

COLD CLIMATE PACKAGED TERMINAL UNIT CERTIFIED DRAWING

DWG. NO. **RSXC-Series Submittal**
REV. -

PROJECT		DATE	1/14/21		BY	JL	REVISIONS	
PURCHASER		P.O. #					BY	DESCRIPTION
ARCHITECT		SHIP DATE						
ENGINEER								
HVAC CONTR.								
GEN. CONTR.								
DESIGNATION	MODEL NUMBER	QTY						
A								
B								
C								
TOTAL								

UNIT SPECIFICATIONS+

SERIES MODEL #	RSXC09		RSXC13		RSXC18
Cooling Capacity (Btu/hr) ¹	9,200		12,500		16,300
Cooling Capacity Range (Btu/hr)	6,300 - 11,800		6,500 - 14,900		7,300 - 18,000
EER ¹	12.1		11.1		10.0
Heating Capacity (Btu/hr) ²	10,200		12,000		17,300
Heating Capacity Range (Btu/hr)	5,200 - 12,600		5,600 - 14,200		9,500 - 17,000
COP ²	3.6		3.1		3.0
HSPF ²	9.6		9.5		9.0
Voltage	115	208	115	208	208
Electric Heater (kW) ³	1.5	3.0 3.5	1.5	3.0 3.5 4.3	3.0 3.5 4.3
Electric Heater (A) ³	13	14.4 16.8	13	14.4 16.8 20.7	14.4 16.8 20.7
Current in Cooling Operation (Amps)	6.6	3.7	9.8	5.4	7.8
Power in Cooling Operation (Watts)	760		1126		1630
Current in Heating Operation (Amps)	7.2	4.0	9.9	5.5	8.1
Power in Heating Operation (Watts)	830		1134		1690
MCA (without Electric Heat)	11.7	5.9	12.6	8.5	10.4
MOCP (without Electric Heat)	20	15	20	15	15
MCA (with Electric Heat)	17.0	18.4 21.5	17.0	18.4 21.5 26.4	18.4 21.5 26.4
MOCP (with Electric Heat)	20	20 25	20	20 25 30	20 25 30
Evaporator Motor Nominal HP	1/25	1/25	1/25	1/25	1/25
Airflow (CFM)	380		400		480
Outside Air (CFM)	60		60		60
Weights (lbs.)	127		134		151
LOW AMBIENT PERFORMANCE					
HEATING CAPACITY @ 47F	10,200		12,000		17,400
COP @ 47F	3.6		3.1		3.03
HEATING CAPACITY @ 10F	6,600		7,700		11,600
COP @ 10F	2.2		2.14		2.02
HEATING CAPACITY @ 5F	6,100		6,900		10,600
COP @ 5F	1.98		1.91		1.93
HEATING CAPACITY @ -5F	5,500		6,400		8,100
COP @ -5F	1.74		1.62		1.6

SPECIFICATION NOTES:

1. Rated performances in cooling mode @ 80F/67F DB/WB Indoors and 95F/75F DB/WB Ambient
2. Rated performances in heating mode @ 70F/60F DB/WB Indoors and 47F/43F DB/WB Ambient
3. If the electric heat option is selected, the heat pump operation is disabled and electric heat enabled below -5°F (+/- 3 °F).
4. Units without electric heat will operate below -5F with derated performance. Performance below -5F has not been certified.
5. Electric heat is recommended in markets that may experience ambient temperatures below -5F.

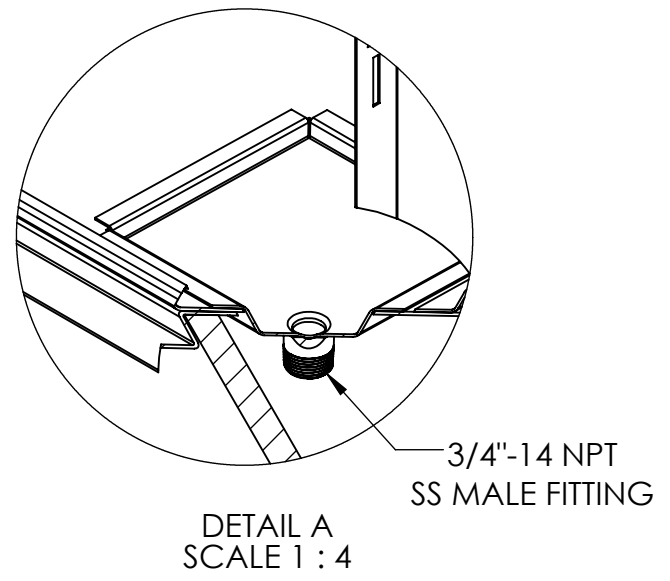
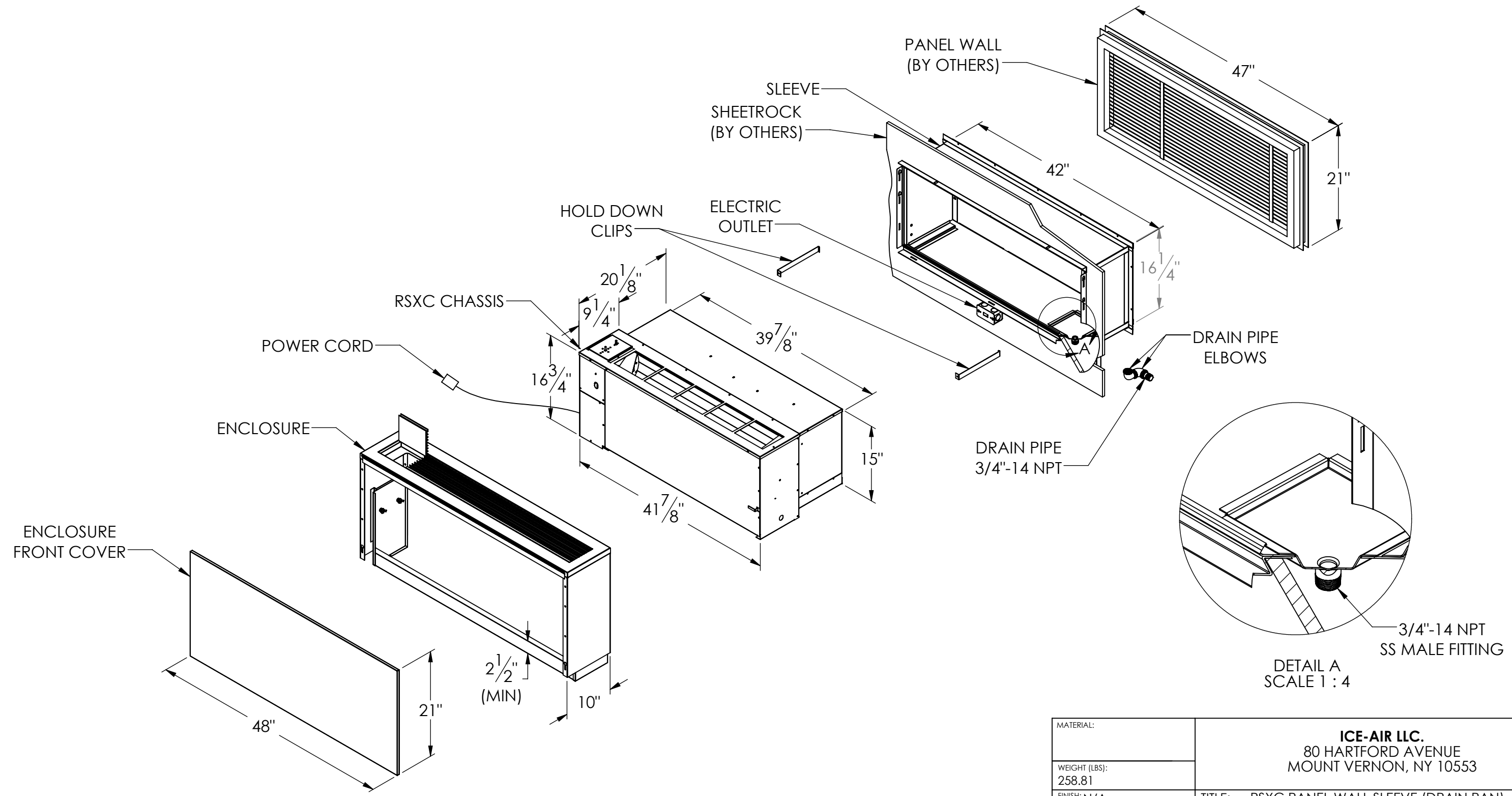
GENERAL NOTES:

- 1: For use as a complete assembly only. For replacement unit applications, consult Manufacturer.

CUSTOM NOTES



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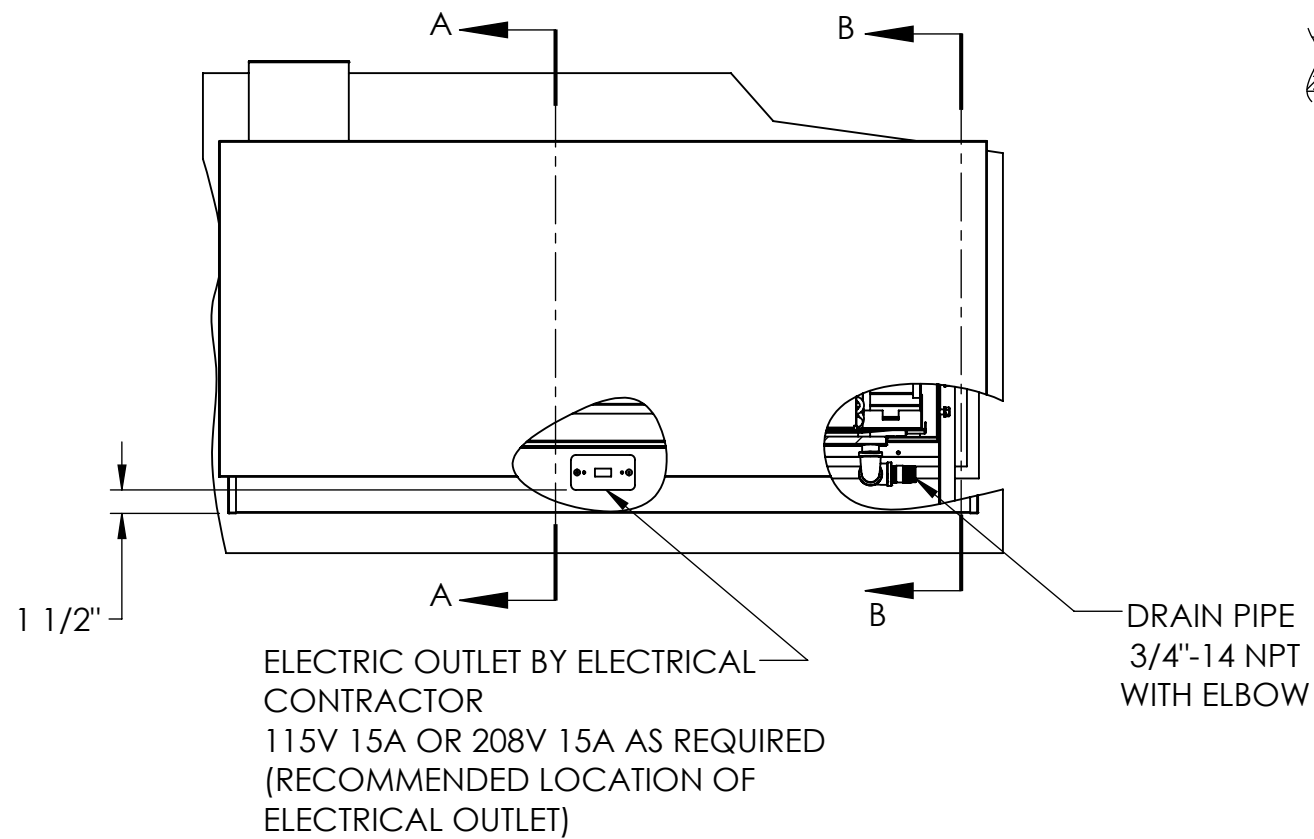
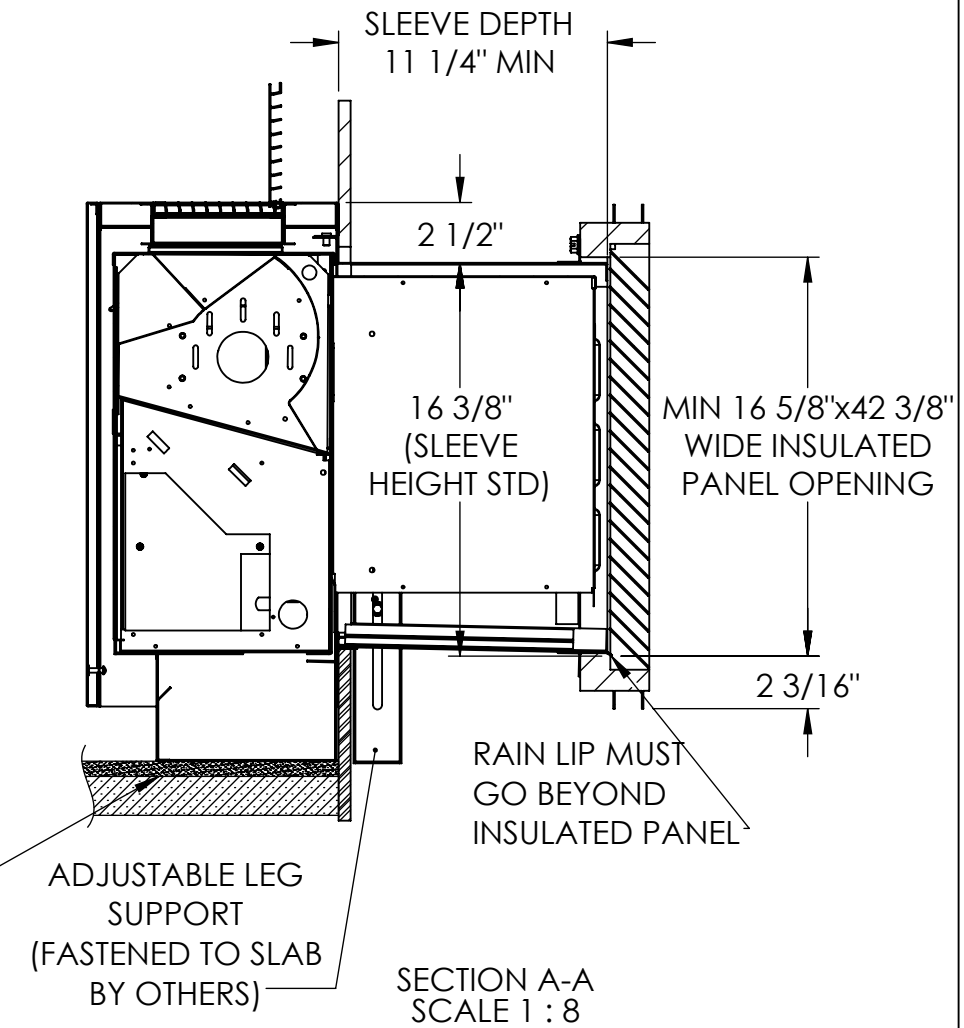
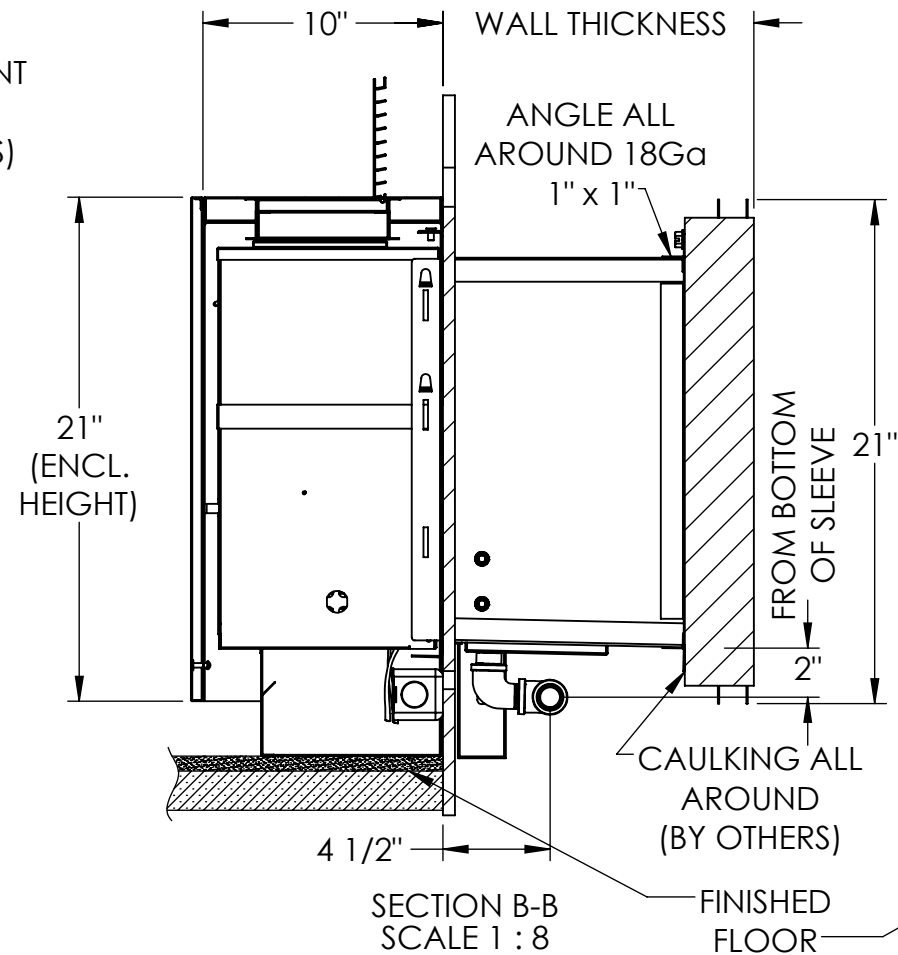
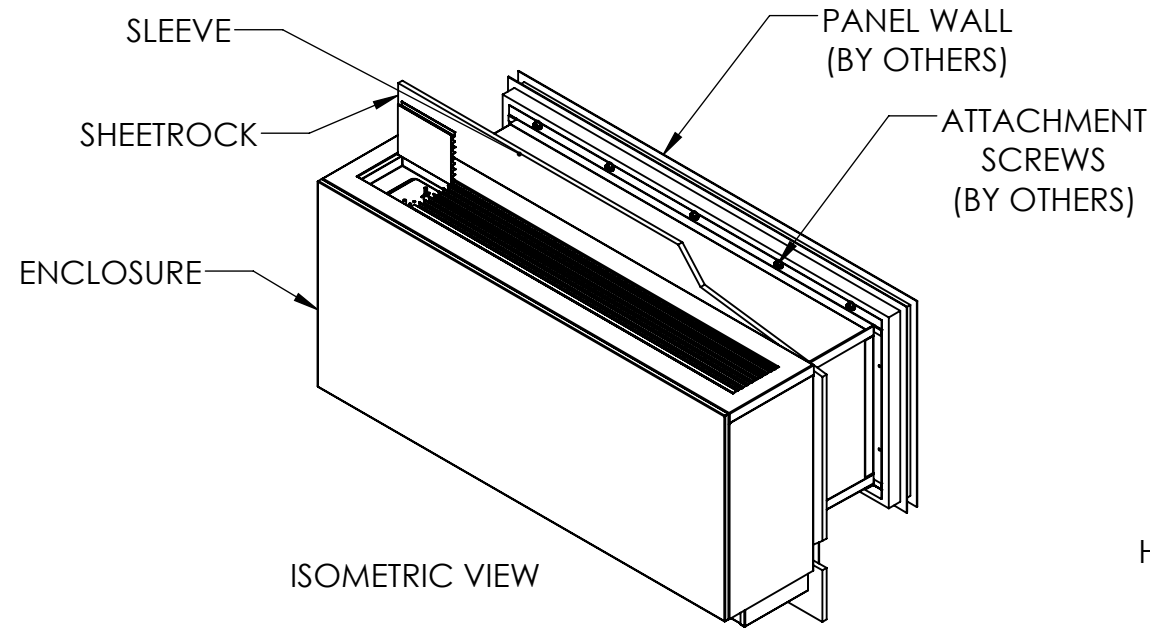


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MATERIAL:	ICE-AIR LLC. 80 HARTFORD AVENUE MOUNT VERNON, NY 10553					
WEIGHT (LBS): 258.81						
FINISH: N/A						
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/32 ANGULAR: MACH ± ° BEND ± 1° TWO PLACE DECIMAL ± .03 THREE PLACE DECIMAL ± .015	TITLE: RSXC PANEL WALL SLEEVE (DRAIN PAN), UNIT MOUNTED T-STAT MODEL BY: VP DATE: 07/30/20 DRAWING BY: DATE:	DWG. NO. RSXC LAYOUT	SIZE B	SCALE: NONE DO NOT SCALE DRAWING	SHEET 1 OF 1	REV A

RSXC PANEL WALL LAYOUT

REVISIONS			
REV.	DESCRIPTION	BY	DATE

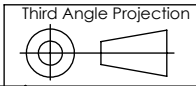


FRONT VIEW

- NOTES.
1. PROVIDED LOUVER WILL HAVE AN AREA OF 60% MINIMUM FREE AIR.
 2. 2 1/2" ABOVE TOP OF SLEEVE ON ROOMSIDE MUST BE KEPT CLEAR FOR MOUNTING OF ENCLOSURE.
 3. WALL SLEEVE DIMENSION IS (16 3/8"Hx42"W).
 4. ARCHITECT TO PROVIDE DETAILS FOR EACH FLOOR.

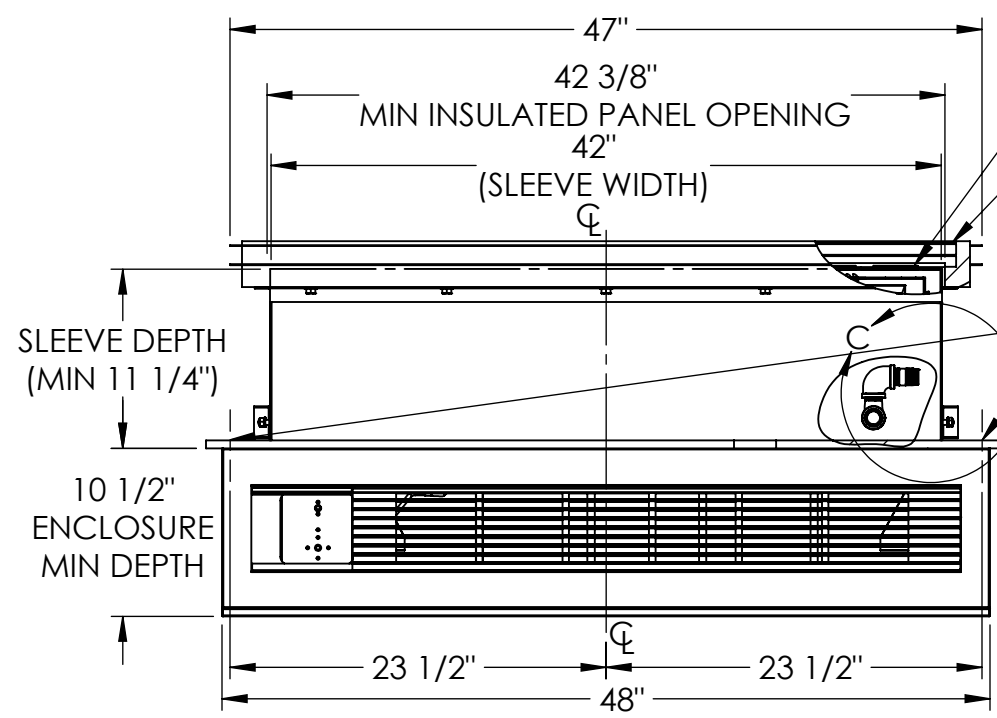
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SIZE B	SCALE: NONE DO NOT SCALE DRAWING	SHEET 1 OF 2	REV A

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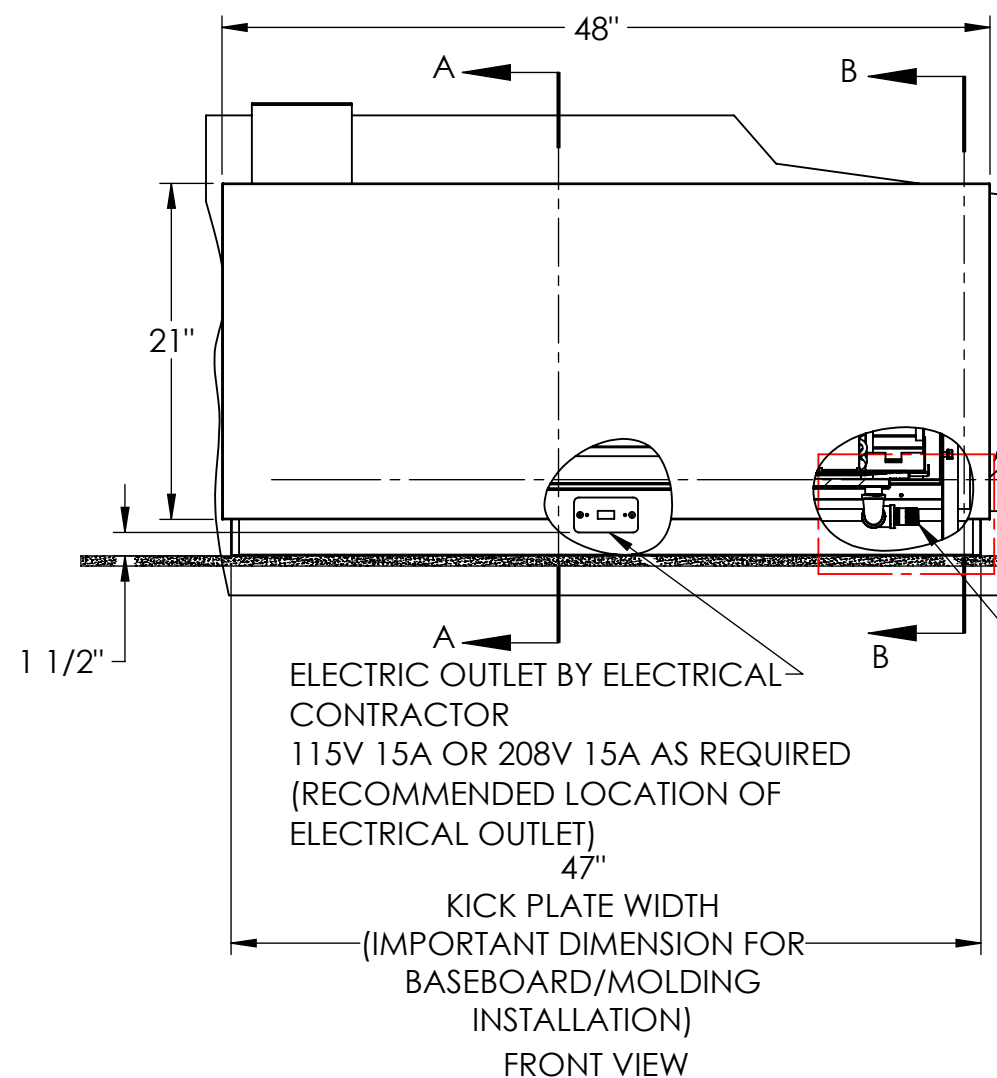


RSXC PANEL WALL LAYOUT

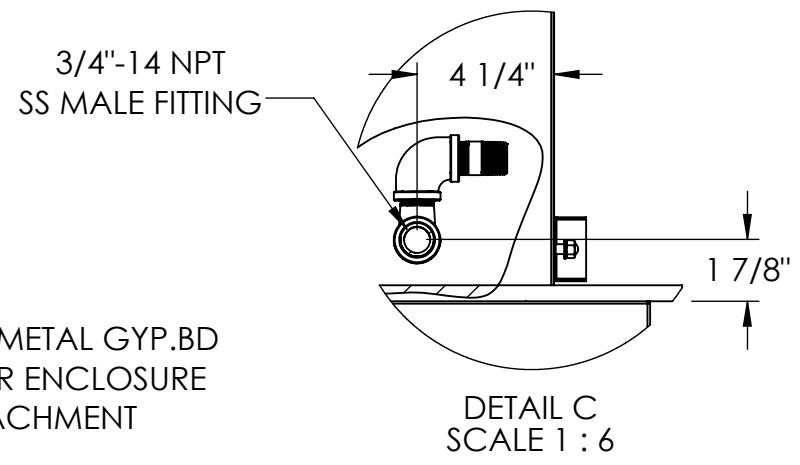
REVISIONS			
REV.	DESCRIPTION	BY	DATE



TOP VIEW



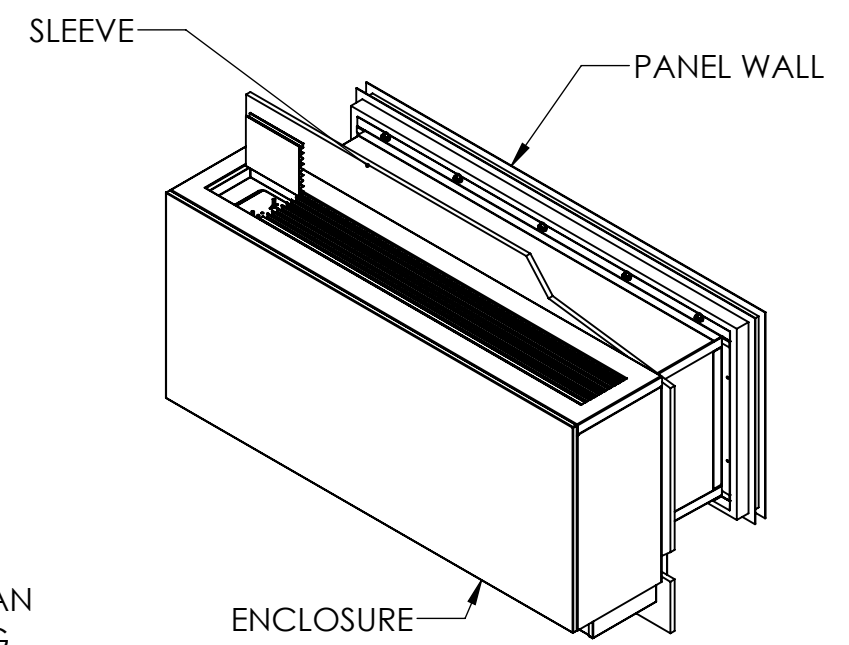
FRONT VIEW



DETAIL C
SCALE 1 : 6

NEMA 5-15	NEMA 6-15	NEMA 5-20	NEMA 6-20	NEMA 6-30
1.5kW TO 2.5kW		3.0kW TO 4.0kW		4.3kW TO 5.0kW

INSTALL THE ELECTRICAL OUTLET WHERE THE END-USER CAN EASILY CONNECT/DISCONNECT THE POWER CORD PLUG.



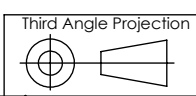
ISOMETRIC VIEW

NOTES.

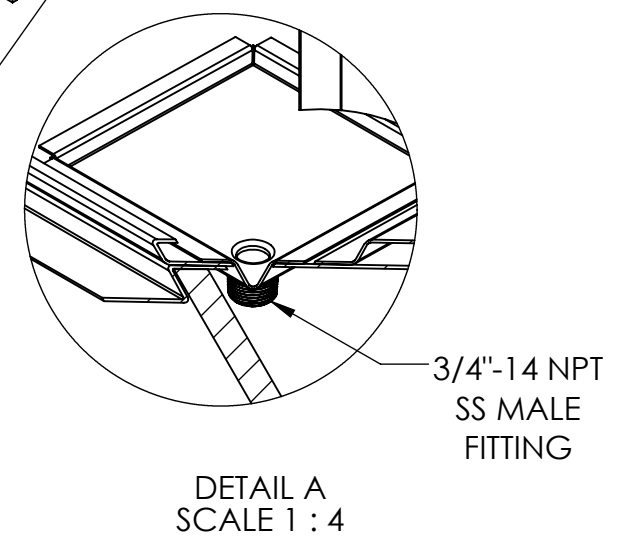
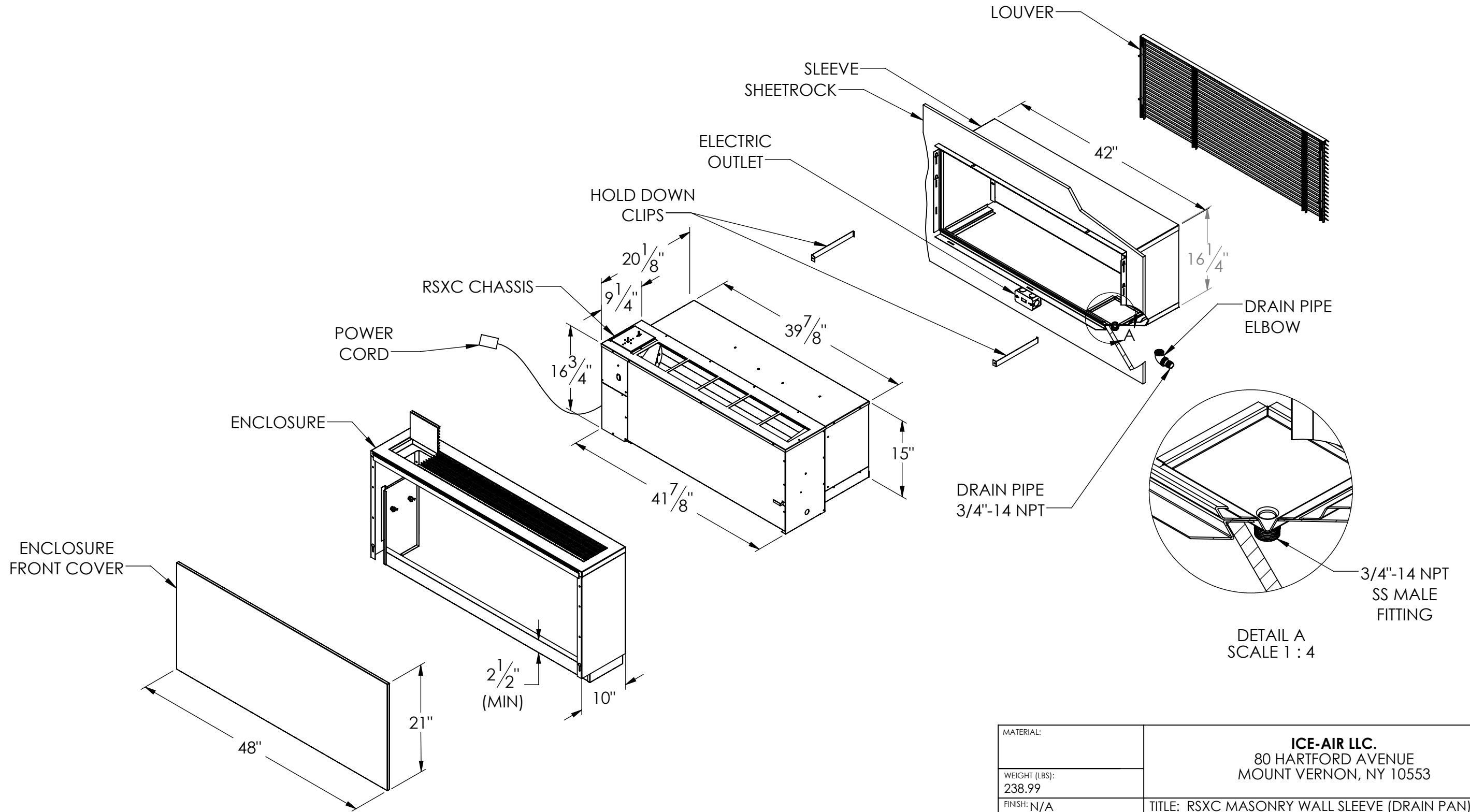
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 - "A" IS BOTTOM OF SLEEVE TO FINISHED FLOOR
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SIZE B	SCALE: NONE DO NOT SCALE DRAWING	SHEET 2 OF 2	REV A

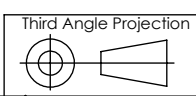
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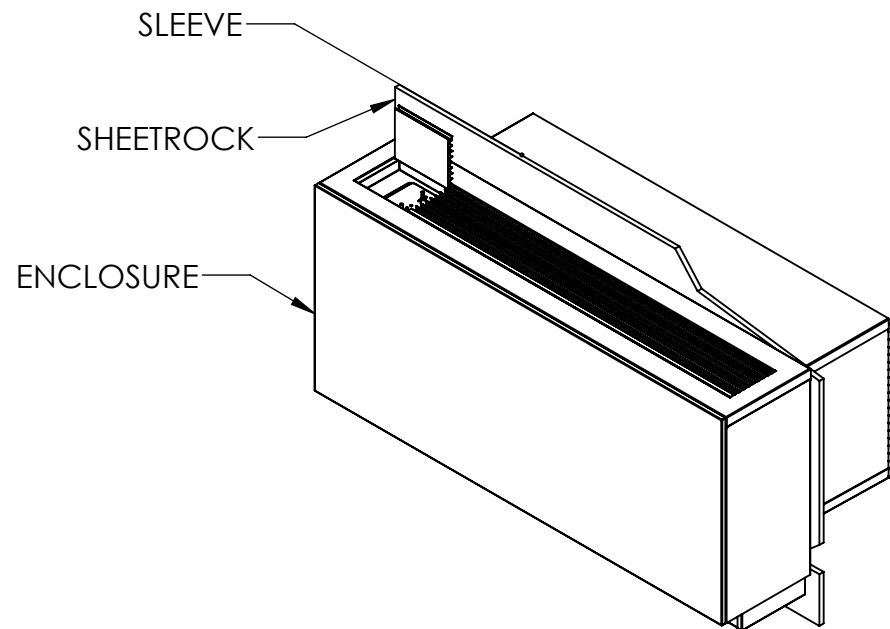


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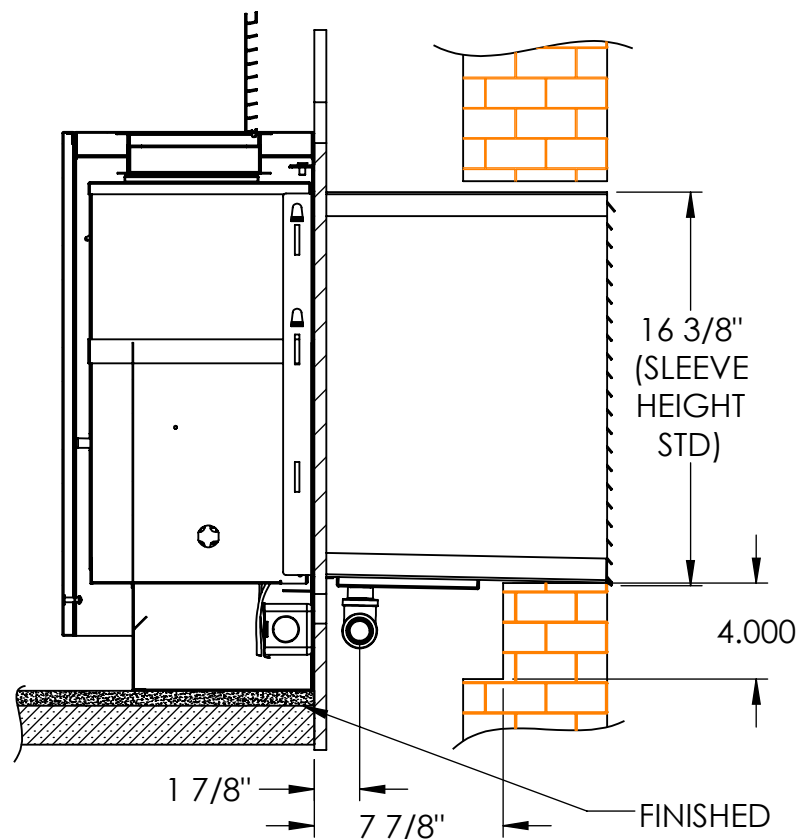


MATERIAL:		ICE-AIR LLC. 80 HARTFORD AVENUE MOUNT VERNON, NY 10553		
WEIGHT (LBS): 238.99				
FINISH: N/A		TITLE: RSXC MASONRY WALL SLEEVE (DRAIN PAN), UNIT MOUNTED T-STAT		
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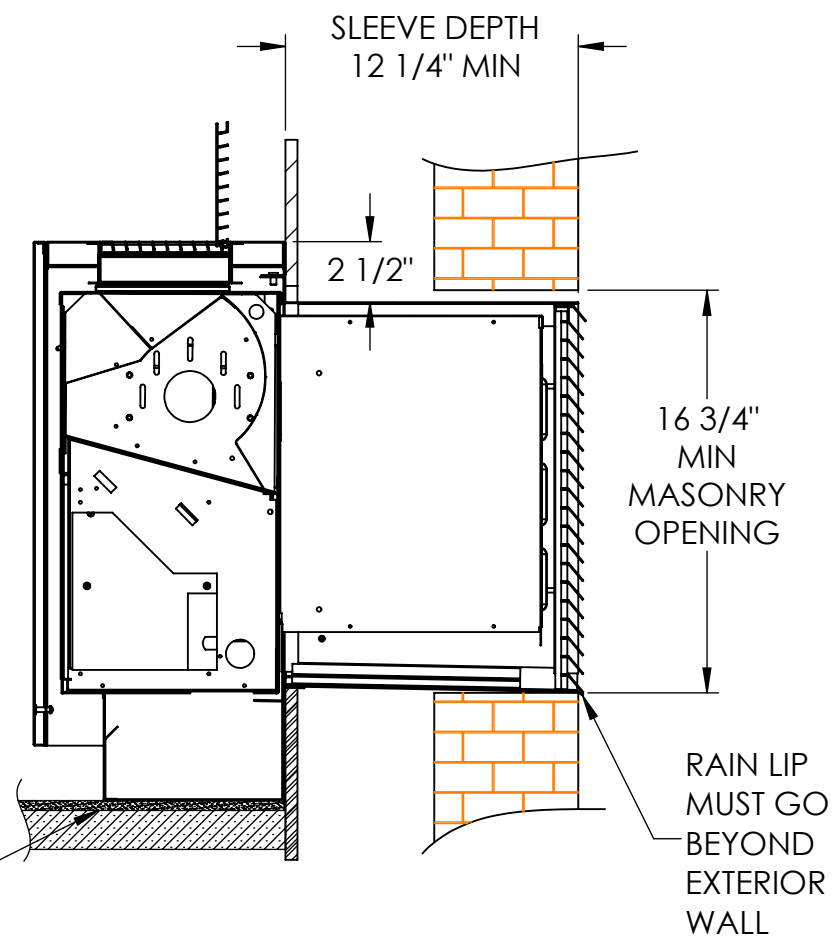
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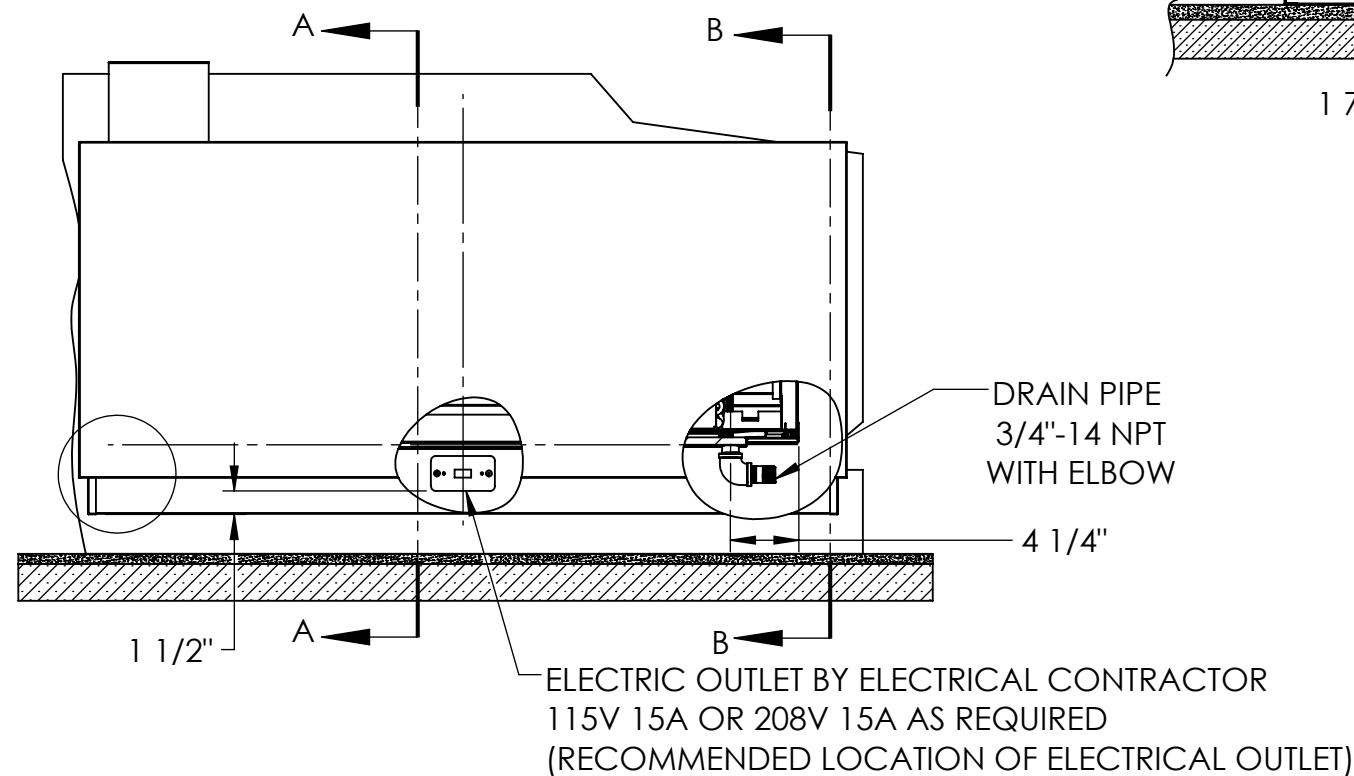
ISOMETRIC VIEW



SECTION B-B
SCALE 1 : 8



SECTION A-A
SCALE 1 : 8



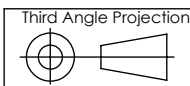
FRONT VIEW

NOTES.

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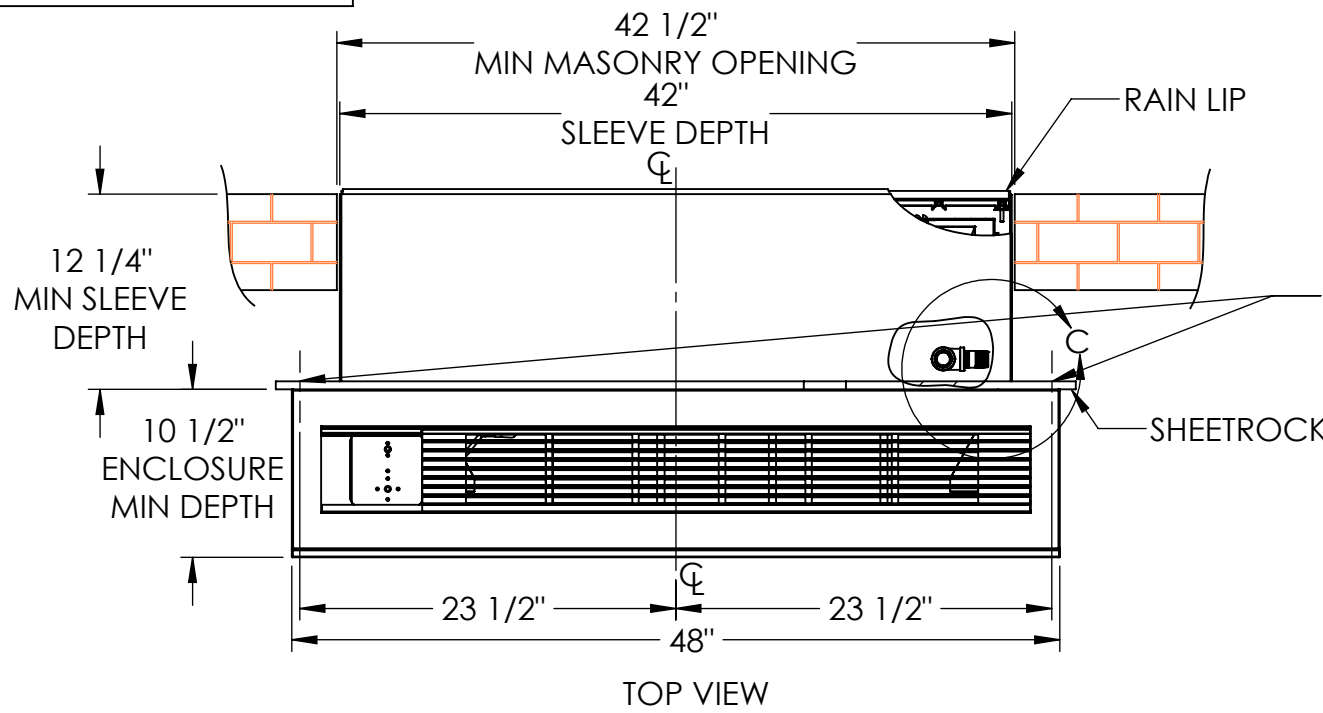
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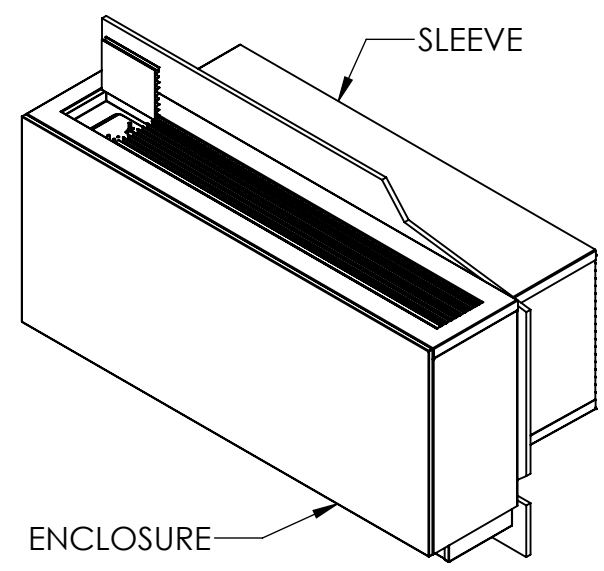
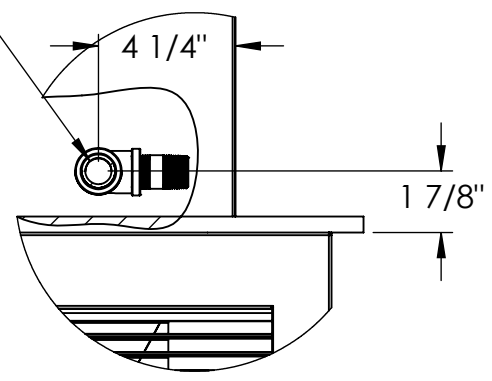
RSXC MASONRY WALL LAYOUT

REVISIONS			
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PROVIDE METAL GYP.BD STUDS FOR ENCLOSURE ATTACHMENT

3/4"-14 NPT SS MALE FITTING

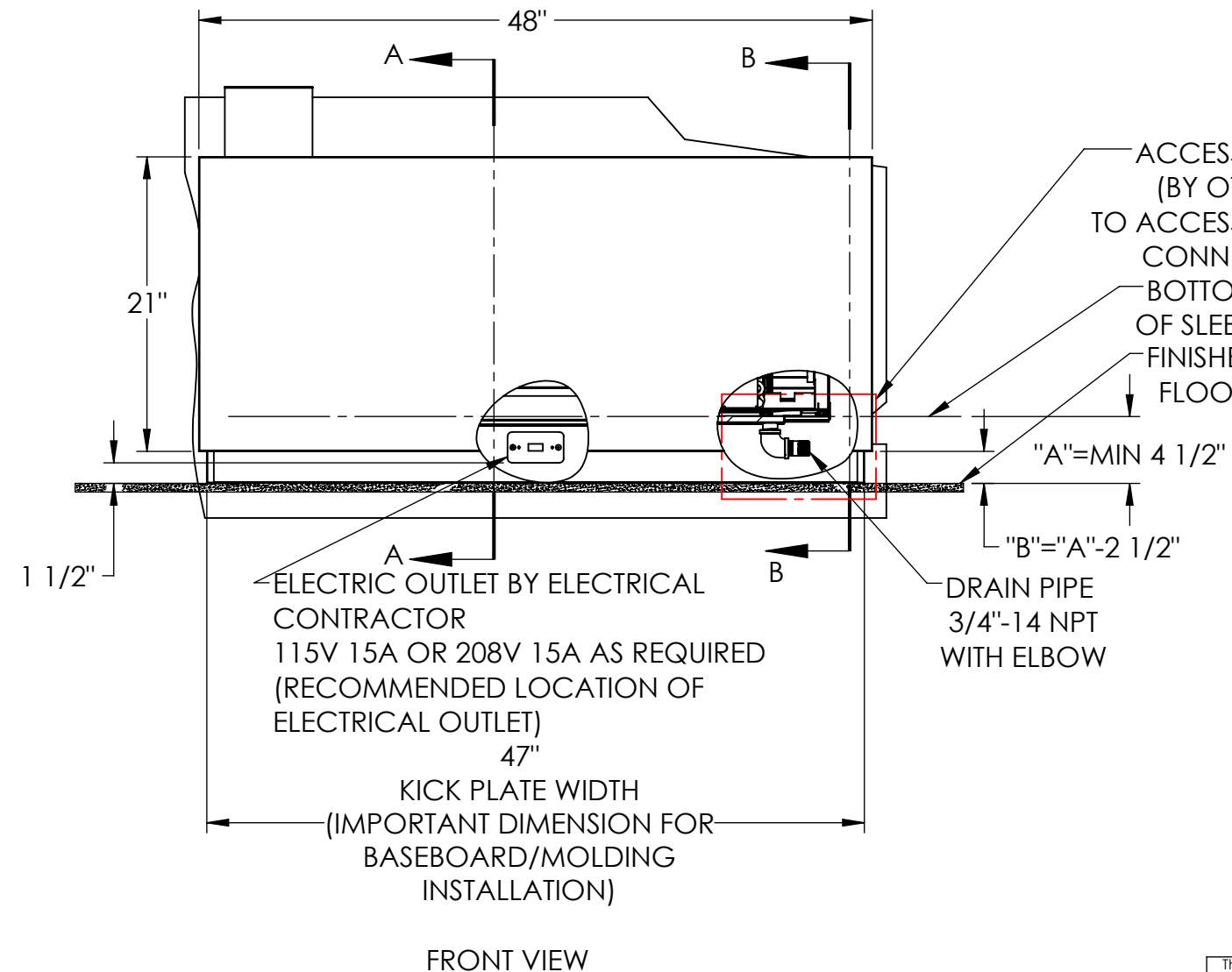


NEMA 5-15	NEMA 6-15	NEMA 5-20	NEMA 6-20	NEMA 6-30
1.5kW TO 2.5kW	3.0kW TO 4.0kW	4.3kW TO 5.0kW		

INSTALL THE ELECTRICAL OUTLET WHERE THE END-USER CAN EASILY CONNECT/DISCONNECT THE POWER CORD PLUG.

NOTES.

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 - "B" = "A" - 2 1/2"



ACCESS PANEL (BY OTHERS) TO ACCESS TO DRAIN CONNECTION

BOTTOM OF SLEEVE
FINISHED FLOOR

"A"=MIN 4 1/2"

"B"="A"-2 1/2"

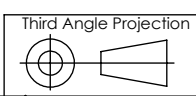
DRAIN PIPE 3/4"-14 NPT WITH ELBOW

ELECTRIC OUTLET BY ELECTRICAL CONTRACTOR 115V 15A OR 208V 15A AS REQUIRED (RECOMMENDED LOCATION OF ELECTRICAL OUTLET)

KICK PLATE WIDTH (IMPORTANT DIMENSION FOR BASEBOARD/MOLDING INSTALLATION)

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SIZE B	SCALE: NONE DO NOT SCALE DRAWING	SHEET 2 OF 2	

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PRODUCT SPECIFICATIONS
PACKAGED TERMINAL AIR CONDITIONER (PTAC)

ICE AIR HI SPEC™ UNITS
'RSXC' SERIES UNITS

1. Equipment: Provide "RSXC" Series Packaged Terminal Air Conditioners (PTACs), as manufactured by Ice Air, LLC.
2. Components: Air conditioner to consist of wall sleeve, exterior louver, heat pump/cooling chassis and room enclosure. Units to operate at 115 or 208 / 230 volt, single phase, 60 hertz circuits with 115 or 208 volt emergency standby power.
3. Wall Sleeves: Wall sleeve exterior dimensions to be 42" wide x 16" high (RSXC Series), to comply with US DOE requirements for new construction PTACs. Smaller dimension wall sleeves are not acceptable under DOE regulations. Wall sleeve to be fabricated of 18-gauge galvanized steel and to be shipped with a mechanically attached temporary cardboard filler panel at the exterior for weather protection. Cardboard filler panel to be removed prior to chassis and louver installation. Wall sleeve to have built-in pitch of at least ¼" and to be fabricated with an angled rain lip for proper drainage to the exterior of the building. Wall sleeve to include one ¾"-14 NPT Male Fitting for interior condensate line attachment. Wall sleeves for masonry locations to be factory fabricated to match the full wall depth at each location; wall sleeves with field-installed extension pieces are not acceptable. An optional Passive House wall sleeve is offered, Passive House wall sleeve must test and comply with Passive House pressure test standards.
4. Louvers: Exterior louver to be horizontal, extruded aluminum blade-type construction with clear anodized or painted Duranar finish (color must be specified). Louver to be supplied with stainless steel fastening hardware and must be capable of being installed from within the wall sleeve. Louvers at panel wall locations to be supplied by others. Louvers by others to have minimum 60% free area and to be approved by PTAC manufacturer.
5. Chassis: Chassis to be a self-contained, slide-in assembly consisting of a sealed refrigerant system, evaporator and condenser sections with separate Permanent Split Capacitor (PSC) motors (single motor units are not acceptable), unit mounted controls and line cord.
6. (Optional OITC chassis are available. The OITC version will increase the min sleeve depth from 11.25" to 13.25")

- 6.1. Chassis sheet metal parts to be manufactured entirely of 18 gauge and 20-gauge galvanized steel. Chassis base pan to be powder coated inside and out to prevent corrosion of sheet metal pan. Chassis to be manufactured with an outsized indoor section that mates with the wall sleeve interior flanges and creates a positive weather seal using neoprene gasketing, thereby preventing air and water infiltration. Chassis seal must be an integral part of unit construction and use of attached sealing angles or channels is not acceptable.
- 6.2. Refrigeration System: Sealed refrigerant system to consist of an enhanced vapor injection (EVI) variable speed compressor, copper tube / aluminum fin evaporator and condenser coils, refrigeration metering device consisting of Electronic Expansion Valve (EEV) and a capillary tube expansion system and interconnecting tubing. System to be factory charged and sealed and capable of operating in the cooling mode to an outdoor ambient temperature of 38°F. All units to be manufactured with R410A refrigerant.
- 6.3. Heat Pump System: Heat Pump operation using reversing valve to be factory charged and sealed and laboratory tested for heating operation down to ambient temperatures of -5°F (with theoretical heating operation down to -20°F). All units to be manufactured with R410A refrigerant. (Optional Back up electric heat available).
- 6.4. Evaporator Section: Evaporator motor and tangential blower wheel to be mounted above the evaporator coil. Tangential blower wheel to be directly driven by a multi-speed PSC motor with built-in thermal overload protector. Evaporator section to contain an integral stamped and powder coated steel drain pan, draining into a 3/4" i.d. drain hose. Evaporator coil to be aluminum fin, copper tube, rated up to 350 -psig pressure.
 - 6.4.1. Evaporator Condensate Disposal: Condensate to drain from the indoor base pan into the exterior galvanized steel condenser base pan through a 3/4" i.d. drain hose. Condensate to be drained into the interior section of wall sleeve and connected to a building drain.
- 6.5. Condenser Section: Condenser section to contain a separate PSC motor and plastic or metal propeller fan with an integral slinger ring. Condenser motor to cycle with EVI compressor and to run during the cooling and heating cycle. Condenser coil to be aluminum fin, copper tube, rated up to 350-psig pressure.

- 6.5.1. Condenser Frost Disposal: The condenser coil section shall be provided with a drain pan with integral resistance heater. Condensate from the defrost cycle shall be drained into the interior section of wall sleeve and connected to a building drain. The integral condenser drain pan heater shall operate during the defrost cycle only. Wall Sleeve drain connection is 3/4" MNPT.
- 6.6. Unit Controls: Unit controls to include a digital controller with integral electronic thermostat. Provide unit mounted seven-day programmable thermostat. Both Interior room and outdoor temperature sensors to be mounted on the evaporator coil and condenser coil to provide true temperature readings for antifreeze and defrost purposes.
- 6.7. Manual Outside Air: Provide manual outside air damper with chassis mounted actuator. (Optional motorized damper available).
7. Room Enclosure (Cabinet): Room enclosure to be flat top type and to be fabricated of 18-gauge galvanized paint grip furniture steel. Enclosure front cover to be fabricated from 20-gauge galvanized steel. Enclosure to be finished in (Antique White) (Arctic White) baked powder coat finish. Room enclosure to rest on the wall sleeve and fasten to the wall using the concealed flanges with clearance holes. Enclosure kick plate to be vertically adjustable.
8. Warranty and Code Compliance: Unit to be guaranteed free of defects in material and workmanship for one year from date of delivery. Units to be ETL listed for safety in the United States and Canada, to have New York City MEA and BEC approvals, to be in compliance with all local, state and federal energy efficiency and building codes and to be tested in accordance with current AHRI standards.