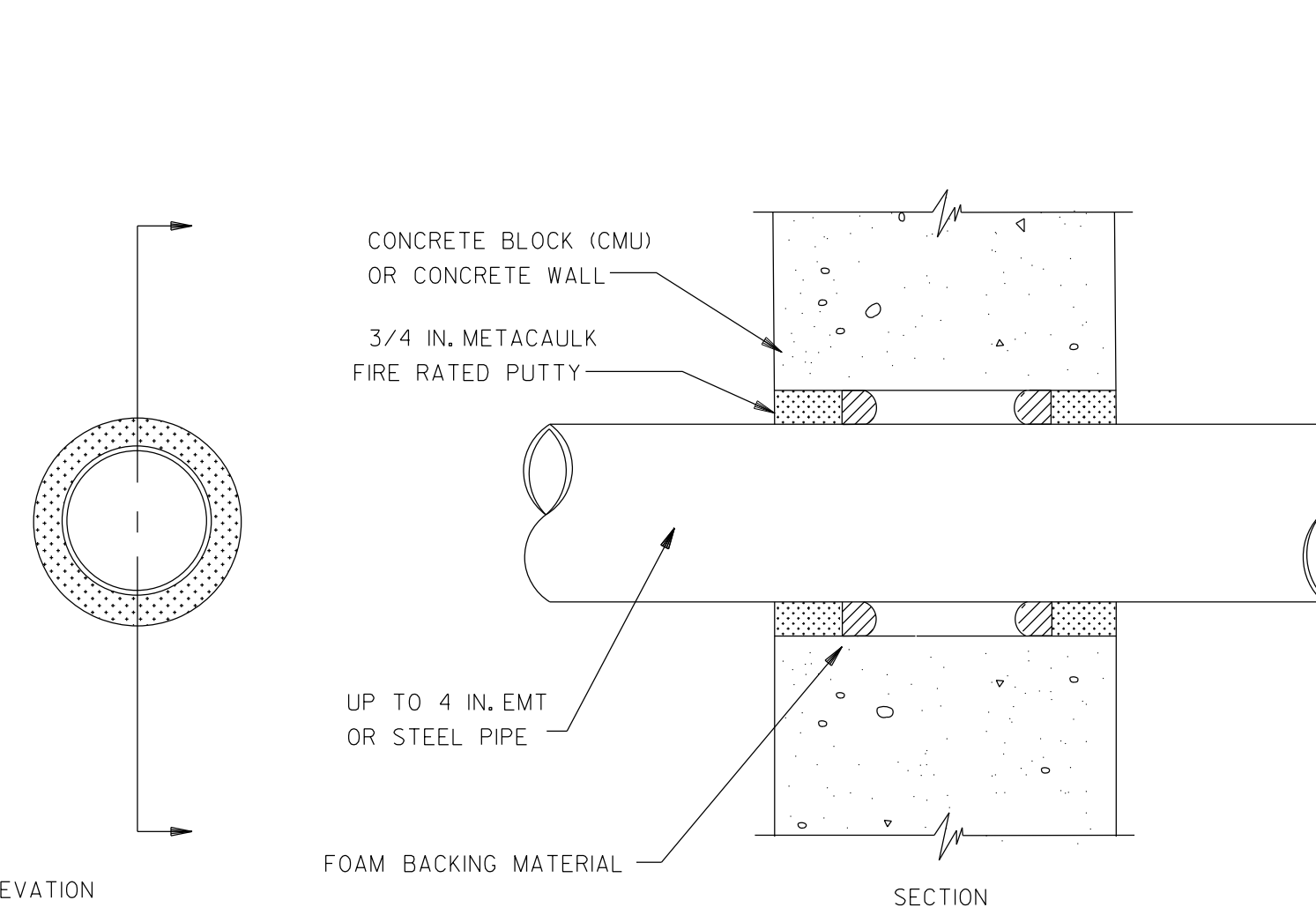


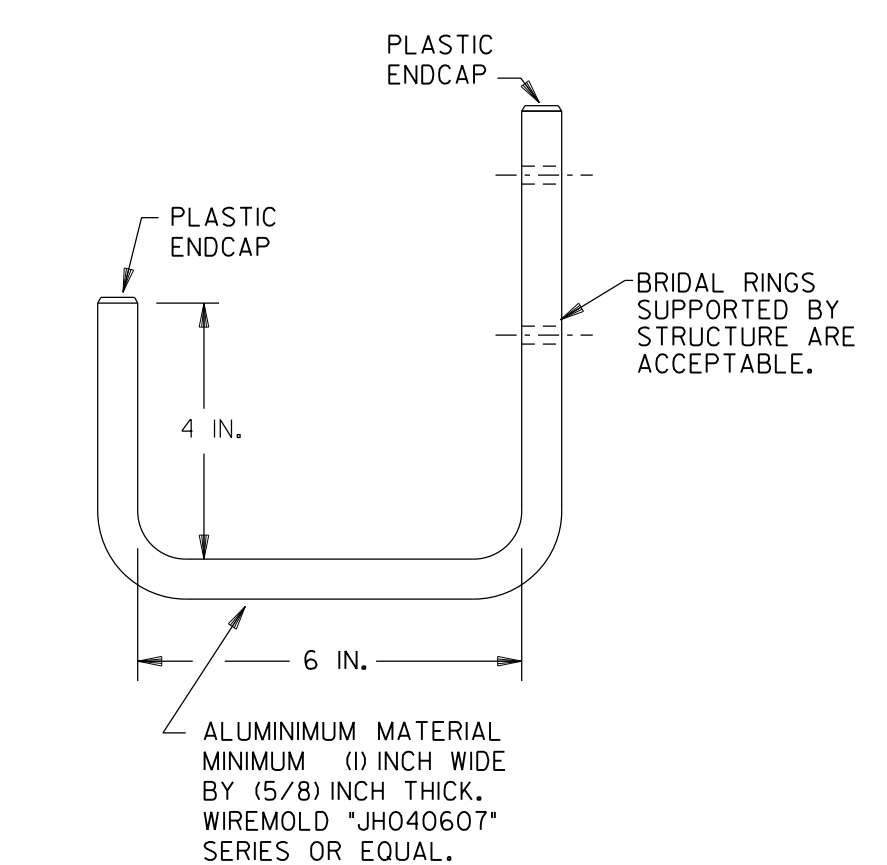
NOTE: WHERE CONDUIT IS USED AS A SLEEVE FOR ROUTING LOW VOLTAGE CABLES THROUGH A RATED WALL, LOCATE CONDUCTORS IN CENTER OF SLEEVE AND FILL OPENING WITH FIRE RATED PUTTY AT EACH END OF SLEEVE.

**5** DETAIL - GYPSUM WALLBOARD PENETRATION  
E5.2 NOT TO SCALE

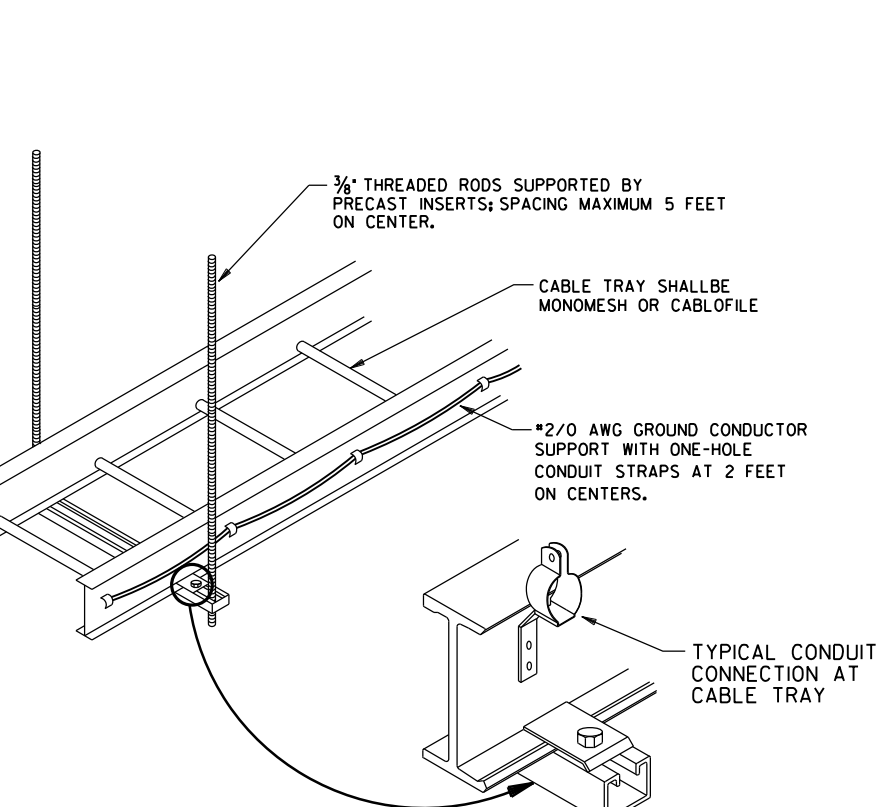


NOTE: WHERE CONDUIT IS USED AS A SLEEVE FOR ROUTING LOW VOLTAGE CABLES THROUGH A RATED WALL, LOCATE CONDUCTORS IN CENTER OF SLEEVE AND FILL OPENING WITH FIRE RATED PUTTY AT EACH END OF SLEEVE.

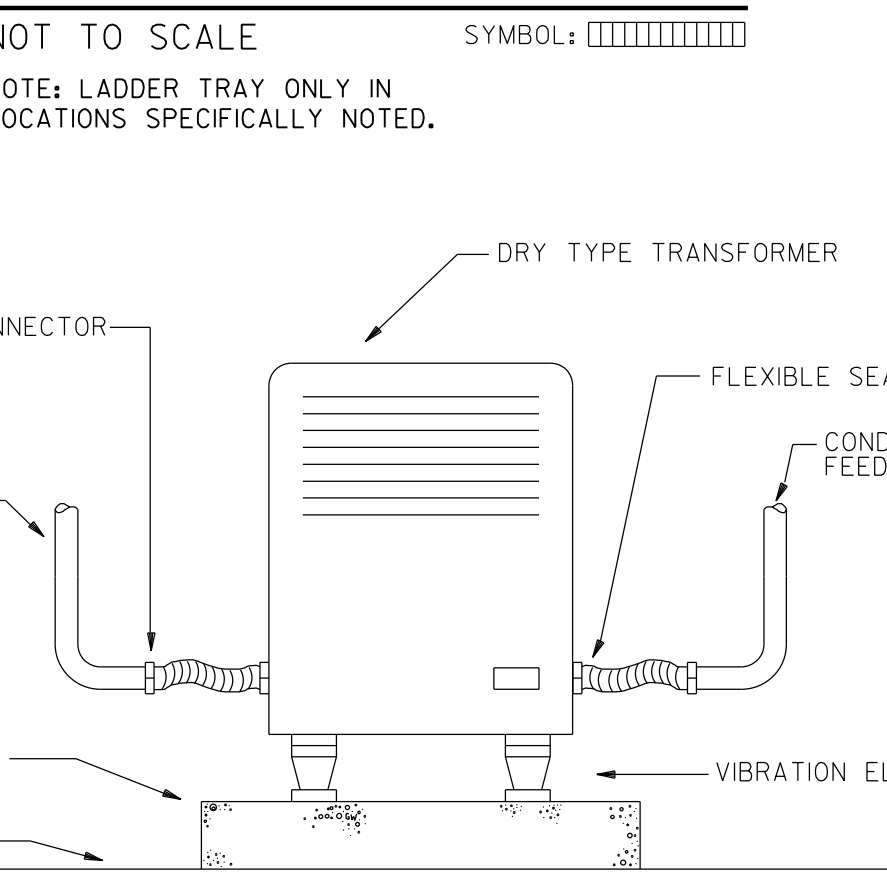
**6** DETAIL - CONCRETE WALL PENETRATION  
E5.2 NOT TO SCALE



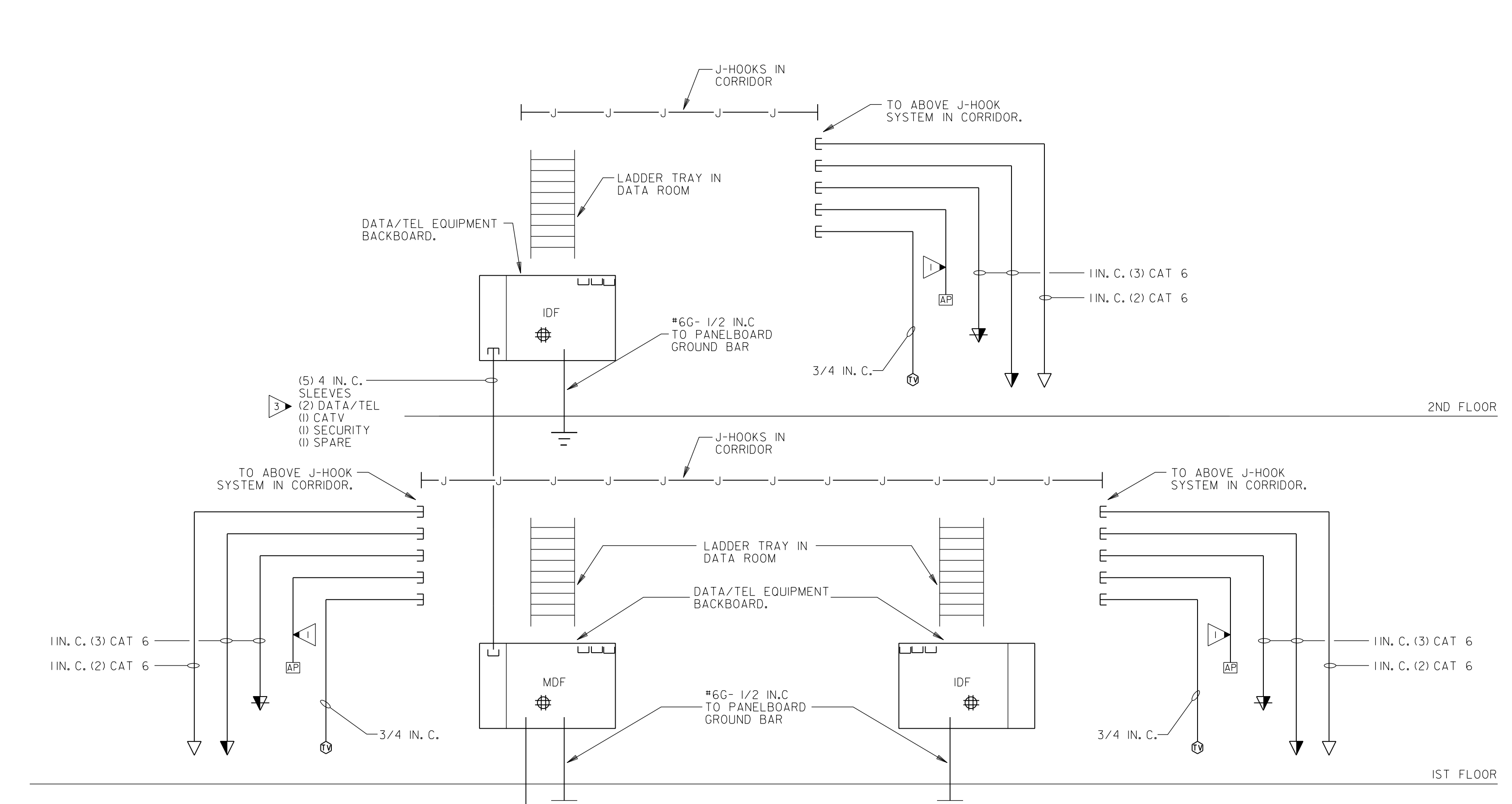
**2** J-HOOK DETAIL  
E5.2 NOT TO SCALE



**3** LADDER CABLE TRAY  
E5.2 NOT TO SCALE



**4** FLOOR MOUNTED TRANSFORMER  
E5.2 NOT TO SCALE



**1** TELEPHONE/DATA RISER  
E5.2 NOT TO SCALE

**KEYED NOTES:** (DETAIL 1/E5.2)

- 1. PROVIDE (2) CAT 6A IN 1IN. C. TO BISCUIT JACK FLUSH MOUNTED IN CEILING FOR WIRELESS AP. WIRELESS ACCESS POINT PROVIDED BY OTHERS.
- 2. PROVIDE (2) - 3 IN. CONDUITS FOR DATA/TEL AND (1) SPARE CONDUIT, (1) CONDUIT FOR (1) 50 PAIR EXTENSION RATED, DEL FILLER COPPER CAT 6E (1) CONDUIT FOR 12 STRAND MULTIMODE FIBER AND 12 STRAND SINGLEMODE FIBER EACH IN INNERDUCT, COORDINATE WITH OWNER FOR EXACT FIBER SPECIFICATIONS AND TERMINATIONS, COORDINATE EXACT DATA/TEL STUB OUT LOCATIONS AT DEMARC WITH SERVING UTILITY COMPANIES.
- 3. FROM MDF (FIRST FLOOR) TO IDF ON SECOND FLOOR: DATA: 6-STRAND FIBER MULTIMODE/6-STRAND FIBER SINGLEMODE IN INNERDUCT, TEL: 25 PAIR COPPER CABLE TO SECOND FLOOR, RISER RATED, SECURITY: SPARE CONDUIT FOR CABLEING BY OTHERS, SPARE: SPARE CONDUIT FOR FUTURE USE.
- 4. PROVIDE (1) - 3 IN. CONDUIT WITH PULL STRING FOR CATV SYSTEM, COORDINATE EXACT STUB OUT LOCATION AT STREET WITH SERVING UTILITY COMPANY.
- 5. ADDITIONAL WALL SLEEVES AND WALL PENETRATIONS WILL BE REQUIRED FOR NETWORK CABLING, PROVIDE AS NECESSARY AND FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS.
- 6. TY-WRAPS SHALL NOT BE CINCHED TIGHT ENOUGH TO DEFORM CABLES, MAINTAIN MINIMUM BEND RADIUS ON FIBER, TIE CABLES, STATION WIRES, AND PATCH CORDS.
- 7. REFER TO SPECIFICATIONS FOR CABLING, ALL CABLING SHALL BE PLENUM RATED.
- 8. PROVIDE VELCRO CABLE WRAPS AT RACKS TO PROPERLY LACE AND TRAP PATCH CORDS AT RACKS IN AN ORDERLY FASHION.
- 9. FIELD VERIFY MOUNTING SPACE IN DATA RACK ROOM, PROVIDE WALL MOUNTED RACKS WHERE NECESSARY.
- 10. CABLING FOR COMPUTER DATA SHALL BE ROUTED VIA CABLE TRAY SYSTEM PROVIDE CONDUIT TO 6 IN. ABOVE ACCESSIBLE CEILING, BUNDLE CABLES, SLEEVE THROUGH CORRIDOR WALL USING 4 IN. C.
- 11. NETWORK HUBS AND ELECTRONICS, RACK MOUNTED UPS, PATCH CORDS AND FIBER OPTIC PATCH CORDS ARE INCLUDED IN CONTRACT.
- 12. REFER TO POWER SHEETS FOR ADDITIONAL INFORMATION.
- 13. SEE WIRE MANAGEMENT NOTES.

**WIRE MANAGEMENT NOTES**

- NOTES:
- A. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A FULL J-HOOK SYSTEM IN THE CORRIDORS WITH ACCESSIBLE CEILINGS FOR LOW VOLTAGE CABLING.
  - B. ALL J-HOOKS SHALL BE SPACED NO MORE THAN 48 INCHES APART AND NO MORE THAN 12 INCHES FROM THE CORNER OF ANY SPACE.
  - C. PROVIDE J-HOOKS NO MORE THAN 12 INCHES AWAY FROM CONDUIT SLEEVES.
  - D. WHERE J-HOOKS ARE (2) ROWS; SPACING BETWEEN THE ROWS SHALL BE 12 INCHES.
  - E. CONDUIT SLEEVES SHALL BE AT THE SAME LEVEL AS THE ROWS OF J-HOOKS.
  - F. FIRE SEAL AROUND ALL CONDUIT SLEEVES, SEE ARCHITECTURAL SHEET FOR REQUIRED RATINGS.
  - G. COORDINATE THE EXACT LEVEL OF J-HOOKS AND CONDUIT SLEEVES WITH OTHER TRADES PRIOR TO ROUGHING.
  - H. J-HOOKS SHALL NOT BE SUPPORTED BY GYPSUM WALL BOARD, J-HOOKS SHALL BE SUPPORTED BY BLOCK WALL OR STUD, SEE ARCHITECTURAL PLAN FOR WALL MATERIALS.
  - I. ALL CABLING SHALL BE NEATLY BUNDLED UTILIZING "NOT A CINCH" TYPE RATED VELCRO TIE WRAPS.
  - J. J-HOOKS SHALL SUPPORT CABLING FOR: FIRE ALARM, DATA, TELEPHONE, CATV, SECURITY, AND SOUND.
  - K. ONE ROW SHALL SUPPORT SOUND SYSTEM CABLING, ONE ROW SHALL SUPPORT DATA/TELEPHONE CABLING, ONE ROW SHALL SUPPORT CATV CABLING, ONE ROW SHALL SUPPORT FIRE ALARM SYSTEM, ONE ROW SHALL SUPPORT SECURITY SYSTEM.
  - L. SEE DETAIL - CONCRETE WALL PENETRATION, 6/E5.2.
  - M. SEE DETAIL - GYPSUM WALLBOARD PENETRATION, 5/E5.2.
  - N. WHERE J-HOOKS ARE SHOWN ABOVE SLUG SOFFITS MORE THAN TWO FEET WIDE, PROVIDE J-HOOKS HUNG FROM STRUCTURE (4 HOOKS PER 3/8 IN THREADED ROD).
  - O. PROVIDE (2) 2 INCH CONDUIT SLEEVES INTO ALL SPACES FROM CORRIDOR WHERE RATED WALLS OCCUR.

**GENERAL NOTES:(DATA CABLING)**

- 1. ADDITIONAL WALL SLEEVES AND WALL PENETRATIONS WILL BE REQUIRED FOR NETWORK CABLING, PROVIDE AS NECESSARY AND FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS.
- 2. ALL JACKS SHALL BE PROVIDED WITH ICON DENOTING DATA OR VOICE OUTLET, OUTLET SHALL BE LABELED WITH FOLLOWING NOMENCLATURE:  
D M XXX  
MDF OR IDF DESIGNATION FROM WHICH JACK IS SERVED.  
D OR V INDICATING VOICE OR DATA OUTLET.  
ALL PATCH PANELS AND NO BLOCKS SHALL BE CORRESPONDINGLY LABELED.
- 3. PROVIDE METAL D-RING OR RING RUNS AS NECESSARY TO PROPERLY LACE AND SUPPORT ALL CABLING AT BACKBOARDS.
- 4. REFER TO/IN PLANS SHOWING OUTLET LOCATIONS, PANEL LOCATIONS, CEILING TYPES, ETC.
- 5. GROUND ALL RACKS WITH #6 COPPER LOCATED AT EACH BACKBOARD, CONTRACTOR SHALL ROUTE #6, 2IN. C. TO GROUND PLATE, PROVIDE 12 IN. CABLE RUNWAY SPANNING FROM TOP OF RACK TO WALL AND TURNED UP TO ABOVE DROP TILE CEILING IN ORDER TO ROUTE CABLE TO RACK, AT EACH RACK LOCATION PROVIDE A 3/4INx4 FTx8 FT. BACKBOARD PAINTED WITH TWO COATS OF BLACK FIRE RETARDANT PAINT.

**SERVICE DEMAND CALCULATIONS**

	CONNECTED LOAD (VA)	DEMAND FACTOR	CALCULATED DEMAND (VA)
TOTAL CONNECTED LOAD (VA)	677,894		118,979
LIGHTING	17,730	1.25	22,163
HVAC	206,010	1.00	206,010
HVAC (CONTINUOUS)	0	1.25	0
LARGEST MOTOR	3,816	1.25	4,770
MOTOR LOAD	350	1.00	350
RECEPTACLE (FIRST 10,000 VA)	10,000	1.00	10,000
RECEPTACLE (GREATER THAN 10,000 VA)	41,600	0.50	20,800
WATER HEATER	1,088	1.00	1,088
MISC LOADS	58,000	1.00	58,000
PANEL LADA (WORST CASE)	144,000	1.00	144,000
PANELS (WORST CASE)	54,000	1.00	54,000
FUTURE 2ND FLR PANEL (50% ESTIMATE)	144,000	1.00	144,000
<b>DEMAND LOAD - VOLT-AMPERES</b>			<b>111,135</b>
<b>DEMAND LOAD - 208V 3-PHASE AMPS</b>			<b>308.7</b>
PANEL IS SIZED/RATED FOR 400 AMPS.			

**LB/LB2 DEMAND CALCULATIONS**

	CONNECTED LOAD (VA)	DEMAND FACTOR	CALCULATED DEMAND (VA)
TOTAL CONNECTED LOAD (VA)	118,979		118,979
LIGHTING	6,990	1.25	8,663
HVAC	84,540	1.00	84,540
HVAC (CONTINUOUS)	0	1.25	0
LARGEST MOTOR	128	1.25	160
MOTOR LOAD	128	1.00	128
RECEPTACLE (FIRST 10,000 VA)	10,000	1.00	10,000
RECEPTACLE (GREATER THAN 10,000 VA)	12,200	0.50	6,100
WATER HEATER	544	1.00	544
MISC LOADS	1,000	1.00	1,000
<b>DEMAND LOAD - VOLT-AMPERES</b>			<b>102,108</b>
<b>DEMAND LOAD - 208V 3-PHASE AMPS</b>			<b>283.6</b>
PANEL IS SIZED/RATED FOR 400 AMPS.			

**LC/LC2 DEMAND CALCULATIONS**

	CONNECTED LOAD (VA)	DEMAND FACTOR	CALCULATED DEMAND (VA)
TOTAL CONNECTED LOAD (VA)	108,154		108,154
LIGHTING	6,990	1.25	8,663
HVAC	1,500	1.00	1,500
HVAC (CONTINUOUS)	0	1.25	0
LARGEST MOTOR	3,816	1.25	4,770
MOTOR LOAD	94	1.00	94
RECEPTACLE (FIRST 10,000 VA)	10,000	1.00	10,000
RECEPTACLE (GREATER THAN 10,000 VA)	19,400	0.50	9,700
WATER HEATER	544	1.00	544
MISC LOADS	8,000	1.00	8,000
PANELS (WORST CASE)	54,000	1.00	54,000
<b>DEMAND LOAD - VOLT-AMPERES</b>			<b>102,108</b>
<b>DEMAND LOAD - 208V 3-PHASE AMPS</b>			<b>283.6</b>
PANEL IS SIZED/RATED FOR 400 AMPS.			

**LD DEMAND CALCULATIONS**

	CONNECTED LOAD (VA)	DEMAND FACTOR	CALCULATED DEMAND (VA)
TOTAL CONNECTED LOAD (VA)	119,979		119,979
LIGHTING	0	1.25	0
HVAC	119,979	1.00	119,979
HVAC (CONTINUOUS)	0	1.25	0
LARGEST MOTOR	0	1.25	0
MOTOR LOAD	0	1.00	0
RECEPTACLE (FIRST 10,000 VA)	0	1.00	0
RECEPTACLE (GREATER THAN 10,000 VA)	0	0.50	0
WATER HEATER	0	1.00	0
MISC LOADS	0	1.00	0
<b>DEMAND LOAD - VOLT-AMPERES</b>			<b>119,979</b>
<b>DEMAND LOAD - 208V 3-PHASE AMPS</b>			<b>333.3</b>
PANEL IS SIZED/RATED FOR 400 AMPS.			

**COMcheck Software Version 4.1.5.5**  
Interior Lighting Compliance Certificate

Project Information  
Energy Code: 2015 IECC  
Project Title: Retrofits & Renovations for Madison Methodist Church  
Project Type: Alteration  
Owner/Agent: Alteration

Construction Site: 1091 Confederate Highway, Madison, GA 30650  
Owner/Agent: Alteration  
Designer/Contractor: Electrical Design Consultants, 175 New Street, Suite 1, Macon, GA 31201

**Allowed Interior Lighting Power**

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Residential Building	29380	1.00	29380
Total Allowed Watts = 29380			

**Proposed Interior Lighting Power**

A Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Wattage (B X C)	E (C X D)
<b>Religious Building (29380 sq.ft.)</b>				
A2: A2 2 FT. X 4 FT. TROFFER LED Panel 40W	1	30	40	1560
A3: A3 2 FT. X 4 FT. TROFFER LED Panel 30W	1	7	32	224
B1: B1 2 FT. X 2 FT. TROFFER LED Panel 41W	1	8	41	328
B2: B2 2 FT. X 2 FT. TROFFER LED Panel 30W	1	1	35	35
B3: B3 2 FT. X 2 FT. TROFFER LED Panel 30W	1	1	27	27
C1: C1 4 FT. SURFACE MOUNT WRAP LED Other Fixture Unit 50W	1	12	49	588
D: D 4 IN. DOWNLIGHT LED Other Fixture Unit 25W	1	64	22	1408
E: E 4 FT. STRIP LIGHT LED Other Fixture Unit 20W	1	7	42	294
F1: F1 TWO LIGHT WALL SCIENCE LED Other Fixture Unit 40W	2	9	40	360
F2: F2 FOUR LIGHT PENDANT LANTERN LED Other Fixture Unit 60W	4	5	60	300
F3: F3 2 FT. VANKY LIGHT LED Other Fixture Unit 25W	1	6	25	150
F4: F4 58 IN. DIAMETER CHANDELIER LED Other Fixture Unit 25W	8	2	25	50
F5: F5 LED WALL SCIENCE LED Other Fixture Unit 6.5W	1	2	6	12
F6: F6 FOUR LIGHT PENDANT LANTERN LED Other Fixture Unit 60W	4	6	60	480
F7: F7 LED WALL SCIENCE LED Other Fixture Unit 60W	1	3	60	180
F8: F8 8.5 IN. SURFACE MOUNT LED Other Fixture Unit 60W	1	5	60	300
F9: F9 16 IN. DIAMETER PENDANT LED Other Fixture Unit 60W	1	5	60	300
F10: F10 22.5 IN. DIAMETER PENDANT LED Other Fixture Unit 40W	3	6	40	240
F11: F11 16 IN. DIAMETER SURFACE MOUNT LED Other Fixture Unit 13W	1	4	13	52
G1: G1 6 IN. SURFACE PANEL LED Other Fixture Unit 13W	1	9	14	126
H: H 30 IN. ARCHITECTURAL PENDANT Other	1	2	130	260
J: J 4 FT. WALL FIXTURE LED Other Fixture Unit 40W	1	4	40	160
K: K 6 IN. DOWNLIGHT LED Other Fixture Unit 20W	1	67	29	1943
L1: L1 6 IN. CYLINDER LED Other Fixture Unit 20W	1	70	29	2030
L2: L2 6 IN. CYLINDER LED Other Fixture Unit 25W	1	22	23	506
M: M 6 IN. CYLINDER WALL WASH LED Other Fixture Unit 20W	1	15	29	638
N: N 4 IN. WALL WASH LED Other Fixture Unit 18W	1	12	19	228
P: P 17 FT. LINEAR PENDANT Other	1	12	136	1632
Q1: Q1 CYLINDRA TRACK HEAD LED Other Fixture Unit 60W	1	3	55	165
Q2: Q2 CYLINDRA TRACK HEAD LED Other Fixture Unit 60W	1	4	55	220
Q3: Q3 CYLINDRA TRACK HEAD LED Other Fixture Unit 60W	1	8	55	440
Total Proposed Watts = 15636				

Interior Lighting PASSES  
Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jeffrey H. McGee, PE  
Name - Title: PE  
Signature: [Signature]  
Date: 02/11/2026

**COMcheck Software Version 4.1.5.5**  
Exterior Lighting Compliance Certificate

Project Information  
Energy Code: 2015 IECC  
Project Title: Retrofits & Renovations for Madison Methodist Church  
Project Type: Alteration  
Exterior Lighting Zone: 2 (Residential mixed use area (L2))  
Owner/Agent: Alteration

Construction Site: 1091 Confederate Highway, Madison, GA 30650  
Owner/Agent: Alteration  
Designer/Contractor: Electrical Design Consultants, 175 New Street, Suite 1, Macon, GA 31201

**Allowed Exterior Lighting Power**

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Front Door (Main entry)	6 ft of door	20	Yes	120
Front Entry canopy	710 sq ft	0.25	Yes	178
Building Exterior (Walkway < 10 feet wide)	1050 sq ft	0.7	Yes	735
Total Tradable Watts (a) = 1032				
Total Allowed Watts = 1032				
Total Allowed Supplemental Watts (b) = 600				

**Proposed Exterior Lighting Power**

A Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Wattage (B X C)	E (C X D)
<b>Front Door (Main entry 6 ft of door width): Tradable Wattage</b>				
OB: OB ARCHITECTURAL SCIENCE LED Other Fixture Unit 60W	1	2	60	120
<b>Front Entry canopy (710 sq ft): Tradable Wattage</b>				
OK: OK 6 IN. RETROFIT DOWNLIGHT LED Other Fixture Unit 13W	1	7	14	98
<b>Building Exterior (Walkway &lt; 10 feet wide 1050 ft of walkway length): Tradable Wattage</b>				
OC: OC BUILDING WALL PACK LED Other Fixture Unit 10W	1	30	16	480
OD: OD BUILDING WALL PACK LED Other Fixture Unit 30W	1	12	36	432
Total Tradable Wattage = 1130				

Exterior Lighting PASSES  
Compliance Statement: The proposed exterior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jeffrey H. McGee, PE  
Name - Title: PE  
Signature: [Signature]  
Date: 02/11/20