

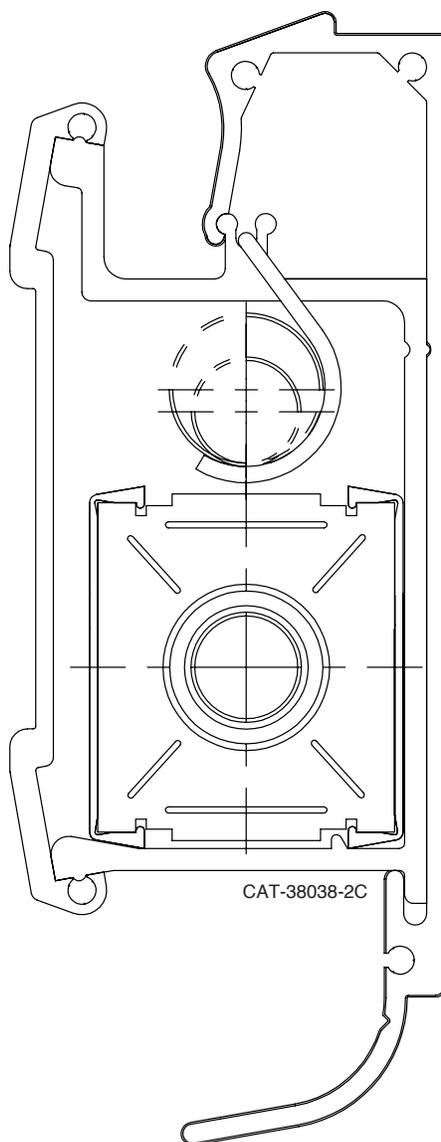
# DESIGNLINE

DESIGNED TO LAST FOREVER

## Performance and Technical Data

**Bathrooms**

**Kitchens**



CAT-38038-2C

***"Everywhere Baseboard Takes a Beating"***

# SPECIFICATION AND SUBMITTAL

## MATERIAL AND CONSTRUCTION

### Enclosure Assembly

The entire enclosure assembly components are made of heavy gauge extruded 6063T5 clear anodized aluminum.

### Finish

The standard finish supplied on all of the enclosure assembly and accessories is a high solid baked enamel. White and Sand Dunes (tan) are the standard colors. Consult factory for special or custom colors.

### Backplate

The backplate is designed to provide the basic backbone to the entire assembly. Its form is extruded, providing a minimum thickness of 10 gauge (.100) throughout. Incorporated in its design are alignment slots that will receive lock-pins which will interlock with the adjoining piece of backplate or terminating end cap and/or 90° inside corner accessory. The backplate also provides mounting tracks in which the element/face plate support brackets locate and interlock.

### Brackets

The brackets are designed to integrate with the backplate and support the element while providing a pressure lock fit with the face plate. The bracket extrusion maintains a minimum thickness of 8 gauge (.125).

### Fronts

The extruded insert front is designed to maintain a minimum thickness of 10 gauge (.100). Its design provides a pressure lock along the length of the backplate mounted brackets.

### 90° Inside Corner

The 90° inside corner accessory is made of die cast 380 aluminum material. The minimum wall thickness will not be less than 10 gauge (.100). Each end will fit over the enclosure assembly. Lock-pin receiver holes are provided to inter lock with the adjoining pieces of enclosure to ensure tight and positive attachment.

### Wall Trim

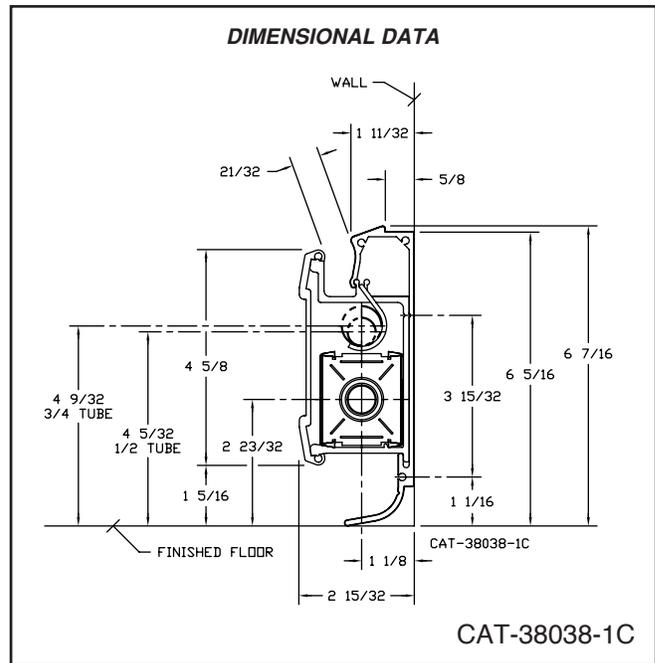
The wall piece is designed to snap fit over the enclosure assembly. It is intended to be used to start or finish the run of enclosure when terminating at a wall. The bottom of the wall trim returns back to the backplate and is secured into position with a drill point fastener supplied by Designline. The material thickness is to be no less than 12 gauge (.075) extruded aluminum.

### End Cap

The end cap accessory is made of die cast 380 aluminum material. The minimum wall this thickness will not be less than 10 gauge (.100) thick. It overlaps the enclosure assembly and is provided with lock-pin receiver holes for tight and positive attachment. Up to 3/8" lateral adjustment can be obtained.

### Element

The copper tube aluminum finned element is mechanically expanded to provide maximum fin contact. The aluminum fin is of full collared design so that consistent spacing is provided along with maximum heat transfer. The copper tube will be



1/2" nominal O.D. The aluminum fins shall be 1-11/16" x 1-31/32 x .009" thick. There are 64 fins per foot. The fin will have air turbulence impressions over the vertical stiffening edges on the front and back.

### Slide Shoe

The element will be provided with two vertically mounted plastic slide shoes occurring at each bracket. These slide shoes are designed to snap into precut notches in the element fins. The slide shoes provide a noise isolation effect between the element and bracket and eliminate metal to metal contact.

### Supply/Return Hanger

The supply/return hanger provides extra support to the supply or return tube inside of the enclosure assembly. The dual loop design is made of no. 13 wire. It snaps into the lock groove formed in the bracket and allows lateral movement due to expansion and contraction to take place. Movement front to back is eliminated. The hanger will accommodate 1/2" and 3/4" copper tube.

### Access Panel

The access panel is designed to slide over the front panel and provide access to the interior area where valves or air vents are located. The material thickness is to be no less than 12 gauge (.075) extruded aluminum.

# BTU PERFORMANCE DATA

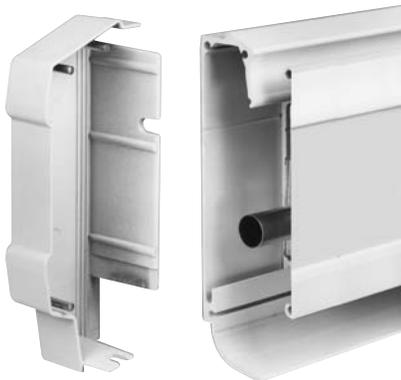
BASEBOARD RATINGS											
I = B = R HOT WATER RATINGS—FORCED CIRCULATION    Based on 65°F Entering Air Temperatures											
FLOW RATE	BTUH PER LINEAL FOOT OF ACTIVE LENGTH AT AVERAGE WATER TEMPERATURES INICATED °F										
	DL-500 Assembled with 1/2" Element										
GPM	150°	160°	170°	180°	190°	200°	210°	215°	220°	230°	240°
4	270	320	370	420	470	520	560	590	610	660	710
1	260	300	350	400	440	490	530	560	580	620	670
RATING AND PRESSURE DROPS AT VARIOUS FLOW RATES											
GPM		1.0	1.5	2.0	2.5	3.0	3.5	4.0	.45	5.0	6.0
Lb. per Hr.		500	750	1,000	1,250	1,500	1,750	2,000	2,250	2,500	3,000
I = B = R Factor											
to Obtain Rating at Given Flow		1,000	1,016	1,028	1,038	1,045	1,051	1,057	1,062	1,067	1,074
DL-500 Element – P.D.		260	520	850	1,270	1,730	2,290	2,880	3,600	4,300	5,900
Milinches Per Ft.											
<b>NOTES:</b>											
1. The Hot Water Ratings shown are based on an active length of 7.75 ft.—The total length is 3 inches longer or 8 ft.											
2. The Hot Water Capacities are obtained by actual test at 500 lbs./hr. water flow rate to which 15% has been added to obtained I = B = R.											
3. The heating element P5E is 1/2" nominal diameter copper tubing with unpainted aluminum fins 1-11/16" x 1-31/32" x .009", 64 fins per foot.											
4. The I = B = R Ratings at 4 gpm shoould not be used unless the flow rate is known to be equal to or greater than 4 gpm. Where the flow rate is unknown, the I = B = R Rating at 1 gpm (500 lb. hr.) must be used.											



**ENCLOSURE WITH ACCESS PANEL**



**ENCLOSURE WITH INSIDE CORNER**



**ENCLOSURE ASSEMBLY WITH END CAP**



**RETURN PIPE HANGER IN BRACKET**



**ENCLOSURE WITH WALL TRIM**



**INTERLOCKING  
FRONT PANEL**



**FRONT PANEL WITH  
PIN INSERTED**



**INTERLOCKING  
ACCESSORIES**



**END CAP WITH  
PIN INSERTED**

<b>BASEBOARD ENCLOSURE OPTIONS</b>	
<b>Model D-500</b>	Complete with 1/2" element with standard baked enamel paint. Available lengths 2',3',4',5',6',7' & 8'.
<b>Model D</b>	Enclosure only with standard baked enamel paint. Available lengths 2',3',4',5',6',7' & 8'.
<b>Model DE-500</b>	Single 1/2" heating elements. Available lengths 2',3',4',5',6',7' & 8'.

# DESIGNLINE

DESIGNED TO LAST FOREVER

260 North Elm Street, Westfield, MA 01085  
Tel: (413) 564-5545 Fax: (413) 562-8437

*Patent Applied for*