

## SINGLE PACKAGE A/C / HEAT PUMP (SPHP) CERTIFIED DRAWING

DWG. NO.  
**SPAC-SPHP30**  
REV. - 01

PROJECT	DATE	2/14/19	BY	JL	REVISIONS	
PURCHASER	P.O. #		QTY	DATE	BY	DESCRIPTION
ARCHITECT	SHIP DATE	ACCESS PANEL				
ENGINEER		WALL PLENUM				
HVAC CONTR.		LOUVER				
GEN. CONTR.		CHASSIS				

DESIGNATION	MODEL NUMBER	QTY	ACCESS PANEL		WALL PLENUM		LOUVER		ELECTRIC HEAT		DIGITAL THERMOSTAT					
			STD	SPCL	STD	SPCL	STD	SPCL			YES	NO	YES	NO	YES	NO
TOTAL																

### UNIT SPECIFICATIONS+

#### GENERAL NOTES:

- 1: WALL PLENUM IS #18 GAUGE GALVANIZED STEEL.
- 2: WALL PLENUM DEPTH TO BE SPECIFIED BY CONTRACTOR.
- 3: WALL PLENUM OPENING TO BE 1.125" LARGER THAN CHASSIS

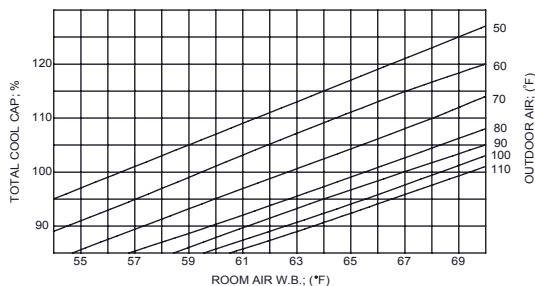
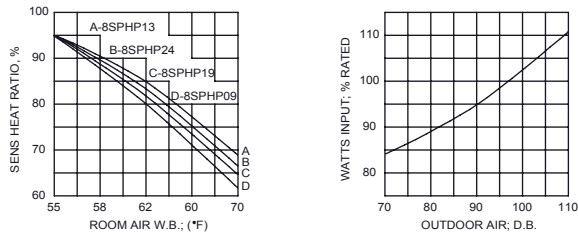
SERIES MODEL #	8SPHP09	8SPHP12	8SPHP15	8SPHP18	8SPHP24	8SPHP30
COOLING CAPACITY*	9,000	11,200	14,300	16,500	22,700	26,400
SENSIBLE CAPACITY	6,750	8,400	10,725	12,375	17,025	19,500
EER	10.2	10.2	10	10	10	10
COOLING WATTS	882	1098	1430	1650	2270	2630
COOLING AMP	4.4	5.5	7.4	8.8	11.3	13
HEATING CAPACITY	8,200	10,700	13,500	15,500	20,250	22,800
HEATING COP	3.6	3.3	3.2	3.1	3.0	3.0
HEATING WATTS	810	1045	1350	1545	1950	2175
HEATING AMP	3.9	5.0	6.5	7.4	9.4	10.9
ELECTRIC HEAT MAX.	2.5	3.5	3.5	3.5	5	5
VOLTAGE	208	208	208	208	208	208
MAX. ESP (INDOOR)	0.3"	0.3"	0.3"	0.3"	0.3"	0.3"
MCA	16.4	17.3	18.2	21.2	25.2	27.2
MAX FUSE	20	20	20	25	30	35
CHASSIS WEIGHT	165	176	185	200	225	265

#### CUSTOM NOTES:

- 1: DISCONNECT SWITCH
- 2: WALL MOUNTED DIGITAL THERMOSTAT
- 3: DRAWING SHOWS OPTIONAL FRESH AIR MODULE, NORMALLY NOT INCLUDED

### PERFORMANCE DATA

#### COOLING CAPACITY CORRECTION FACTORS

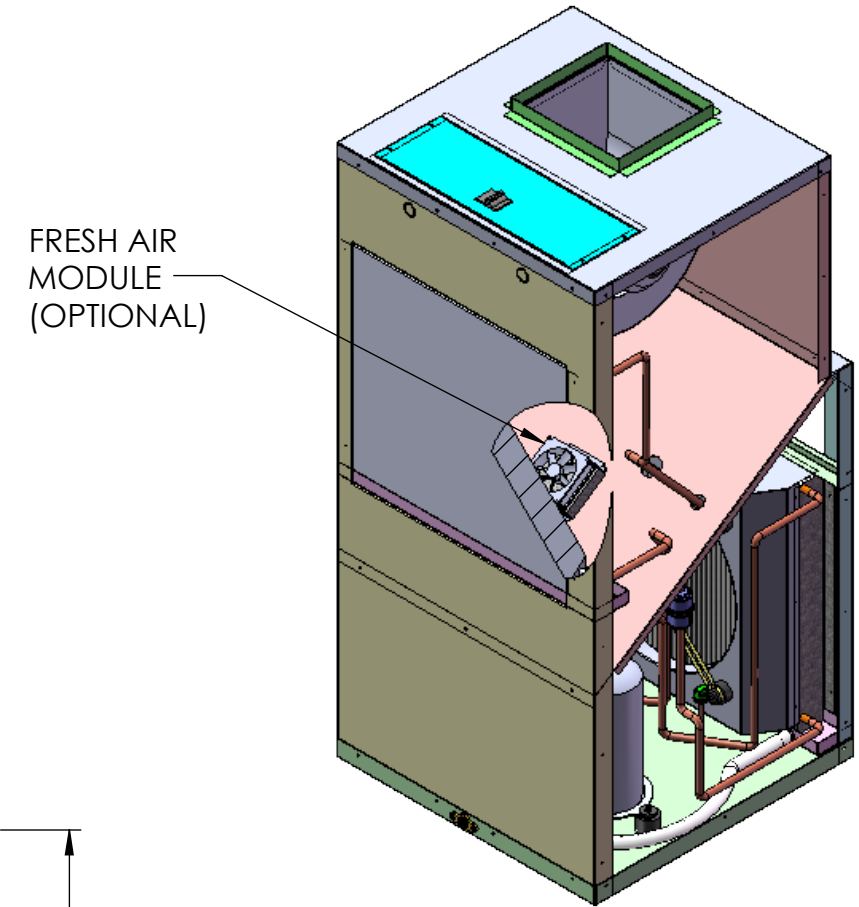
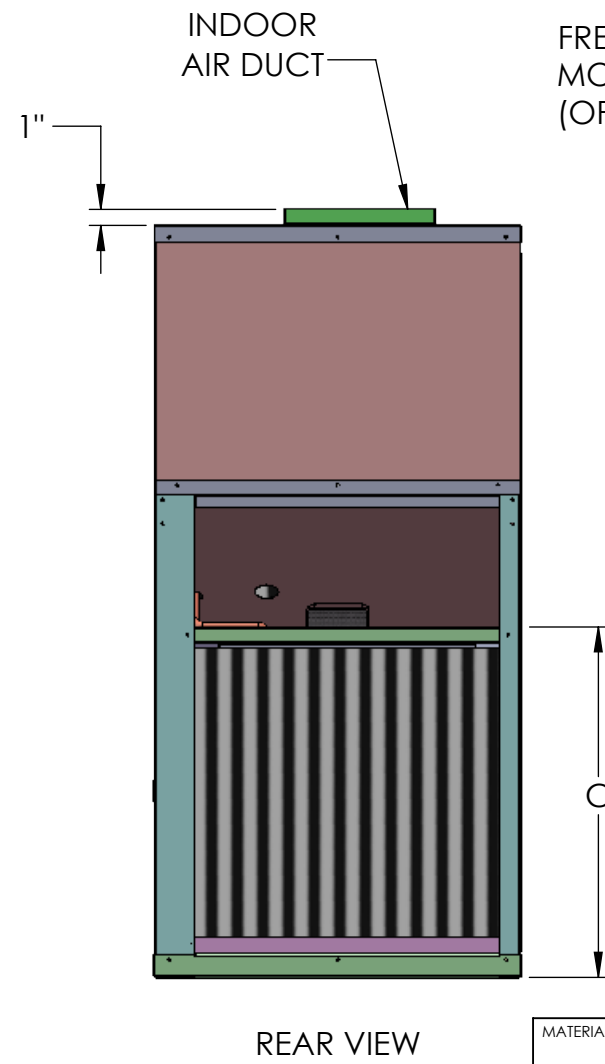
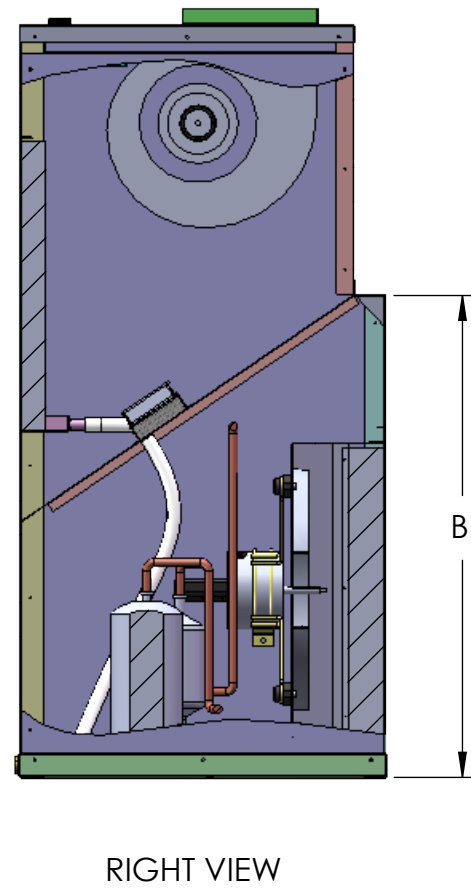
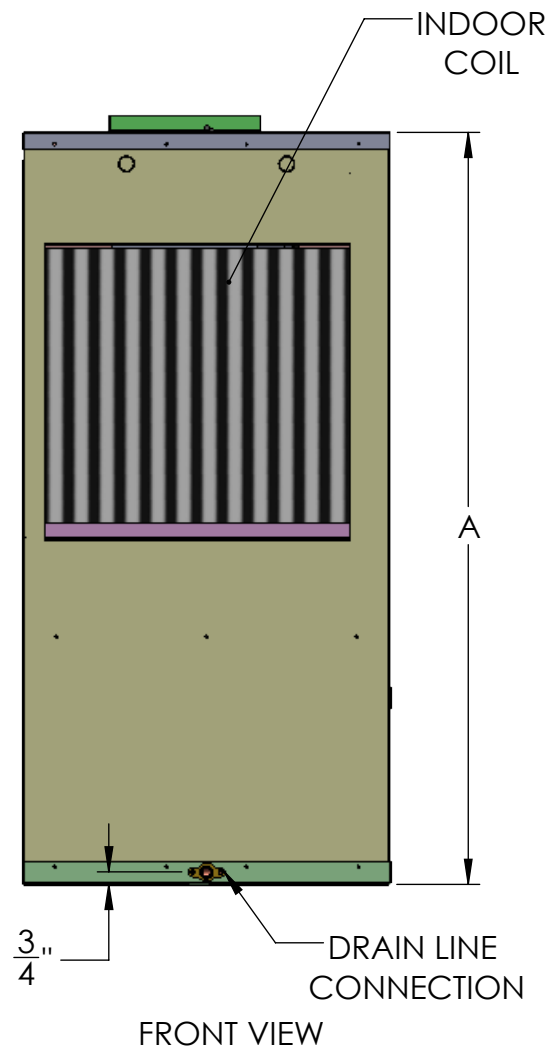
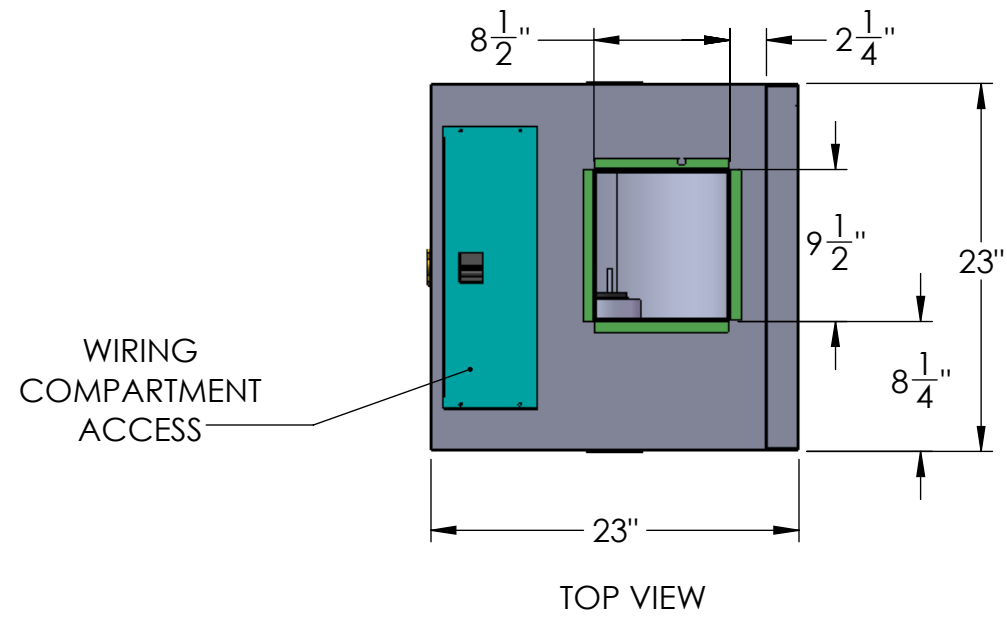


#### SPECIFICATION NOTES:

- 1: \* = BTUH @ 95°F. DB/75 °F. WB OUTDOORS; 80 °F. DB/67 °F. DB INDOORS.
- 2: \*\* = BTUH @ 47°F. DB/43 °F. WB OUTDOORS; 70 °F. DB/60 °F. DB INDOORS.
- 3: FOR CAPACITIES AT CONDITIONS OTHER THAN THOSE SHOWN IN NOTES 1-2 ABOVE USE GRAPHICS BELOW.

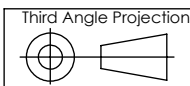
REVISIONS			
REV.	DESCRIPTION	BY	DATE

Unit Size	A	B	C
09,12,15, 18,24	47	30.13	22
30	52	40	36.25

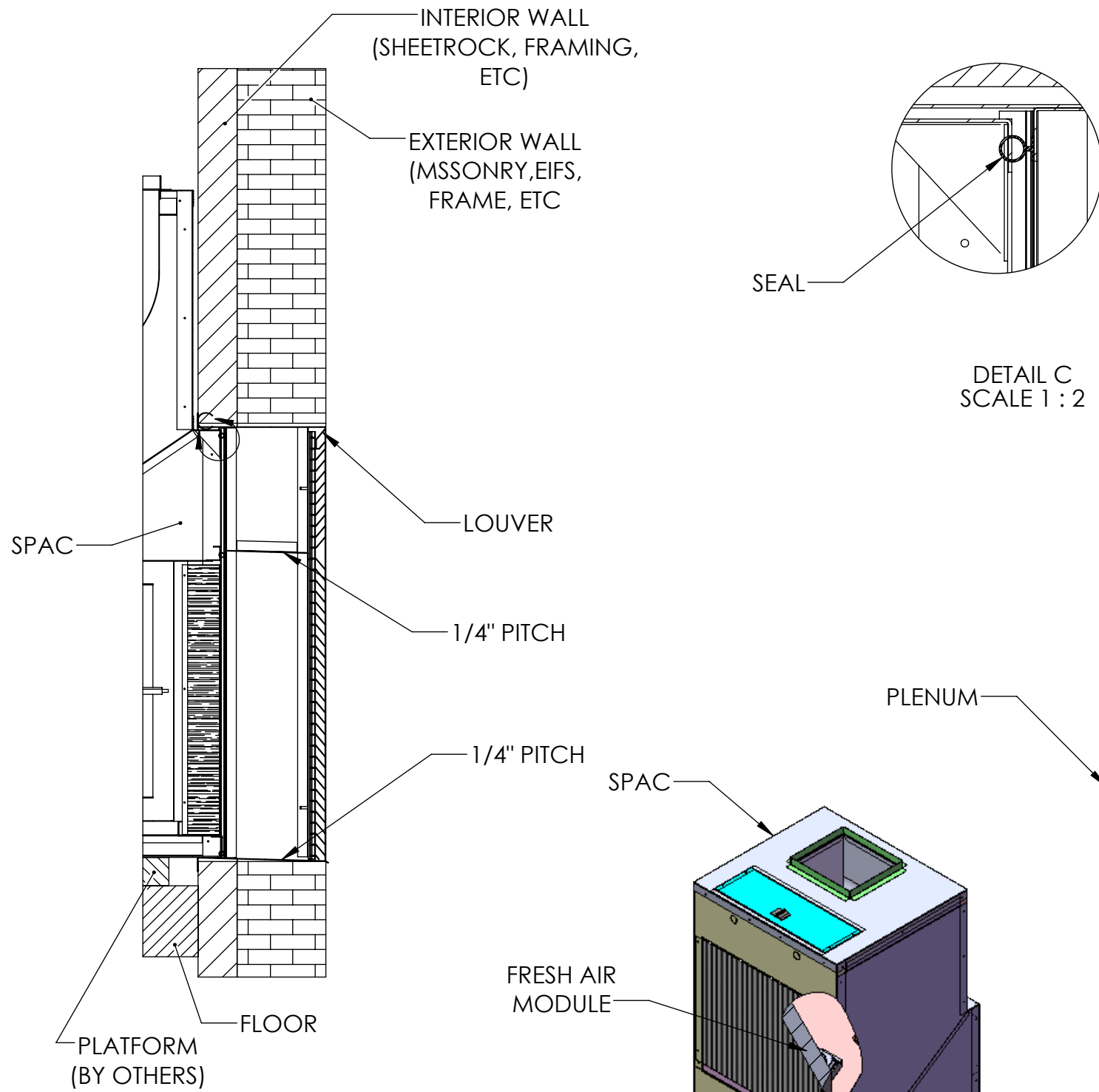


MATERIAL:	<b>ICE-AIR LLC.</b> 80 HARTFORD AVENUE MOUNT VERNON, NY 10553		
WEIGHT (LBS): 156.91			
FINISH: N/A	TITLE: SPAC NEW DESIGN		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/32 ANGULAR: MACH ± ° BEND ± 1° TWO PLACE DECIMAL ± .03 THREE PLACE DECIMAL ± .015	MODEL BY: VP	DATE: 07/20/18	DWG. NO.
	DRAWING BY: -	DATE: -	SAB-10287-02-RECTANGLE
SIZE <b>B</b>	SCALE: NONE DO NOT SCALE DRAWING	SHEET 1 OF 2	REV <b>C</b>

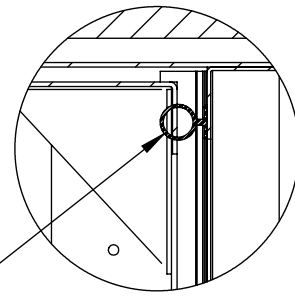
**PROPRIETARY AND CONFIDENTIAL**  
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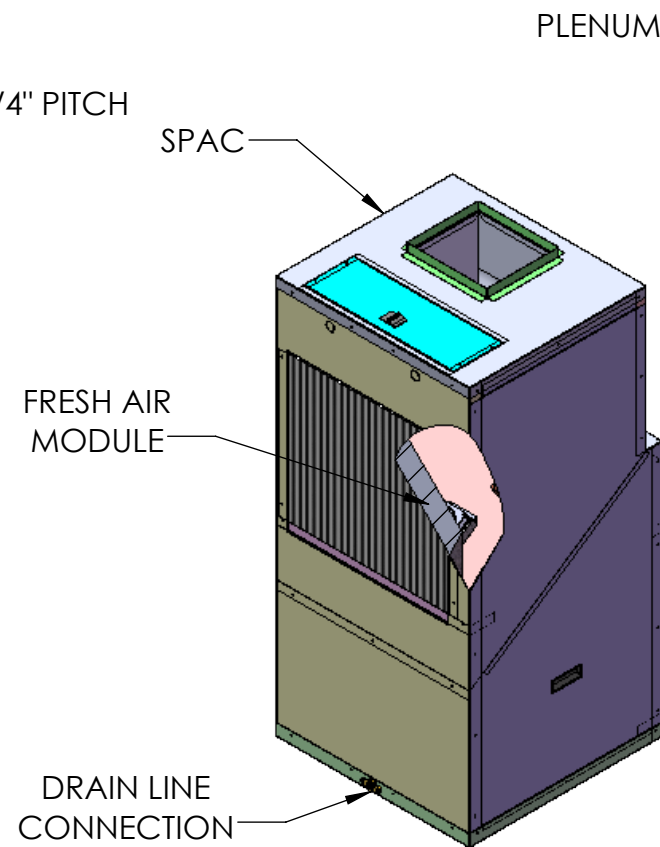
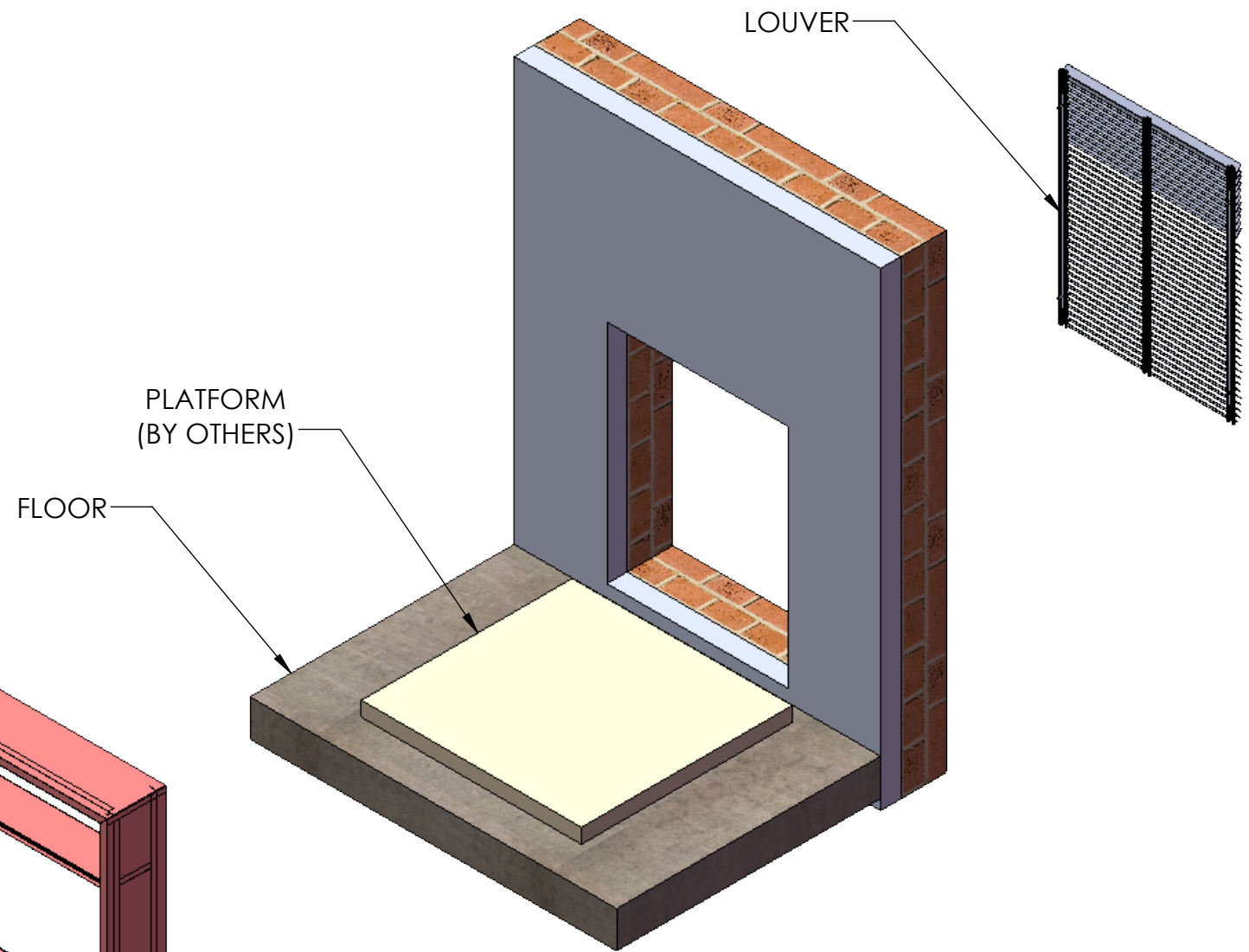
REVISIONS			
REV.	DESCRIPTION	BY	DATE



VERTICAL SECTION  
SCALE 1 : 10



DETAIL C  
SCALE 1 : 2

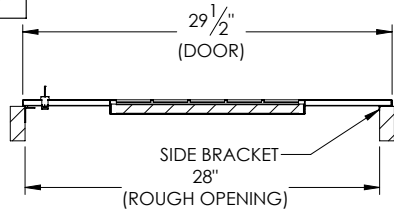


NOTE.  
PLENUM DEPTH DETERMINED BY WALL THICKNESS.

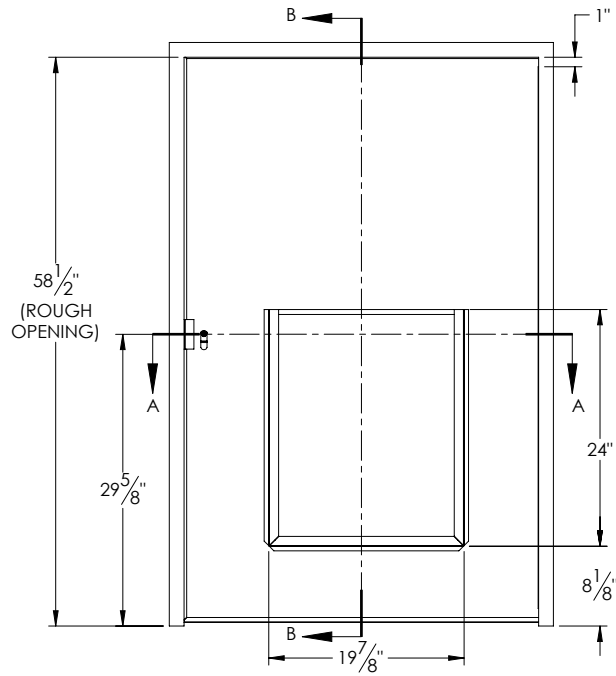
MATERIAL:	<b>ICE-AIR LLC.</b> 80 HARTFORD AVENUE MOUNT VERNON, NY 10553			
WEIGHT (LBS): 1414.30				
FINISH: N/A	TITLE: SPAC NEW DESIGN LAYOUT	MODEL BY: VP	DATE: 07/27/18	DWG. NO.
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/32 ANGULAR: MACH ± ° BEND ± 1° TWO PLACE DECIMAL ± .03 THREE PLACE DECIMAL ± .015	DRAWING BY: -	DATE: -	SAB-10305-02	
Third Angle Projection 	PROPRIETARY AND CONFIDENTIAL This drawing is the intellectual property of Ice Air, LLC and consists of confidential data belonging solely to Ice Air, LLC. The sharing of this data with you does not constitute a license to share this data with any third party, which is strictly prohibited without Ice Air's prior written consent.	SIZE <b>B</b>	SCALE: NONE DO NOT SCALE DRAWING	SHEET 2 OF 2

WEB-8860-VTAC-3(APP)

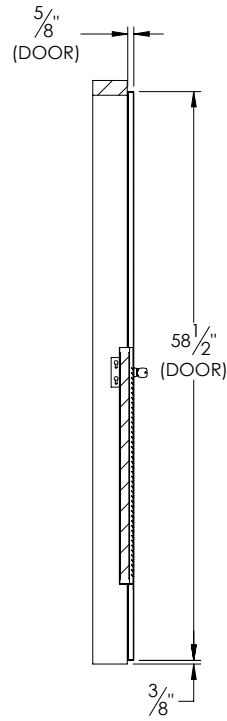
REVISIONS			
REV.	DESCRIPTION	BY	DATE



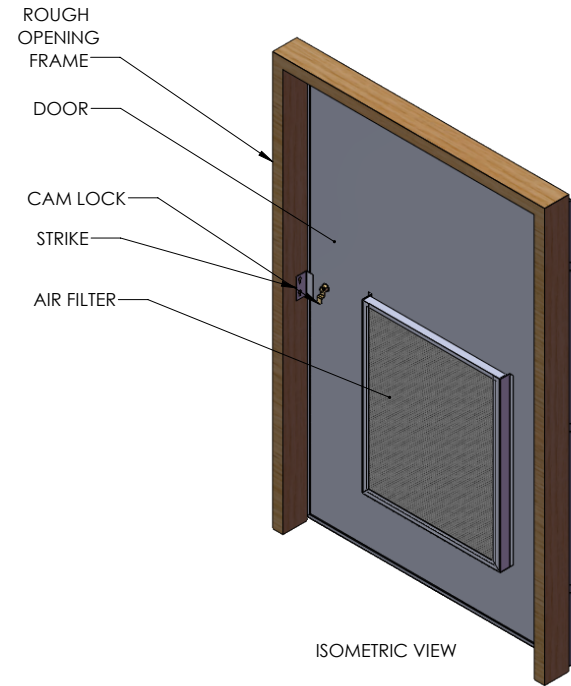
SECTION A-A  
SCALE 1 : 12



FRONT VIEW



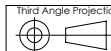
SECTION B-B  
SCALE 1 : 12



ISOMETRIC VIEW

NOTE.

1. ACCESS DOOR IS LHR.
2. INSTALL SIDE BRACKET ON LEFT JAMB OF FRAME WITH DIM. 1" FROM TOP JAMB AND SECURE IT WITH SCREWS.
3. HAND ON THE DOOR, CLOSE IT AND INSTALL STRIKE ON OPPOSITE SIDE OF FRAME.
4. ADJUST STRIKE ACCORDING POSITION OF CAM LOCK.



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MATERIAL:	<b>ICE-AIR LLC.</b> 80 HARTFORD AVENUE MOUNT VERNON, NY 10553		
WEIGHT (LBS): 71.93	TITLE:		
FINISH: N/A	MODEL BY: VP	DATE: 10/14/11	DWG. NO. WEB-8860-VTAC-3(APP)
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: 1/32 ANGULAR: MACH ± * BEND ± 1° TWO PLACE DECIMAL ± .03 THREE PLACE DECIMAL ± .015	DRAWING BY: -	DATE: -	
<b>SIZE</b> <b>B</b>	SCALE: NONE DO NOT SCALE DRAWING		SHEET 1 OF 1 REV A

8

7

6

5

4

3

2

1

PRODUCT SPECIFICATIONS  
SINGLE PACKAGED AIR CONDITIONER (SPHP)

ICE AIR HI SPEC™ UNITS  
'SPAC' SERIES UNITS

1. Equipment: Provide “SPHP” Series Single Packaged Heat pump (SPHP), as manufactured by Ice Air, LLC.
2. Components: Heat Pump to consist of wall plenum, exterior louver, cooling/heating chassis and front panel. Units to operate at 208 / 230-volt, single phase, 60 hertz circuits.
3. Wall Plenum: Wall plenum exterior dimensions to be 47 <sup>3/4</sup>” high x 23<sup>3/4</sup>” wide to comply with US DOE requirements for new construction SPACs. Smaller dimension wall plenums are not acceptable under DOE regulations. Wall plenum 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 plenum 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 plenums for masonry locations to be factory fabricated to match the full wall depth at each location; wall plenums with field-installed extension pieces are not acceptable.
4. Louvers: Exterior louver to be horizontal, extruded aluminum blade-type construction with clear anodized (painted Duranar) finish. Louver to be supplied with stainless steel fastening hardware and must be capable of being installed from within the wall plenum, supplied for all through wall locations
5. Chassis: Cooling chassis to be a self-contained, assembly consisting of a sealed refrigerant system, evaporator and condenser sections with separate PSC motors (single motor units are not acceptable), motorized outside fresh air damper, wired for remote mounted thermostats and a non fused disconnect. Provide a permanent, washable mesh filter with each unit.
- 5a. Refrigeration System: Sealed refrigerant system to consist of high efficiency rotary compressor, copper tube / aluminum fin evaporator and condenser coils, refrigeration metering device consisting of a capillary tube expansion system, a reversing valve and interconnecting tubing. System to be factory charged and sealed and capable of operating in the cooling mode to an outdoor ambient temperature of 35° F. All units to be manufactured with R410A Green refrigerant; units containing R22 or R407C refrigerant are not acceptable.

- 5b. Evaporator Section: Evaporator motor and blower wheel to be mounted behind the evaporator coil. 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 one 3/4" O.D. drain hose.
- 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 compressor and to run during the cooling and heating cycle.
- 5d. Condensate Disposal: Condensate to drain from the indoor base pan into the lower galvanized steel condenser base pan through one 3/4" O.D. drain hose. 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 may be required.
- 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 will slide into the wall plenum 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, use of attached sealing angles or channels is not acceptable.
- 5f. Unit Controls: Unit controls to include a wall-mounted digital controller with integral electronic thermostat. Controller to be seven-day programmable type. Interior room temperature, and Freezestat to be mounted on the evaporator coil only (condenser mounted freezestats are unacceptable) to provide true temperature readings.
- 5g. Outside Air: Provide motorized outside air damper with chassis mounted actuator. Optional motorized damper could also be supplied by special request.
6. Front access panel: Front access panel to be fabricated from 20 gauge galvanized steel. Panel to be finished in (Antique White) (Arctic White) baked powder coat finish. Front access panel to mount to closet jam.
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.