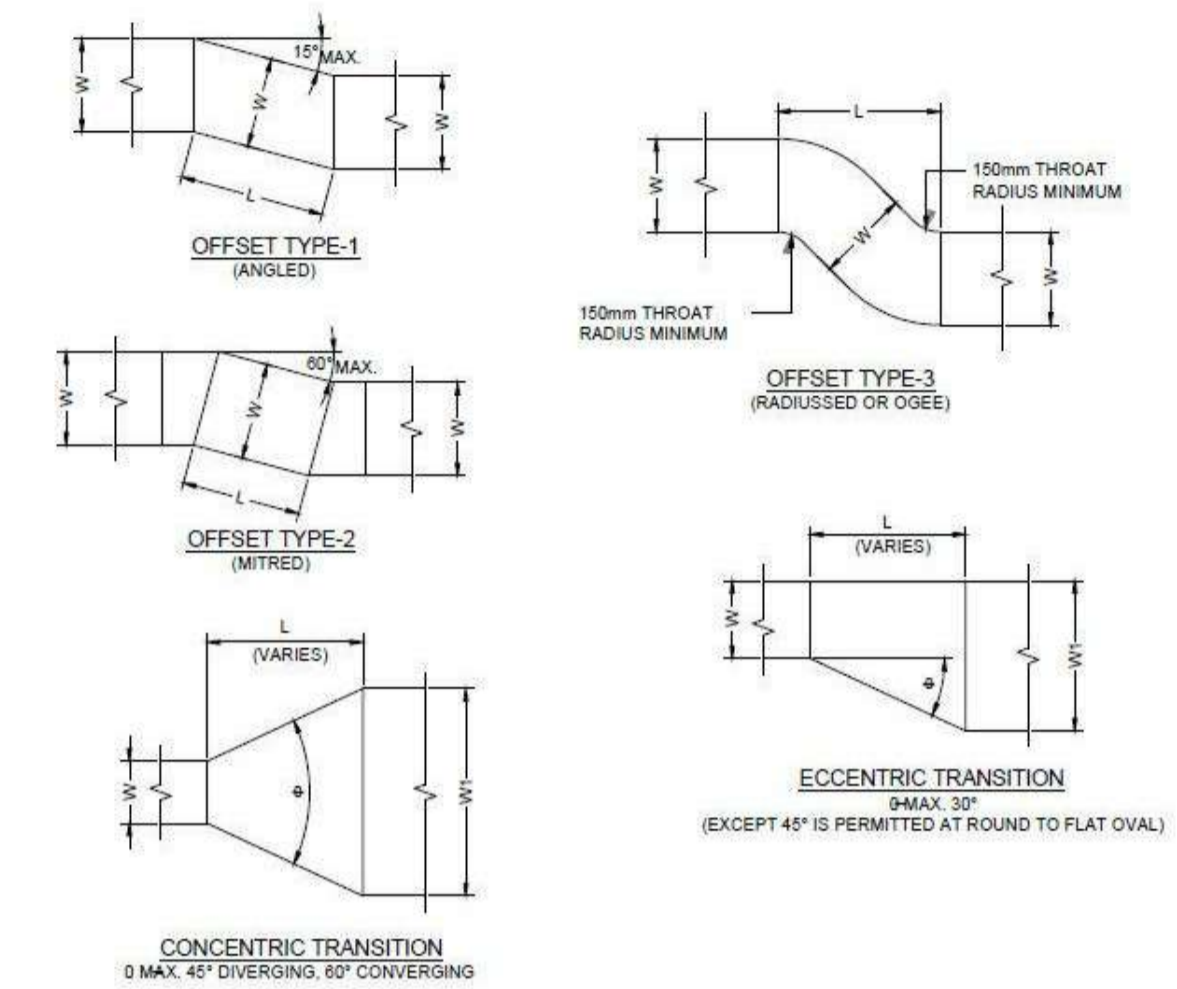
| Family and Type | Free Size | Count |
|--------------------------------------|---------------|-------|
| M Balancing Damper - Round: Standard | 200 mm-200 mm | 1 |
| | | 1 |



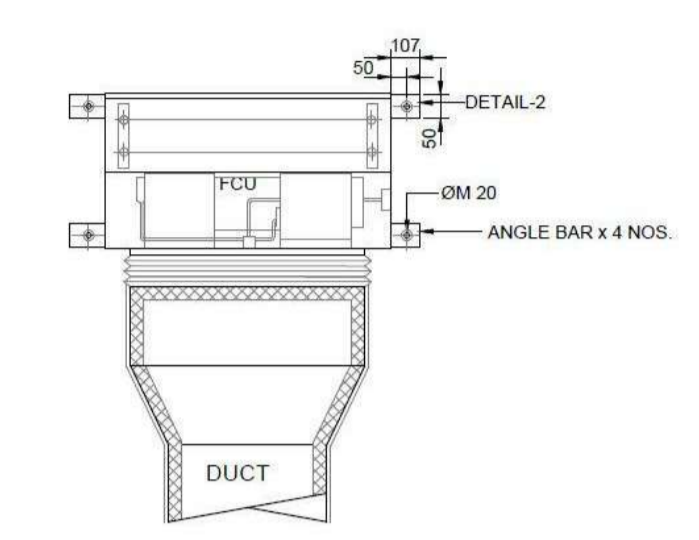
11 TYPICAL VOLUME DAMPER DETAILS (NOT TO SCALE)



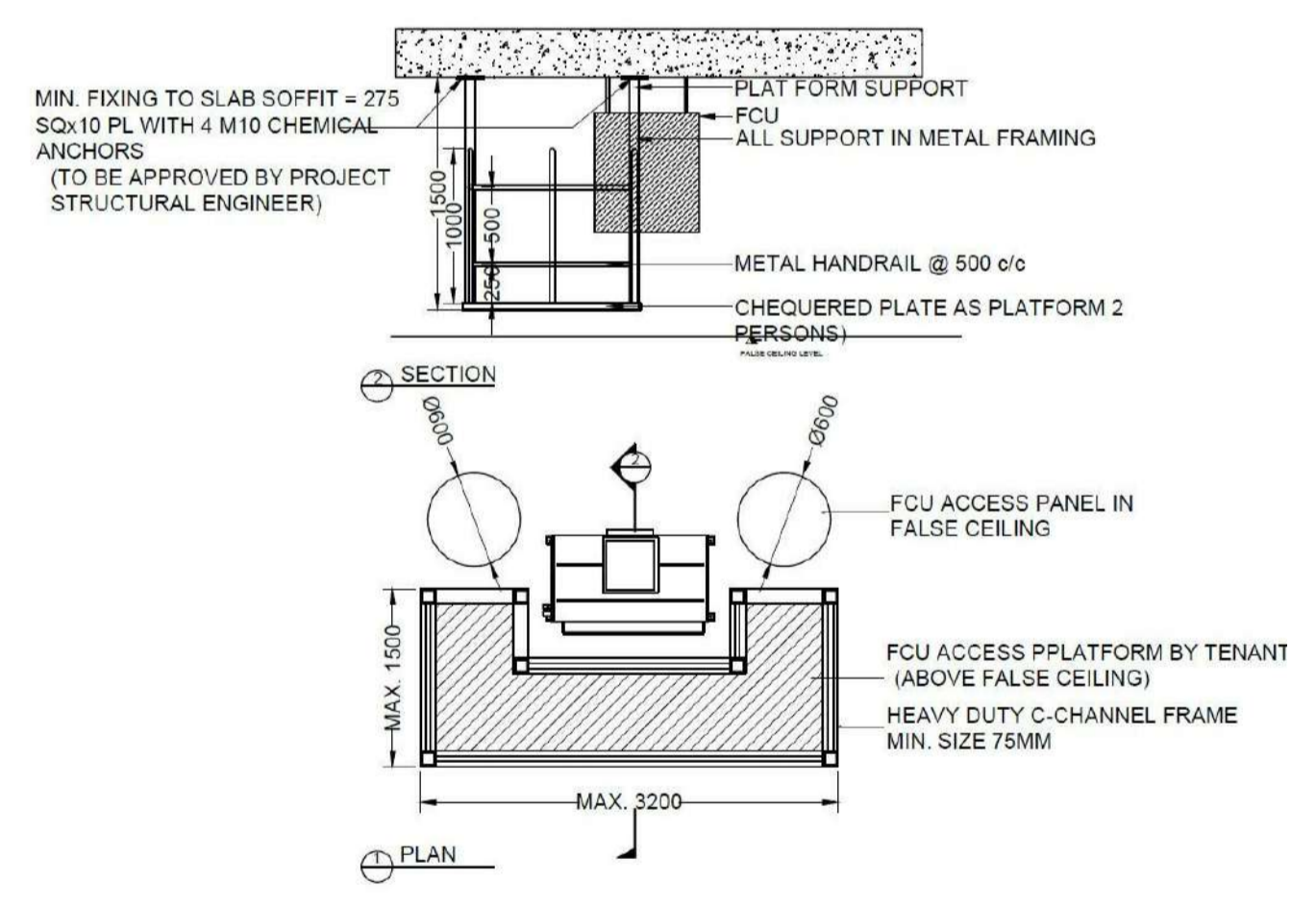
08 TYPICAL CONDENSATE DRAIN PIPE CEILING MOUNTED DETAIL (NOT TO SCALE)



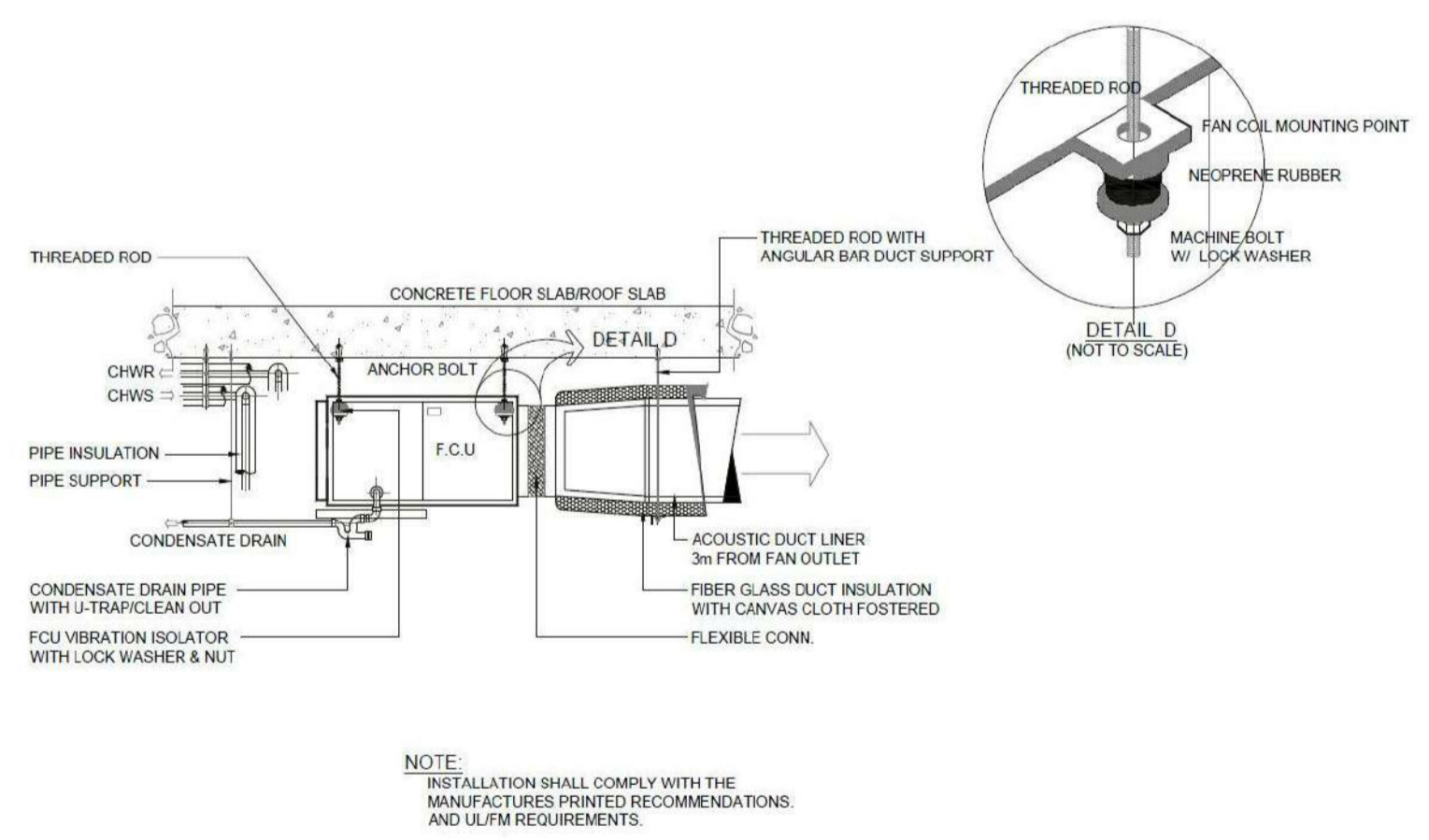
6 OFFSETS AND TRANSITIONS (NOT TO SCALE)



10 TYPICAL FCU SUPPLY DUCT CONNECTION DETAIL (NOT TO SCALE)



FCU PLATFORM INSTALLATION DETAILS



27 TYPICAL DETAILS FOR FAN COIL UNITS CEILING SUSPENDED TYPE (NOT TO SCALE)

MORE INFORMATION

| No | Date | Description | Iss. to | Iss. by |
|-------------------|----------|-------------|---------|---------|
| 6 | 15/12/20 | FDS to Mall | Hanna | Zahir |
| Revision Schedule | | | | |

REVISIONS

Design Drawing Status

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GENERAL NOTES

RAYDAN PERFUMES UNIT N18, MALL OF OMAN

PROJECT

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Drawing Title HVAC Details

| | | | |
|-------------|---------|-------------|------------|
| Drawn | Author | Date | Issue Date |
| Checked | Checker | Approved | Approver |
| Scale | - | | |
| File | - | | |
| Project No. | Type | Drawing No. | Rev. |
| 143 | | M101B | 6 |

Lighting Legend (Types)

| | |
|--|--|
| | 1X18 W, T5 LAMP, SUSPENDED EMERGENCY LUMINAIRE |
| | RECESSED SQUARE BODY DOWNLIGHT |
| | TRACK LIGHT |
| | 1X18 W, SURFACE MOUNTED EXIT LUMINAIRE |
| | 150MM RECESSED DOWNLIGHT |
| | 80MM DOWNLIGHT |
| | STRIP LIGHT |
| | LIGHTING POWER CONNECTOR - CABLE TAIL WITH CONNECTION ROSE |
| | PENDANT LIGHT, AS PER ID |
| | RECESSED CEILING LIGHT, 600X600 |

MORE INFORMATION

| No | Date | Description | Iss. to | Iss. by |
|----|----------|---------------------------------------|---------|---------|
| 6 | 15/12/20 | FDS to Mail | Hanna | Zahr |
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GENERAL NOTES

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UNIT N18, MALL OF OMAN**

PROJECT

AZZOMORRODA ENTERPRISES
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Drawing Title
**Lighting & Emergency Lighting
Layout**

| | | | |
|-------------|----------------|-------------|--------------|
| Drawn | • ZAH | Date | • Issue Date |
| Checked | • | Approved | • Approver |
| Scale | • As indicated | | |
| File | • | | |
| Project No. | 143 | Drawing No. | M102 |
| Type | | Rev. | 6 |

CHILLED WATER PIPE WORK: (F& B) AND ANCHOR UNITS.

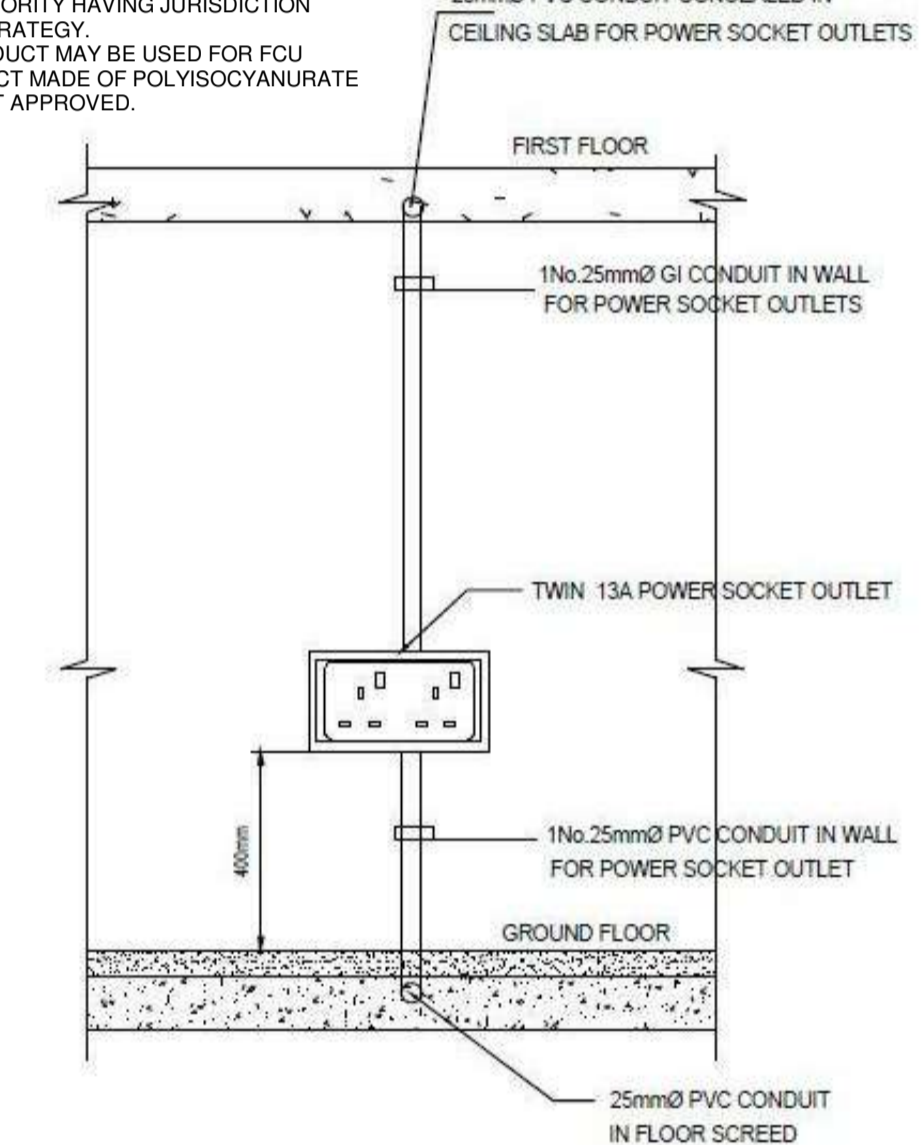
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DUCT WORK:

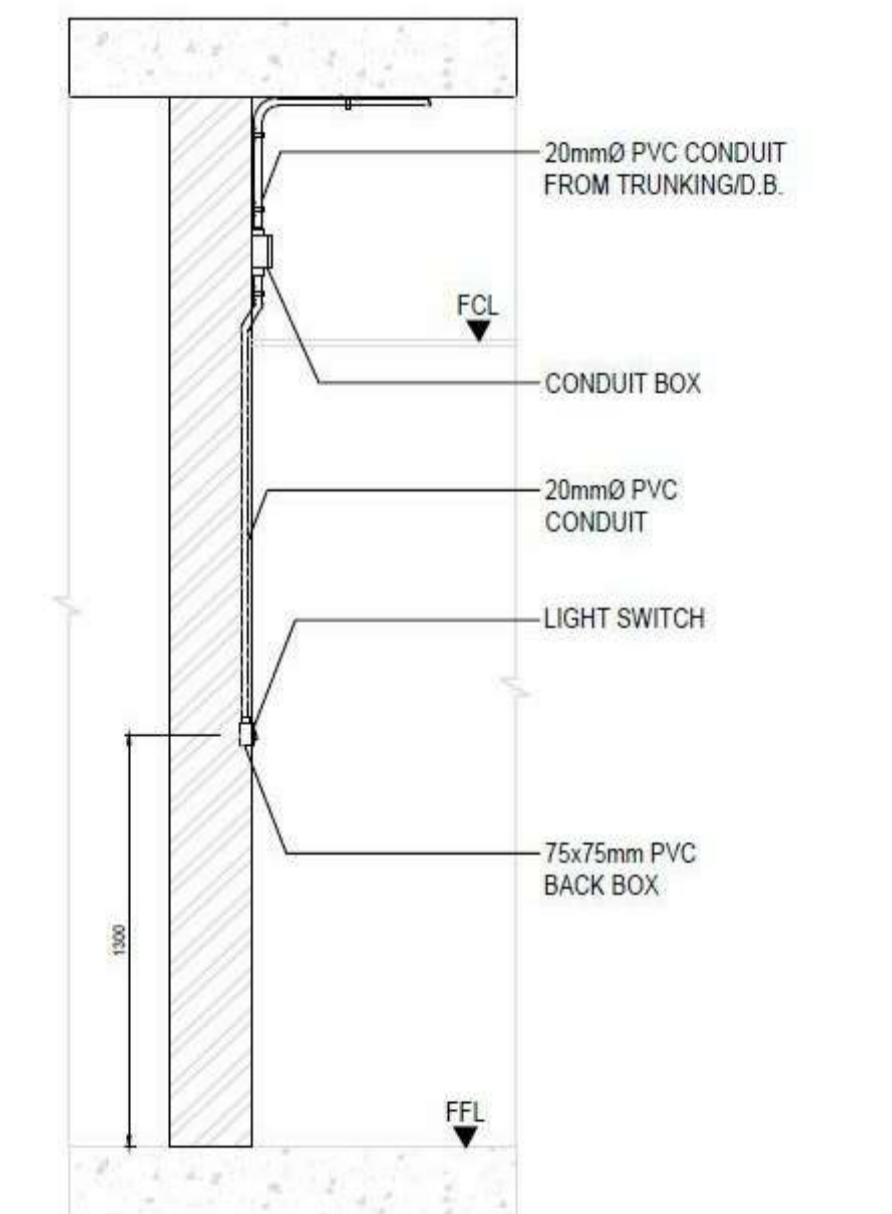
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- G, I DUCT SHALL BE HOT DIPPED GALVANIZED STEEL SHEET LOCK FORMING QUALITY, HOT-DIP GALVANIZED STEEL WITH G90 (Z 275 G/ M²) COATING.
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DUCT INSULATION:

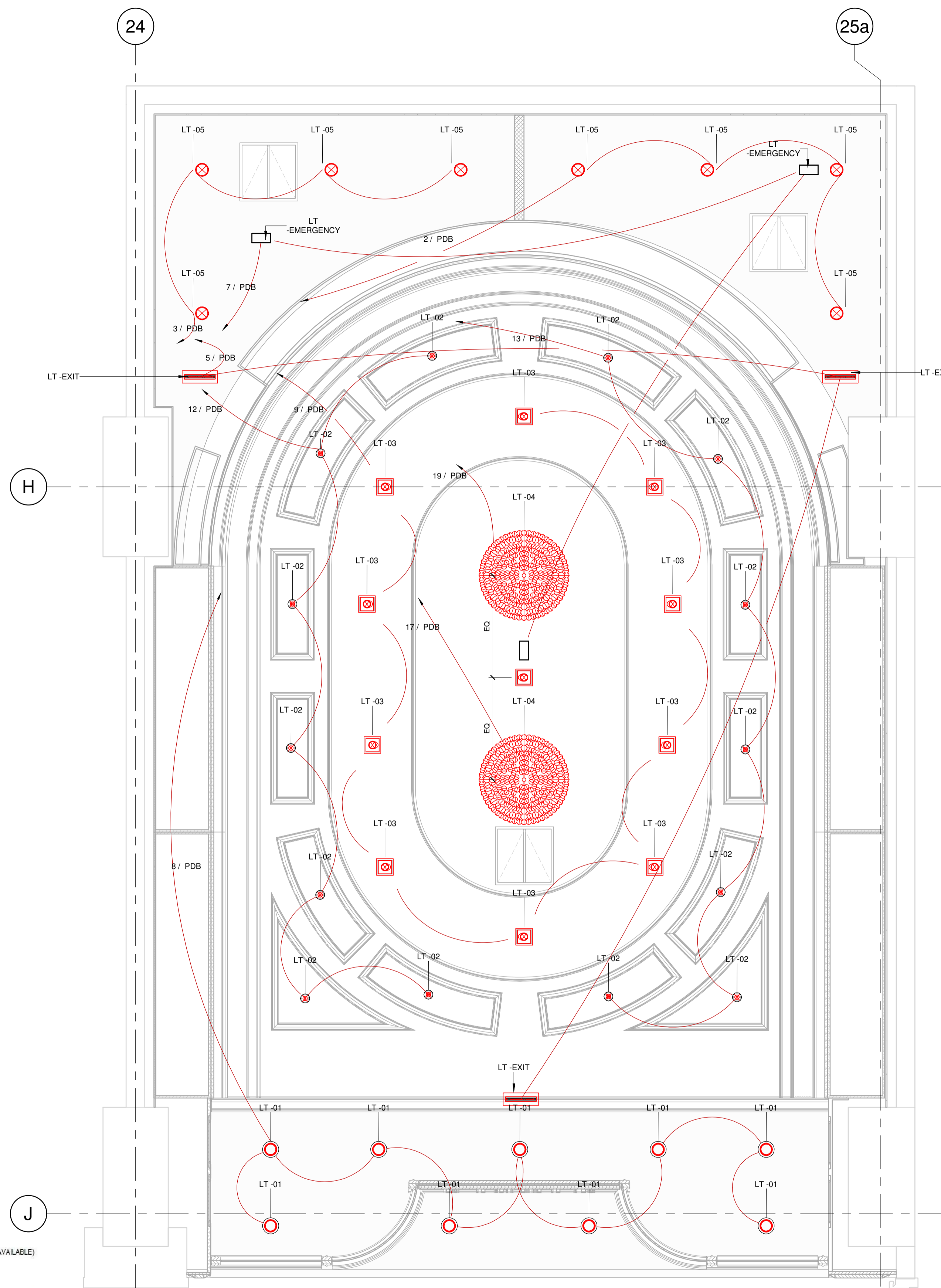
- 25 MM THICK (45 KG/M³ IN THE PLANT ROOM) 24 KG/M³ DENSITY, GLASS FIBRE BLANKET INSULATION WITH FACTORY APPLIED VAPOUR BARRIER REINFORCED ALUMINIUM FACING.
- CROSS LINKED CLOSED CELL POLYOLEFIN FOAM (DENSITY 45-50 KG/M³)
- CFC & HCFC FREE, 60 - 70 KG/M³ DENSITY FLEXIBLE CLOSED CELL ELASTOMERIC SHEET FACTORY FACING ALUGLASS / ALUGLASS INSULATION WITH MINIMUM THICKNESS OF 19 MM (25 MM FOR PLANT ROOM AND OUT DOOR AREAS) WITH PVC JACKETING OR ALU CLADDING FACING.
- IF THE DUCT IS EXPOSED TO ATMOSPHERE (ROOF), THE DUCTS ARE INSULATED WITH GLASS FIBRE COVERED WITH COTTON CLOTH, COATED WITH VAPOUR BARRIER AND FINALLY FINISHED WITH 0.8 MM THICK ALUMINIUM CLADDING (PLAIN / EMBOSSED).



13 | TYPICAL MOUNTING DETAIL FOR SOCKET OUTLET



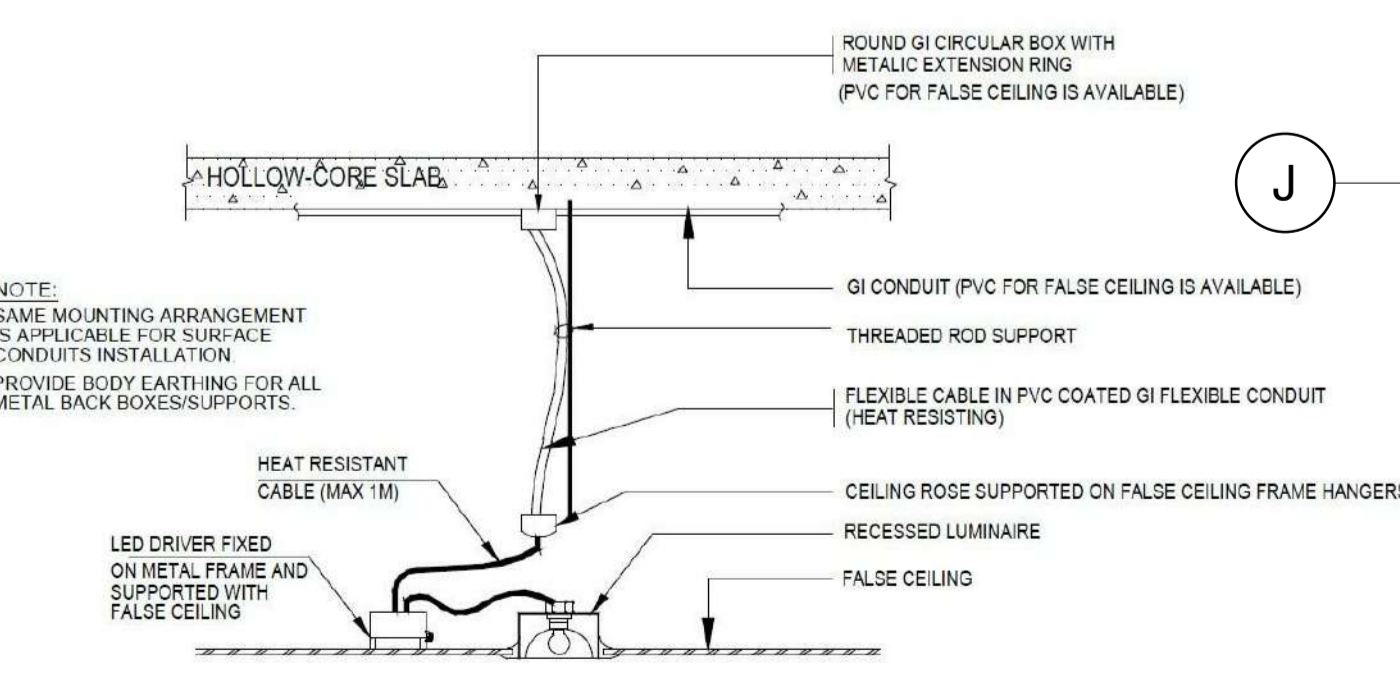
15 | TYPICAL LIGHT SWITCH INSTALLATION DETAILS



1
M102
03-LIGHTING LAYOUT
SCALE 1 : 30

Lighting Fixture Schedule

| Drawing Reference (LT-) | Image | Count |
|---|-------|-------|
| 01 | | 9 |
| 02 | | 14 |
| 03 | | 11 |
| 04 | | 2 |
| 05 | | 8 |
| EMERGENCY | | 3 |
| EXIT | | 3 |
| LIGHTING POINT FOR FURNITURE, SWITCH AT STORE | | 13 |
| 63 | | 63 |



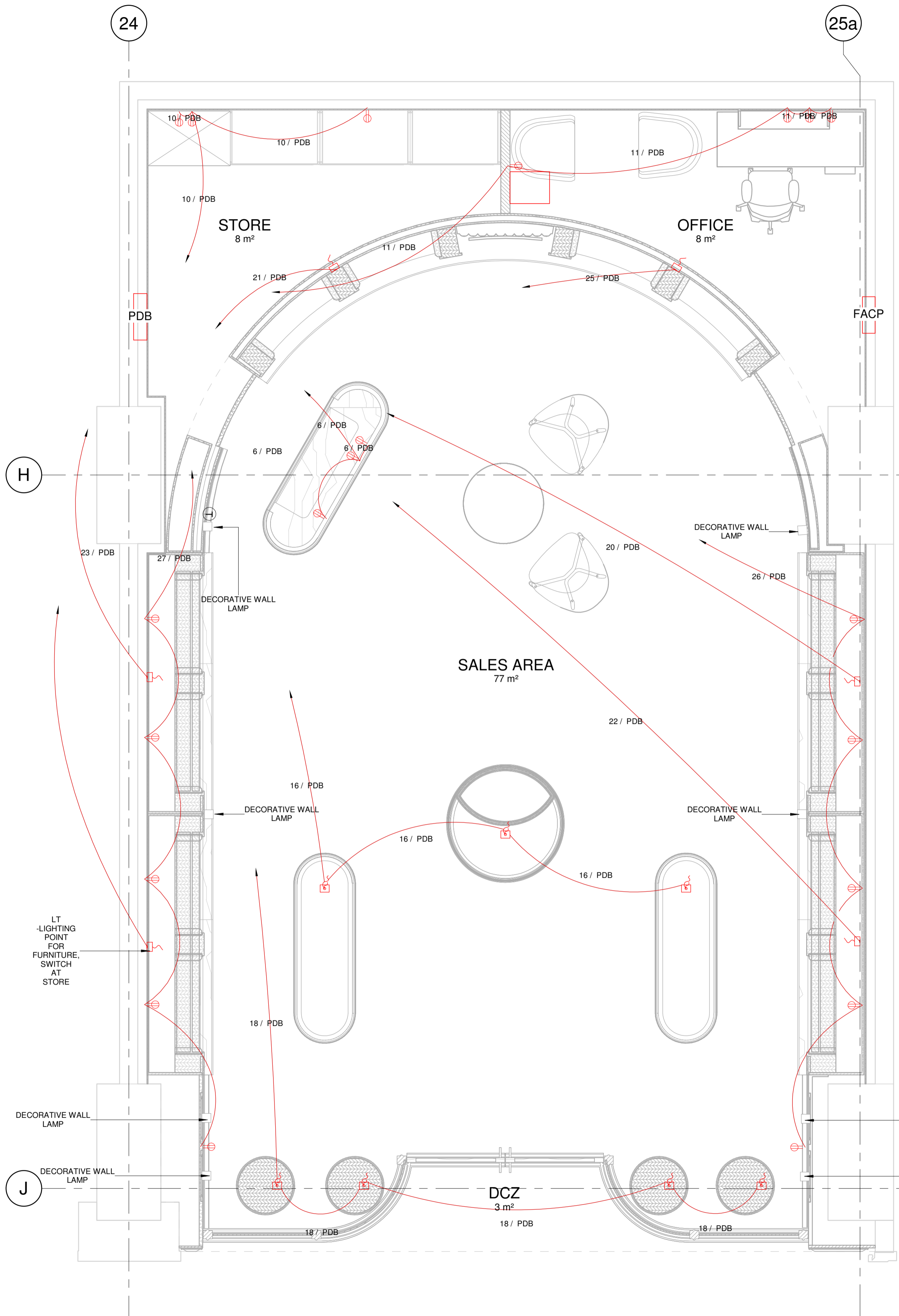
5 | TYPICAL INSTALLATION DETAILS OF HANGING TYPE LIGHT FIXTURE.

Electrical Legend

- DUPLEX RECEPTACLE
- ISOLATED GROUND RECEPTACLE
- COUNTERTOP RECEPTACLE

- ENSURE ALL INSTALLATIONS ARE COMPLIANT WITH APPROVED BY LOCAL ELECTRICITY AUTHORITY
- INSTALL WATERPROOF IP65 TYPE POWER SOCKETS FOR ANY SOCKETS WITHIN 1 METER FROM WATER SOURCE/WET AREA
- GI CONDUITS : INSTALL AT OPEN CEILING AND IN KITCHEN AREA
- PVC CONDUITS : INSTALL AT ABOVE CEILING (CONCEALED), CONCEALED WALL CLADDING AND AT SCREED (NON F&B UNIT).
- USE XLPE PVC CABLE FOR ALL 3 PHASE EQUIPMENT.
- DO NOT INSTALL PVC CONDUIT IN THE KITCHEN AREA AN IN OPEN CEILING AREA. GI TRUNKING SHALL BE USED FOR THOSE APPLICATION
- FLOOR CONDUIT RUN IS NOT ALLOWED INSIDE KITCHEN/ WET AREA.
- USE SWITCHED TYPE IP65 RATED SOCKETS IN KITCHEN.
- DO NOT INSTALL ANY KITCHEN EQUIPMENT POWER SOCKETS ABOVE CEILING.
- INSTALL ALL KITCHEN EQUIPMENT POWER OUTLETS JUST BEHIND THE CORRESPONDING UNIT AT 450MM FFL, WITH NO POWER CABLES EXPOSED TO VIEW.
- COVER ALL POWER CABLES NEATLY WITH CUSTOMIZED STAINLESS STEEL POSTING WITH WATER PROOF SOCKETS. ENSURE NO CABLES ARE HANGING FROM CEILING
- USE ONLY METAL TYPE FLOOR BOXES
- LOCATE ISOLATORS, SUB MAIN DISTRIBUTION BOARDS AND DISTRIBUTION BOARDS IN AN UNOBSTRUCTED AREA WITH DIRECT ACCESS
- ENSURE ALL MATERIALS USED IN THE FT-OUT ARE COMPLIANT WITH MEP SPECIFICATIONS AND AS PER LOCAL AUTHORITY REQUIREMENTS
- ENSURE ALL LIGHTING INSTALLATIONS ARE COMPLIANT WITH ELECTRICAL TYPICAL INSTALLATION DETAILS.
- REFER PROCESS FLOW CHART 3.4.5.17 AND 18 FOR TESTING AND COMMISSIONING OF THE ELECTRICAL SYSTEM.
- INSTALLATION OF THE FLOOR CONDUITS AND FLOOR BOXES ARE NOT ACCEPTABLE IN THE KITCHEN AREA
- TENANT TO SUBMIT SEPARATE DRAWING FOR TRUNKING / CONTAINMENT LAYOUT FOR POWER, ELV, CCTV AND TELEPHONE AND DATA
- EXTENSION LEAD/ PORTABLE OUTLETS ARE NOT ALLOWED TO CONNECT ADDITIONAL EQUIPMENT/ LOAD.
- INSTALLED EQUIPMENT LOAD MUST MATCH WITH APPROVED LOAD SCHEDULE AND NO ADDITIONAL EQUIPMENT LOAD TO BE CONNECTED WITHOUT MALL APPROVAL
- USE CU/XLPE /SWA/PVC CABLES FOR ALL 3PHASE EQUIPMENT.
- USE CU/XLPE/SWA/PVC CABLES FOR OUTDOOR APPLICATION.
- USE SINGLE CORE CU/PVC WIRE FOR 1PHASE LIGHTING AND POWER CIRCUIT.

| DB Ref PDB | | 14 WAY (8+6) TPN MCB DB-SPLIT... MAIN ISOLATOR 63A TPN CABLE: 4C 16MM2 CU/XLPE/SWA/PVC + 1C 16MM2 CU/PVC ECC | | LOCATION FED FROM | | | | |
|---------------------|----------------|--|-------------------------|----------------------------------|--------|-----------------|---------------|---------|
| ELCB RATING | CIRCUIT NO. | LOAD DESCRIPTION | R | Y | B | MCB RATING AMPS | Wire Size MM2 | REMARKS |
| | 1 | R1 | Spare | 0 W | | | 13 A | -- |
| | 2 | Y1 | Lighting OFFICE 4 | | 32 W | | 20 A | 2.5 |
| | 3 | B1 | Lighting STORE 3 | | | 32 W | 20 A | 2.5 |
| | 4 | R2 | Other OFFICE 4 | 20 W | | | 13 A | 4.0 |
| | 5 | Y2 | Other | | 60 W | | 20 A | 4.0 |
| | 6 | B2 | Receptacle SALES AREA 1 | | | 120 W | 20 A | 4.0 |
| | 7 | R3 | Emergency Lighting | 60 W | | | 20 A | 2.5 |
| | 8 | Y3 | Lighting | | 135 W | | 20 A | 2.5 |
| | 9 | B3 | Lighting SALES AREA 1 | | | 140 W | 20 A | 4.0 |
| | 10 | R4 | Receptacle STORE 3 | 120 W | | | 20 A | 4.0 |
| | 11 | Y4 | Receptacle OFFICE 4 | | 160 W | | 20 A | 4.0 |
| | 12 | B4 | Lighting SALES AREA 1 | | | 210 W | 20 A | 2.5 |
| | 13 | R5 | Lighting SALES AREA 1 | 210 W | | | 20 A | 4.0 |
| | 14 | Y5 | CEILING STRIP LIGHT | | 250 W | | 13 A | 2.5 |
| | 15 | B5 | WALL LAMP | | | 240 W | 13 A | 2.5 |
| | 16 | R6 | Lighting SALES AREA 1 | 240 W | | | 20 A | 2.5 |
| | 17 | Y6 | Other SALES AREA 1 | | 400 W | | 20 A | 4.0 |
| | 18 | B6 | Lighting SALES AREA 1 | | | 320 W | 20 A | 2.5 |
| | 19 | R7 | Other SALES AREA 1 | 400 W | | | 20 A | 4.0 |
| | 20 | Y7 | Lighting SALES AREA 1 | | 80 W | | 13 A | 2.5 |
| | 21 | B7 | Lighting STORE 3 | | | 80 W | 13 A | 2.5 |
| | 22 | R8 | Lighting SALES AREA 1 | 80 W | | | 13 A | 2.5 |
| | 23 | Y8 | Lighting SALES AREA 1 | | 80 W | | 13 A | 2.5 |
| | 24 | B8 | Lighting SALES AREA 1 | | | 80 W | 13 A | 2.5 |
| | 25 | R9 | Lighting OFFICE 4 | 80 W | | | 13 A | 2.5 |
| | 26 | Y9 | Receptacle SALES AREA 1 | | 200 W | | 20 A | 4.0 |
| | 27 | B9 | Receptacle SALES AREA 1 | | | 200 W | 20 A | 4.0 |
| | 28 | R10 | Other | 200 W | | | 13 A | 4.0 |
| | 29 | Y10 | | | 418 W | | | |
| | 30 | B10 | FCU | | | 418 W | 20 A | 6.0 |
| | 31 | R11 | | 418 W | | | | |
| | 32 | Y11 | Spare | | 0 W | | 13 A | -- |
| | 33 | B11 | Spare | | | 0 W | 13 A | -- |
| | 34 | R12 | Spare | 0 W | | | 13 A | -- |
| | 35 | Y12 | Spare | | 0 W | | 13 A | -- |
| | 36 | B12 | Spare | | | 0 W | 13 A | -- |
| | 37 | R13 | | | | | | |
| | 38 | Y13 | | | | | | |
| | 39 | B13 | | | | | | |
| | 40 | R14 | | | | | | |
| | 41 | Y14 | | | | | | |
| | 42 | B14 | | | | | | |
| | | | 1762 W | 1749 W | 1774 W | | | |
| Legend: | | | 15 A | 15 A | 15 A | | | |
| Load Classification | Connected Load | Demand Factor | Estimated Demand | Panel Totals | | | | |
| Cooling | 1254 W | 100.00% | 1254 W | | | | | |
| Other | 1570 W | 100.00% | 1570 W | Total Conn. Load: 5286 W | | | | |
| Receptacle | 800 W | 50.00% | 400 W | Total Est. Demand: 4890 W | | | | |
| | | | | Total Conn. Current: 15 A | | | | |
| | | | | Total Est. Demand: 14 A | | | | |



1 05-SMALL POWER LAYOUT
M103 SCALE 1:30

| No | Date | Description | Iss. to | Iss. by |
|----|----------|---------------------------------------|---------|-------------|
| 6 | 15/12/20 | FDS to Mall | | Hanna Zahar |
| 5 | 07/12/20 | Final Submittal to Client | | Yahya Zahar |
| 4 | 30/08/20 | Second Submittal to MOO | | Hanna Zahar |
| 3 | 24/06/20 | First Submittal to MOO | | Hanna Zahar |
| 2 | 21/06/20 | Ceiling and Wall Shelf Revised | | Yahya Zahar |
| 1 | 20/06/20 | Revised Concept Design | | Yahya Zahar |
| 0 | 11/08/20 | First Concept Presentation For Client | | Yahya Zahar |

REVISIONS

Design

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GENERAL NOTES

RAYDAN PERFUMES UNIT N18, MALL OF OMAN

PROJECT

AZZOMORRODA ENTERPRISES

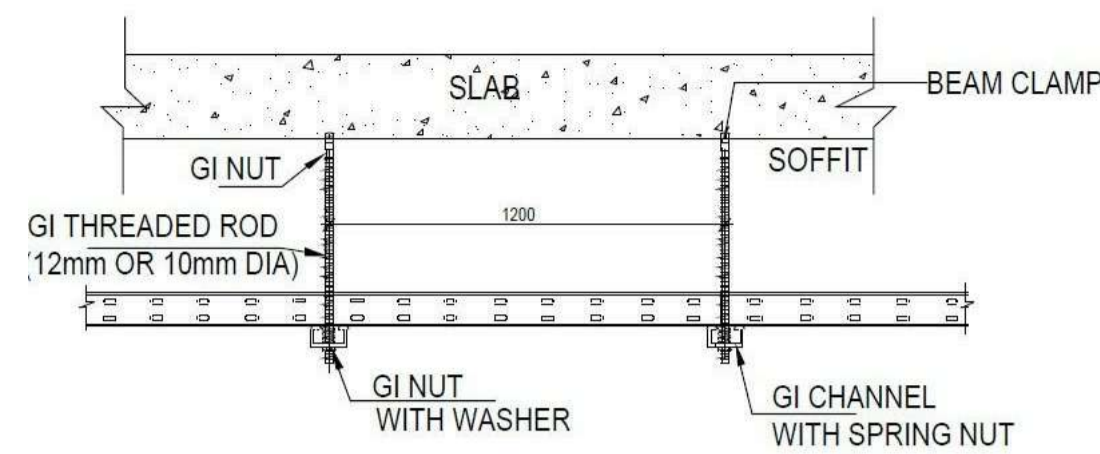
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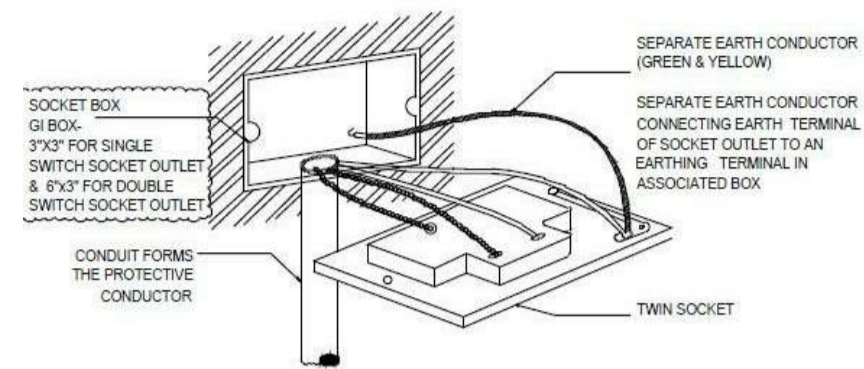
Drawing Title

Small Power Layout & DB Schedule

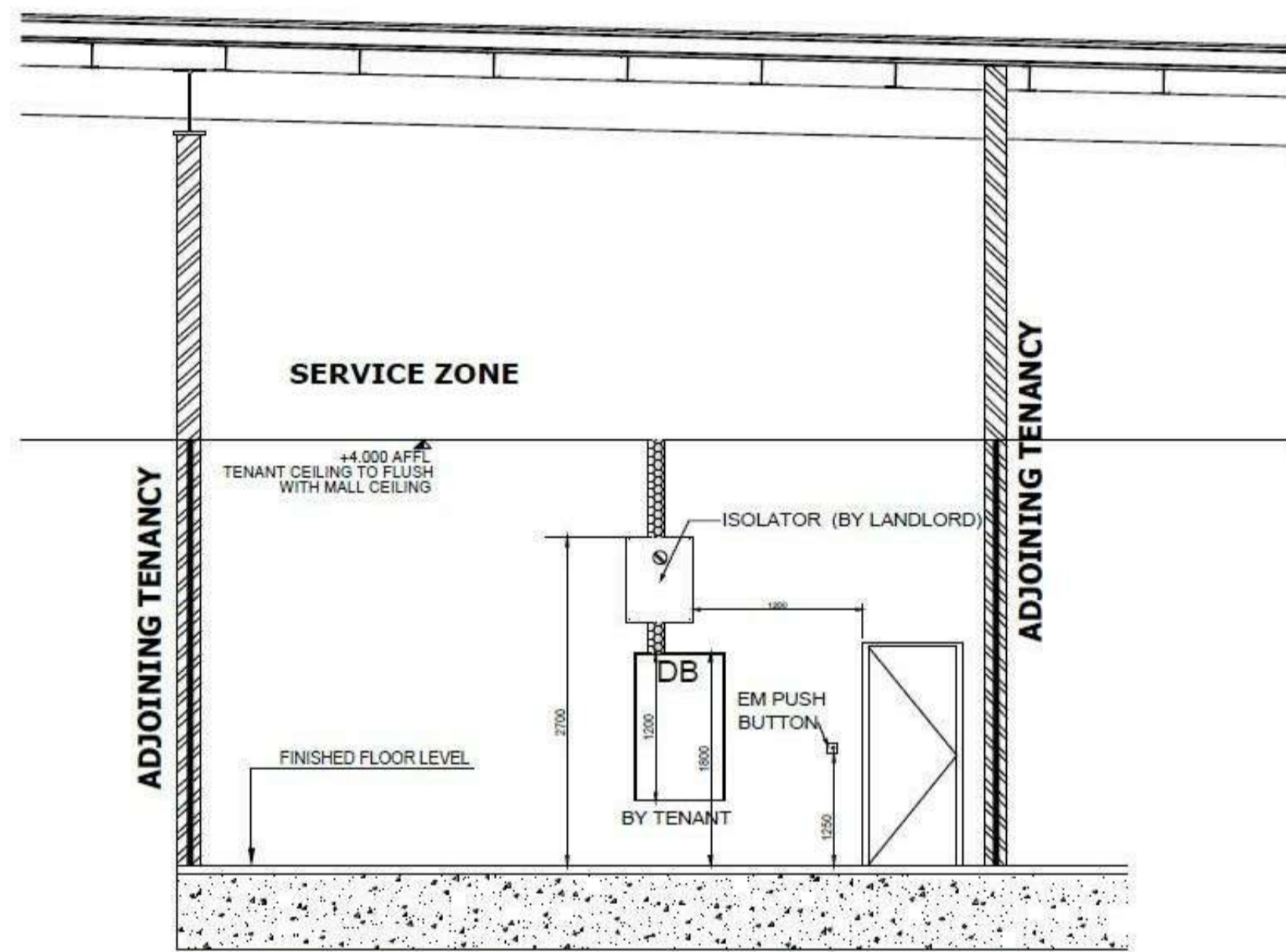
| | | | |
|-------------|--------------|-------------|------------|
| Drawn | ZAH | Date | Issue Date |
| Checked | | Approved | Approver |
| Scale | As indicated | | |
| File | | | |
| Project No. | 143 | Drawing No. | M103 |
| Type | | Rev. | 6 |



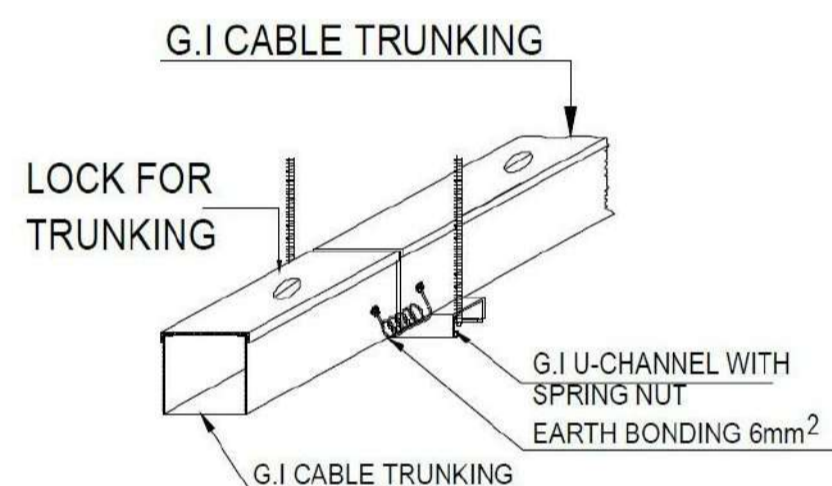
7 CABLE TRAY FIXING DETAILS



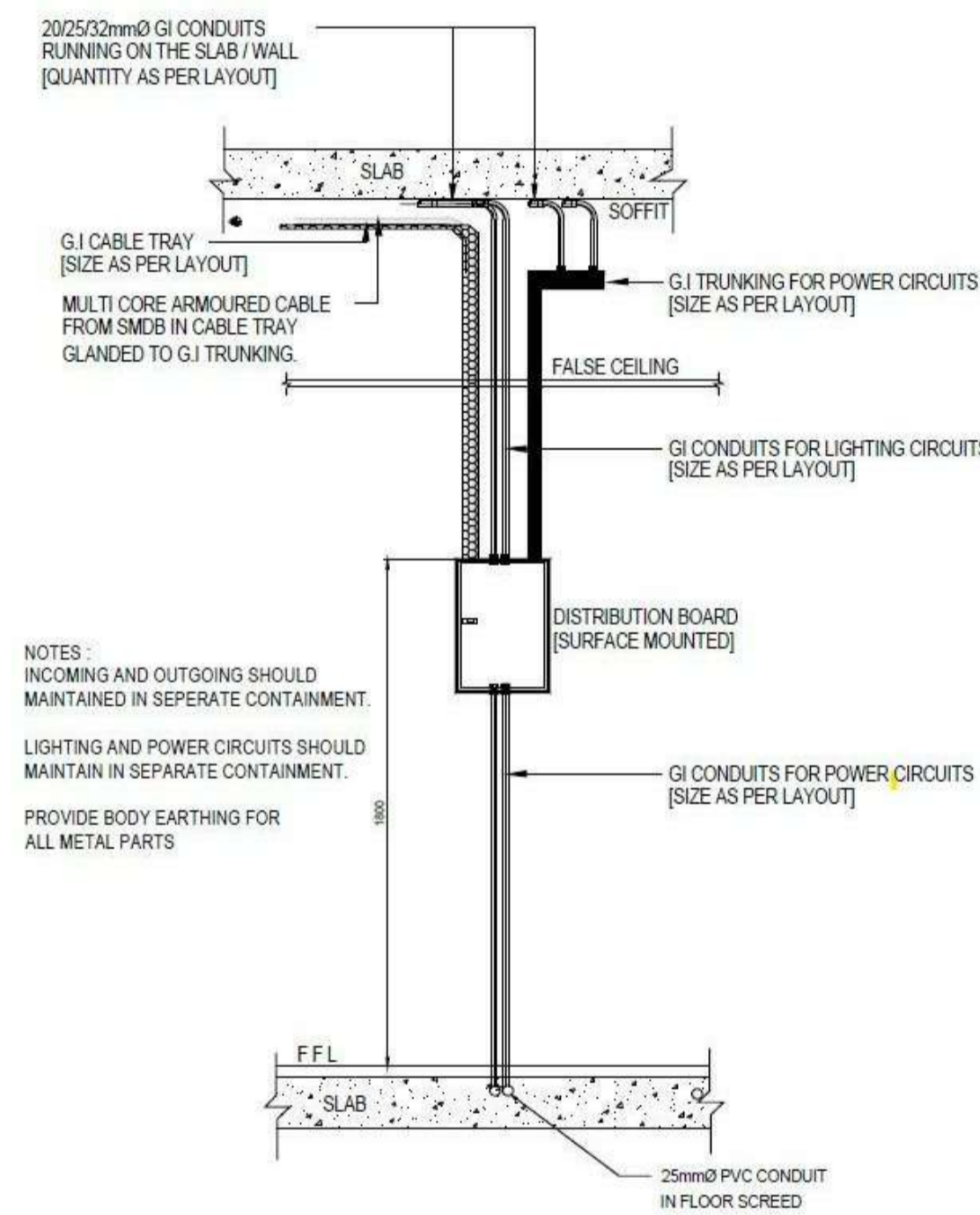
1 TYPICAL EARTHING FOR SOCKET OUTLET



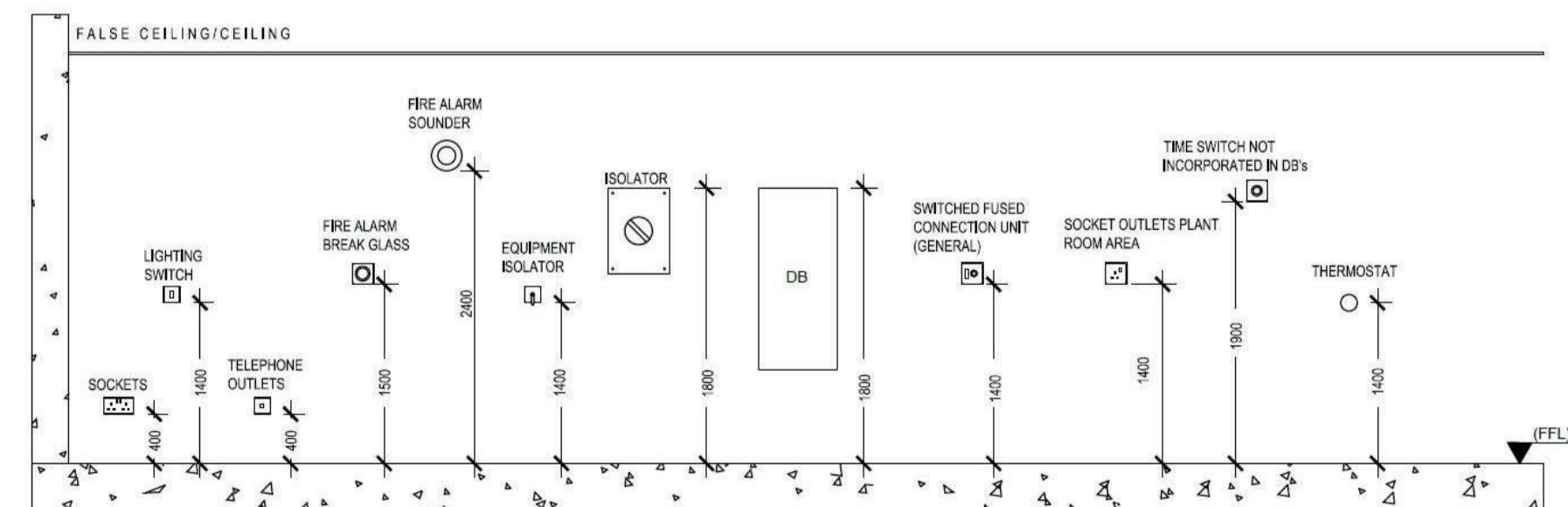
17 TYPICAL TENANT CONNECTION DETAIL OF ARMoured CABLE ON ISOLATOR (FOOD COURT TENANT) FOR OTHER THAN UAE PROJECTS



8 CABLE TRUNKING DETAILS



16 TYPICAL SURFACE MOUNTED DISTRIBUTION BOARD MOUNTING DETAIL.



9 STANDARD MOUNTING HEIGHT DETAILS OF ELECTRICAL ACCESSORIES

MORE INFORMATION

| No | Date | Description | Hanna | Zahir |
|-------------------|----------|-------------|-------|-------|
| 6 | 15/12/20 | FDS to Mall | | |
| Revision Schedule | | | | |

REVISIONS

Design

Drawing Status

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GENERAL NOTES

RAYDAN PERFUMES
UNIT N18, MALL OF OMAN

PROJECT

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Drawing Title
Electrical Details

Drawn . Author Date . Issue Date

Checked . Checker Approved . Approver

Scale .

File .

| Project No. | Type | Drawing No. | Rev. |
|-------------|------|-------------|------|
| 143 | | M103B | 6 |

Data/Telephone Legend

| | |
|--|-------------------------------|
| | DATA OUTLET - STANDARD |
| | DATA OUTLET EMBEDDED IN FLOOR |
| | DATA JUNCTION BOXES |
| | TELEPHONE OUTLET |
| | TELEPHONE OUTLET - DUAL |
| | TELEPHONE OUTLET - FLOOR |

TO BE COMPLIANT AS PER LOCAL TELECOM SERVICE PROVIDER REQUIREMENT.

MORE INFORMATION

| No | Date | Description | Iss. to | Iss. by |
|----|----------|---------------------------------------|---------|---------|
| 6 | 15/12/20 | FDS to Mail | Hanna | Zahr |
| 5 | 07/12/20 | Final Submittal to Client | Yahya | Zahr |
| 4 | 30/08/20 | Second Submittal to MOO | Hanna | Zahr |
| 3 | 24/06/20 | First Submittal to MOO | Hanna | Zahr |
| 2 | 21/06/20 | Ceiling and Wall Shell Revised | Yahya | Zahr |
| 1 | 20/06/20 | Revised Concept Design | Yahya | Zahr |
| 0 | 11/06/20 | First Concept Presentation For Client | Yahya | Zahr |

REVISIONS

Design

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GENERAL NOTES

RAYDAN PERFUMES
UNIT N18, MALL OF OMAN

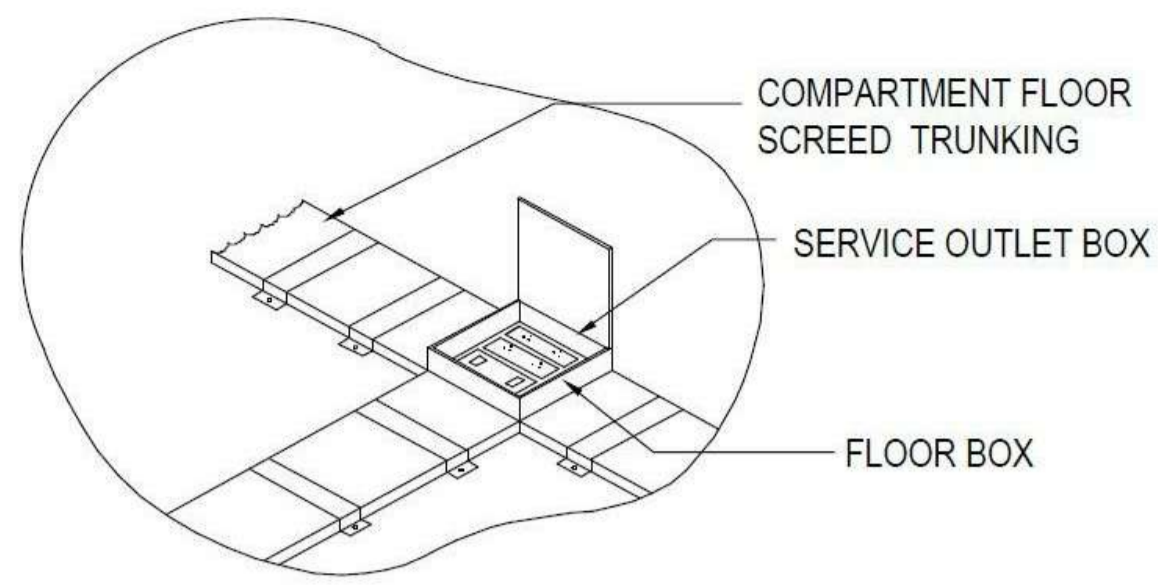
PROJECT

AZZOMORRODA ENTERPRISES
CLIENT

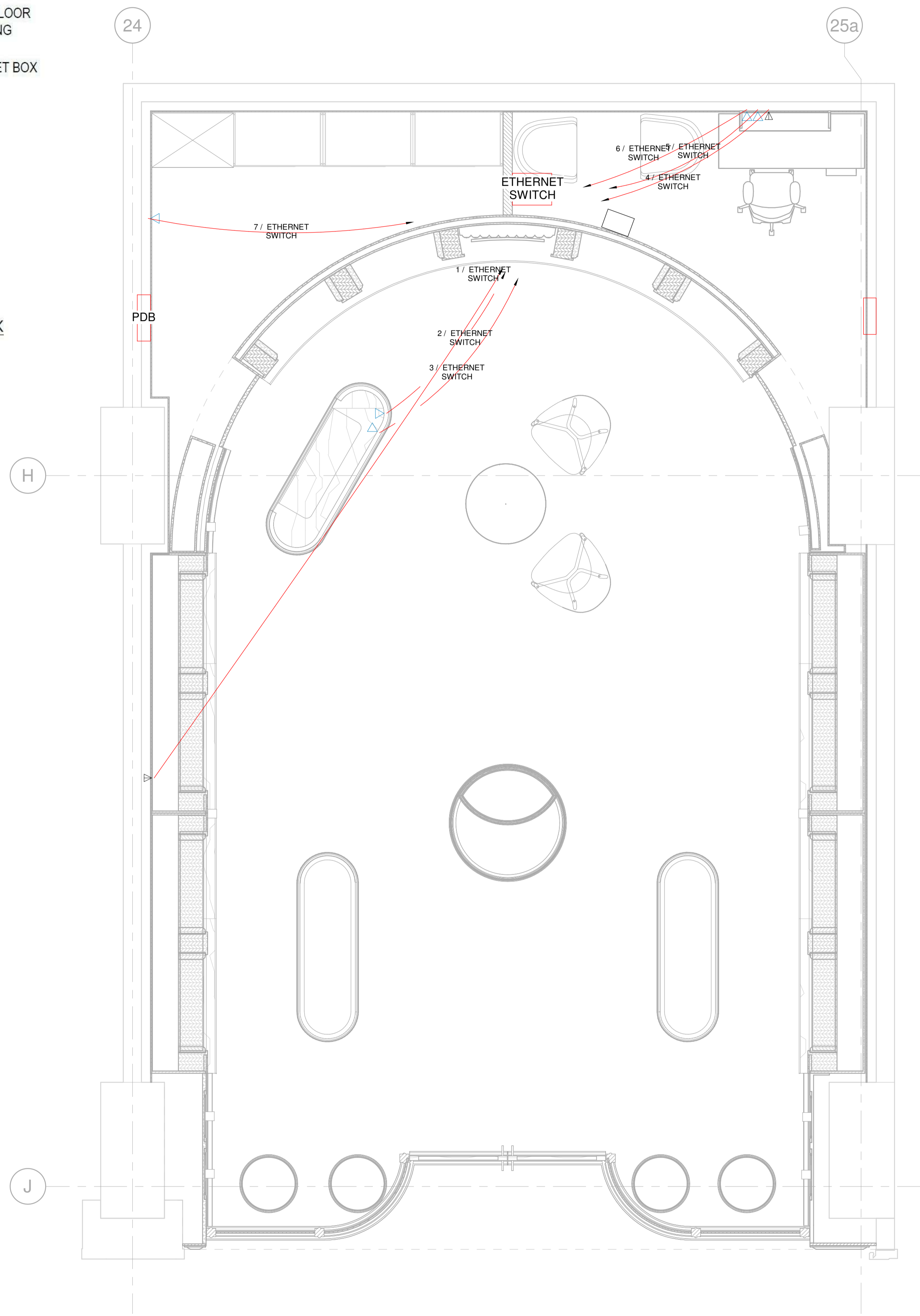
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Drawing Title
Data / Telephone Layout

| | | | |
|-------------|----------------|-------------|--------------|
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| Checked | • | Approved | • Approver |
| Scale | • As indicated | | |
| File | • | | |
| Project No. | 143 | Drawing No. | M104 |
| Type | | Rev. | 6 |



10 TYPICAL DETAIL OF FLOOR DUCTING & BOX



1 06-DATA/TELEPHONE LAYOUT
M104 SCALE 1:30

TO BE COMPLIANT AS PER LOCAL TELECOM SERVICE PROVIDER REQUIREMENT.

INTERIOR DESIGNER

ELV System legend

| | |
|--|-------------------------------------|
| | AMPLIFIER |
| | INTERCOM |
| | MICROPHONE |
| | ROUND SPEAKER, CEILING HUNG-MOUNTED |
| | CCTV CAMERA, IR |
| | CCTV ENCODER |
| | SECURITY ENCODER, RACK MOUNTED |
| | ELECTRIC LOCK |
| | KEY CARD |

MORE INFORMATION

| No | Date | Description | Iss. to | Iss. by |
|----|----------|---------------------------------------|---------|---------|
| 6 | 15/12/20 | FDS to Mail | Hanna | Zahir |
| 5 | 07/12/20 | Final Submittal to Client | Yahya | Zahir |
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| 3 | 24/06/20 | First Submittal to MOO | Hanna | Zahir |
| 2 | 21/06/20 | Ceiling and Wall Shell Revised | Yahya | Zahir |
| 1 | 20/06/20 | Revised Concept Design | Yahya | Zahir |
| 0 | 11/08/20 | First Concept Presentation For Client | Yahya | Zahir |

REVISIONS

Design

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GENERAL NOTES

RAYDAN PERFUMES
UNIT N18, MALL OF OMAN

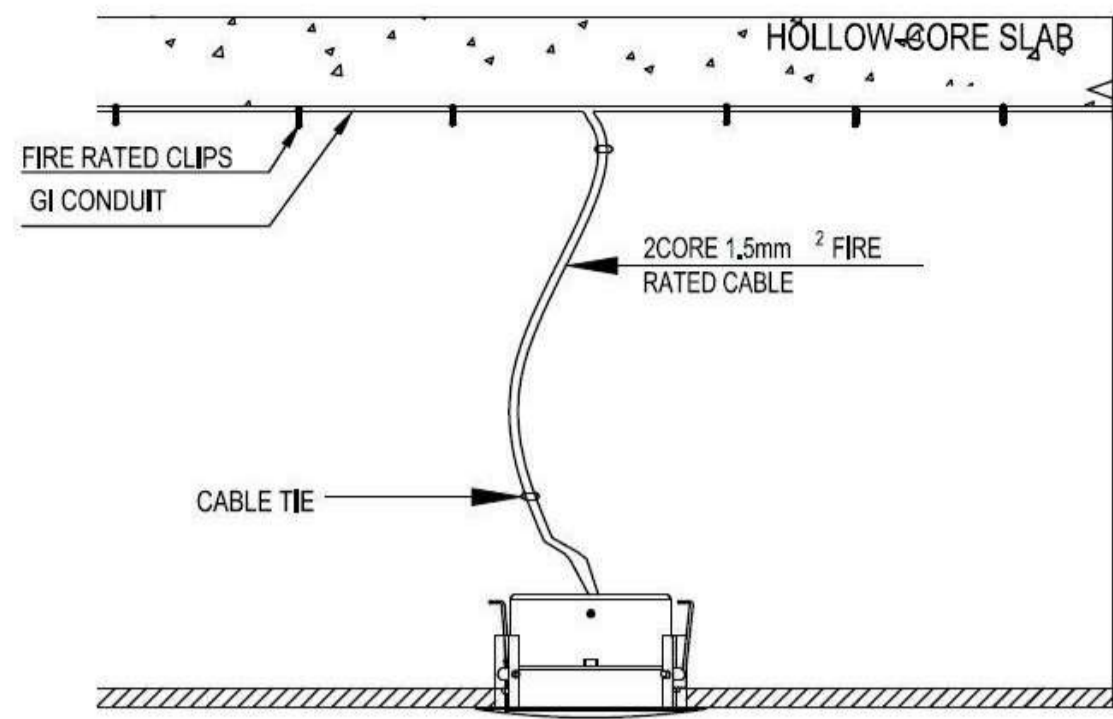
PROJECT

AZZOMORRODA ENTERPRISES
CLIENT

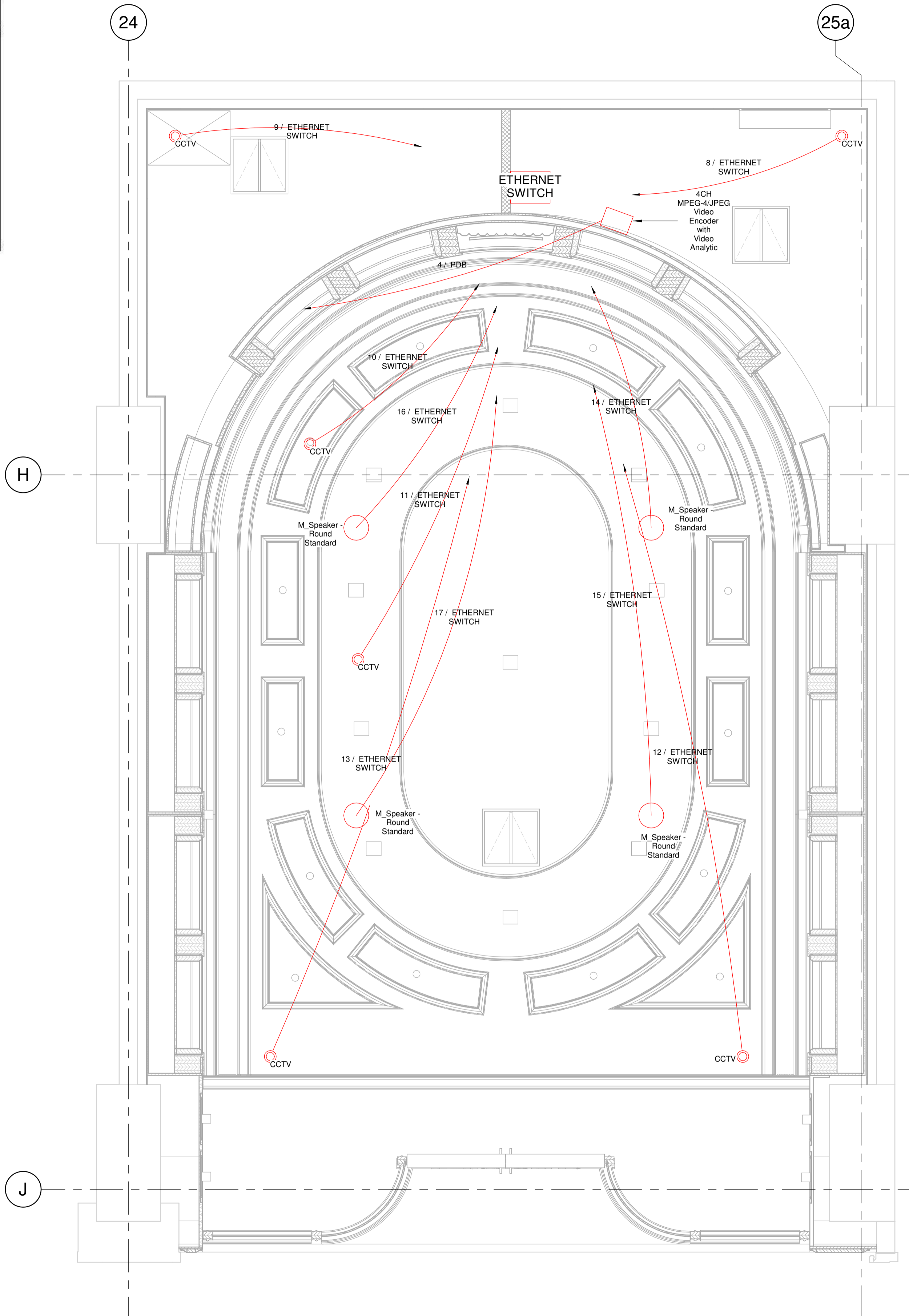
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Drawing Title
CCTV & Audio Layout

| | | | |
|-------------|----------------|-------------|--------------|
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| Checked | • | Approved | • Approver |
| Scale | • As indicated | | |
| File | • | | |
| Project No. | 143 | Drawing No. | M105 |
| Type | | Rev. | 6 |



11 | TYPICAL MOUNTING DETAIL FOR CEILING SPEAKER



1 | 04-CCTV / AUDIO LAYOUT
M105 SCALE 1 : 30

Fire Alarm Legend

| | |
|--|--|
| | BREAK GLASS |
| | BELL CHIME |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR WITH LED, FOR CEILING VOIDS |

- ENSURE ALL INSTALLATIONS ARE COMPLIANT WITH AUTHORITY HAVING JURISDICTION (AHJ), CIVIL DEFENCE REQUIREMENT
- SYSTEM TO BE DESIGNED IN LINE WITH BSS839 / NFPA72.
- USE FIRE RATED CABLE AND INSTALL DIRECTLY TO SOFFIT, SUPPORTED WITH FIRE RATED CLIPS.
- DO NOT USE PVC CONDUITS FOR DISTRIBUTION OF THE FIRE ALARM CABLE.
- ALL HANGING FIRE ALARM CABLE IS NEATLY TIED UP WITH FIRE RATED CLIPS.
- ALL CEILING SMOKE DETECTOR SHALL BE SUPPORTED WITH DROP IN THREADED RODS.
- ENSURE ALL MATERIALS USED IN THE FIT-OUT ARE COMPLIANT WITH MEP SPECIFICATIONS
- ENSURE ALL FIRE ALARM INSTALLATIONS ARE COMPLIANT WITH FIRE ALARM TYPICAL INSTALLATION DETAILS
- REFER PROCESS FLOW CHART 9.10.11, 13 AND 14 FOR TESTING AND COMMISSIONING OF THE FIRE ALARM SYSTEM.
- USE 2CX1.5 SQ.MM FIRE RESISTANCE CABLE FOR FIRE ALARM INSTALLATION.

MORE INFORMATION

| No | Date | Description | Iss. to | Iss. by |
|----|----------|---------------------------------------|---------|---------|
| 6 | 15/12/20 | FDS to Mall | Hanna | Zahir |
| 5 | 07/12/20 | Final Submittal to Client | Yahya | Zahir |
| 4 | 30/08/20 | Second Submittal to MOO | Hanna | Zahir |
| 3 | 24/06/20 | First Submittal to MOO | Hanna | Zahir |
| 2 | 21/06/20 | Ceiling and Wall Shelf Revised | Yahya | Zahir |
| 1 | 20/06/20 | Revised Concept Design | Yahya | Zahir |
| 0 | 11/08/20 | First Concept Presentation For Client | Yahya | Zahir |

REVISIONS

Design

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GENERAL NOTES

RAYDAN PERFUMES UNIT N18, MALL OF OMAN

PROJECT

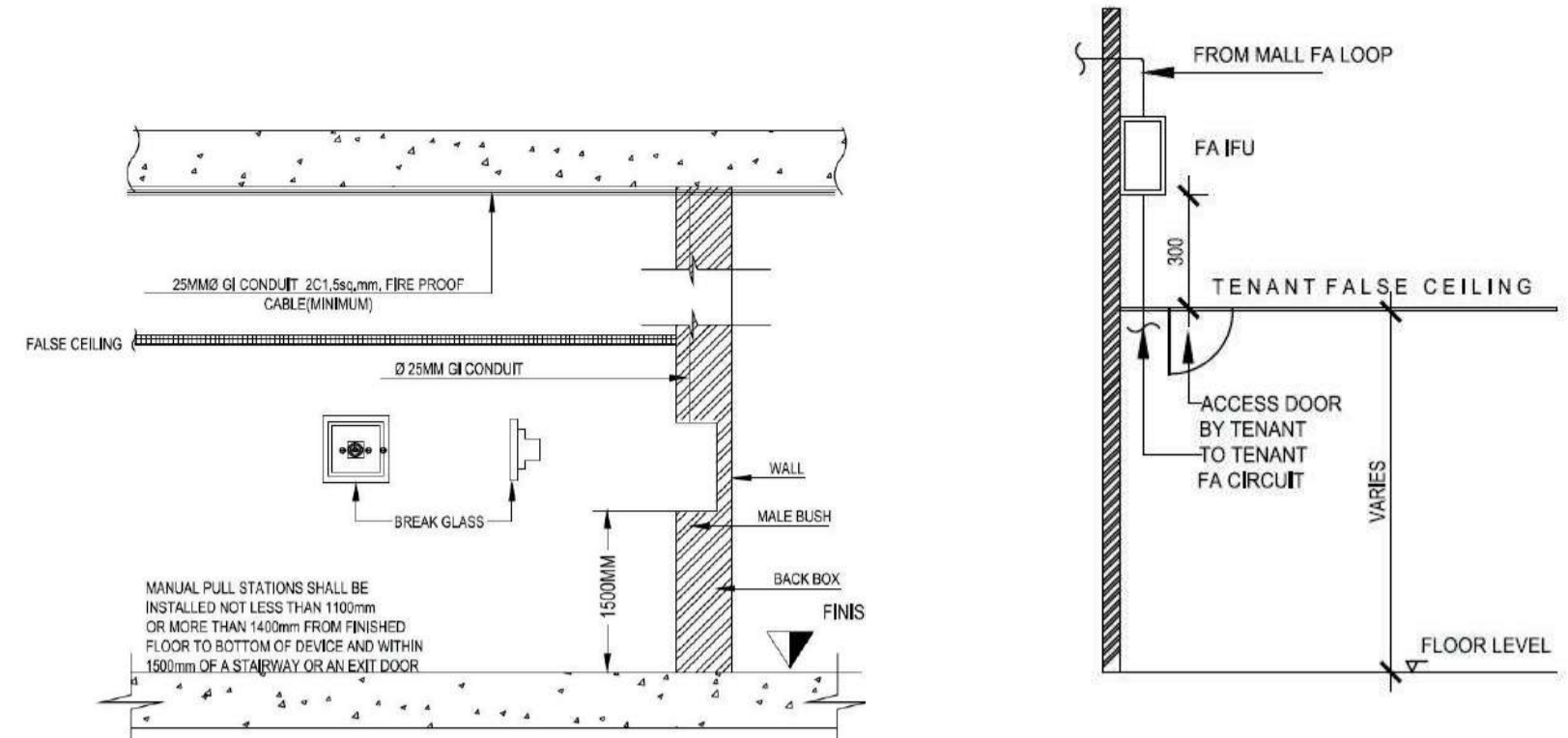
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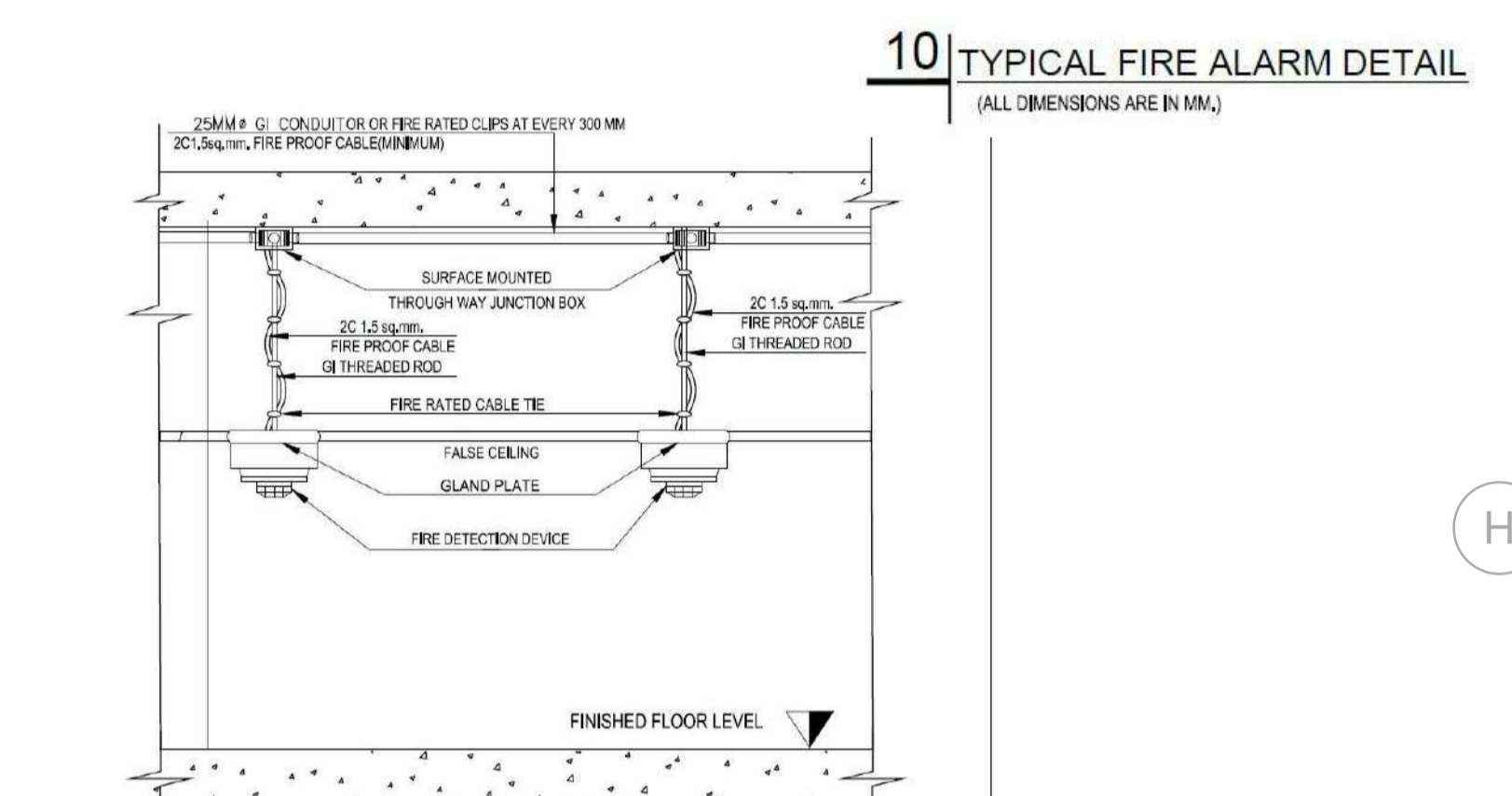
Drawing Title

Fire Alarm Layout

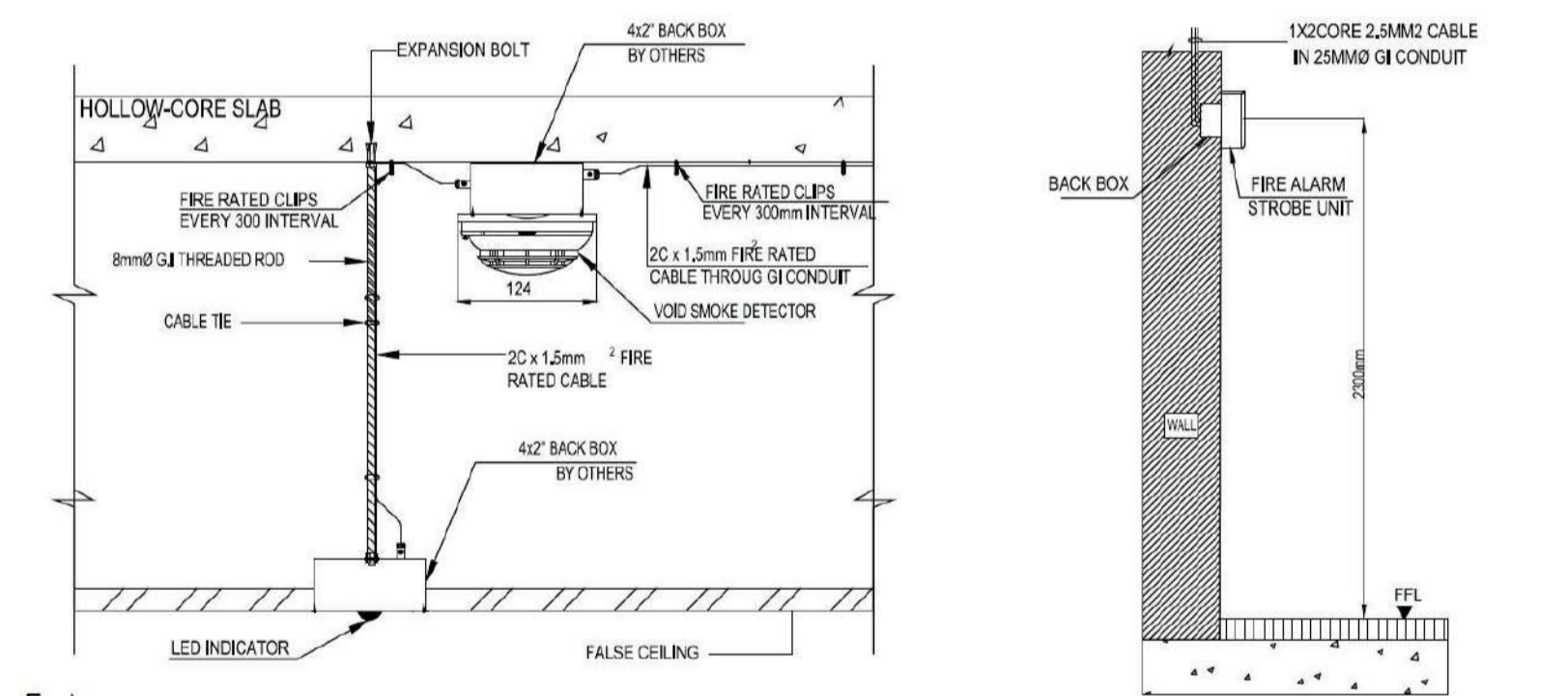
| | | | |
|-------------|----------------|-------------|--------------|
| Drawn | • ZAH | Date | • Issue Date |
| Checked | • | Approved | • Approver |
| Scale | • As indicated | | |
| File | • | | |
| Project No. | 143 | Drawing No. | M107 |
| Type | | Rev. | 6 |



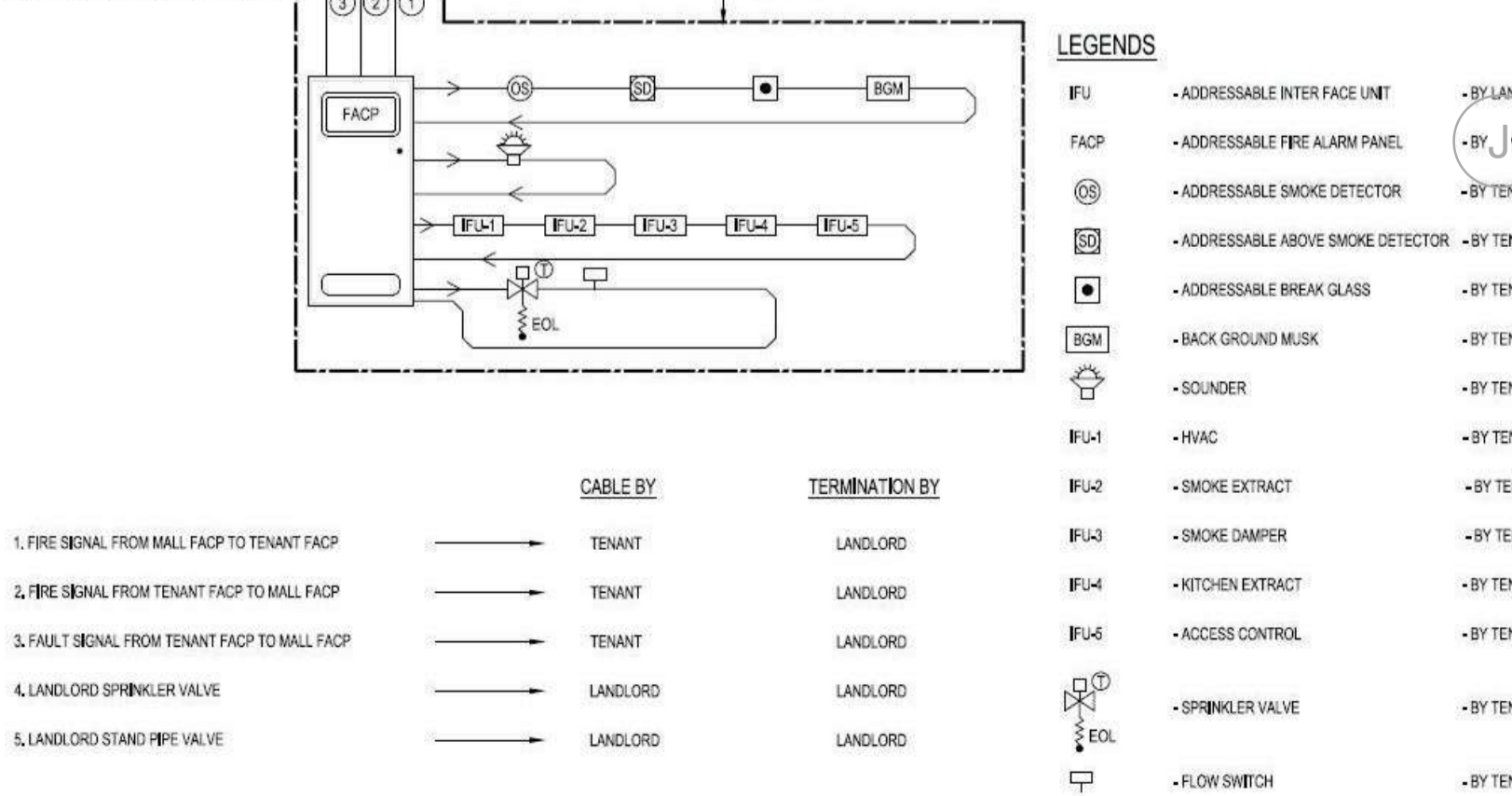
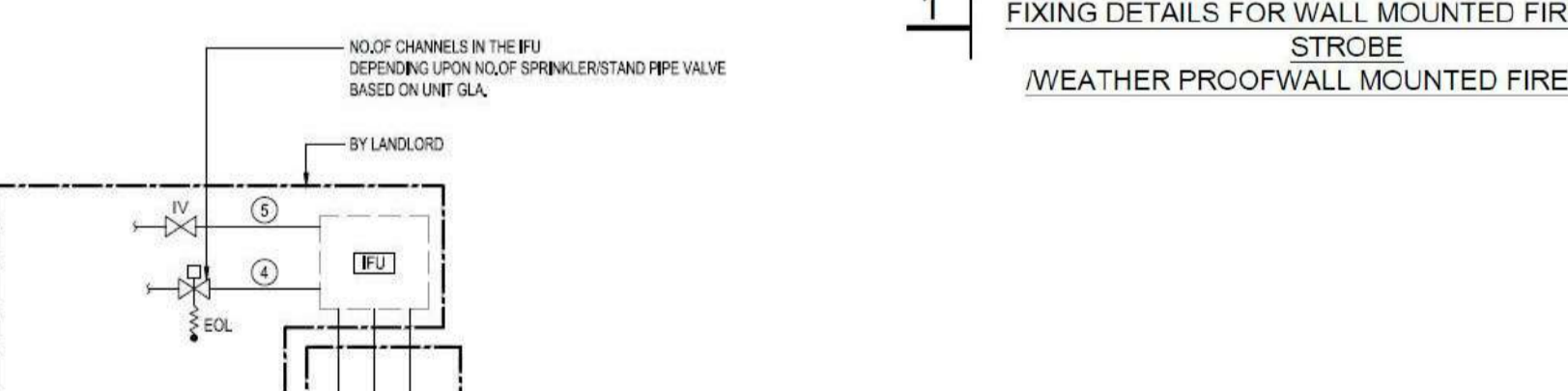
7 TYPICAL MOUNTING DETAIL FOR MANUAL FIRE ALARM STATION



6 TYPICAL MOUNTING DETAIL WITH CONDUITS (WHERE FALSE CEILING APPLICABLE)



5 INSTALLATION DETAIL FOR VOID SMOKE DETECTOR IN SOFFIT

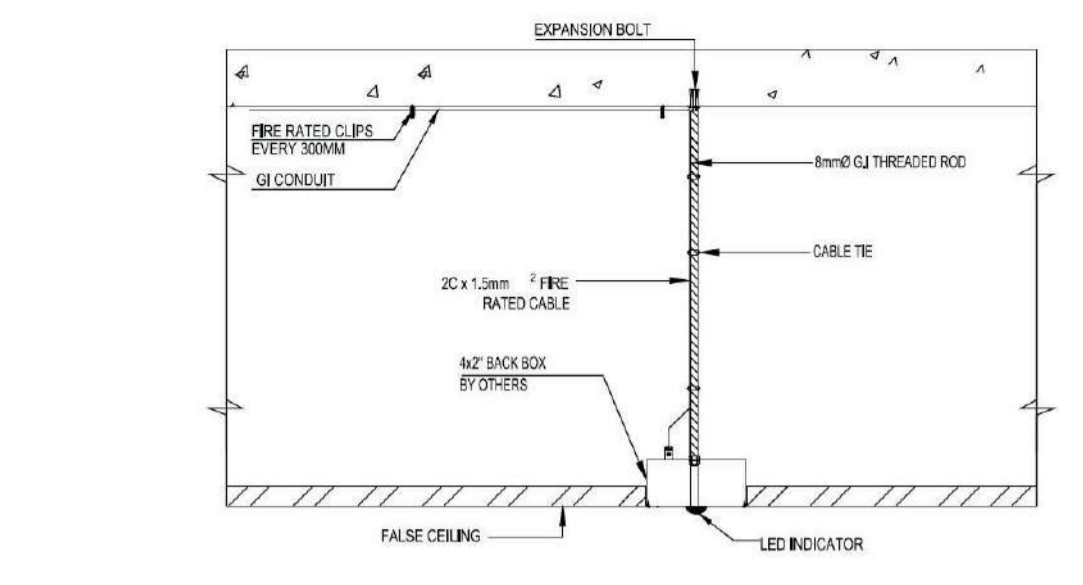
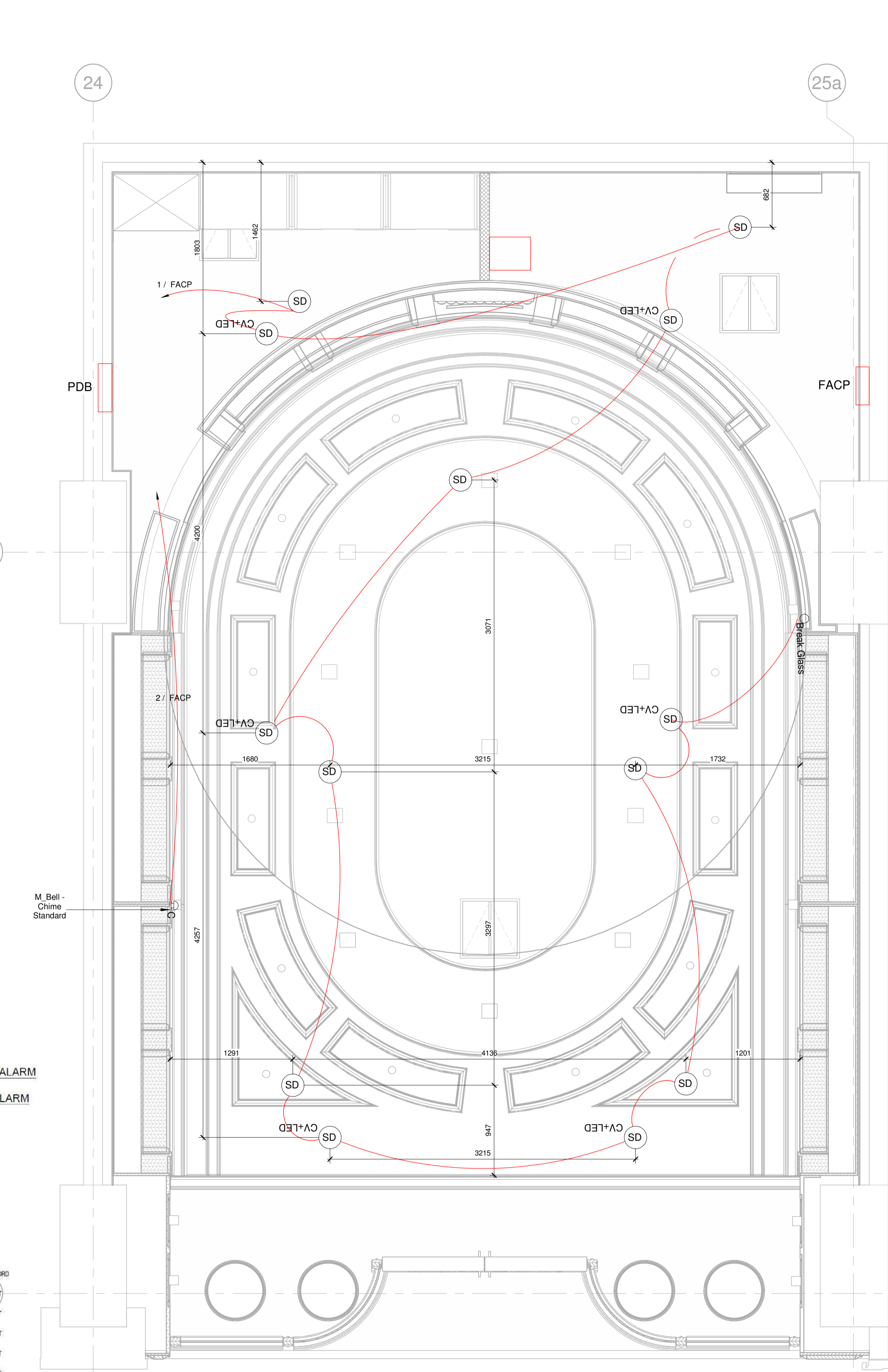


1 05-FIRE ALARM LAYOUT SCALE 1 : 30

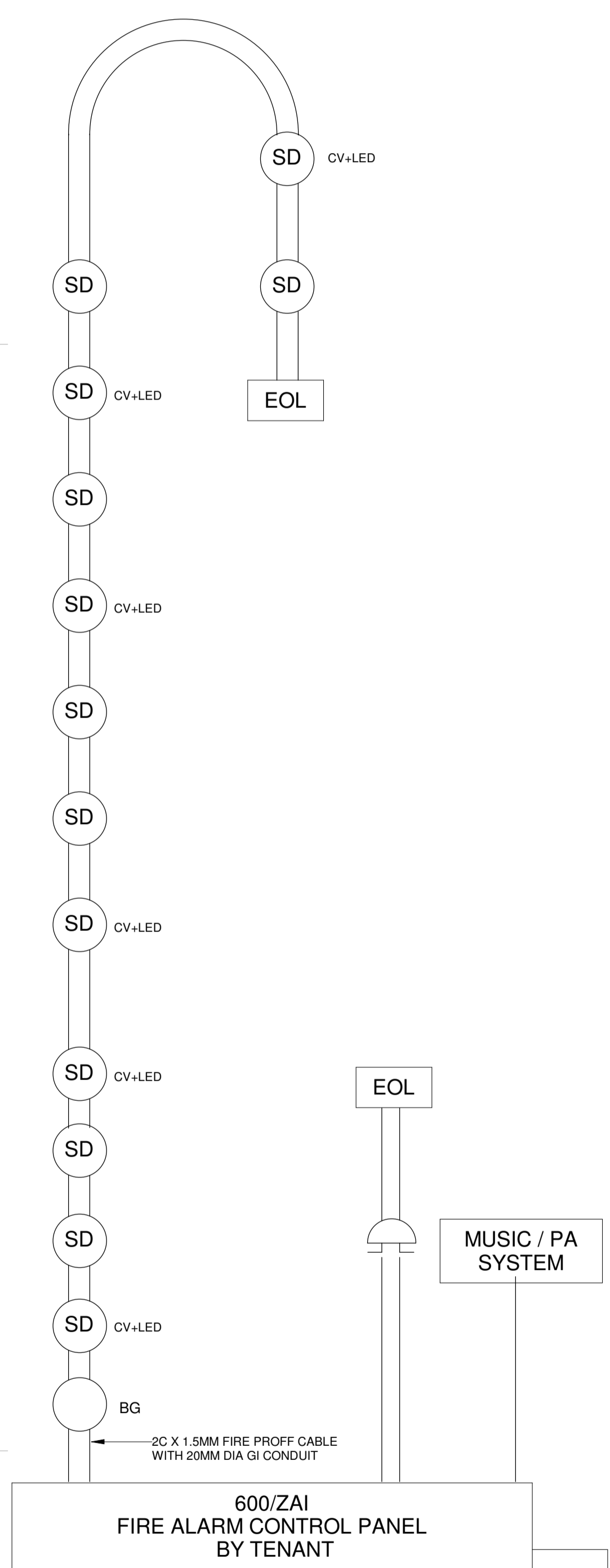
| CABLE BY | TERMINATION BY |
|---|----------------|
| 1. FIRE SIGNAL FROM MALL FACP TO TENANT FACP | TENANT |
| 2. FIRE SIGNAL FROM TENANT FACP TO MALL FACP | TENANT |
| 3. FAULT SIGNAL FROM TENANT FACP TO MALL FACP | TENANT |
| 4. LANDLORD SPRINKLER VALVE | LANDLORD |
| 5. LANDLORD STAND PIPE VALVE | LANDLORD |

LEGENDS

| | | |
|--------|------------------------------------|---------------|
| IFU | • ADDRESSABLE INTER FACE UNIT | • BY LANDLORD |
| FACP | • ADDRESSABLE FIRE ALARM PANEL | • BY UNIT |
| SD | • ADDRESSABLE SMOKE DETECTOR | • BY TENANT |
| CV+LED | • ADDRESSABLE ABOVE SMOKE DETECTOR | • BY TENANT |
| BG | • ADDRESSABLE BREAK GLASS | • BY TENANT |
| BSM | • BACK GROUND MUSIC | • BY TENANT |
| S | • SOUNDER | • BY TENANT |
| IFU-1 | • HVAC | • BY TENANT |
| IFU-2 | • SMOKE EXTRACT | • BY TENANT |
| IFU-3 | • SMOKE DAMPER | • BY TENANT |
| IFU-4 | • KITCHEN EXTRACT | • BY TENANT |
| IFU-6 | • ACCESS CONTROL | • BY TENANT |
| | • SPRINKLER VALVE | • BY TENANT |
| | • FLOW SWITCH | • BY TENANT |



3 INSTALLATION DETAIL FOR REMOTE LED INDICATOR IN FALSE CEILING AREA



600/ZAI FIRE ALARM CONTROL PANEL BY TENANT

1/C POWER SUPPLY FROM POWER DB1

MUSIC / PA SYSTEM

IFU BY MALL

Fire Protection Legend

- PENDANT SPRINKLER, 25MM
- ▭ FIRE EXTINGUISHER SET / CABINET

- DESIGN, INSTALL, TEST AND COMMISSION AS PER AUTHORITY HAVING JURISDICTION (AHJ), CIVIL DEFENCE REQUIREMENT, NFP13, NFPA 14, NFPA 101, CONDITIONS OF THE PREMISES (COP) AND TECHNICAL CRITERIA TENANT MEP WORKS.
- EACH SPRINKLER HEAD COVERAGE IS 12 M².
- BELOW CEILING SPRINKLER HEAD SHALL BE RECESSED PENDENT TYPE, QUICK RESPONSE, TEMPERATURE RATING 68°C, CHROMO PLATED BRASS/ BRONZE, RED BULB WITH 3 MM DIAMETER.
- USE FACTORY GALVANIZED ASTM A53, SCHEDULE 40, TYPE E (ERW), GRADE B, UL LISTED FOR FIRE FIGHTING PIPE.
- USE UL LISTED AND FM APPROVED PIPE FITTINGS.
- USE UL LISTED AND FM APPROVED PIPE SUPPORT HANGERS (CLEVIS HANGER WITH SWIVEL RING).
- DO NOT USE CONCEALED SPRINKLER HEADS AND SIDE WALL SPRINKLER HEADS.
- FIRE EXTINGUISHERS TO BE SHOWN 1 SET (CO2 DRY POWDER) FOR EACH 100 SQ. M AREA.
- FIRE EXTINGUISHERS TO BE INSTALLED AT HEIGHT (TOP) OF 1100 MM.
- WET CHEMICAL FIRE EXTINGUISHER TO BE INSTALLED NEAR TO THE KITCHEN HOOD.
- ENSURE ALL MATERIALS USED IN THE FIT-OUT ARE COMPLIANT WITH MEP SPECIFICATIONS.
- ENSURE ALL FIRE FIGHTING INSTALLATIONS ARE COMPLIANT WITH FIRE FIGHTING TYPICAL INSTALLATION DETAILS.
- REFER PROCESS FLOW CHART 3, 4, 5, 8 AND 17 FOR TESTING AND COMMISSIONING OF THE FIRE FIGHTING SYSTEM.
- CLEAN AGENT SHALL COMPLY WITH NFPA2001, AUTHORITY HAVING JURISDICTION, LEED, ESTIDAMA AND BREEAM.

MORE INFORMATION

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REVISIONS

Design

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GENERAL NOTES

**RAYDAN PERFUMES
UNIT N18, MALL OF OMAN**

PROJECT

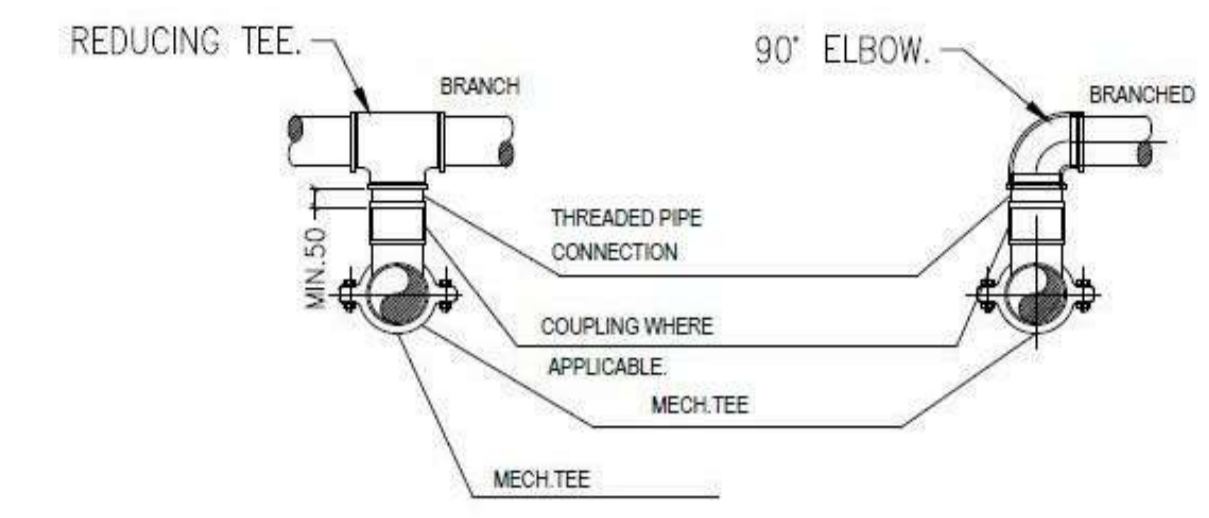
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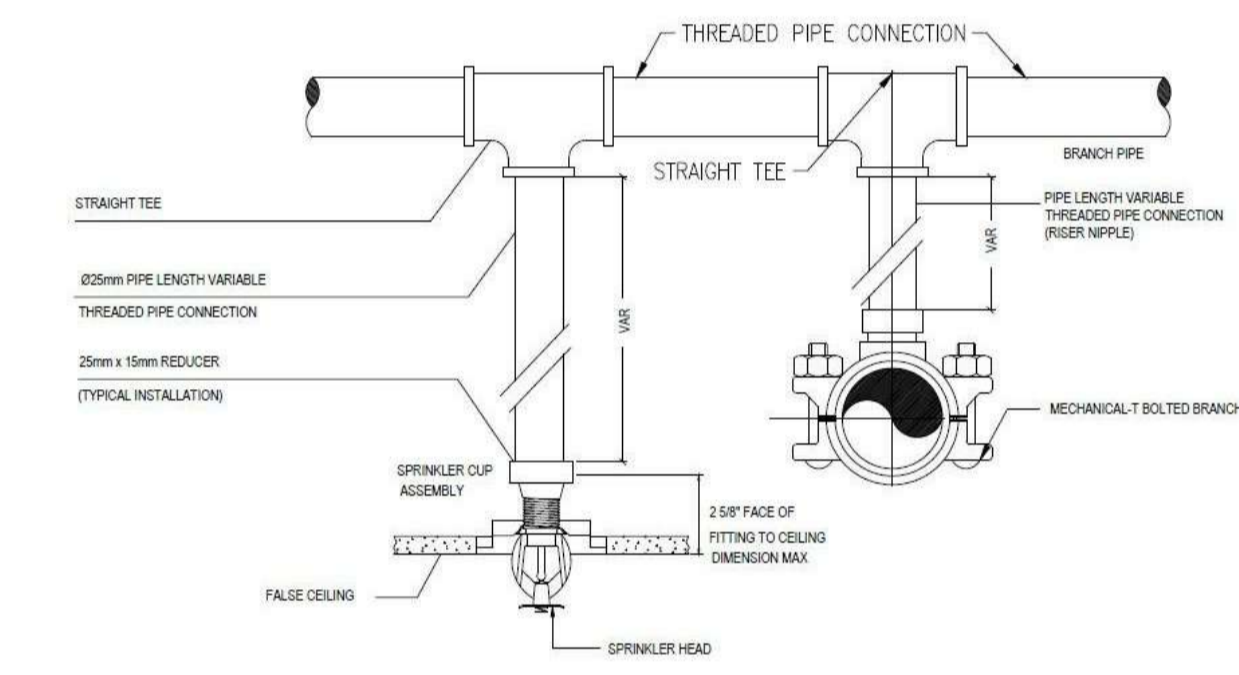
**Drawing Title
Fire Fighting Layout - Below Ceiling**

| | | | |
|-------------|----------------|----------|--------------|
| Drawn | • ZAH | Date | • Issue Date |
| Checked | • | Approved | • Approver |
| Scale | • As indicated | | |
| File | • | | |
| Project No. | 143 | Type | Drawing No. |
| | | | M108 |
| | | | Rev. |
| | | | 6 |

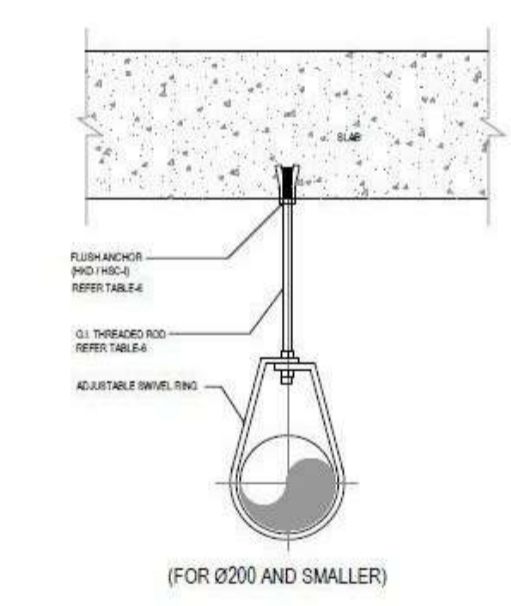
NOTE
1. CONTRACTOR TO RE-SUBMIT FIRE FIGHTING DRAWINGS PRIOR TO CONSTRUCTION WITH NECESSARY ROP CERTIFICATIONS.



15 RISER NIPPLE TYPICAL INSTALLATION DETAIL (NOT TO SCALE)



13 RECESSED TYPE PENDENT SPRINKLER (QUICK RESPONSE) 68°C HEAD INSTALLATION DETAIL (BY TENANT) (NOT TO SCALE)



**TABLE 6
HANGER ROD SIZE (AS PER NFPA - 13)**

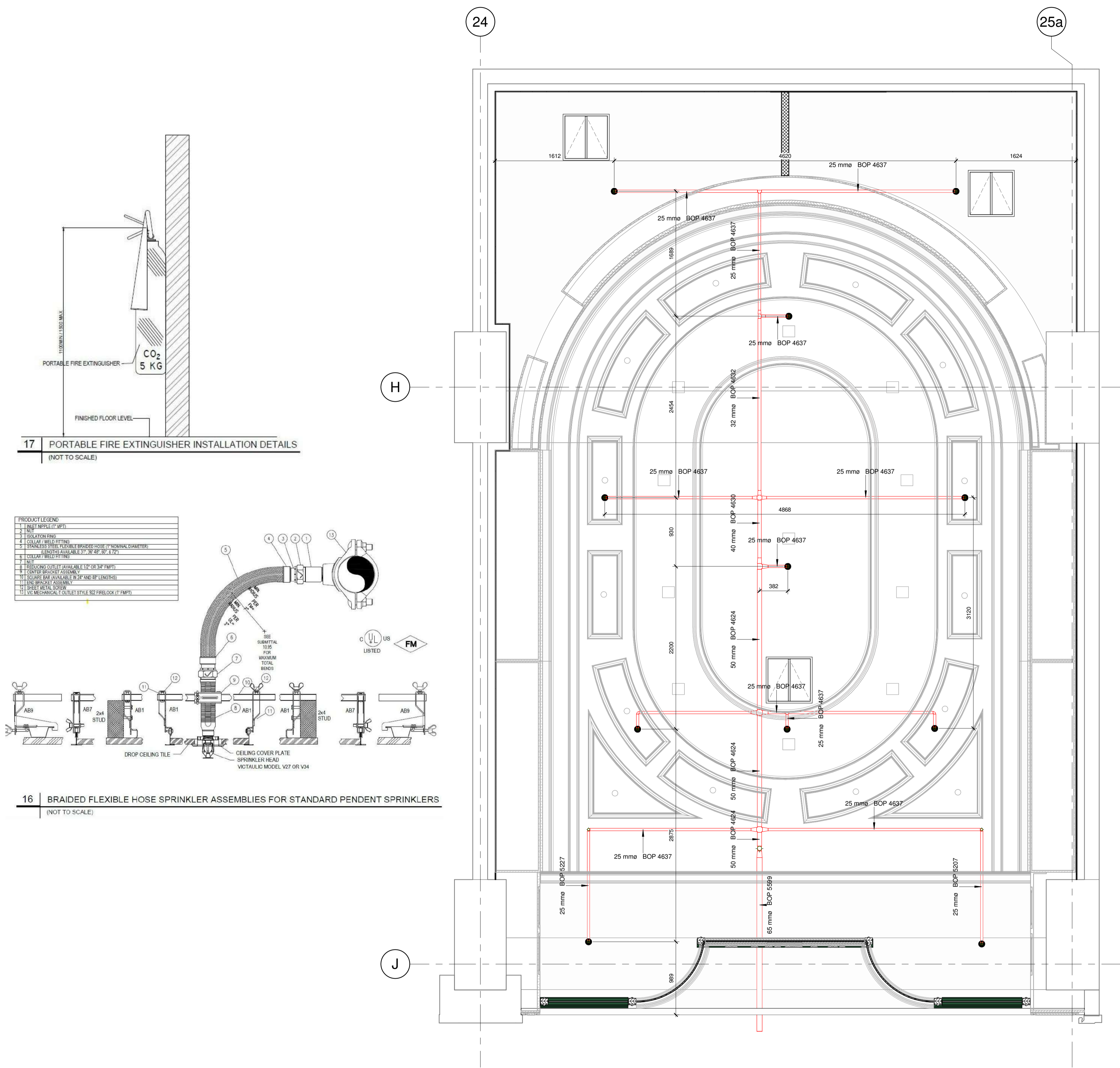
| PIPE SIZE (mm) | HANGER ROD DIAMETER (mm) | ANCHOR |
|---------------------------|--------------------------|-------------|
| UP TO AND INCLUDING 100mm | 8.5 | MED W/SHAW |
| 105mm TO 150mm | 12.7 | MED W/SHAW |
| 155mm & ABOVE | 19.0 | SWFT W/SHAW |

MAXIMUM DISTANCE BETWEEN HANGERS (AS PER NFPA - 13)

| NOMINAL PIPE SIZE (mm) | 025 | 032 | 040 | 050 | 063 | 075 | 090 | 0110 | 0125 | 0150 |
|------------------------------|------|------|------|------|------|------|------|------|------|------|
| STEEL PIPE (SLIGHT THREADED) | 3000 | 3000 | 3000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 |
| LYON PIPE (1/2") | | | | | | | | | | |

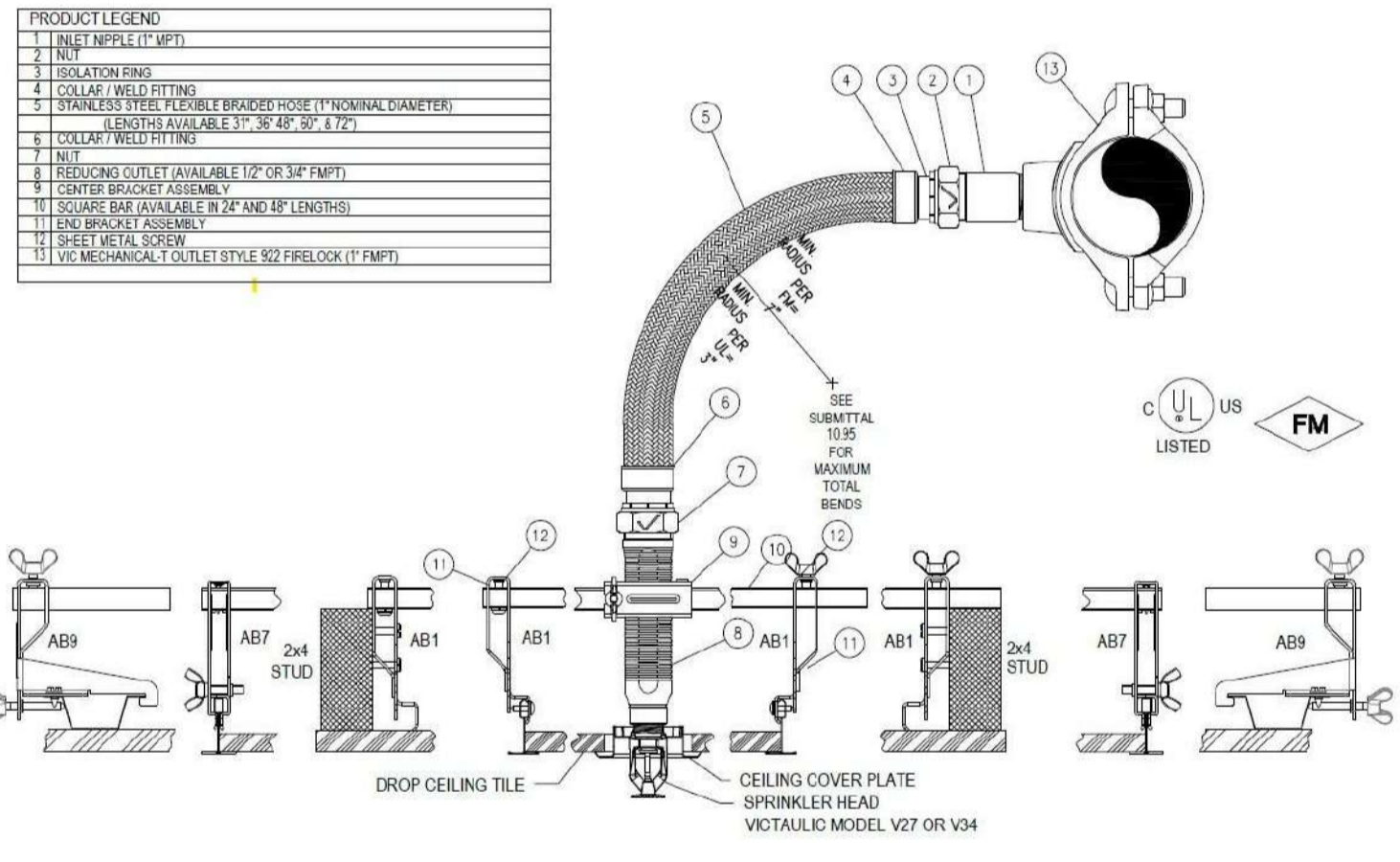
DETAIL

18 PIPE HANGER (SPRINKLER) (NOT TO SCALE)



1 06- FIRE PROTECTION - BELOW CEILING
SCALE 1:30

17 PORTABLE FIRE EXTINGUISHER INSTALLATION DETAILS (NOT TO SCALE)



16 BRAIDED FLEXIBLE HOSE SPRINKLER ASSEMBLIES FOR STANDARD PENDENT SPRINKLERS (NOT TO SCALE)

Fire Protection Legend

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- FIRE EXTINGUISHER SET / CABINET

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GENERAL NOTES

**RAYDAN PERFUMES
UNIT N18, MALL OF OMAN**

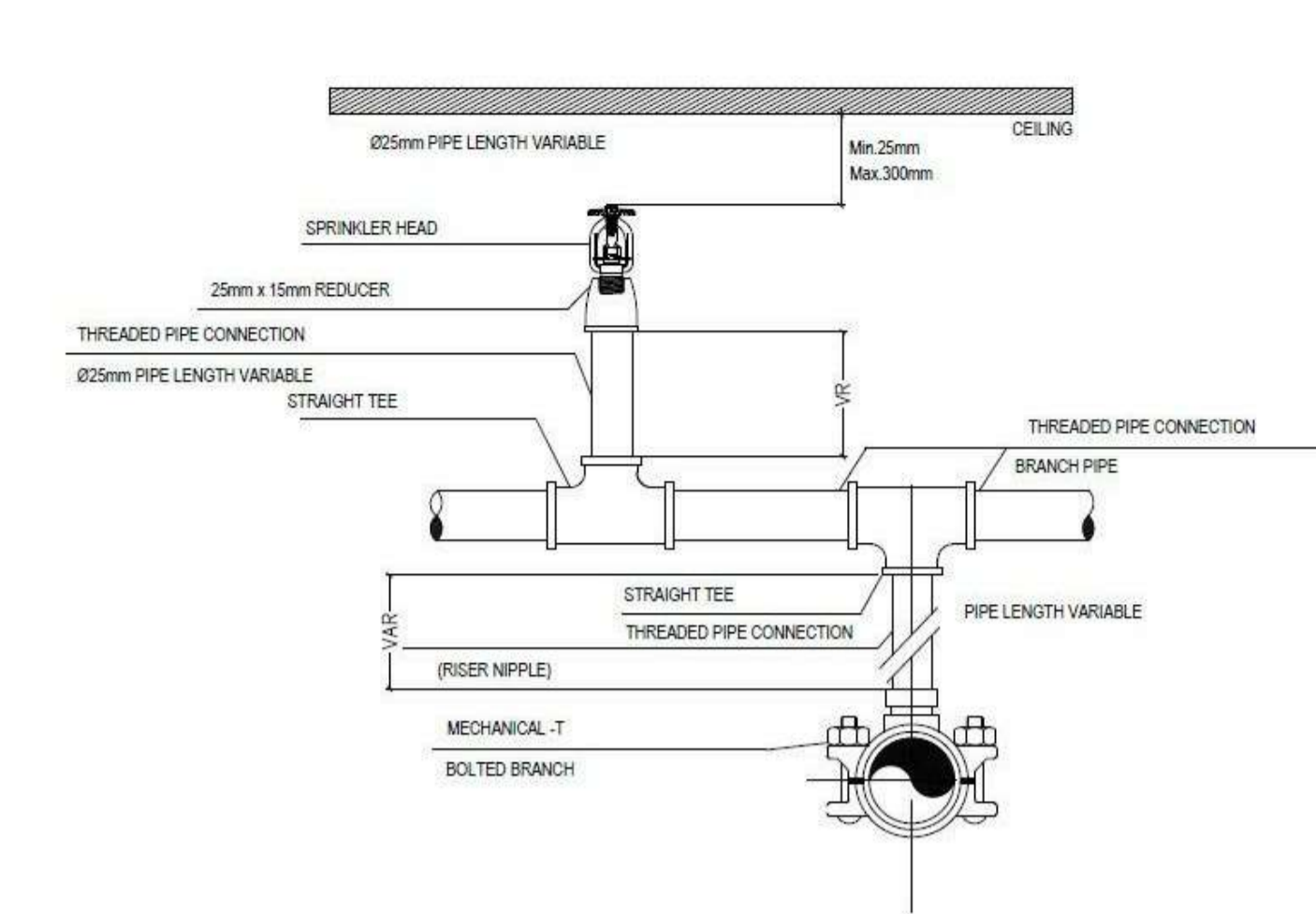
PROJECT

AZZOMORRODA ENTERPRISES
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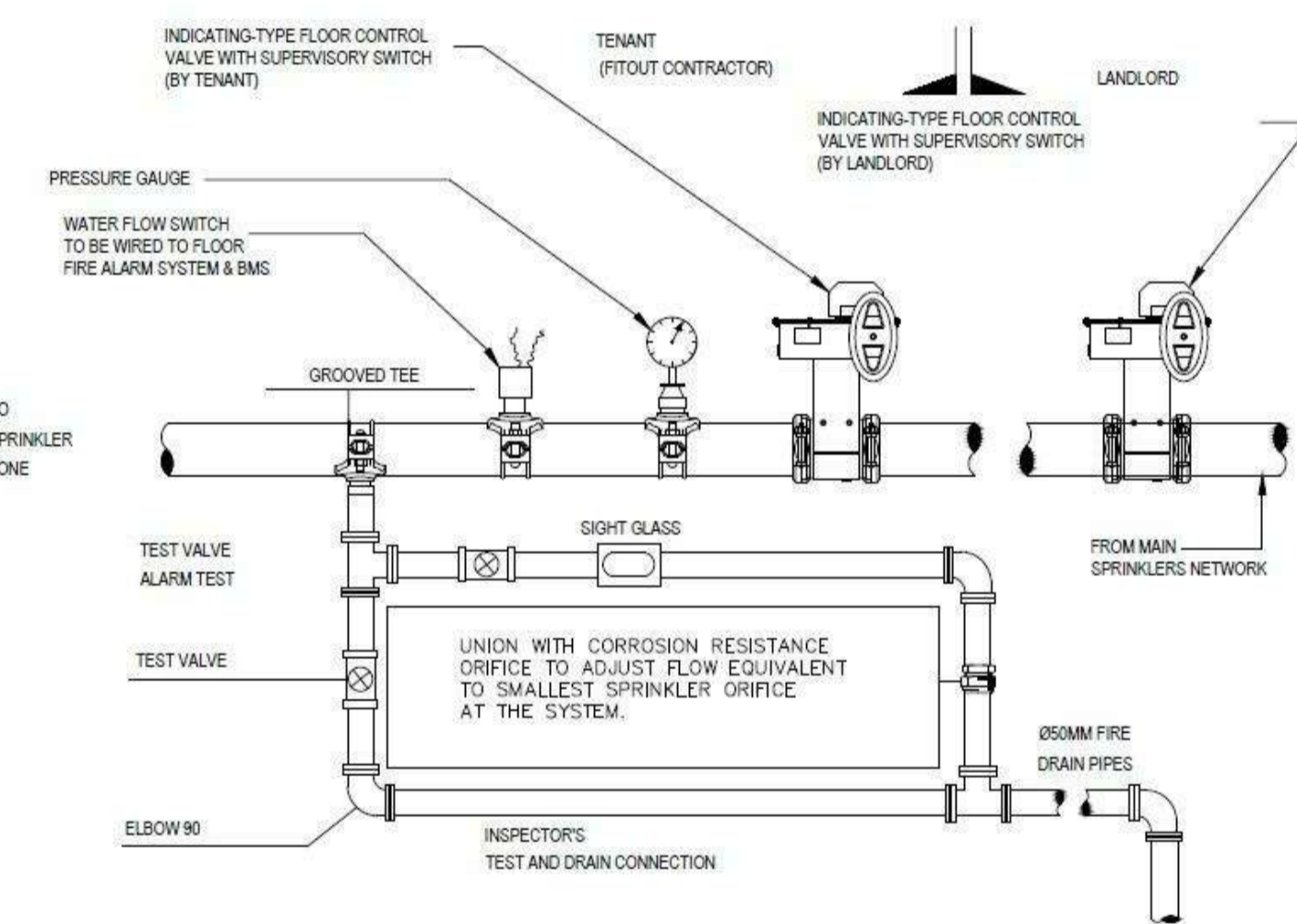
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Drawing Title
Fire Fighting Layout - Above Ceiling

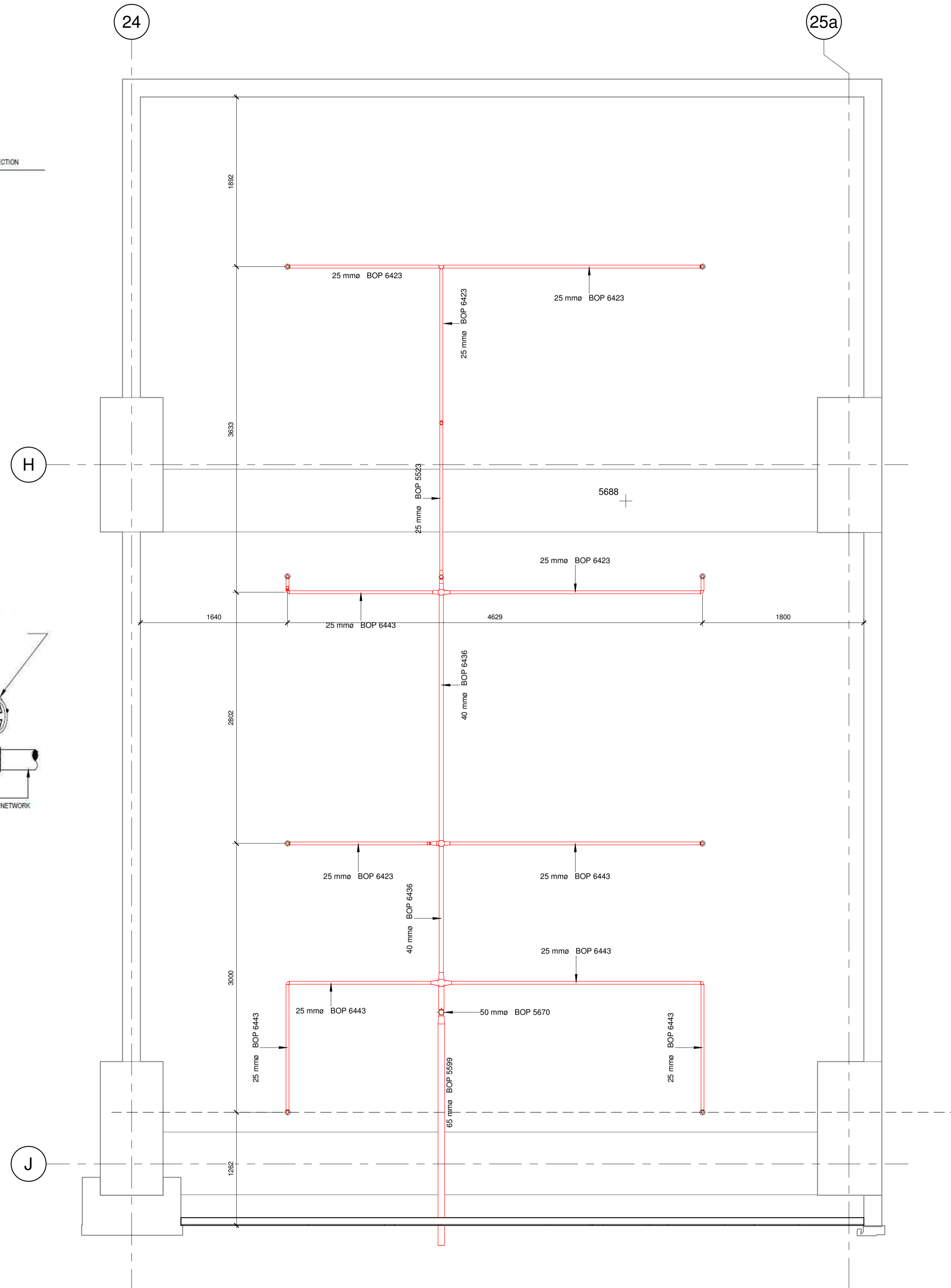
| Drawn | Author | Date | Issue Date |
|-------------|--------------|-------------|------------|
| Checked | Checker | Approved | Approver |
| Scale | As indicated | | |
| File | . | | |
| Project No. | Type | Drawing No. | Rev. |
| 143 | | M109 | 6 |



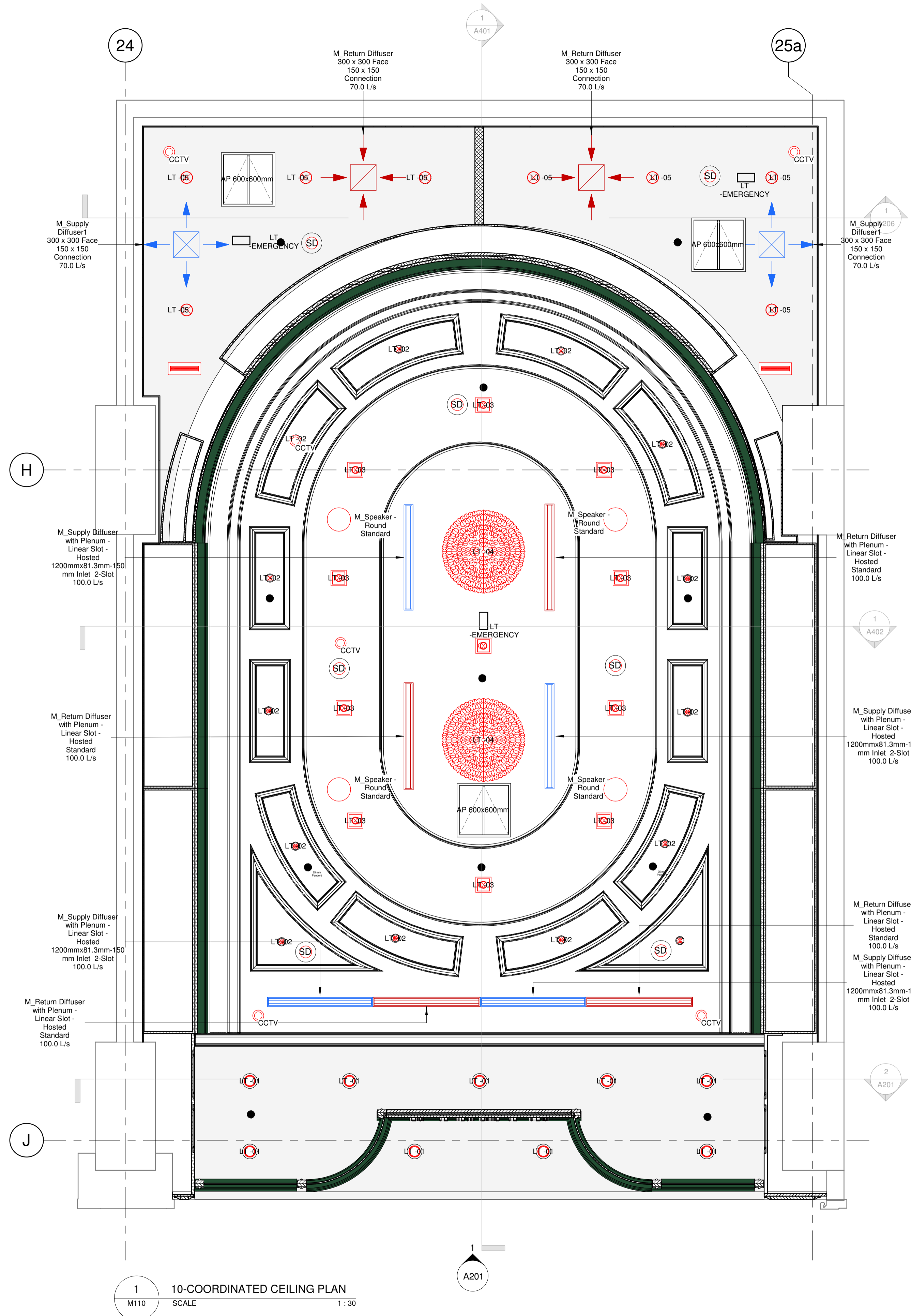
14 UPRIGHT SPRINKLER HEAD WITH MECHANICAL-TEE INSTALLATION
(NOT TO SCALE)



12 ZONE CONTROL VALVE ASSEMBLY DETAIL
(NOT TO SCALE)



1 07- FIRE PROTECTION - ABOVE CEILING
SCALE 1 : 30



1 10-COORDINATED CEILING PLAN
M110 SCALE 1:30

ELV System legend

- [A] AMPLIFIER
- [I] INTERCOM
- [M] MICROPHONE
- [R] ROUND SPEAKER, CEILING HUNG/MOUNTED
- [CCTV] CCTV CAMERA, IR
- [E] CCTV ENCODER
- [SEC] SECURITY ENCODER, RACK MOUNTED
- [EL] ELECTRIC LOCK
- [KC] KEY CARD

Fire Alarm Legend

- [BG] BREAK GLASS
- [BC] BELL CHIME
- [SD] SMOKE DETECTOR
- [SD-LED] SMOKE DETECTOR WITH LED, FOR CEILING VOIDS

Fire Protection Legend

- [PS] PENDANT SPRINKLER, 25MM
- [FES] FIRE EXTINGUISHER SET / CABINET

HVAC Legend

- [BD] BALANCING DAMPER, ROUND
- [RD] ROUND DUCT
- [FD] FLEXIBLE DUCT, ROUND
- [FCU] FCU
- [RAT] RETURN AIR TERMINAL, SQUARE 300X300
- [SAT] SUPPLY AIR TERMINAL, SQUARE 300X300
- [FDR] FLEXIBLE DUCT, ROUND
- [LSD2] LINEAR SLOT DIFFUSER WITH PLENUM, 2 SLOT
- [LSD4] LINEAR SLOT DIFFUSER WITH PLENUM, 4 SLOT

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PROJECT

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Drawing Title
Coordinated Ceiling Plan

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|-------------|--------------|-------------|------------|
| Checked | Checker | Approved | Approver |
| Scale | As indicated | | |
| File | | | |
| Project No. | Type | Drawing No. | Rev. |
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