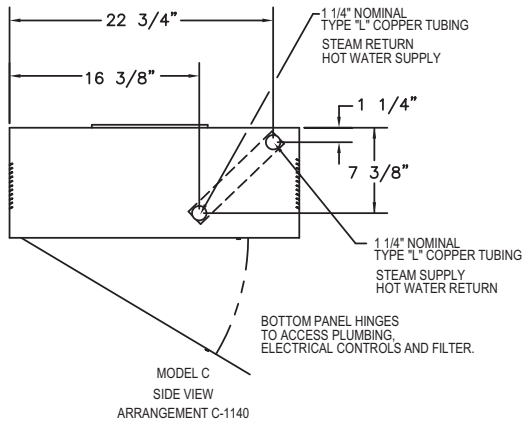


CABINET UNIT HEATER SUBMITTAL DATA

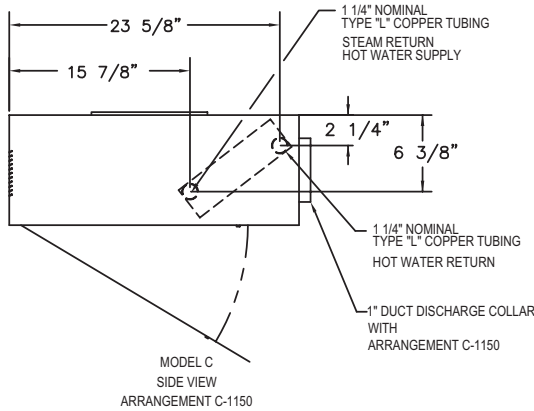
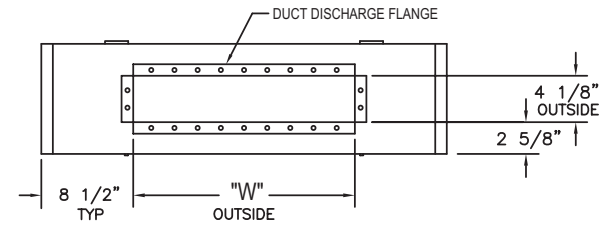
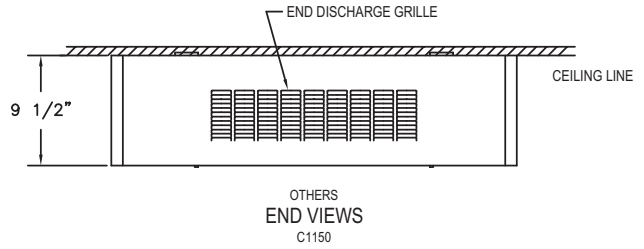
CBS-C-15

Ceiling Mounted Units (Non Recessed Only) - Models C

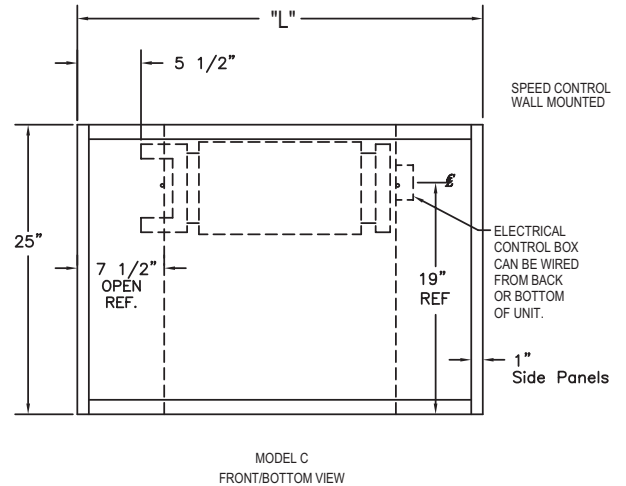
PIPING AND MOUNTING CONNECTIONS SHOWN ARE TYPICAL FOR ALL AIR FLOW ARRANGEMENTS SEE OTHER SIDE.



STANDARD ONE ROW COIL PIPING DIMENSIONS.
(SHOWN ABOVE)



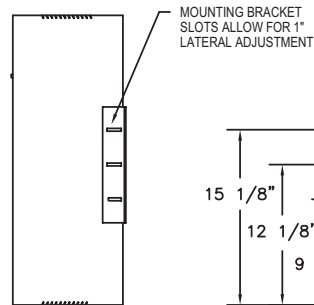
TWO ROW COIL PIPING DIMENSIONS
(SHOWN ABOVE)



THIS DATA SHEET SHOWS CEILING MOUNTED UNITS
(Non Recessed ONLY) MODELS "C".

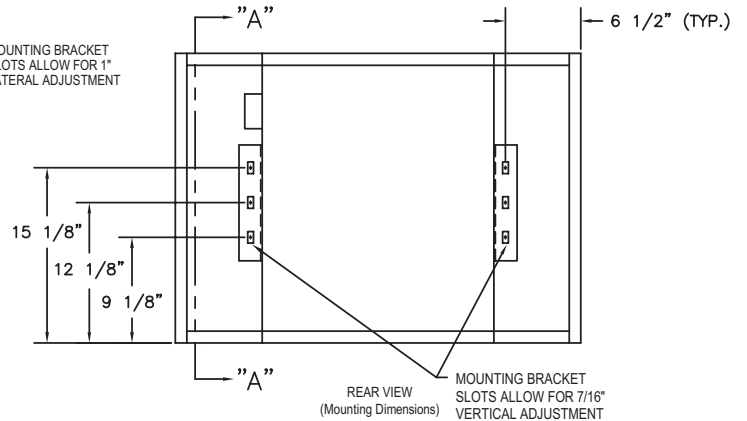
PIPING AND MOUNTING CONNECTIONS SHOWN ARE TYPICAL
FOR ALL AIR FLOW ARRANGEMENTS.

SEE PAGE 6 for other air flow arrangements.



◊ MAXIMUM RECESS DEPTH
MODELS C1140, C1150, C1160, C1180 ONLY.

SECTION "A"- "A"



PROJECT: _____
 LOCATION: _____
 ARCHITECT: _____
 ENGINEER: _____
 CONTRACTOR: _____
 PO NUMBER: _____
 DATE: _____

CAT00202A



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A MESTEK COMPANY



CABINET UNIT HEATERS RATINGS AND SPECIFICATIONS

ENTERING WATER - 200°F
ENTERING AIR - 60°F

TABLE 1

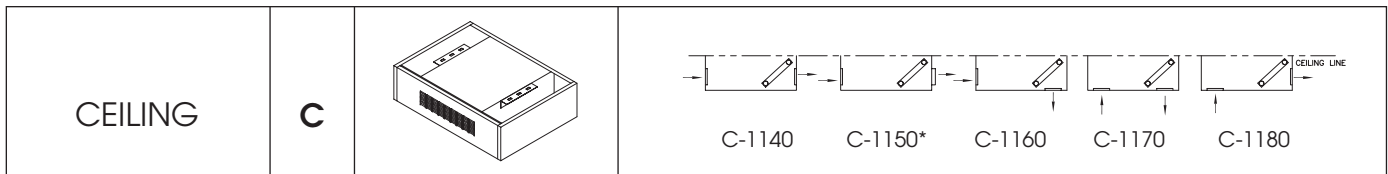
| UNIT SIZE | | 02 | 03 | 04 | 06 | 08 | 10 | 12 | 14 |
|--------------------------------|---|-------------------|-------------------|-------------------|-------------------|-----------------------------------|-----------------------------------|-------------------|-------------------|
| Heating Cap. - Hot Water | MBH | 16.4 | 22.8 | 29.8 | 48.0 | 54.5 | 62.0 | 75.6 | 78.5 |
| | 20_WTD GPM | 1.64 | 2.28 | 2.98 | 4.80 | 5.46 | 6.20 | 7.56 | 7.85 |
| High Cap. - Coil 2 Row | MBH | 25.8 | 35.4 | 46.3 | 69.8 | 87.6 | 101.8 | 119.8 | 128.6 |
| | Hot Water 20_WTD GPM | 2.58 | 3.54 | 4.63 | 6.98 | 8.76 | 10.18 | 11.98 | 12.86 |
| Heating Cap. - Steam 2 PSIG | MBH | 22.6 | 31.4 | 41.0 | 66.1 | 75.1 | 85.4 | 104.1 | 108.2 |
| | EDR | 94 | 131 | 171 | 276 | 313 | 356 | 434 | 451 |
| | Standard Coil Connections Cond. LB/HR | 23.4 | 32.5 | 42.4 | 68.4 | 77.7 | 88.4 | 107.7 | 112 |
| Coil: | Number Fins Per Inch | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | Face Area-Ft. ² | 97 | 1.5 | 1.8 | 2.6 | 2.8 | 3.1 | 3.6 | 4.4 |
| | Coil Connections | 1-1/4CU | 1-1/4CU | 1-1/4CU | 1-1/4CU | 1-1/4CU | 1-1/4CU | 1-1/4CU | 1-1/4CU |
| | Blowers: | | | | | | | | |
| Standard PSC Motor: | Number | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 |
| | Diameter/Width (In) HP | 5-3/4 x 7 1/15 | 5-3/4 x 7 1/15 | 5-3/4 x 7 1/10 | 5-3/4 x 7 1/10 | 5-3/4 x 7 1 @ 1/10 1 @ 1/15 | 5-3/4 x 7 1 @ 1/10 1 @ 1/15 | 5-3/4 x 7 1/10 | 5-3/4 x 7 1/10 |
| Fan Speed Control | RPM: High | 1050 | 1050 | 1050 | 1050 | 1050 | 1050 | 1050 | 1050 |
| | Low | 875 | 875 | 875 | 875 | 875 | 875 | 875 | 875 |
| | Number | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| | Volts/Phase/Hz | 115/1/60 | 115/1/60 | 115/1/60 | 115/1/60 | 115/1/60 | 115/1/60 | 115/1/60 | 115/1/60 |
| Optional ECM Motor: | Amperes | 0.8 | 0.8 | 1.4 | 1.4 | 2.2 | 2.2 | 2.8 | 2.8 |
| | Standard Mtr | VAR. | VAR. | VAR. | VAR. | VAR. | VAR. | VAR. | VAR. |
| | CFM: High | 230 | 335 | 430 | 630 | 860 | 1060 | 1230 | 1410 |
| | Low | 185 | 270 | 345 | 505 | 685 | 845 | 985 | 1130 |
| Fan Speed Control | HP | 1/15 | 1/15 | 1/15 | 1/15 | 1/10 | 1/10 | 1/4 | 1/4 |
| | Number | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| | Volts/Phase/Hz | 120/1/60 | 120/1/60 | 120/1/60 | 120/1/60 | 120/1/60 | 120/1/60 | 120/1/60 | 120/1/60 |
| | Amperes | 0.45 | 0.45 | 0.65 | 0.85 | 1.5 | 1.95 | 2.8 | 2.8 |
| Filter: | ECM Mtr | 3 - SPEED | 3 - SPEED | 3 - SPEED | 3 - SPEED | 3 - SPEED | 3 - SPEED | 3 - SPEED | 3 - SPEED |
| | CFM: High | 230 | 335 | 430 | 630 | 860 | 1060 | 1230 | 1410 |
| | Med | 160 | 240 | 375 | 440 | 590 | 740 | 850 | 980 |
| | Low | 120 | 150 | 280 | 320 | 450 | 560 | 640 | 730 |
| dB, Level 18" From Unit | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Type | PERM. | PERM. | PERM. | PERM. | PERM. | PERM. | PERM. | PERM. |
| | Length (In) | 19-3/4 | 27-3/4 | 31-3/4 | 43-3/4 | 45-3/4 | 50-3/4 | 57-3/4 | 69-3/4 |
| | Width (In) | 8-11/16 | 8-11/16 | 8-11/16 | 8-11/16 | 8-11/16 | 8-11/16 | 8-11/16 | 8-11/16 |
| Length (In) | Thickness (In) | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 |
| | 50 | 52 | 53 | 54 | 55 | 55 | 56 | 56 | |
| | 35 | 43 | 47 | 59 | 61 | 66 | 73 | 85 | |
| | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | |
| Depth (In) | 9-1/2 | 9-1/2 | 9-1/2 | 9-1/2 | 9-1/2 | 9-1/2 | 9-1/2 | 9-1/2 | |

| FILTER IDENTIFICATION AND DATA | | |
|--------------------------------|-----------|-----------------------------|
| SIZE | PART NO. | FILTER SIZE |
| 02 | PC1297-2 | 15/32" x 8 11/16" x 19 3/4" |
| 03 | PC1297-3 | 15/32" x 8 11/16" x 27 3/4" |
| 04 | PC1297-4 | 15/32" x 8 11/16" x 31 3/4" |
| 06 | PC1297-6 | 15/32" x 8 11/16" x 43 3/4" |
| 08 | PC1297-8 | 15/32" x 8 11/16" x 45 3/4" |
| 10 | PC1297-10 | 15/32" x 8 11/16" x 50 3/4" |
| 12 | PC1297-12 | 15/32" x 8 11/16" x 57 3/4" |
| 14 | PC1297-14 | 15/32" x 8 11/16" x 69 3/4" |

| SIZE | DIM "L" | DIM "W" |
|------|---------|---------|
| 02 | 35" | 18 1/8" |
| 03 | 43" | 26 1/8" |
| 04 | 47" | 30 1/8" |
| 06 | 59" | 42 1/8" |
| 08 | 61" | 44 1/8" |
| 10 | 66" | 49 1/8" |
| 12 | 73" | 56 1/8" |
| 14 | 85" | 68 1/8" |

CABINET UNIT HEATERS SHIPPING WEIGHT (LBS)

| STYLE | SIZE | | | | | | | |
|-------|------|-----|-----|-----|-----|-----|-----|-----|
| | 02 | 03 | 04 | 06 | 08 | 10 | 12 | 14 |
| C | 97 | 115 | 128 | 157 | 175 | 185 | 207 | 234 |



*Arrangement is specifically designed for duct use. See Options 114 and 115.

CABINET UNIT HEATERS HEATING CAPACITIES

TABLE II — STANDARD COIL

ENTERING WATER - 200°F
ENTERING AIR - 60°F

| UNIT SIZE | GPM | WATER PD/FT | HIGH FAN SPEED | | | | LOW FAN SPEED | | | |
|-----------|------|-------------|----------------|------|------|-----|---------------|------|------|-----|
| | | | CFM | MBH | WTD | FAT | CFM | MBH | WTD | FAT |
| 02 | .84 | .06 | 230 | 14.3 | 34.0 | 117 | 185 | 12.9 | 30.6 | 124 |
| | 1.0 | .06 | | 15.1 | 30.2 | 120 | | 13.8 | 27.6 | 129 |
| | 1.5 | .15 | | 16.2 | 21.6 | 125 | | 15.0 | 20.0 | 135 |
| | 2.0 | .24 | | 17.4 | 17.4 | 130 | | 16.1 | 16.1 | 140 |
| | 2.5 | .36 | | 18.8 | 15.0 | 135 | | 17.3 | 13.8 | 146 |
| 03 | 1.0 | .07 | 335 | 21.3 | 42.6 | 118 | 270 | 19.1 | 38.2 | 125 |
| | 1.5 | .16 | | 22.0 | 26.6 | 120 | | 19.8 | 26.4 | 128 |
| | 2.0 | .26 | | 22.7 | 22.7 | 122 | | 20.1 | 20.1 | 129 |
| | 2.5 | .39 | | 23.5 | 18.8 | 125 | | 20.7 | 16.6 | 131 |
| | 3.0 | .55 | | 23.8 | 15.8 | 126 | | 21.1 | 14.1 | 132 |
| 04 | 1.0 | .07 | 430 | 21.8 | 43.6 | 106 | 345 | 19.0 | 38.0 | 111 |
| | 2.0 | .27 | | 26.6 | 26.6 | 117 | | 23.9 | 23.9 | 124 |
| | 2.5 | .41 | | 29.0 | 23.2 | 122 | | 25.8 | 20.5 | 129 |
| | 4.0 | 1.00 | | 30.9 | 15.4 | 126 | | 27.4 | 13.7 | 133 |
| | 5.0 | 1.45 | | 32.3 | 12.9 | 129 | | 28.3 | 11.3 | 136 |
| 06 | 2.0 | .30 | 630 | 40.4 | 40.4 | 119 | 505 | 35.7 | 35.7 | 125 |
| | 3.0 | .63 | | 44.8 | 29.8 | 125 | | 39.8 | 26.5 | 133 |
| | 4.0 | 1.10 | | 47.2 | 23.6 | 129 | | 41.9 | 21.0 | 136 |
| | 5.0 | 1.60 | | 49.4 | 19.8 | 132 | | 43.6 | 17.5 | 140 |
| | 6.0 | 2.25 | | 50.7 | 16.9 | 134 | | 44.6 | 15.0 | 142 |
| 08 | 2.0 | .31 | 860 | 47.1 | 47.1 | 110 | 685 | 42.0 | 42.0 | 117 |
| | 3.0 | .64 | | 52.2 | 34.8 | 115 | | 46.5 | 31.0 | 123 |
| | 4.0 | 1.10 | | 53.9 | 26.9 | 117 | | 48.3 | 24.2 | 125 |
| | 6.0 | 2.25 | | 56.0 | 18.6 | 120 | | 49.1 | 16.4 | 126 |
| | 8.0 | 3.85 | | 57.8 | 14.4 | 122 | | 51.2 | 12.8 | 129 |
| 10 | 3.0 | .65 | 1060 | 55.8 | 32.7 | 109 | 845 | 50.2 | 33.5 | 115 |
| | 4.0 | 1.15 | | 60.4 | 30.2 | 112 | | 53.5 | 26.8 | 118 |
| | 6.0 | 2.35 | | 62.2 | 20.7 | 114 | | 54.7 | 18.2 | 120 |
| | 8.0 | 4.00 | | 64.1 | 16.0 | 116 | | 56.3 | 14.1 | 121 |
| | 10.0 | 6.00 | | 66.0 | 13.2 | 117 | | 58.9 | 11.8 | 124 |
| 12 | 4.0 | 1.20 | 1230 | 71.5 | 35.7 | 113 | 985 | 65.1 | 32.6 | 131 |
| | 6.0 | 2.50 | | 74.5 | 24.8 | 116 | | 66.6 | 22.2 | 133 |
| | 8.0 | 4.20 | | 76.7 | 19.1 | 117 | | 68.0 | 17.0 | 134 |
| | 10.0 | 6.30 | | 77.7 | 15.5 | 118 | | 69.0 | 13.8 | 135 |
| | 12.0 | 8.85 | | 78.6 | 13.1 | 119 | | 69.7 | 11.6 | 136 |
| 14 | 3.5 | 1.00 | 1410 | 71.0 | 40.6 | 106 | 1130 | 66.3 | 37.9 | 114 |
| | 4.0 | 1.30 | | 74.1 | 37.0 | 108 | | 68.4 | 34.2 | 116 |
| | 6.0 | 2.70 | | 77.6 | 25.9 | 111 | | 69.9 | 23.3 | 117 |
| | 10.0 | 6.80 | | 80.9 | 16.2 | 113 | | 72.5 | 14.5 | 119 |
| | 12.0 | 9.55 | | 81.7 | 13.6 | 113 | | 73.0 | 12.2 | 120 |

CABINET UNIT HEATERS HEATING CAPACITIES

TABLE III — HIGH CAPACITY - 2 ROW COIL

ENTERING WATER - 200°F
ENTERING AIR - 60°F

| UNIT SIZE | GPM | WATER PD/FT | HIGH FAN SPEED | | | | LOW FAN SPEED | | | |
|-----------|------|-------------|----------------|-------|------|-----|---------------|-------|------|-----|
| | | | CFM | MBH | WTD | FAT | CFM | MBH | WTD | FAT |
| 02 | 1.68 | .26 | 225 | 23.6 | 27.9 | 157 | 180 | 21.2 | 25.3 | 169 |
| | 2.0 | .34 | | 24.8 | 24.8 | 162 | | 22.5 | 22.5 | 175 |
| | 2.5 | .50 | | 25.7 | 20.6 | 165 | | 23.5 | 18.8 | 180 |
| | 3.0 | .73 | | 26.6 | 18.1 | 169 | | 23.9 | 16.0 | 183 |
| | 3.5 | .96 | | 27.5 | 15.9 | 173 | | 24.8 | 14.1 | 187 |
| 03 | 1.68 | .27 | 330 | 30.3 | 36.0 | 149 | 265 | 27.3 | 32.5 | 155 |
| | 2.0 | .38 | | 33.1 | 33.1 | 152 | | 29.7 | 29.7 | 163 |
| | 2.5 | .56 | | 34.3 | 27.4 | 156 | | 30.3 | 24.2 | 165 |
| | 3.0 | .77 | | 34.9 | 23.3 | 157 | | 30.8 | 20.5 | 167 |
| | 3.5 | .96 | | 35.3 | 20.2 | 159 | | 31.8 | 18.2 | 170 |
| 04 | 1.68 | .30 | 420 | 37.2 | 43.6 | 142 | 335 | 33.5 | 39.9 | 152 |
| | 2.0 | .44 | | 39.5 | 39.5 | 147 | | 35.8 | 35.8 | 158 |
| | 2.5 | .59 | | 42.4 | 33.9 | 153 | | 37.8 | 30.2 | 164 |
| | 4.0 | 1.41 | | 45.4 | 22.7 | 160 | | 39.7 | 19.9 | 169 |
| | 5.0 | 2.04 | | 46.8 | 18.7 | 163 | | 40.8 | 16.3 | 172 |
| 06 | 2.0 | .45 | 620 | 57.6 | 57.6 | 146 | 495 | 52.7 | 52.7 | 158 |
| | 3.0 | .93 | | 63.1 | 42.1 | 154 | | 57.0 | 38.0 | 166 |
| | 4.0 | 1.60 | | 66.0 | 33.0 | 158 | | 59.7 | 29.9 | 171 |
| | 5.0 | 2.30 | | 69.1 | 27.6 | 163 | | 61.2 | 24.5 | 174 |
| | 6.0 | 3.30 | | 69.5 | 23.2 | 164 | | 62.0 | 20.7 | 175 |
| 08 | 2.0 | .46 | 845 | 67.1 | 67.1 | 133 | 675 | 58.1 | 58.1 | 139 |
| | 3.0 | .95 | | 75.8 | 50.5 | 143 | | 68.2 | 45.5 | 153 |
| | 4.0 | 1.65 | | 79.3 | 39.7 | 146 | | 71.6 | 35.8 | 158 |
| | 6.0 | 3.35 | | 82.6 | 27.5 | 150 | | 73.4 | 24.5 | 160 |
| | 8.0 | 5.60 | | 86.5 | 21.6 | 154 | | 75.8 | 19.0 | 163 |
| 10 | 3.0 | 1.00 | 1040 | 84.6 | 56.4 | 135 | 830 | 75.9 | 50.6 | 144 |
| | 4.0 | 1.75 | | 90.6 | 45.3 | 140 | | 81.2 | 40.6 | 150 |
| | 6.0 | 3.50 | | 94.6 | 31.5 | 144 | | 84.0 | 28.0 | 153 |
| | 8.0 | 5.90 | | 98.6 | 24.7 | 147 | | 86.3 | 21.6 | 156 |
| | 10.0 | 8.85 | | 101.6 | 20.3 | 150 | | 88.9 | 17.8 | 159 |
| 12 | 4.0 | 1.85 | 1210 | 105.3 | 52.7 | 140 | 970 | 93.3 | 46.7 | 149 |
| | 6.0 | 3.75 | | 111.6 | 37.2 | 145 | | 100.4 | 33.5 | 155 |
| | 8.0 | 6.30 | | 115.3 | 28.8 | 148 | | 102.8 | 25.7 | 158 |
| | 10.0 | 9.45 | | 118.1 | 23.6 | 150 | | 105.0 | 21.0 | 160 |
| | 12.0 | 13.20 | | 119.8 | 20.0 | 151 | | 106.7 | 17.8 | 161 |
| 14 | 4.0 | 2.05 | 1385 | 109.8 | 54.9 | 133 | 1110 | 100.2 | 50.1 | 143 |
| | 5.0 | 3.00 | | 114.8 | 45.9 | 136 | | 103.5 | 41.4 | 146 |
| | 6.0 | 4.15 | | 118.3 | 39.4 | 139 | | 106.6 | 35.5 | 149 |
| | 10.0 | 10.45 | | 125.8 | 25.2 | 144 | | 111.4 | 22.3 | 152 |
| | 12.0 | 14.55 | | 127.9 | 21.3 | 145 | | 112.2 | 18.7 | 153 |

SPECIFICATIONS & WARRANTY*

*STANDARD CABINET UNIT ONLY

The contractor shall furnish and install Vulcan Cabinet Unit Heaters as selected to meet or exceed job requirements. The Cabinet Unit Heaters will conform to the items listed below and be certified under CSA guidelines.

CABINETS

All cabinets will be constructed with 18-gauge cold rolled steel, side panels and top. The front panel shall be furnished in 16-gauge cold rolled steel. It will have 1/2", 1-1/2 pound insulation with one side neoprene coated in front of coil. The internal cabinet shall be furnished in 18-gauge galvanized steel. Adequate work area for installation of control valves or electrical equipment shall be provided on both sides of the internal cabinet.

The cabinet shall be provided with a neutral eggshell baked enamel prime coat as standard. (Available if specified) Powder coated baked enamel, color selected from standard.

All cabinets shall be supplied with adjustable rear mounting brackets which will provide adjustment to correct alignment of the unit at installation to non square or out of true walls, joists, studs or surfaces. Adjustable leveling legs (two each base leg) are available when specified.

RECESSED UNITS

All recessed units shall be supplied with a "Wall Seal" assembly. This assembly shall provide protection to the wall or ceiling construction material. The "Wall Seal" shall be supplied in an eggshell baked enamel prime coat as standard. (When specified) Baked enamel colors may be selected from standard.

CEILING MOUNT OR RECESSED UNITS

All "C" and "RC" units shall be supplied with a hinged front panel. The multiple hinges shall provide full swing through 90°. A safety chain shall be provided as standard to prevent the face panel from swinging fully open accidentally. This chain must be easily detached to allow full access for servicing. Speed control switch will be shipped with wiring diagram for installation where desired.

FILTERS

All filters supplied as standard shall be reusable aluminum media with a 69% arrestance level. Filters shall be slide in type which are locked into position with a cotter pin.

FANS

Fan wheels shall be centrifugal, forward curved, double width of electro galvanized steel. Fan housings shall be of formed galvanized sheet metal.

COILS

STANDARD ONE ROW - The durable mechanically bonded copper/aluminum coil presents the best of today's hydronic heating technology. All element assemblies are submersion tested at factory at 250 PSI and are rated at a working pressure of 300 PSI. All units are designed so that field modifications can be made to reverse the coil position if required.

HIGH CAPACITY COIL - This is a hot water coil designed to provide increased capacity when the required load exceeds that of the standard coil for a given size. Its construction is similar to the standard coil however, there are two rows of tubes. Element assemblies are submersion tested at 250 PSI and are rated at a working pressure of 300 PSI.

MOTORS

Standard PSC motors shall have integral thermal protection and start at 78% of rated voltage. Optional PSC High Static motors will be capable of operating in high static conditions up to 4 inches of water column. All motors shall be factory run-tested and assembled in unit prior to shipping. Optional ECM and high static motors will have a solid state control board and a 3 speed switch. All motors shall be factory run-tested and assembled in unit prior to shipping.

ELECTRICAL

All primary internal wiring shall be done at the factory and every unit shall be factory tested for reliability.

FRESH AIR DAMPERS ON DESIGNATED UNITS ONLY

When desired specify either of the following:

1. Where noted 25% Manual Outside Air Dampers shall be provided. A manually operated damper quadrant shall provide from 0% to 25% outside air through the use of a single blade damper.

2. Where noted 25% Motorized Outside Air Dampers shall be provided. A synchronous motor (115/60/1) interlocked with the blower shall automatically open the outside air damper when blower starts. The single blade damper shall be adjustable from 0% to 25% outside air. When the blower stops or there is a loss of power, the damper shall return to the closed position. A damper override switch shall be provided to prevent damper operation when desired.

WARRANTY

The products in this catalog are warranted by Vulcan, to be free from defects in material and workmanship for a period of one (1) year from the date of shipment from Vulcan's plant. Vulcan's liability under this warranty is limited to replacing or repairing at our option, F.O.B. our plant any defective component or assembly returned to our factory prepaid and with proper return authorization document. All repairs or replacements are made subject to factory inspection. In the interest of product improvement, Vulcan reserves the right to make changes without notification.



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