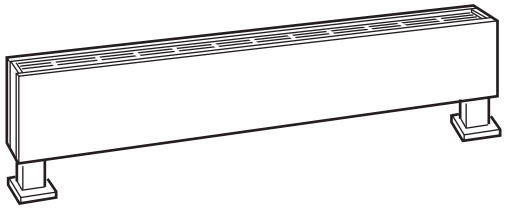
QMARK®
A Marley Engineered Products Brand

470 Beauty Spot Rd. E, Bennettsville, SC 29512

SUBMITTAL SHEET
TYPE CPH
COMMERCIAL PEDESTAL CONVECTION HEATERS



DIMENSIONS

Type	Height	Width	Length
CPH05A	5-1/2”	3”	28” to 10’
CPH07A	7”	5”	28” to 10’

c UL us
FILE #37116

ITEM	QTY.	CATALOG NUMBER	TAG	LENGTH	NO. OF ELE-MENTS	WATTS	VOLTS	Ø	AMPS	BUILT-IN CONTROLS

ACCESSORIES AND CONTROLS

ITEM	QTY.	CAT. NO.	TAG	DESCRIPTION

SUBMITTED BY:	DATE:

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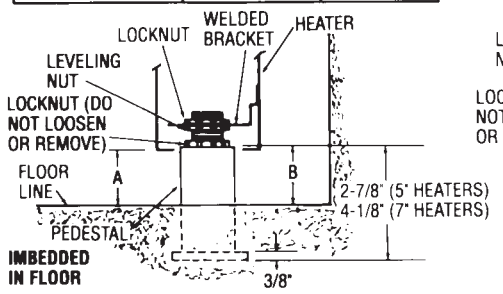
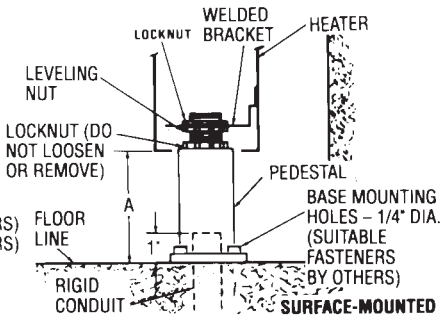
Pedestals

Heater Capacity (Watts/Ft. Heater Length)	Heater Dimension "A" (Minimum Mounting Height Above Floor)	Pedestal Dimension "B" (Minimum Height Above Floor)
125, 188 and 250 Watts/Ft.	1-3/4"	2"
376, 500, 564, 625 and 750 Watts/Ft.	3"	3-1/4"

Heater Catalog Number	Height Above Floor (Dim. "A")	
	Min.	Max.
CPH05A, DPH05A	2-5/8"	3-3/8"
CPH07A, DPH07A	3-7/8"	4-5/8"





ACCESSORIES

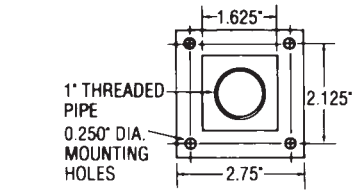
CATALOG NUMBER	USE W/DSH	DIMENSIONS (inches) H	D	L	N*
LEFT END CAPS					
CSH05-ECL**	CPH05A	5-1/2	2-1/2	—	1/8
CSH07-ECL**	CPH07A	7	4-3/4	—	1/8
RIGHT END CAPS					
CSH05-ECR**	CPH05A	5-1/2	2-1/2	—	1/8
CSH07-ECR**	CPH07A	7	4-3/4	—	1/8
PEDESTAL LEGS (FOR CPH05A HEATERS					
PHB05-2**	2', 3', & 4' heaters and blank sections				
PHB05-3**	5', 6', & 8' heaters and blank sections				
PHB05-4**	10' heaters and blank sections				
PEDESTAL LEGS (FOR CPH07 HEATERS)					
PHB07-2**	2', 3', & 4' heaters and blank sections				
PHB07-3**	5', 6', & 8' heaters and blank sections				
PHB07-4**	10' heaters and blank sections				
BLANK SECTIONS (CPH05)					
CPH05-BL2-1				28	28
CPH05-BL3-1				36	36
CPH05-BL4-1				48	48
CPH05-BL5-1	CPH05	5-1/2	3	60	60
CPH05-BL6-1				72	72
CPH05-BL8-1				96	96
CPH05-BL10-1				120	120
BLANK SECTIONS (CPH07)					
CPH07-BL2-1				28	28
CPH07-BL3-1				36	36
CPH07-BL4-1				48	48
CPH07-BL5-1	CPH07	7	5	60	60
CPH07-BL6-1				72	72
CPH07-BL8-1				96	96
CPH07-BL10-1				120	120

*N is the additional length the accessory adds to the total installation length.

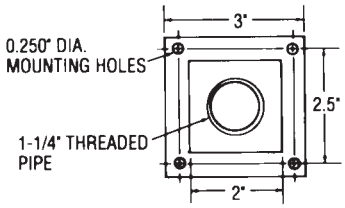
** PHB = Painted pedestal base.

*** Built-in duplex receptacle available. See page 3.

Pedestals Details

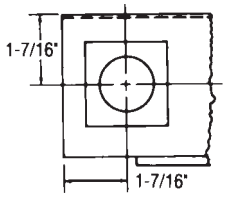


CPH05A HEATER PEDESTAL

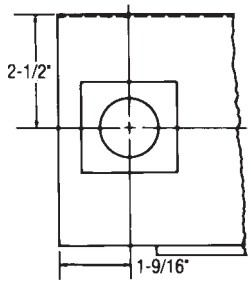


CPH07A HEATER PEDESTAL

Pedestals Location



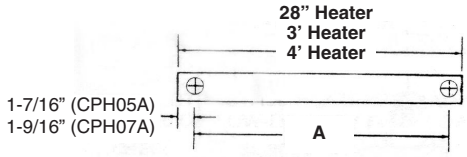
BOTTOM OF CPH05A HEATER

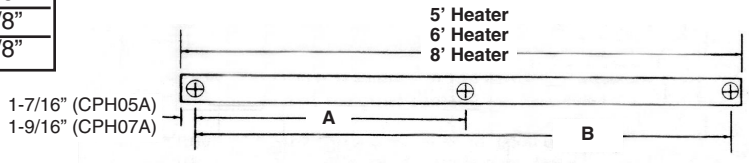


BOTTOM OF CPH07A HEATER

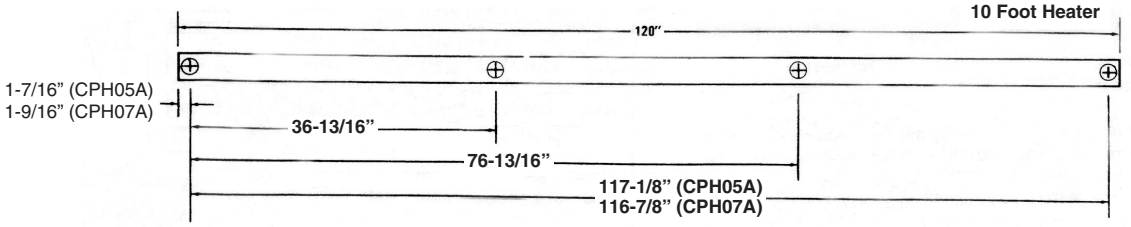
Pedestal Location

Heater Length	CPH05A		CPH07A	
	A	B	A	B
28"	25-1/8"	n/a	24-7/8"	n/a
3'	33-1/8"	n/a	32-7/8"	n/a
4'	45-1/8"	n/a	44-7/8"	n/a
5'	28-13/16"	57-1/8"	28-13/16"	56-7/8"
6'	32-13/16"	69-1/8"	32-13/16"	68-7/8"
8'	44-13/16"	93-1/8"	44-13/16"	92-7/8"





*** WHEN BUTTING HEATERS, LEAVE A 1/16" GAP BETWEEN HEATERS TO ALLOW FOR EXPANSION.**



CPH-05A SPECIFICATIONS

LENGTH	AMPERAGE						NOMINAL WATTS/FT.	TOTAL HEATING CAPACITY		NO. OF ELEMENTS	CATALOG NUMBER
	120V	208V	240V	277V	347V	600V		WATTS	BTU/HR		
	2.1	1.2	1.0	0.9	0.7	0.4	125	250	853		**CPH05A2125**
28"	3.1	1.8	1.6	1.4	1.1	0.6	188	375	1,280	One	**CPH05A2188**
(711mm)	4.2	2.4	2.1	1.8	1.4	0.8	250	500	1,706		**CPH05A2250**
	3.1	1.8	1.6	1.4	1.1	0.6	125	375	1,280		**CPH05A3125**
3'	4.7	2.7	2.4	2.0	1.6	0.9	188	564	1,925	One	**CPH05A3188**
(914mm)	6.2	3.6	3.1	2.7	2.2	1.2	250	750	2,560		**CPH05A3250**
	4.2	2.4	2.1	1.8	1.4	0.8	125	500	1,706		**CPH05A4125**
4'	6.2	3.6	3.1	2.7	2.2	1.2	188	750	2,560	One	**CPH05A4188**
(1219mm)	8.3	4.8	4.2	3.6	2.9	1.7	250	1,000	3,412		**CPH05A4250**
	5.2	3.0	2.6	2.3	1.8	1.0	125	625	2,133		**CPH05A5125**
5'	7.8	4.5	3.9	3.4	2.7	1.6	188	940	3,208	One	**CPH05A5188**
(1524mm)	10.4	6.0	5.2	4.5	3.6	2.1	250	1,250	4,266		**CPH05A5250**
	6.2	3.6	3.1	2.7	2.2	1.2	125	750	2,560		**CPH05A6125**
6'	9.4	5.4	4.7	4.1	3.2	1.9	188	1,125	3,840	One	**CPH05A6188**
(1829mm)	12.5	7.2	6.3	5.4	4.3	2.5	250	1,500	5,120		**CPH05A6250**
	—	4.8	4.2	3.6	2.8	1.7	125	1,000	3,412		**CPH05A8125**
8'	—	7.2	6.3	5.4	4.3	2.5	188	1,500	5,120	One	**CPH05A8188**
(2438mm)	—	9.6	8.3	7.2	5.8	3.3	250	2,000	6,824		**CPH05A8250**
	—	6.0	5.2	4.5	3.6	2.1	125	1,250	4,266		**CPH05A10125**
10'	—	9.0	7.8	6.8	5.4	3.1	188	1,875	6,400	One	**CPH05A10188**
(3048mm)	—	12.0	10.4	9.0	7.2	4.2	250	2,500	8,532		**CPH05A10250**

CPH07A SELECTION CHART

LENGTH	AMPERAGE								NOMINAL WATTS/FT.	TOTAL HEAT CAPACITY		NO. OF ELEMENTS	CATALOG NUMBER
	208V		240V		277V	347V	600			WATTS	BTU/HR		
	1Ø	3Ø	1Ø	3Ø	1Ø	1Ø	1Ø	3Ø					
	1.2	—	1.0	—	0.9	0.7	0.4	—	125	250	853		**CPH07A2125**
	1.8	—	1.6	—	1.4	1.1	0.6	—	188	375	1,280	One	**CPH07A2188**
	2.4	—	2.1	—	1.8	1.4	0.8	—	250	500	1,706		**CPH07A2250**
28"	3.6	—	3.1	—	2.7	2.2	1.2	—	375	750	2,560	Two	**CPH07A2375**
(711mm)	4.8	—	4.2	—	3.6	2.9	1.7	—	500	1,000	3,412		**CPH07A2500**
	5.4	3.1	4.7	2.7	4.1	3.2	1.9	1.1	564	1,125	3,840		**CPH07A2564**
	6.0	3.5	5.2	3.0	4.5	3.6	2.1	1.2	625	1,250	4,266	Three	**CPH07A2625**
	7.2	4.2	6.3	3.6	5.4	4.3	2.5	1.4	750	1,500	5,120		**CPH07A2750**
	1.8	—	1.6	—	1.4	1.1	0.6	—	125	375	1,280		**CPH07A3125**
	2.7	—	2.4	—	2.0	1.6	0.9	—	188	564	1,925	One	**CPH07A3188**
	3.6	—	3.1	—	2.7	2.2	1.2	—	250	750	2,560		**CPH07A3250**
3'	5.4	—	4.7	—	4.1	3.2	1.9	—	375	1,125	3,840	Two	**CPH07A3375**
(914mm)	7.2	—	6.3	—	5.4	4.3	2.5	—	500	1,500	5,120		**CPH07A3500**
	8.1	4.7	7.0	4.1	6.1	4.8	2.8	1.6	564	1,690	5,768		**CPH07A3564**
	9.0	5.2	7.8	4.5	6.8	5.4	3.1	1.8	625	1,875	6,400	Three	**CPH07A3625**
	10.8	6.3	9.4	5.4	8.1	6.5	3.7	2.1	750	2,250	7,680		**CPH07A3750**
	2.4	—	2.1	—	1.8	1.4	0.8	—	125	500	1,706		**CPH07A4125**
	3.6	—	3.1	—	2.7	2.2	1.2	—	188	750	2,560	One	**CPH07A4188**
	4.8	—	4.2	—	3.6	2.9	1.7	—	250	1,000	3,412		**CPH07A4250**
4'	7.2	—	6.3	—	5.4	4.3	2.5	—	375	1,500	5,120	Two	**CPH07A4375**
(1219mm)	9.6	—	8.3	—	7.2	5.8	3.3	—	500	2,000	6,824		**CPH07A4500**
	10.8	6.3	9.4	5.4	8.1	6.5	3.7	2.1	564	2,250	7,680		**CPH07A4564**
	12.0	7.0	10.4	6.0	9.0	7.2	4.2	2.4	625	2,500	8,532	Three	**CPH07A4625**
	14.4	8.3	12.5	7.2	10.8	8.6	5.0	2.9	750	3,000	10,239		**CPH07A4750**
	3.0	—	2.6	—	2.3	1.8	1.0	—	125	625	2,133		**CPH07A5125**
	4.5	—	3.9	—	2.4	2.7	1.6	—	188	940	3,208	One	**CPH07A5188**
	6.0	—	5.2	—	4.5	3.6	2.1	—	250	1,250	4,266		**CPH07A5250**
5'	9.0	—	7.8	—	6.8	5.4	3.1	—	375	1,875	6,400	Two	**CPH07A5375**
(1524mm)	12.0	—	10.4	—	9.0	7.2	4.2	—	500	2,500	8,532		**CPH07A5500**
	13.6	7.8	11.8	6.8	10.2	8.1	4.7	2.7	564	2,820	9,625		**CPH07A5564**
	15.0	8.7	13.0	7.5	11.3	9.0	5.2	3.0	625	3,125	10,665	Three	**CPH07A5625**
	18.0	10.4	15.6	9.0	13.5	10.8	6.2	3.6	750	3,750	12,800		**CPH07A5750**
	3.6	—	3.1	—	2.7	2.2	1.2	—	125	750	2,260		**CPH07A6125**
	5.4	—	4.7	—	4.1	3.2	1.9	—	188	1,125	3,840	One	**CPH07A6188**
	7.2	—	6.3	—	5.4	4.3	2.5	—	250	1,500	5,120		**CPH07A6250**
6'	10.8	—	9.4	—	8.1	6.5	3.7	—	375	2,250	7,680	Two	**CPH07A6375**
(1829mm)	14.4	—	12.5	—	10.8	8.6	5.0	—	500	3,000	10,239		**CPH07A6500**
	16.3	9.4	14.1	8.1	12.2	9.7	5.6	3.2	564	3,380	11,535		**CPH07A6564**
	18.0	10.4	15.6	9.0	13.5	10.8	6.2	3.6	625	3,750	12,800	Three	**CPH07A6625**
	21.6	12.5	18.8	10.8	16.2	12.9	7.5	4.3	750	4,500	15,358		**CPH07A6750**
	4.8	—	4.2	—	3.6	2.9	1.7	—	125	1,000	3,412		**CPH07A8125**
	7.2	—	6.3	—	5.4	4.3	2.5	—	188	1,500	5,120	One	**CPH07A8188**
	9.6	—	8.3	—	7.2	5.8	3.3	—	250	2,000	6,824		**CPH07A8250**
8'	14.4	—	12.5	—	10.8	8.6	5.0	—	375	3,000	10,239	Two	**CPH07A8375**
(2438mm)	19.2	—	16.7	—	14.4	11.5	6.7	—	500	4,000	13,652		**CPH07A8500**
	21.6	12.5	18.8	10.8	16.2	13.0	7.5	4.3	564	4,500	15,358		**CPH07A8564**
	24.0	13.9	20.8	12.0	18.1	14.4	8.3	4.8	625	5,000	17,065	Three	**CPH07A8625**
	28.8	16.7	25.0	14.5	21.7	17.3	10.0	5.8	750	6,000	20,478		**CPH07A8750**
	6.0	—	5.2	—	4.5	3.6	2.1	—	125	1,250	4,266		**CPH07A10125**
	9.0	—	7.8	—	6.8	5.4	3.1	—	188	1,875	6,400	One	**CPH07A10188**
	12.0	—	10.4	—	9.0	7.2	4.2	—	250	2,500	8,532		**CPH07A10250**
10'	18.0	—	15.6	—	13.5	10.8	6.2	—	375	3,750	12,800	Two	**CPH07A10375**
(3048mm)	24.0	—	20.8	—	18.1	14.4	8.3	—	500	5,000	17,065		**CPH07A10500**
	27.1	15.7	23.5	13.6	20.4	16.2	9.4	5.4	564	5,640	19,250		**CPH07A10564**
	30.0	17.4	26.0	15.0	22.6	18.0	10.4	6.0	625	6,250	21,330	Three	**CPH07A10625**
	36.1	20.8	31.3	18.1	27.1	21.6	12.5	7.2	750	7,500	25,600		**CPH07A10750**

Optional Built-in Control Specifications

Optional built-in Control (CATALOG No. Suffix)	Ratings
1-Pole Thermostat (-T)	Thermostat adjustable through grill; tamper resistant; range 60-120°F; rated 24 amps @ 120-240 VAC and 22 amps @ 277 VAC; Pilot Duty rating of 125 VA @ 24-277 VAC.
2-Pole Thermostat (-2T)	Thermostat adjustable through grill; tamper resistant; range 60-120°F; rated 24 amps @ 120-240 VAC and 22 amps @ 277 VAC; Pilot Duty rating of 125 VA @ 24-277 VAC.
2-Stage Thermostat (-2ST)	Thermostat adjustable through grill; tamper resistant; range 60-120°F; rating (per stage) 24 amps @ 120-240 VAC and 22 amps @ 277 VAC; Pilot Duty (per stage) 125 VA @ 24-277 VAC; 3°F differential between stages.
Power On/Off Switch* (-DS)	Power on/off switch energized through grill; Tamper resistant; double pole single throw switch rated 20 amps (per pole) @ 120-277 VAC.
Transformer Relay (-TR)	Single pole relay with 24 volts holding coil and built-in transformer; relay contacts rated 24 amp @ 120-240 VAC and 22 amps @ 277 VAC for 07 and 14 units; 22 amps @ 120-240 VAC and 19 amps @ 277 VAC for 05 units. 24 volt control.
Power Relay (-PR)	Single pole magnetic relay rated 25 amps @ 120-277 VAC; available with 24, 120, 208/240, or 277 VAC holding coil.
1-Pole Thermostat and Power On/Off Switch (-TDS)	Line voltage control, both thermostat and power on/off switch in power circuit; thermostat adjustable through grill (range 60-120°F); power on/off switch energized through grill; control combi-nation rated 20 amps @ 120-277 VAC.
Power On/Off Switch and Transformer Relay (-DSTR)	Line voltage control (requires a remote 24V Pilot Duty thermostat); both power on/off switch and transformer relay in power circuit; dis-connect switch energized through grill; control combination rate 20 amps @ 120-240 VAC and 19 amps @ 277 VAC.
Power On/Off Switch and Power Relay (-DSPR)	Line voltage control; both power on/off switch and power relay in power circuit; requires a remote control voltage and thermostat for power relay (holding coil voltages available: 24, 120, 208/240, 277 VAC); power on/off switch energized through grill. Control combination rated 18 amps @ 120-277 VAC.
Pilot Duty Thermostat (-PDT)	Thermostat adjustable through grill; tamper resistant; range 60-120°F; thermostat (rated 125 VA @ 24-277 VAC) is wired for Pilot Duty operation of Power Relay (PR) or Transformer Relay (TR). See circuit amperage restrictions with -PR or -TR.
120V Duplex Receptacle (-R)	20 amp duplex receptacle built into left or right end cap or 6, 9, 12 or 18-inch filler section.

NOTES:

These control options are available on all models as built-in components. In cases where the amperage of the heater (or heaters) exceeds the rated limit of the control, multiple controls must be specified.

Example: CPH07A8750
240 Volt Single-Phase
Pilot Duty Thermostat & Power Relay Required
Rated 25 Amps
Order: CPHA078750-PDT-2PR (240V holding coil) 240 volt, 1 PH supply

For 3-phase operation, multiple controls must be specified

Example: CPH07A8750
240 Volt 3-Phase
Pilot Duty Thermostat & Power Relay Control
Order: CPH07A8750-PDT-3PR
240 Volt, 3 PH supply

*2 required for 3-phase units & single-phase units over 20A.

TYPE CPH

QMARK®
A Marley Engineered Products Brand
470 Beauty Spot Rd. E, Bennettsville SC 29512

ARCHITECT'S AND ENGINEER'S SUGGESTED SPECIFICATIONS*

Heaters shall be low profile (3" x 5-1/2", 5" x 7") and available in lengths from 28 inches through 10 feet.

Enclosures shall be 16 gauge, furniture quality steel with reinforced, all welded construction; designed to withstand heavy-duty commercial and institutional use.

Enclosures shall be chemically-treated to resist corrosion. Finish shall be mar and temperature-resistant to retain contemporary appearance throughout years of rough use.

For safety, the electric heating bank shall consist of metal sheath heating elements. The elements shall have a copper clad steel sheath for strength and corrosion resistance, and aluminum fins for faster heat transfer.

One, two or three, low density elements shall be installed side-by-side on the same plane to uniformly warm all incoming air. Elements shall be center-anchored and shall float freely on each end through nylon bushings for quietness.

Discharge louvers shall be closely spaced steel to direct heat away from wall and to minimize wall surface temperatures and control dirt streaking.

A 1/4 inch mesh screen shall be installed beneath the discharge grille to deter the insertion of foreign objects.

Optional built-in controls shall include single-pole, double-pole or two-stage thermostats, power on/off switch, transformer relay and power relay. The thermostat shall be capable of controlling multiple units on a pilot duty circuit. (Observe the control limitations indicated.) Thermostat adjustment shall be with a thin-bladed screwdriver through the discharge louvers and shall be considered tamper-resistant.

An automatic reset thermal overheat protector shall run the full-length of the heater and shall turn off heating elements should overheating occur at any point along heating length. Overheat protector shall restore operation automatically when cause of overheating is removed.

Pedestal legs shall be architecturally styled and shall be individually adjustable to insure an even, level heater installation.

Heaters shall be designed with a built-in pre-wired race-way to enable multiple unit wiring from one feeder source.

Back panel shall be one piece heavy gauge painted steel, completely finished, and shall be suitable for mullion-to-mullion mounting in front of a glass curtain wall.

28-inch control sections, finished to match the heating units, shall be available with factory built-in mercury contactors, circuit breakers, control transformer, P.E. switch or SCR controls. This control section shall also be furnished blank, as an optional accessory, for field installation of controls.

All heaters and electrical accessories shall be labeled by Underwriters' Laboratories, Inc.

Accessories shall include end caps, blank sections. Blank sections shall be completely enclosed to enable the installer to pull standard wiring from heater to heater through the accessories.

**QMark reserves the right to change specifications*

APPLICATION LIMITATIONS AND PRECAUTIONS

A. Hazardous Atmosphere - Because the possibility of a concealed spark can exist from the built-in over-head cutout, heaters should not be used in potentially explosive atmospheres.

B. Corrosive Atmosphere - The high quality finish and steel internal sheet metal parts will give excellent service under most operating conditions, including coastal salt air and industrial atmospheres. However, the finish is not intended for direct salt spray exposure in marine application or highly corrosive greenhouse, swimming pool, chemical storage or industrial atmospheres.

C. Cleanliness - Although specifically designed for mounting below window areas, heaters can be installed on plaster, wood paneled, metal, masonry or composition wall surfaces with reasonable expectation of clean wall operation. Should some soiling occur, after a period of years, smooth walls may be cleaned with standard maintenance materials. For deep textured walls, consideration should be given to choice of enclosure height and watt per foot capacity - generally, the enclosure with lowest surface temperature will have the least soiling tendency.

D. Comfort - Optimum room comfort results when heater is mounted just below the window sill, since window cold down draft is eliminated and maximum convection air distribution without stratification is maintained throughout the room. Because of the tendency for warm air to stratify, installing heaters close to the ceiling is not recommended. If it should be necessary, at least 18" clearance above the air discharge must be maintained. Bottom of heaters are not intended for attractive appearance when mounted above eye level.

E. Air Throw - Since heaters provide only natural convection air throw, they are not recommended for combatting cold outside air blasts through high traffic, main entry ways and vestibules. Heaters will maintain satisfactory comfort conditions in low traffic, side entry ways and vestibules, but for most entry ways, faster response fan driven heaters would be preferred.

F. Curtains, drapes or blinds - should clear the top of the heater by at least six inches. See I for vinyl blinds. Never permit draperies to completely cover the unit. Furniture - should be placed so it does not touch the heater and so it does not completely block the air vents. Allow at least 4" free space between furniture and the heaters.

G. Recess mounting - UL labeled for free standing wall surface mounting only. Not recommended for mounting behind built-in book shelves, storage cabinets, window seats, etc.

H. In institutional applications such as hospitals, nursing homes, child day-care centers and clinics, it is recommended that low-watt density convectors be used to provide optimum comfort at lowest case temperatures.

I. Due to variations in vinyl compositions and their potential to discolor, the use of stand-off brackets (SO1 or SO2) and/or specifying the lower watt density unit may be required when installing on vinyl wall-coverings or under vinyl window dressings.
Prior to setting specifications, consult factory for installation recommendations.