

## VRF PACKAGED TERMINAL AIR CONDITIONER (PTAC) CERTIFIED DRAWING

DWG. NO. **VRF PTAC Ext Low Submittal**  
 REV. -

PROJECT		DATE		BY		REVISIONS
PURCHASER		P.O. #		DATE		DESCRIPTION
ARCHITECT		SHIP DATE	SLEEVES			
ENGINEER			ENCLOSURE			
HVAC CONTR.			CHASSIS			
GEN. CONTR.						

DESIGNATION	MODEL NUMBER	QTY
A		
B		
C		
TOTAL		

### UNIT SPECIFICATIONS+

SERIES MODEL #	RSVF-S-XC	RSVF-M-XC	RSVF-L-XC
COOLING CAPACITY (RATED)*	9,300	12,900	16,400
EER (RATED)	12.2	11.2	10
COOLING CAPACITY RANGE*	6,300 - 11,800	6,500 - 14,900	7,300 - 18,000
COOLING WATTS	762	1,158	1,635
COOLING AMPERAGE	3.7	5.9	8.1
HEATING CAPACITY (RATED)**	10,200	12,200	17,400
COP (RATED)	3.6	3.16	3.03
HSPF (RATED)	9.6	9.5	9.0
HEATING WATTS	830	1,131	1,683
HEATING AMPERAGE	4.1	5.7	8.3
HEATING CAPACITY RANGE**	5,200 - 12,600	5,600 - 14,200	9,500 - 17,000
HEATING CAPACITY @ 10°F	6,600	7,700	11,600
HEATING CAPACITY @ -5°F	4,900	5,300	7,160
VOLTAGE	208	208	208
MCA	5.9	8.5	10.4
MOP	15	15	15

### GENERAL NOTES:

1: NEW CONSTRUCTION USE ONLY.

### CUSTOM NOTES

1: SUPPLEMENTAL ELECTRIC HEATING IS OPTIONAL.

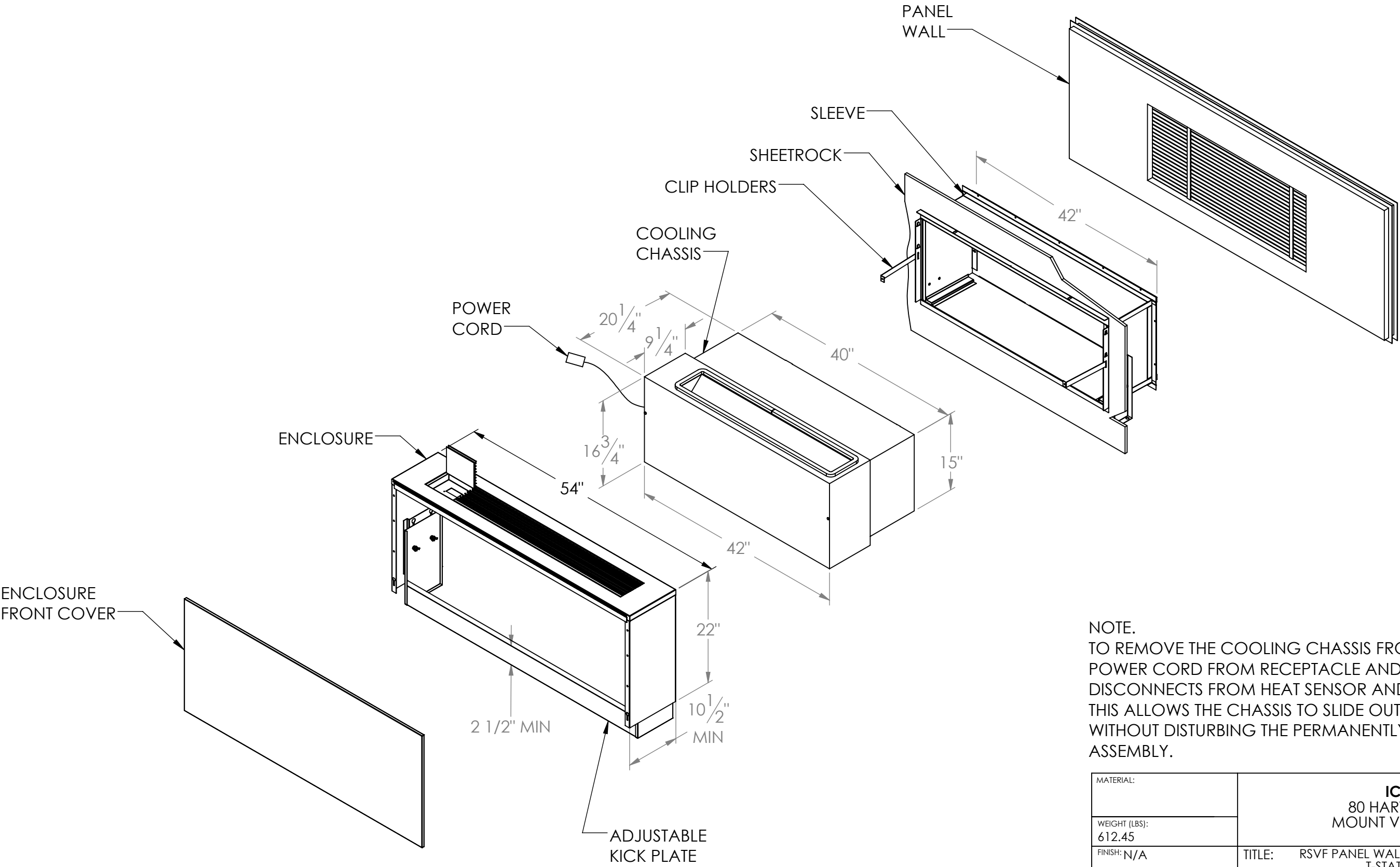
### SPECIFICATION NOTES:

- \* = BTUH @ 80°F DB/67 °F WB INDOORS;  
95°F DB/75 °F WB OUTDOORS.
- \*\* = BTUH @ 70°F DB/60°F WB INDOORS;  
47°F DB/43°F WB OUTDOORS.
- UNIT USES ENHANCED VAPOR INJECTION VARIABLE  
SPEED COMPRESSOR.
- HEATING @ 10°F IS FOR NEW YORK STATE DESIGN CONDITION.



RSVF SLEEVE LAYOUT

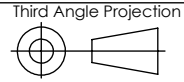
REVISIONS			
REV.	DESCRIPTION	BY	DATE



NOTE.  
TO REMOVE THE COOLING CHASSIS FROM SLEEVE, DISCONNECT POWER CORD FROM RECEPTACLE AND SEPARATE QUICK DISCONNECTS FROM HEAT SENSOR AND MOTORIZED VALE. THIS ALLOWS THE CHASSIS TO SLIDE OUT OF THE WALL SLEEVE WITHOUT DISTURBING THE PERMANENTLY INSTALLED HEATING ASSEMBLY.

MATERIAL:	ICE-AIR LLC. 80 HARTFORD AVENUE MOUNT VERNON, NY 10553				
WEIGHT (LBS): 612.45					
FINISH: N/A	TITLE: RSVF PANEL WALL SLEEVE, ENCLOSURE MOUNTED T-STAT, HEAT PUMP-EL.HEAT				
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/32 ANGULAR: MACH ± ° BEND ± 1 ° TWO PLACE DECIMAL ± .03 THREE PLACE DECIMAL ± .015	MODEL BY: JL		DATE 07/14/19		DWG. NO.
	DRAWING BY:		DATE:		RSVF SLEEVE LAYOUT
	SIZE B	SCALE: NONE DO NOT SCALE DRAWING		SHEET 1 OF 1	REV

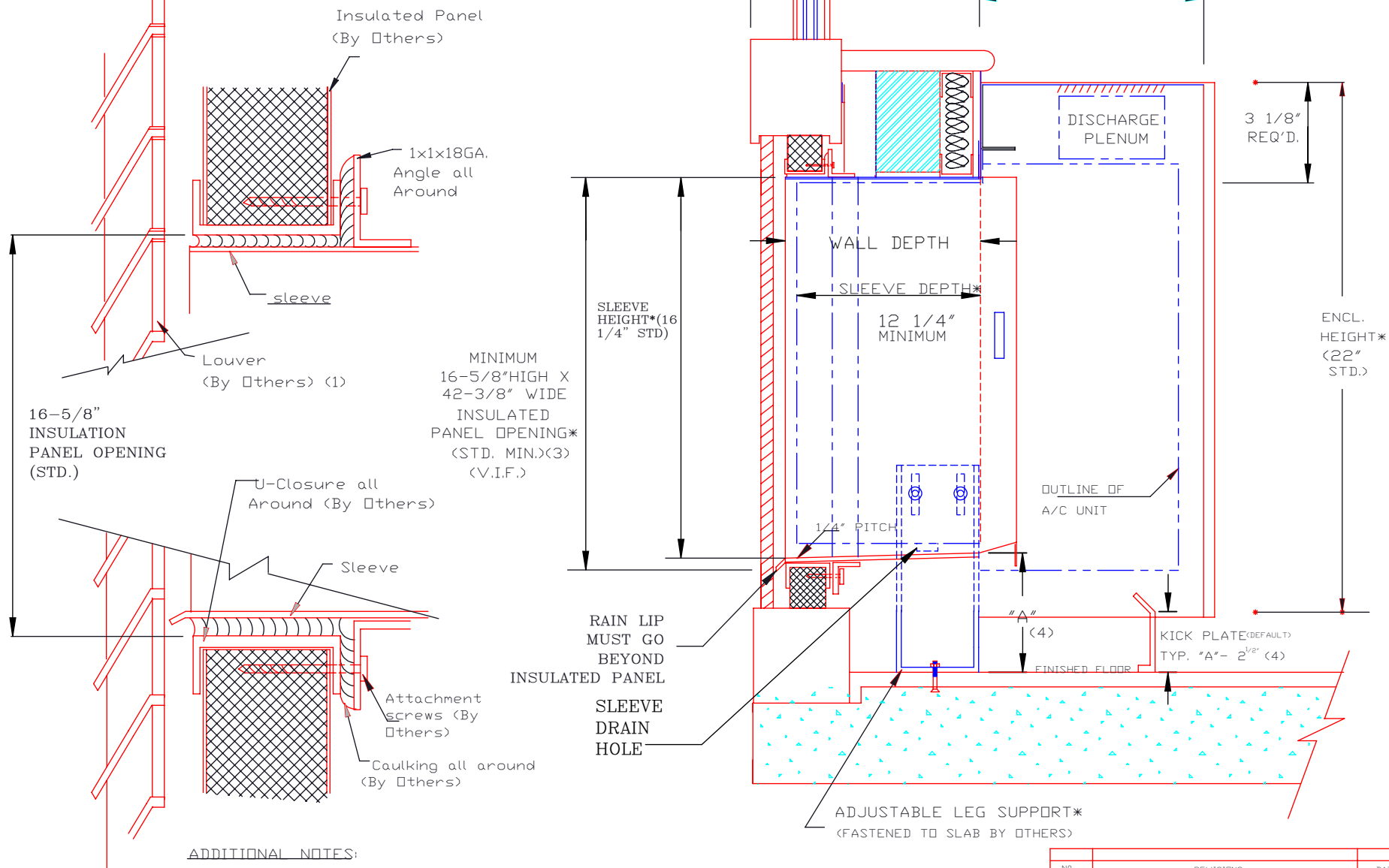
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\* ARCHITECT TO PROVIDE DETAILS FOR EACH FLOOR

NOTE (1):

PROVIDED LOUVER WILL HAVE AN AREA OF  
60% MINIMUM FREE AIR



ADDITIONAL NOTES:

(3) WALL SLEEVE DIMENSION IS (RSNU) 16"-1/4 Hx42" W

(4) WHEN BOTTOM OF SLEEVE TO FINISHED FLOOR ("A")  
MEASURES BETWEEN 2 3/4 TO 4 1/2 .  
THIS NECESSITATES ORDERING A FRONT INTAKE  
ENCLOSURE AND CHASSIS AS OPPOSED TO A  
BOTTOM INTAKE.

NO.	REVISIONS	DATE	BY
ICE-AIR LLC.			
RSVF HEAT PUMP			
TYP. PTAC @ PANEL WALL			
SCALE	N.T.S.	DR. BY	J.L.
DATE	04/13/20	DRG. NO.	REV.

PRODUCT SPECIFICATIONS  
PACKAGED TERMINAL AIR CONDITIONER (PTAC)

ICE AIR HI SPEC™ UNITS  
'RSVF' SERIES UNITS

1. Equipment: Provide "RSVF" 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 208 / 230 volt, single phase, 60 hertz circuits with 208 volt emergency standby power.
3. Wall Sleeves: Wall sleeve exterior dimensions to be 42" wide x 16" high (RSVF Series), to comply with US DOE requirements for new construction PTACs. Wall sleeves to be insulated with neoprene type insulation on interior facings. Smaller dimension wall sleeves are not acceptable under DOE regulations. Wall sleeve to be factory fabricated of 18 gauge galvanized steel and to be shipped with a mechanically-attached temporary coated 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 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.
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.
5. Chassis: Cooling 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.
- 5ai. Refrigeration System: Sealed refrigerant system to consist of an enhanced vapor injection (EVI) compressor, copper tube / aluminum fin evaporator and condenser coils, refrigeration metering device consisting of Electronic Expansion Valve (EEV) and/or 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 Green refrigerant.

- 5aii. Heat Pump System: Heat Pump operation using reverse heating cycle. System to be factory charged and sealed and capable of operating in the heating mode to an outdoor ambient temperature of -5°F. All units to be manufactured with R410A Green refrigerant.
- 5b. Evaporator Section: Evaporator motor and tangential blower wheel to be mounted above the evaporator coil. Tangential blower wheel to be fabricated from aluminum and 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 two 3/4" i.d. drain hoses (single drain units are not acceptable).
- 5c. 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 cycle only.
- 5d. Condensate Disposal: Condensate to drain from the indoor base pan into the exterior galvanized steel condenser base pan through two 3/4" i.d. drain hoses. Condensate disposal to be accomplished by the entrainment of water particles in the condenser air stream and evaporation upon the hot condenser coil. Building condensate drain lines are to be required for heating season to drain any defrosting water.
- 5e. Chassis Sheet Metal: 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 crushable pressure-sensitive foam tape, 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.
- 5f. 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.
- 5g. Manual Outside Air (Optional): Provide manual outside air damper with chassis mounted actuator.

6. Room Enclosure (Cabinet): Room enclosure to be (flat top) type and to be fabricated of 18 gauge galvaneal paint grip furniture steel. Enclosure front cover to be fabricated from 20 gauge galvaneal steel and to be removable without the use of tools. Enclosure to be finished in (Antique White) (Arctic White) baked powder coat finish. Room enclosure to mount to wall sleeve. Provide concealed flanges with clearance holes as an alternate means of enclosure attachment by fastening directly to the interior wall. Enclosure kick plate to be vertically adjustable.
7. 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 ARI standards.