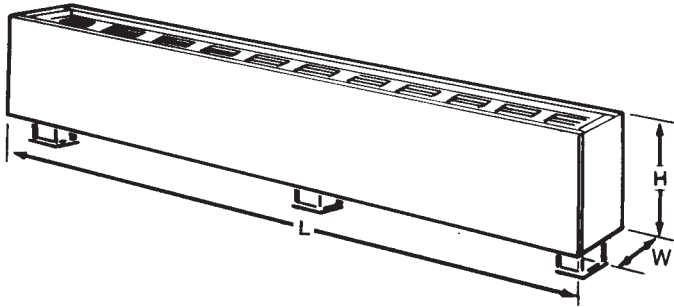




A Marley Engineered Products Brand
 470 Beauty Spot Rd. E, Bennettsville, SC 29512

SUBMITTAL SHEET
CPL SERIES
COMMERCIAL
PEDESTAL LINE HEATERS

CPL SERIES - COMMERCIAL PEDESTAL LINE HEATERS



DIMENSIONS

Type	Height	Width	Length
CPLAS	5-1/2"	3"	28" to 10'
CPLAM	7"	5"	28" to 10'



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

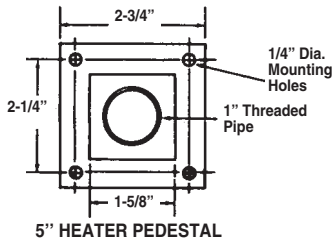
ACCESSORIES & CONTROLS

ITEM	QTY.	CAT. NO.	TAG	DESCRIPTION

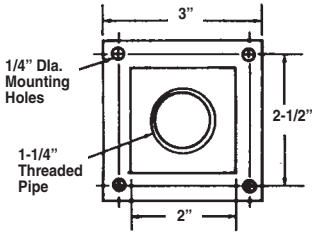
SUBMITTED BY:	DATE

SUBMITTED BY:	DATE

PEDESTAL DETAILS

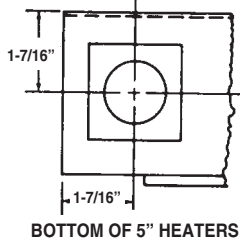


5" HEATER PEDESTAL

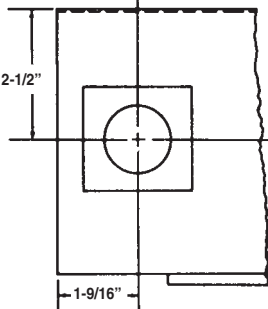


7" HEATER PEDESTAL

PEDESTAL LOCATION

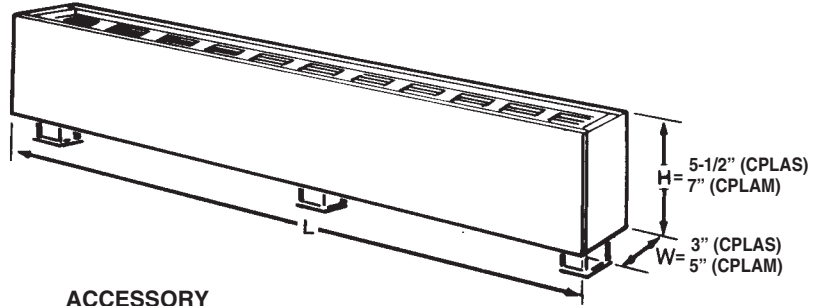


BOTTOM OF 5" HEATERS

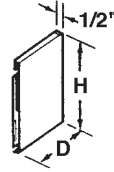


BOTTOM OF 7" HEATERS

HEATING AND BLANK SECTION



ACCESSORY



Heater Capacity (Watt/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"
375, 500, 564 625, and 750 Watts/Ft.	3"	3-1/4"

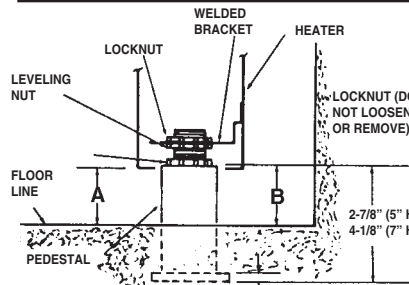
Heater Catalog Number	Height Above Floor Dim. "A"	
	Min.	Max.
CPLAS	2-5/8"	3-3/8"
CPLAM	3-7/8"	4-5/8"

ACCESSORIES

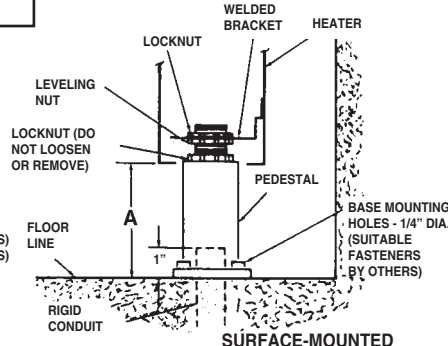
CATALOG NO.	USE WITH	DIMENSIONS (INCHES)			
		H	D	L	X*
LEFT END CAPS					
CSLASECL**	CPLAS	6-1/2	2-1/2	—	1/8
CSLAMECL**	CPLAM	7	4-1/4	—	1/8
RIGHT END CAPS*					
CSLASECR**	CPLAS	6-1/2	2-1/2	—	1/8
CSLAMECR**	CPLAM	7	4-1/4	—	1/8
PEDESTAL LEGS (For Use With CPLAS Units)					
CPLASPD-2	2', 3' and 4' Heaters and Blank Sections				
CPLASPD-3	5', 6' and 8' Heaters and Blank Sections				
CPLASPD-4	10' Heaters and Blank Sections				
PEDESTAL LEGS (For Use With CPLAM Units)					
CPLAMPD-2	2', 3' and 4' Heaters and Blank Sections				
CPLAMPD-3	5', 6' and 8' Heaters and Blank Sections				
CPLAMPD-4	10' Heaters and Blank Sections				
BLANK SECTIONS					
CPLASBL2	CPLAS	5-1/2	3	28	28
CPLASBL3	CPLAS	5-1/2	3	36	36
CPLASBL4	CPLAS	5-1/2	3	48	48
CPLASBL5	CPLAS	5-1/2	3	60	60
CPLASBL6	CPLAS	5-1/2	3	72	72
CPLASBL8	CPLAS	5-1/2	3	96	96
CPLASBL10	CPLAS	5-1/2	3	120	120
CPLAMBL2	CPLAM	7	5	28	28
CPLAMBL3	CPLAM	7	5	36	36
CPLAMBL4	CPLAM	7	5	48	48
CPLAMBL5	CPLAM	7	5	60	60
CPLAMBL6	CPLAM	7	5	72	72
CPLAMBL8	CPLAM	7	5	96	96
CPLAMBL10	CPLAM	7	5	120	120

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

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



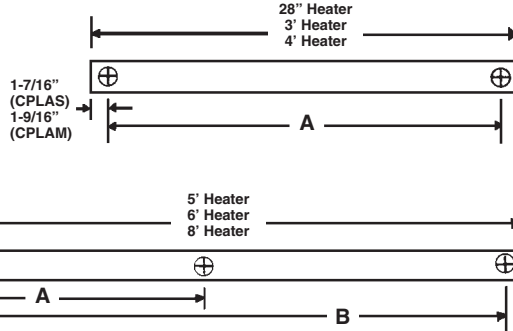
IMBEDDED IN FLOOR



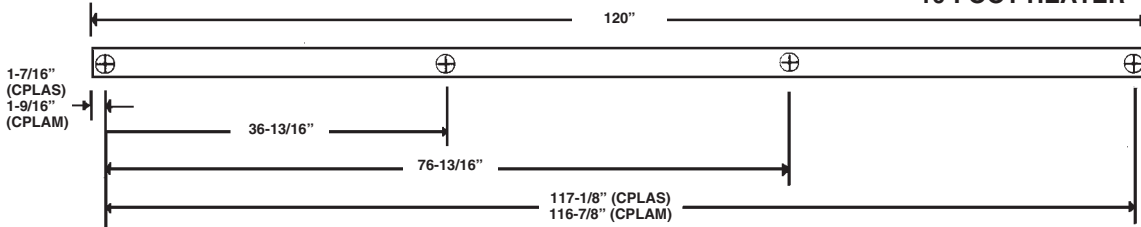
SURFACE-MOUNTED

Pedestal Location

Heater Length	CPLAS		CPLAM	
	A	B	A	B
28"	25-1/8"	NA	24-7/8"	NA
3'	33-1/8"	NA	32-7/8"	NA
4'	45-1/8"	NA	44-7/8"	NA
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"



10-FOOT HEATER



CPLAS SELECTION CHART

CATALOG NO.	LGTH.	WATTS PER FT.	TOTAL WATTS	TOTAL BTU/HR.	AMPERAGE			
					120V	208V	240V	277V
CPLAS2	28 in.	125	250	853	2.1	1.2	1.0	1.0
		188	375	1280	3.1	1.8	1.0	1.6
		250	500	1706	4.2	2.4	2.1	2.1
CPLAS3	3 ft.	125	375	1280	3.1	1.8	1.6	1.4
		188	564	1925	4.7	2.7	2.4	2.0
		250	750	2560	6.2	3.6	3.1	2.7
CPLAS4	4 ft.	125	500	1706	4.2	2.4	2.1	1.8
		188	750	2560	6.2	3.6	3.1	2.7
		250	1000	3412	8.3	4.8	4.2	3.6
CPLAS5	5 ft.	125	625	2133	5.2	3.0	2.6	2.3
		188	940	3208	7.8	4.5	3.9	3.4
		250	1250	4266	10.4	6.0	5.2	4.5
CPLAS6	6 ft.	125	750	2560	6.2	3.6	3.1	2.7
		188	1125	3840	9.4	5.4	4.7	4.1
		250	1500	5120	12.5	7.2	6.3	5.4
CPLAS8	8 ft.	125	1000	3412	—	4.8	4.2	3.6
		188	1500	5120	—	7.2	6.2	5.4
		250	2000	6824	—	9.6	8.3	7.2
CPLAS10	10 ft.	125	1250	4266	—	6.0	5.2	4.5
		188	1875	6400	—	9.0	7.8	6.8
		250	2500	8532	—	12.0	10.4	9.0

CPLAM SELECTION CHART

CATALOG NO.	LGTH.	WATTS PER FT.	TOTAL WATTS	TOTAL BTU/HR.	AMPERAGE					NO. OF ELEM.
					208V 1 PH.	208V 3 PH.	240V 1 PH.	240V 3 PH.	277V 1 PH.	
CPLAM2	28 in.	125	250	853	1.2	—	1.0	—	0.9	1
		188	375	1280	1.8	—	1.6	—	1.4	
		250	500	1706	2.4	—	2.1	—	1.8	
		2	375	750	2460	3.6	—	3.1	—	2.7
			500	1000	3412	4.8	—	4.2	—	3.6
			564	1125	3840	5.4	3.1	4.7	2.7	4.0
CPLAM3	3 ft.	125	375	1280	1.8	—	1.6	—	1.4	1
		188	564	1925	2.7	—	2.4	—	2.0	
		250	750	2560	3.6	—	3.1	—	2.7	
		2	375	1125	3840	5.4	—	4.7	—	4.0
			500	1500	5120	7.2	—	6.2	—	5.4
			564	1690	5768	9.3	4.7	7.4	4.1	6.1
CPLAM4	4 ft.	125	500	1760	2.4	—	2.1	—	1.8	1
		188	750	2560	3.6	—	3.1	—	2.7	
		250	1000	3413	4.8	—	4.2	—	3.6	
		2	375	1500	5120	7.2	—	6.2	—	5.4
			500	2000	6824	9.6	—	8.3	—	7.2
			564	2250	7680	10.8	6.2	9.4	5.4	8.0
CPLAM5	5 ft.	125	625	2133	3.0	—	2.6	—	2.2	1
		188	940	3208	4.5	—	3.9	—	3.4	
		250	1250	4266	6.0	—	5.2	—	4.5	
		2	375	1875	6400	9.0	—	7.8	—	6.7
			500	2500	8532	12.0	—	10.4	—	9.0
			564	2820	9625	13.5	7.8	11.8	6.8	10.2
CPLAM6	6 ft.	125	750	2560	3.6	—	3.1	—	2.7	1
		188	1125	3840	5.4	—	4.7	—	4.0	
		250	1500	5120	7.2	—	6.3	—	5.4	
		2	375	2250	7680	10.8	—	9.4	—	8.1
			500	3000	10,239	14.4	—	12.5	—	10.8
			564	3380	11,535	16.3	9.4	14.1	8.1	12.2
CPLAM8	8 ft.	125	1000	3423	4.8	—	4.2	—	3.6	1
		188	1500	5120	7.2	—	6.2	—	5.4	
		250	2000	6826	9.6	—	8.3	—	7.2	
		2	375	3000	10,239	14.4	—	12.5	—	10.8
			500	4000	13,652	19.2	—	16.7	—	14.4
			564	4500	15,358	21.6	12.5	18.7	10.8	16.2
CPLAM10	10 ft.	125	1260	4266	6.0	—	5.2	—	4.5	1
		188	1875	6400	9.0	—	7.8	—	6.7	
		250	2500	8532	12.0	—	10.4	—	9.0	
		2	375	3750	12,800	18.0	—	15.6	—	13.5
			500	5000	17,065	24.0	—	20.8	—	18.0
			564	5640	19,250	27.2	15.7	23.6	13.6	20.4
3	625	6250	21,330	30.0	17.3	26.0	15.0	22.6		
	750	7500	25,600	36.0	20.8	31.3	18.1	27.0		

OPTIONAL BUILT-IN CONTROL SPECIFICATIONS

Optional Built-In Control (Catalog No. Suffix)	RATINGS
1-Pole Thermostat (-T)	Thermostat adjustable through grille; 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 grille; 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 grille; tamper resistant; range 60-120°F; rating (per stage) 24 amps @ 120-240 VAC and 22 amps @ 277 VAC; Pilot Duty rating of 125 VA @ 24-277 VAC; Pilot Duty (per stage) 125 VA @ 240/277 VAC; 3°F differential between stages.
Disconnect Switch (-DS)	Disconnect switch energized through grille; tamper resistant; double pole single throw switch rated 20 amps (per pole) @ 120-277 VAC.
Transformer Relay (-TR12) - 120V (-TR20) - 208V (-TR24) - 240V (-TR27) - 277V	Single pole relay with 24 volt holding coil and built-in transformer; relay contacts rated 24 amp @ 120-240 VAC and 22 amp @ 277 VAC for CPLAM units; 22 amps @ 120-240 VAC and 19 amps @ 277 VAC for CPLAS units. 24 volt control.
Power Relay (-PR2) - 24V (-PR12) - 120V (-PR20) - 208V (-PR24) - 240V (-PR27) - 277V	Single pole magnetic relay rated 18 amps @ 120-277 VAC; available with 24, 120, 208/240, or 277 VAC holding coil.
Pilot Duty Thermostat (-PDT)	Thermostat adjustable through grille; 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.

HOW TO ORDER

Berko's factory catalog number is made up of groups of numerals and letters to provide a complete description of the product. A typical factory catalog number will consist of six groups. EXAMPLE: If you want a 28" CPL heater, 3" x 5-1/2" case size, 500 watts at 120 volts, with a built-in single pole thermostat and disconnect switch, this is what you should order:

I II III IV V VI
CPLAS 2 250 12 1 TDS

I CASE SIZE

CPLAS - 3" X 5-1/2" CPLAM - 5" X 7"

II LENGTH INDICATOR

The following numbers in this group designate the length of the heater body as follows:

2 - 28" 3 - 3' 4 = 4' 5 = 5' 6 = 6' 8 = 8' 10 = 10'

III OUTPUT - WATTS INDICATOR

Standard Watt Densities are 125W/ft, 188 W/ft, 250 W/ft for all case sizes. or CPLAM, additional watt densities are 375 W/ft, 500 W/ft, 564 W/ft, 625W/ft and 750 W/ft.

IV VOLTAGE

Identify the heater voltage using these two digit numbers:
12 = 120V 20 = 208V 24 = 240V 27 = 277V

V PHASE

Identify voltage phase using these single digit numbers:
1 = 1 phase 3 = 3 phase

VI OPTIONAL BUILT-IN CONTROLS

Specify optional controls to be built into the heater by the letters shown in parentheses in control specification chart above.



A Marley Engineered Products Brand

470 Beauty Spot Rd. E, Bennettsville, SC 29512

ARCHITECT'S AND ENGINEER SPECIFICATIONS*

Furnish and install, where indicated on plans, pedestal convector type heaters suitable for continuous operation as manufactured by Berko, A Marley Engineered Products Brand, Bennettsville, SC. Units shall be Underwriter's Laboratories Listed to US and Canadian standards, shall have a low profile (3" x 5-1/2", 5" x 7"), and be available in lengths from 28" through 10'.

ENCLOSURE - Shall be fabricated of 16 gauge cold-rolled steel (14 gauge optional), with a built-in wireway with factory installed wiring rated up to 45 Amps. This makes it unnecessary to fish wires through when wiring two or more heaters in parallel. Removal of the front panel will provide unobstructed access to the element area and terminal boxes. Enclosures will have an extruded aluminum grille with a 1/4" mesh under the grille to discourage insertion of foreign objects into the heaters. There will be top discharge outlets and bottom inlet outlets.

HEATING ELEMENTS - Constructed of nickel chromium heating element wire, embedded in magnesium oxide, and enclosed in a metal sheath for maximum strength and corrosion resistance. Aluminum fins shall be pressure bonded to the sheath. One, two or three elements shall be installed side-by-side to uniformly warm the incoming air. They shall be center anchored and float freely on each end in nylon bushings.

OVER TEMPERATURE PROTECTION - An automatic reset thermal overhear protector shall run the length of the heater turning the unit off in the event an overheating situation should occur. The protector shall automatically reset after the unit has cooled down.

HEATING LENGTHS AND VOLTAGES - Heater lengths, voltages, and wattage capacities shall be as indicated on the plans.

FINISH - All heaters and trim accessories shall be phosphatized and painted by a baked enamel painting process.

TRIM ACCESSORIES - Optional trim accessories to provide an attractive off-set fit shall be provided. These shall include end caps and blank sections.

PEDESTAL LEGS - Shall be architecturally styled and be individually adjustable to insure a level heater installation.

OPTIONAL BUILT-IN CONTROLS - Shall be provided singularly or in combination as specified. These shall include thermostats, power relays, transformer relays, and disconnect switches.

** Berko reserves the right to change specifications without prior notice.*

APPLICATION LIMITATIONS AND PRECAUTIONS

A. Hazardous Atmosphere - Because the possibility of a concealed spark can exist from the built-in thermal limit switch, 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. Air Throw - Since heaters provide only natural convection air throw, they are not recommended for combatting cold outside air blasts through high traffic, main entryways and vestibules. Heaters will maintain satisfactory comfort conditions in low traffic, side entryways and vestibules, but for most entryways, faster response fan driven heaters would be preferred.

E. Curtains, Drapes, or Blinds - Should clear the top of the heater by at least six inches. 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.

F. 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.

G. 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.