## COOLING CAPACITY CORRECTION FACTORS

### PERFORMANCE DATA

### UNIT SPECIFICATIONS+

#### SERIES MODEL #

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#### SPECIFICATION NOTES:

1. ** = BTUH @ 80°F. DB/67°F. WB INDOORS; 95°F. DB OUTDOORS.
2. ** = BTUH @ 47°F. DB/43°F. WB OUTDOORS; 70°F. DB/60°F. WB INDOORS
3. HEAT PUMP OPERATION DISABLED BELOW 38°F (± 3°F)
4. OPTIONAL CAN BE MOTORIZED
5. ALL UNITS ARE WITH R410A REFRIGERANT

#### GENERAL NOTES:

1. ROOM ENCLOSURE IS FURNITURE TYPE PAINT-GRIP STEEL.
2. WALL SLEEVE IS #18 GAUGE GALVANIZED STEEL.
3. LOUVER IS EXTRUDED ALUMINUM, WITH CLEAR ANODIZED FINISH.
4. IT IS RECOMMENDED THAT THE ELECTRICAL OUTLET IS INSTALLED IN OPPOSITE TO THE HEATING RISERS.
5. N.Y.C. DEPARTMENT OF BUILDINGS ACCEPTED.
6. HEATING COIL QUANTITY AND BREAKDOWN BY MECHANICAL CONTRACTOR.
7. SEE ACCOMPANYING DRAWINGS FOR UNIT CONFIGURATION.
8. STANDARD ROOM COLOR ENCLOSURE TO BE "ANTIQUE WHITE" OR "ARCTIC WHITE".
9. PROVIDE LOUVERS FOR ALL MASONRY OPENING. LOUVERS FOR PANEL WALL OPENINGS PROVIDED BY OTHERS.
TO REMOVE THE COOLING CHASSIS FROM SLEEVE, DISCONNECT POWER CORD FROM RECEPTACLE AND SEPARATE QUICK DISCONNECTS FROM HEAT SENSOR AND MOTORIZED VALVE. THIS ALLOWS THE CHASSIS TO SLIDE OUT OF THE WALL SLEEVE WITHOUT DISTURBING THE PERMANENTLY INSTALLED HEATING ASSEMBLY.
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.
* ARCHITECT TO PROVIDE DETAILS FOR EACH FLOOR

NOTE (1): PROVIDED LOUVER WILL HAVE AN AREA OF 60% MINIMUM FREE AIR

Insulated Panel
(By Others)

1x1x18GA. Angle all Around

Louver
(By Others) (1)

16-5/8” INSULATION PANEL OPENING (STD.)

1/4” PITCH

MINIMUM
16-5/8” HIGH X 42-3/8” WIDE INSULATED PANEL OPENING
(STD. MIN.X(3) (V.I.F.)

U-Closure all Around (By Others)

Sleeve

Attachment Screws (By Others)

Caulking all around (By Others)

ADJUSTABLE LEG SUPPORT
(FASTENED TO SLAB BY OTHERS)

RAIN LIP MUST GO BEYOND INSULATED PANEL

OUTLINE OF A/C UNIT

DISCHARGE PLENUM

KNEEWALL

SLEEVE DEPTH
SLEEVE DEPTH*

12 1/4” MINIMUM

WALL DEPTH

ENCL. HEIGHT* (22” STD.)

3 1/8’ REQ’D.

10 1/2’

ICE-AIR LLC.
RSNU HEAT PUMP – EL. HEAT
TYP. PTAC @ PANEL WALL

ADDITIONAL NOTES:
(3) WALL SLEEVE DIMENSION IS(RSU)16-1/4 H X 42” W
(4) WHEN BOTTOM OF SLEEVE TO FINISHED FLOOR (“A”) MEASURES BETWEEN 23/4” TO 43/4”, THIS NECESSITATES ORDERING A FRONT INTAKE ENCLOSURE AND CHASSIS AS OPPOSED TO A BOTTOM INTAKE.
MIN. 42-3/8" INSULATED PANEL OPENING (1) (V.I.F.)

NOTES
(1) DETAILS TO BE PROVIDED BY GC FOR EACH FLOOR
(2) LOUVER MUST HAVE AN AREA OF
MINIMUM 60X FREE AIR FLOW
(3) DETAILS TO BE PROVIDED FOR EACH FLOOR
"A" IS BOTTOM OF SLEEVE TO FINISHED FLOOR
"B" IS KICK PLATE HEIGHT WITH +/- 1" ADJ.
"B" = "A" - 2 1/2"
WHEN "A", BOTTOM OF SLEEVE TO FINISHED FLOOR,
MEASURES BETWEEN 2-3/4" TO 4-1/2"
IT IS ADVISED TO ORDER A FRONT INTAKE
ENCLOSURE AND CHASSIS AS OPPOSED TO
A REGULAR BOTTOM INTAKE.

PROVIDE METAL GYP. 8"/10 STUDS FOR ENCLOSURE ATTACHMENT
(23" CENTER TO CENTER)

ELEVATION

DISCHARGE PLENUM

53" WIDE KICK PLATE

IMPORTANT DIMENSIONS FOR MEASURE/MOUNTING INSTALLATION

ELECTRIC OUTLET BY ELECTRICAL CONTRACTOR
115V, 15A OR 208V, 15A AS REQUIRED.

RECOMMENDED LOCATION OF ELECTRICAL OUTLET

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

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ICE-AIR LLC

RSNU HEAT PUMP - EL. HEAT
TYP. RSNU @ CURTAIN WALL

SCALE: NTS. 1/8" = 1'

DATE: 07/06/13
NOTES

(1) DETAILS TO BE PROVIDED BY GC FOR EACH FLOOR
(2) PROVIDED LOUVER WILL HAVE AN AREA OF
MINIMUM 60% FREE AIR FLOW
(3) DETAILS TO BE PROVIDED BY EACH FLOOR
"A" IS BOTTOM OF SLEEVE TO FINISHED FLOOR
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ENCLOSURE AND CHASSIS AS OPPOSED TO
A REGULAR BOTTOM INTAKE.

PROVIDE METAL GYP. BID.
STUDS FOR ENCLOSURE ATTACHMENT
(53" CENTER TO CENTER)

ELECTRIC OUTLET BY ELECTRICAL CONTRACTOR
115V, 15A OR 208V, 15A AS REQUIRED.

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ICE-AIR LLC
RSNU HEAT PUMP - EL. HEAT
TYP. PTAC @ MASONRY WALL

REV. Date By
07/08/13 V.P.
PRODUCT SPECIFICATIONS
PACKAGED TERMINAL AIR CONDITIONER (PTAC)

ICE AIR HI SPEC™ UNITS
'RSNU' SERIES UNITS

1. **Equipment:** Provide “RSNU” Series Packaged Terminal Air Conditioners (PTACs), as manufactured by Ice Air, LLC.

2. **Components:** Air conditioner to consist of wall sleeve, exterior louver, electric heating element, cooling chassis and room enclosure. Units to operate at either 115 volt, 208 / 230 volt, or 265 or 277 volt, single phase, 60 hertz circuits.

3. **Wall Sleeves:** Wall sleeve exterior dimensions to be 42” wide x 16” high (RSNU 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. Wall sleeves for panel wall locations are to be provided with optional adjustable-height support legs and galvanized steel sleeve angles to attach to the building panel wall system.

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.

5. **Chassis:** Cooling chassis to be a self-contained, slide-in assembly consisting of a sealed refrigerant system, evaporator and condenser sections with separate PSC motors (single motor units are not acceptable), manual (optional motorized) outside fresh air damper, unit mounted controls and line cord (junction box for 265 / 277 volt applications). Provide a permanent, washable aluminum mesh filter with each unit.

5ai. **Cooling 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, 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.

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 until an outdoor ambient temperature of 38 °F. Electric heating element will automatically energize (manual activation switch available). All units to be manufactured with R410A Green refrigerant; units containing R22 or R407C refrigerant are not acceptable.

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 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. No building condensate drain lines are to 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 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. Controller to be seven-day programmable type (optional non-programmable). (Optional Manual Changeover (MCO) or remote wall mount thermostats are available). Include standard low-temperature control to activate motorized heating control valve below 45 °F. Interior room temperature, and Freezestat to be mounted on the
evaporator coil only (condenser mounted freezestats are unacceptable) to provide true temperature readings.

5g. **Manual Outside Air:** Provide manual outside air damper with chassis mounted actuator. (Optional motorized or full time motorized fresh air dampers are available).

5h. **Electric Heating Element:** Electric heaters to include overheating protection heating elements with self-limiting temperature features.

6. **Room Enclosure (Cabinet):** Room enclosure to be (flat top) (slope top) type and to be fabricated of 18 gauge galvanneal paint grip furniture steel. Enclosure front cover to be fabricated from 20 gauge galvanneal 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. Provide (OPTIONAL) additional 2nd through 5th year compressor parts warranty. 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.