

*Style, comfort and energy efficiency. . . one room at a time.*

# McQuay® Incremental® Comfort Conditioners - PDNS/PDNC

New York City Model



**McQuay**®  
International

*Engineered for flexibility and performance.™*

# McQuay® PDNS/PDNC Incremental® Comfort Conditioners



In 1958, we introduced the Incremental® system – the first through-the-wall, self-contained heating and air conditioning system – and set the standard for reliable, efficient comfort control in multi-story building applications. With hundreds of thousands of installed units, McQuay has earned its reputation as one of the most trusted names in individually-zoned comfort control.

As one of the world's largest heating, ventilation and air-conditioning manufacturers, McQuay stands behind its products with the strength of a global organization. And with our local McQuay representation and manufacturing facility in nearby Auburn, New York, we can provide you the hands-on support you need to make your building project a success.

## ***Flexible, Low Cost, Energy Efficient, Reliable, Durable And Quiet***

The Type PDNS/PDNC Incremental Comfort Conditioner is the perfect solution for new or replacement individually-zoned heating and cooling in New York City, offering:

- Flexible size, capacity and voltage selections to match the requirements of your application.
- Heavy-gauge construction resists dents, scratches and corrosion over decades of use and promotes quieter operation.
- High efficiency heating and cooling chassis, fans, and motors provide reliable comfort control and maximize energy savings.
- ARI certified performance. Meets ASHRAE 90.1 efficiency standards.
- Temperature limiting and night setback to maximize energy savings.
- Continuous condensate removal and filtration of return air promotes good indoor air quality.
- Optional brick stops and/or support legs for brick or panel/curtain wall applications.
- A wide variety of factory-supplied options that can reduce field labor and installation costs.
- Low maintenance design.



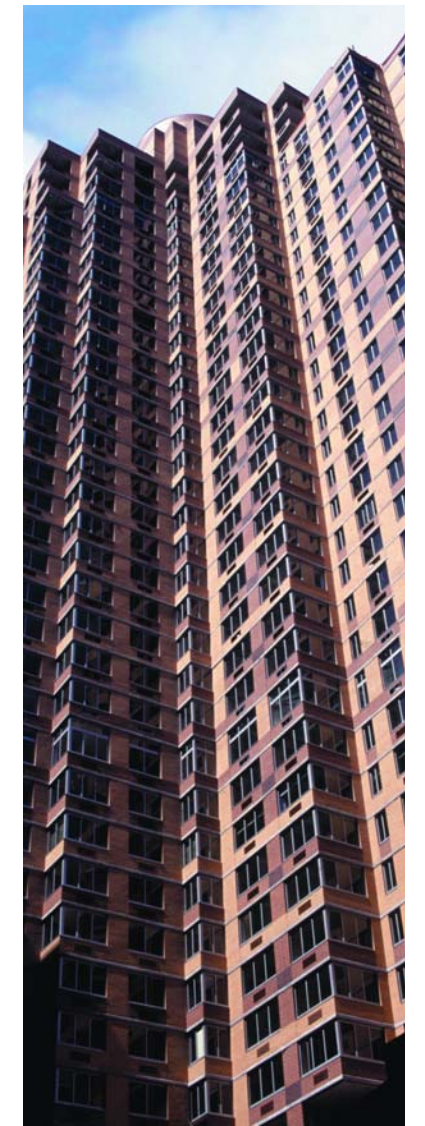
# Quality And Comfort You Can Trust

McQuay Incremental comfort conditioners are manufactured to institutional quality standards at our ISO 9002 certified manufacturing facility. Strict attention to manufacturing details—from raw materials to the unit packaging—gives you a quality product, delivered on-time to support your construction schedule. Every unit is UL Listed, MEA agency approved and ARI certified for performance and efficiency.



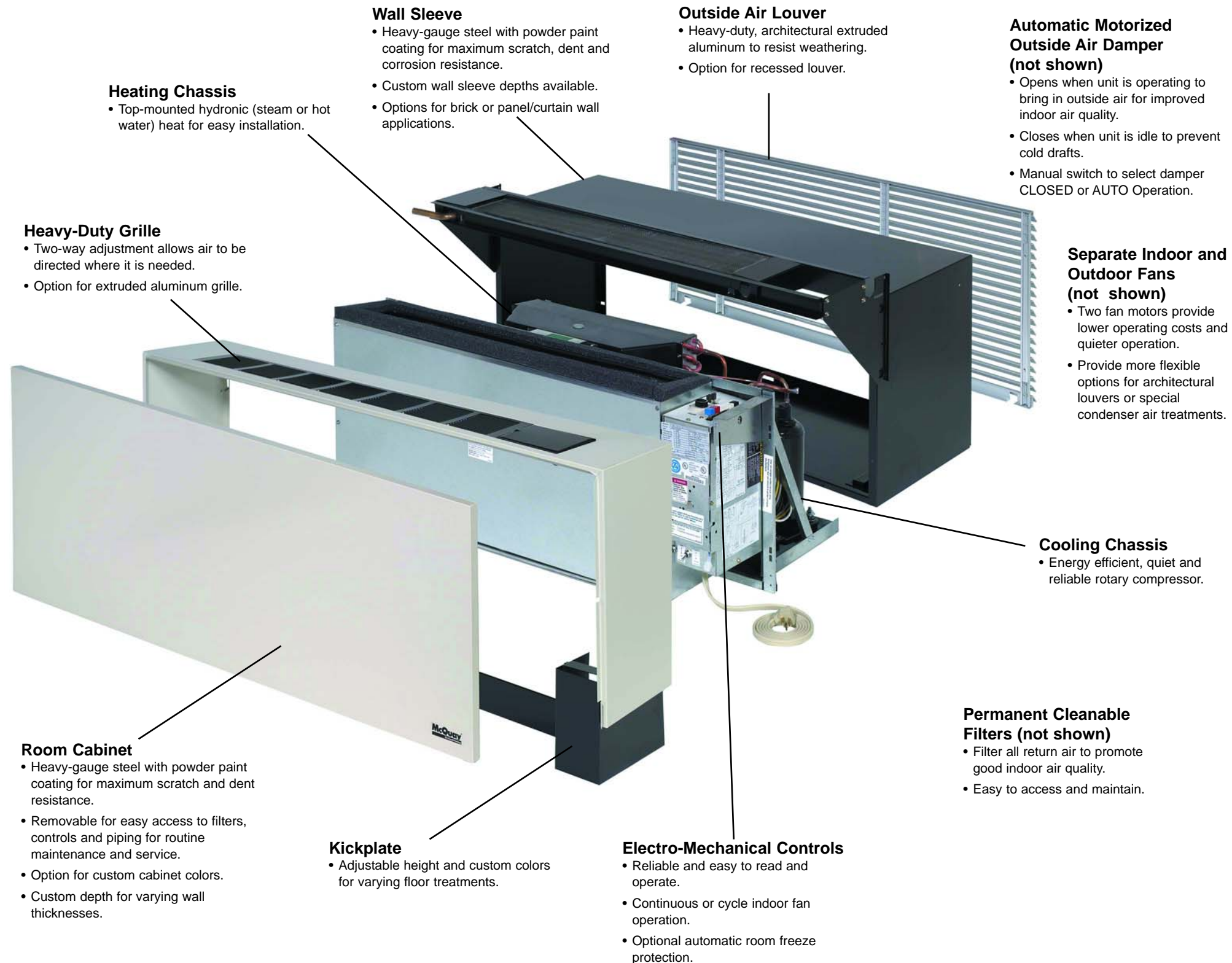
**McQuay International**  
Auburn, New York

The high design standards and heavy-duty construction of McQuay Incremental comfort conditioners can provide you years of reliable service, quieter operation and low operating costs. In fact, many of our comfort conditioners have been operating for more than 30 years.



# Features And Benefits

*Flexible, low cost, energy efficient, reliable, durable and quiet. . .*



Made In U.S.A.

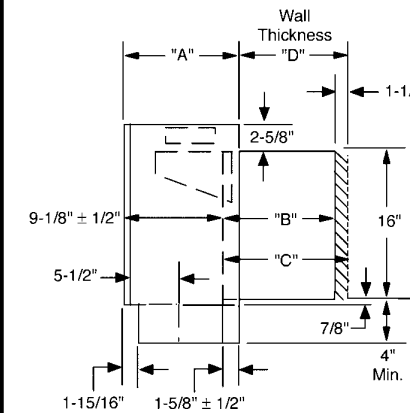


# Performance/Dimensional Data

UNIT SIZE		007 <sup>1,2</sup>			009 <sup>1</sup>			012 <sup>1,2</sup>			015 <sup>1</sup>		016 <sup>1</sup>
VOLTS		115V	208V	265V	115V	208V	265V	115V	208V	265V	208V	265V	208V
COOLING	Btuh	8,000Qt./5,500 Qs.			9,700Qt./6,000Qs			12,100Qt./8,100Qs.			15,000Qt./9,500 Qs.		16,000Qt./10,000Qs.
	EER	10.8			10.4			10.3			10.2		9.3
	Full Load Amps	7.0	3.8	3.4	10.7	5.8	4.5	13.5	6.4	5.4	7.4	6.7	9.7
	Watts	750	750	750	930	930	930	1,175	1,175	1,175	1,521	1,521	1,810
	Power Factor (%)	88	89	79	76	77	78	98	88	82	99	86	90
AIRFLOW CRM TOTAL/ VENT	High Cool	195/60			185/60			300/70			295/70		295/70
	Low Cool	180/40			175/40			275/50			270/50		270/50
	High Heat	205/60			205/60			330/70			340/70		340/70
	Low Heat	190/40			190/40			305/50			315/50		315/50
HEATING	Full Load Amps	.80	.43	.43	.80	.43	.30	1.67	.82	.60	.82	.60	.82
	Hot Water High/Low	16,300/13,800			21,200/18,000			24,500/20,700			24,500/20,700		24,500/20,700
HYDRONIC HEATING BTUH <sup>3</sup>	Hot Water High/Low	16,300/13,800			21,200/18,000			24,500/20,700			24,500/20,700		24,500/20,700
	Steam High/Low	20,100/17,100			23,300/19,800			26,300/22,300			26,300/22,300		26,300/22,300
MINIMUM CIRCUIT AMPACITY		9.5	4.7	4.0	12.8	6.9	5.1	16.1	8.3	6.7	10.5	8.2	12.1
DELAY FUSE OR CIRCUIT BRKR <sup>4</sup>		15	15	15	15	15	15	15	15	15	15	15	15
RECEPTACLE REQUIRED, NEMA No.		5-20R	6-20R	-	5-20R	6-20R	-	5-20R	6-20R	-	6-20R	-	6-20R
TOTAL SHIPPING WEIGHT (LBS)		284			288			292			296		296
ROUGH WALL OPENING		16" x 42"											

<sup>1</sup>Based on ASHRAE and ARI test conditions of 95°F DB/75°F WB outside, 80°F DB/67°F WB inside.  
<sup>2</sup>Cooling performance ratings based on low fan speed.  
<sup>3</sup>Based on 200°F EWT; 20°F ΔT- 70°F EAT; 2 psig steam - 70°F EAT  
<sup>4</sup>Type HACR circuit breaker.  
 Note: 265V unit requires subbase.

## Wall Sleeve Dimensions

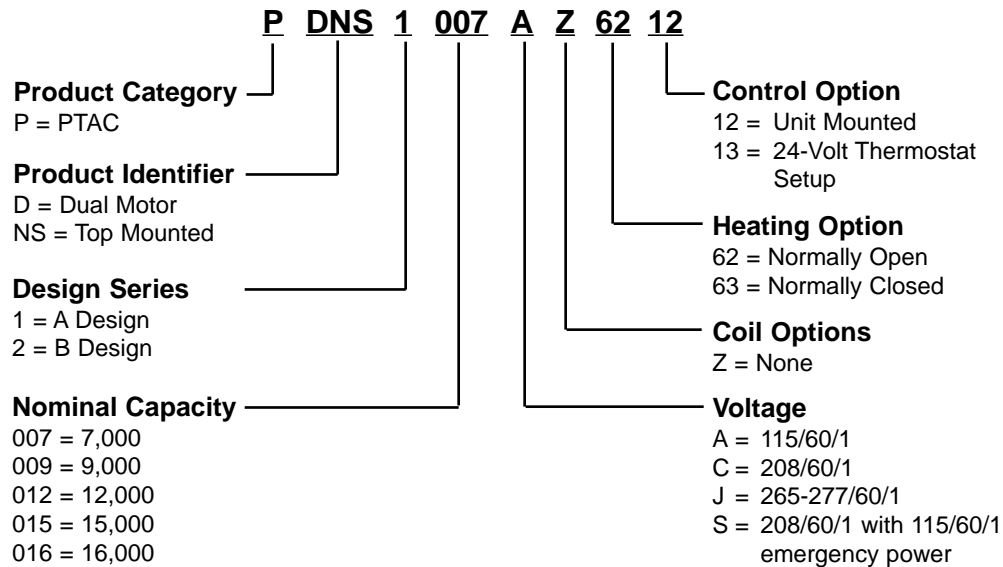


WALL SLEEVE/ROOM CABINET SELECTION CHART			
"A" ROOM CABINET	"B" Standard Wall Sleeve	"C" Recessed Louver Wall Sleeve	"D" Wall Thickness
17-3/4"	13-3/4"	15"	5-3/4" to 6-3/4"
16-3/4"	13-3/4"	15"	6-3/4" to 7-3/4"
15-3/4"	13-3/4"	15"	7-3/4" to 8-3/4"
14-3/4"	13-3/4"	15"	8-3/4" to 9-3/4"
13-3/4"	13-3/4"	15"	9-3/4" to 10-3/4"
12-3/4"	13-3/4"	15"	10-3/4" to 11-3/4"
11-3/4"	13-3/4"	15"	11-3/4" to 12-3/4"
10-3/4"	13-3/4"	15"	12-3/4" to 13-3/4"
10-3/4"	14-3/4"	16"	13-3/4" to 14-3/4"
10-3/4"	15-3/4"	17"	14-3/4" to 15-3/4"
10-3/4"	16-3/4"	18"	15-3/4" to 16-3/4"
10-3/4"	17-3/4"	19"	16-3/4" to 17-3/4"

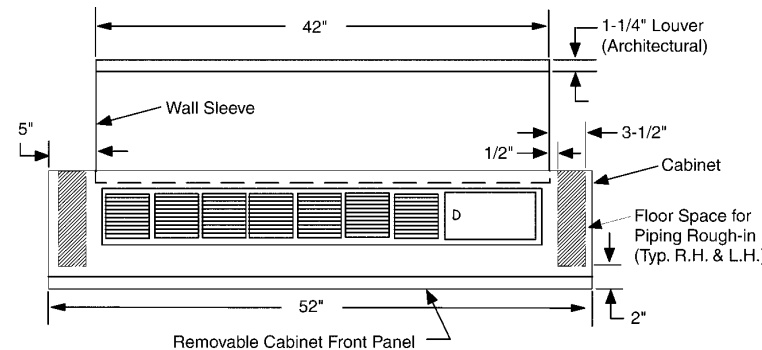
### Notes:

1. Wall opening shall be a minimum of 16-1/4" high X 42-1/4" wide and must be a minimum of 4" above the finished floor, including carpet.
2. Masonry support **must be** left in wall sleeve until mortar has thoroughly dried.
3. The weather panel is provided with a separate shipment of cabinet/wall sleeve. This panel provides a weather seal prior to installation of the chassis. Be sure to **remove** weather panel **before** installing chassis.
4. Wall sleeve should be installed level side-to-side, and inside-to-outside.
5. Wall sleeve must extend past inside finished wall 1-5/8" plus or minus 1/2".
6. Standard kickplate is adjustable from 3" minimum to 5" maximum. Custom heights are available.

## Model Nomenclature

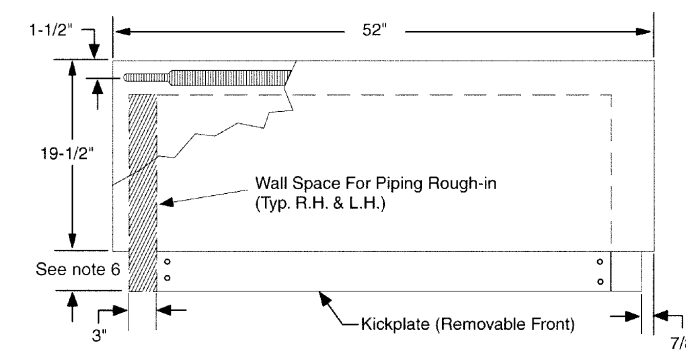


## Top View

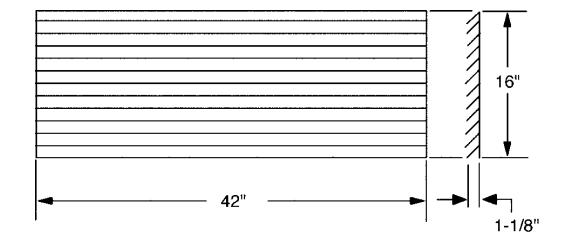


**Note:** Electrical rough-in should be located behind kickplate (removable front) and below wall sleeve.

## Front View



## Architectural Louvers



# Engineering Guide Specification

Furnish and install where shown on plans packaged terminal air conditioners of the sizes and capacities shown on the schedule. The units shall be located as shown on the drawings and shall include cabinet/wall sleeve, chassis, outdoor louver, hydronic heat section, valve, and room cabinet. All units shall be U.L. listed for safety and ARI certified for performance. Overall dimensions for the basic unit shall not exceed 52" wide, 22-1/2" high, and 17-3/4" deep. Overall dimensions of the wall sleeve shall be 16" high, 42" wide and (13-3/4"/\_\_\_\_\_) deep. All units shall operate on \_\_\_\_\_ volts, 60 Hz, 1 phase power. The minimum energy efficiency ratio in Btu per hour per watt for each unit must be 11.3 for size 07, 10.4 for size 09, 10.3 for size 12, 10.2 for size 15 and 9.3 for size 16.

**Heating/Cooling Chassis** — Chassis shall be slide-in, plug-in type with a self-contained, hermetically sealed refrigerant circuit. All chassis sheet metal parts shall be constructed of heavy-gauge galvanized steel for maximum corrosion resistance. The chassis shall consist of the following components: Vibration isolated compressor; rifled copper tubed evaporator and condenser coils with high efficiency aluminum plate fins mechanically expanded to the tubes for maximum heat transfer; and a capillary restrictor type refrigerant metering device. Coils shall be factory tested at 300 psig. Airflow system shall consist of a separate single speed, totally enclosed, fan cooled, PSC outdoor condenser motor. Condenser fan shall be made of high impact resistant polymer and shall be propeller type with a slinger ring. Indoor fan motor shall be two speed and shall be separate from the outdoor condenser fan motor. Single motor units serving both condenser and evaporator sections are not acceptable. The indoor fan motor must be positioned on the indoor side of the bulkhead so as to be completely within the conditioned, filtered airstream. Both the indoor and outdoor fan motors shall be permanently lubricated type for prolonged life. Indoor fans shall be forwardly curved centrifugal type to provide even airflow across the evaporator coil.

**Heating Coil** — Heating assembly shall consist of pre-assembled cradle and heating coil that snaps directly on to the wall sleeve. Attaching the heating coil by screws or other methods is not acceptable. Coils are copper tubes and mechanically expanded into aluminum fins. Coil assemblies are to ship with a protective sheet metal cover to prevent damage during installation and construction. Sheet metal cover is to be removed prior to installation of the cabinet. Coils to be supplied in right-hand or left-hand piping configuration as required.

**During The Cooling Cycle** — The compressor, the outdoor fan motor and the indoor fan motor shall be energized. Condensation accumulated on the evaporator coil shall be drained into the outdoor section where it is to be picked up by the condenser fan and evaporated against the outdoor coil.

**During The Heating Cycle (Hydronic Heat)** — Only the indoor fan motor, the (normally open) (normally closed) valve and automatic fresh air damper shall be energized. Outdoor condenser fan motor and compressor shall not be energized.

**Control Module** — Shall have a six (6) button selector switch containing Off-Heat-Cool-High-Low-Fan and a self-contained, adjustable thermostat with a field adjustable temperature limiting device. A fan cycle shall be incorporated to allow constant fan operation or intermittent fan operation. Intermittent fan operation shall allow the fan to energize upon a demand for heating or cooling.

**Room Cabinet** — Shall be flat top, wrap-around design with a heavy-gauge sheet metal front panel that is phosphatized and coated with a baked on, Antique Ivory corrosion resistant finish. Room cabinets with ordinary enamel finish are not acceptable. Discharge grilles shall be tamper-proof. The control access door shall be mounted on the right-hand side. (Access door shall be furnished with a keylock device to prevent unauthorized tampering.)

**Fresh Air Damper** — A positive closing automatic fresh air damper must be located within the chassis to provide fresh air during fan operation. It will have a manual switch for AUTO operation or CLOSED.

**Filtration** — Shall be accomplished using a permanent, aluminum mesh, cleanable filter. Washable foam type filters are not acceptable. Filters must be concealed but easily accessible for scheduled maintenance. Return air shall enter the filter from the bottom of the chassis. A louvered front panel is unacceptable.

**Wall Sleeve** — Shall be entirely constructed of galvanized, phosphatized, heavy-gauge steel with an Oxford Brown epoxy powder paint corrosion resistant finish. Unpainted, galvanized steel wall sleeves with or without rust inhibiting spray are not acceptable. Wall sleeves with ordinary enamel finish are not acceptable. Wall sleeves shall be installed a minimum of 4" above the floor. Wall sleeves shall be installed through the wall as shown on plans and shall have factory provisions for use of appropriate fastening devices to secure sleeve to the wall. In no event shall fasteners be installed through the basepan in the bottom of the cabinet/wall sleeve.

**Outside Air Louvers** — Shall be (stamped) (architectural) anodized aluminum as shown on plans. Louver shall be (finished natural) (painted) as shown on the schedule. Louvers shall be easily installed from the inside of the building after the cabinet/wall sleeve has been installed. Special field fabricated louvers must be approved by the PTAC manufacturer as to free area and air circulation requirements.

