STERLING®
COMMERCIAL HYDRONIC PRODUCTS

A MESTEK COMPANY

LCS-10

Light Commercial Slope-Top Enclosures for Hydronic Heating

MADE IN THE USA

LCS-10

Sterling Light Commercial Slope-Top Enclosures
The Sterling LCS-10 offers an outstanding value in a light commercial hydronic heating enclosure. Capable of utilizing two tiers of element, the LCS-10 offers high output in a low profile slope-top enclosure. The 3-1/4 inch depth and slope top make this attractive enclosure a real space-saver. LCS-10 elements are available in both copper/aluminum and steel in a wide variety of sizes and outputs.

For ease of installation, the LCS-10 features a self locating bracket with pre-punched mounting holes. The stamped pencil-proof louvers prevent trash accumulation on the element while meeting the specifications of demanding engineers and architects. And, because the LCS-10 does not require a full backplate, it can be mounted off of the finished floor.

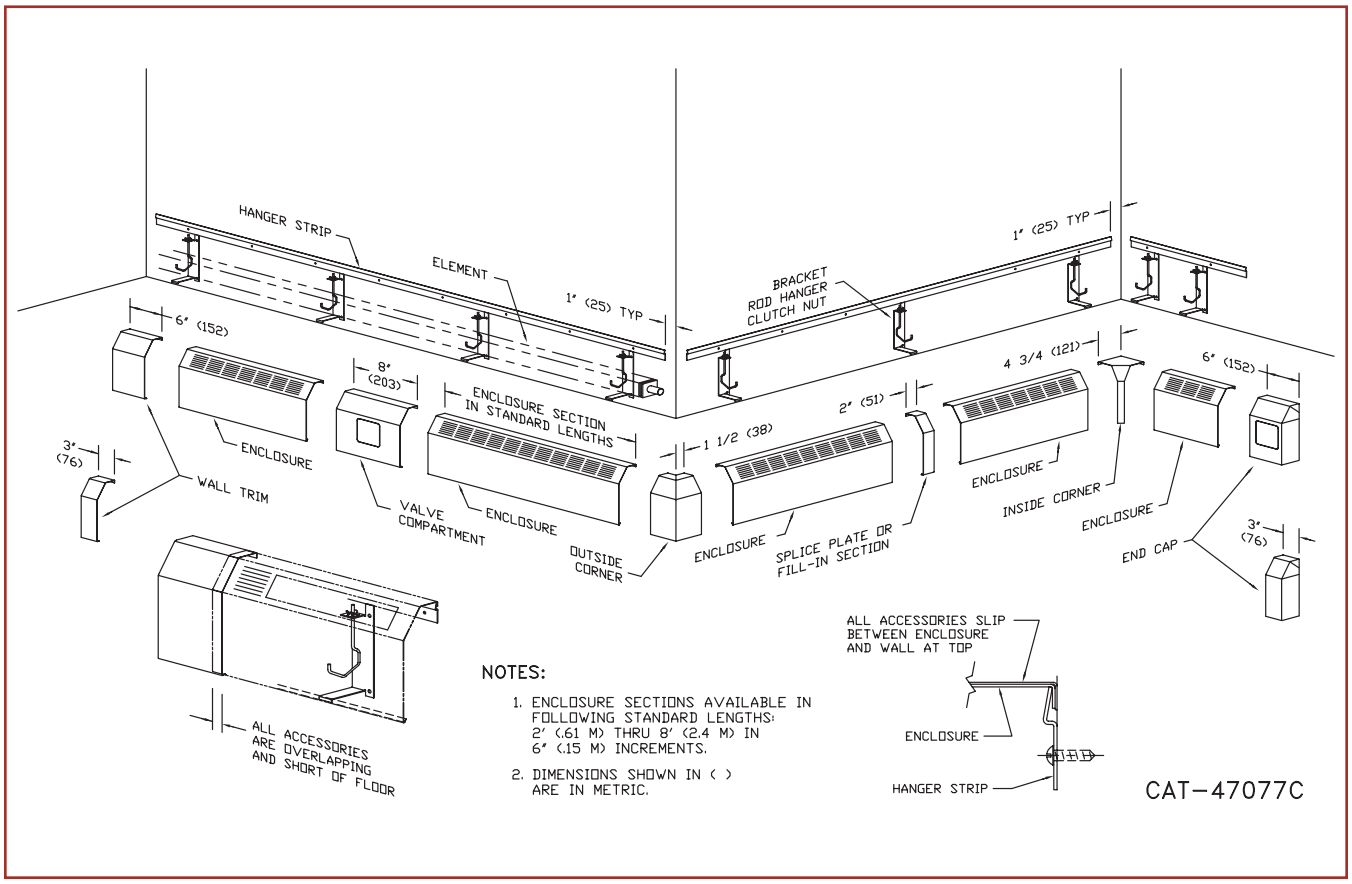
All Sterling LCS-10 enclosures feature a durable baked powder finish and are available in Sterling's full selection of colors. Constructed of 18-gauge cold rolled steel (16-gauge optional), this durable enclosure is ideal for dormitories, military housing, nursing homes, offices and reception areas.

All Sterling commercial hydronic products are made from recycled materials.

FEATURES

- Two tier capacity
- Heavy 18-gauge enclosure (16-gauge optional)
- Narrow 3-1/4 inch depth
- Low 10-1/4 inch height
- Stamped pencil-proof louvers
- Broad choice of elements
- Baked powder finish
- Self-locating brackets

GENERAL LAYOUT



RATINGS LCS-10

STYLE Light Commercial "LCS-10"

COPPER/ALUMINUM ELEMENT RATINGS

ALL RATINGS ARE BASED ON 3 FPS VELOCITY, 65° EAT

TUBE SIZE	CATALOG DESIGNATION	FIN SIZE HEIGHT X WIDTH	FINS PER FT.	FIN THICKNESS IN INCHES	TIERS AND CENTERS IN INCHES	MTG. HEIGHT IN INCHES	STEAM 215°F FACTOR	HOT WATER (AVG.) 200°	190°	180°	170°	160°	150°	140°	130°	120°
								CORRECTION FACTORS FOR AVERAGE WATER TEMPERATURES								
							1.00	0.86	0.78	0.69	0.61	0.53	0.45	.40	.33	.26
3/4"	R02	2-1/2" x 2-3/4"	60	.010	1	14-1/4	1140	980	890	790	700	600	510	460	380	300
					2 - 3-1/2 CL	14-1/4	1560	1340	1220	1080	950	830	700	620	510	410
1"	R03	2-1/2" x 2-3/4"	55	.011	1	14-1/4	1090	940	850	750	660	580	490	440	360	280
					2 - 3-1/2 CL	14-1/4	1600	1380	1250	1100	980	850	720	640	530	420
3/4"	R04	3-3/4" x 2-3/4"	50	.014	1	14-1/4	1170	1010	910	810	710	620	530	470	390	300
1"	R05	3-3/4" x 2-3/4"	50	.011	1	14-1/4	1130	970	880	780	690	600	510	450	370	290
1-1/4"	R08	3-3/4" x 2-3/4"	50	.020	1	14-1/4	1150	990	900	790	700	610	520	460	380	300
1"	R06	5" x 2-3/4"	40	.020	1	14-1/4	1200	1030	940	830	730	640	540	480	400	310
1"	R07	5" x 2-3/4"	50	.020	1	14-1/4	1210	1040	940	830	740	640	540	480	400	310
1-1/4"	R09	5" x 2-3/4"	40	.020	1	14-1/4	1150	990	900	790	700	610	520	460	380	300
1-1/4"	R10	5" x 2-3/4"	50	.020	1	14-1/4	1230	1060	960	850	750	650	550	490	410	320

STYLE Light Commercial "LCS-10"

STEEL ELEMENT RATINGS

ALL RATINGS ARE BASED ON 3 FPS VELOCITY, 65° EAT

TUBE SIZE	CATALOG DESIGNATION	FIN SIZE HEIGHT X WIDTH	FINS PER FT.	FIN THICKNESS IN INCHES	TIERS AND CENTERS IN INCHES	MTG. HEIGHT IN INCHES	STEAM 215°F FACTOR	HOT WATER (AVG.) 200°	190°	180°	170°	160°	150°	140°	130°	120°
								CORRECTION FACTORS FOR AVERAGE WATER TEMPERATURES								
							1.00	0.86	0.78	0.69	0.61	0.53	0.45	.40	.33	.26
1"	R11	3-3/4" x 2-3/4"	40	.024	1	14-1/4	910	780	710	630	560	480	410	360	300	240
1"	R15	5" x 2-3/4"	50	.024	1	14-1/4	1100	950	860	760	670	580	500	440	360	290
1-1/4"	R16	5" x 2-3/4"	50	.024	1	14-1/4	1150	990	900	790	700	610	520	460	380	300

The ratings of the charts above include factors shown in the chart below for the recommended mounting height. Two tier ratings are based on 31/2" between elements. Ratings are in BTU per hour per lineal foot of active length. "Active length" is the catalog ordering length less 4". The water ratings applicable to water flow rates of three or more feet per second, have been determined by applying factors shown to the Steam Ratings. Elements unpainted. If the unit is to be installed at a height different than the recommended mounting height, the rating must be adjusted as follows:

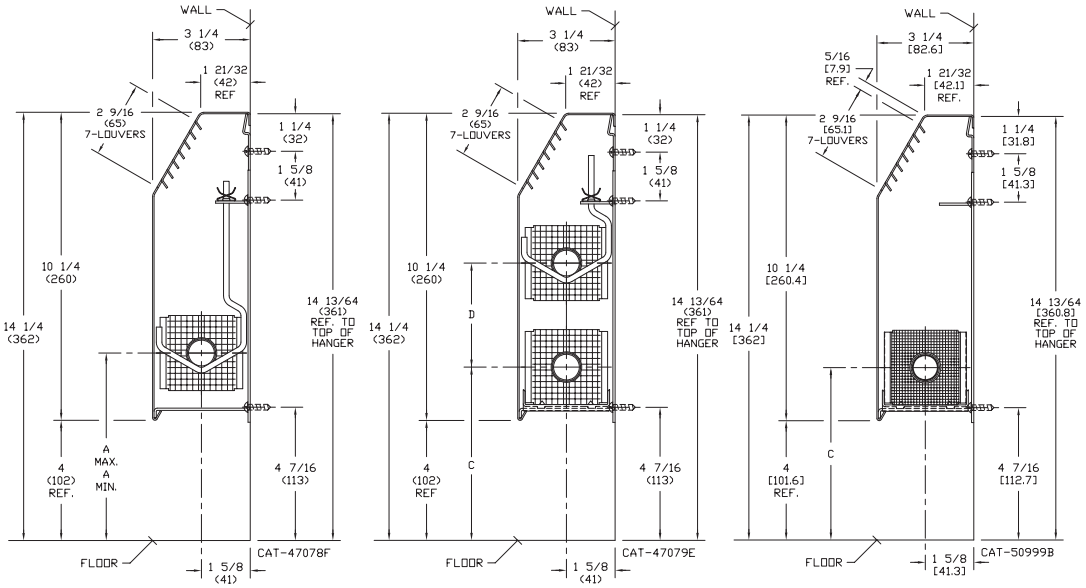
$$\text{RATING MULTIPLIED BY: } \frac{\text{FACTOR FROM TABLE B FOR THE ACTUAL MOUNTING HEIGHT}}{\text{FACTOR FROM TABLE B FOR THE RECOMMENDED MOUNTING HEIGHT}}$$

Table B

MOUNTING HEIGHT IN IN.	18 or less	19	20	21	22	23	24	25	26	27	28	29	30	32	34	36	38 or more
FACTOR 3 1/4" OFFSET	1.100	1.100	1.098	1.091	1.085	1.078	1.071	1.065	1.058	1.051	1.045	1.038	1.031	1.019	1.012	1.006	1.000

CAT NO.	A MIN.	A MAX.
R02	5 15/16 (150.8)	8 7/16 (214.3)
R03	6 1/16 (154)	8 5/8 (219.1)
R04	6 9/16 (166.7)	8 15/16 (227)
R05	6 9/16 (166.7)	9 1/8 (231.8)
R06 R07	7 1/8 (181)	8 11/16 (220.7)
R08	6 11/16 (169.9)	9 1/4 (235)
R09 R010	7 3/16 (182.6)	8 11/16 (220.7)
R11	6 11/16 (169.9)	9 3/16 (233.4)
R15 R16	7 3/16 (182.6)	8 11/16 (220.7)

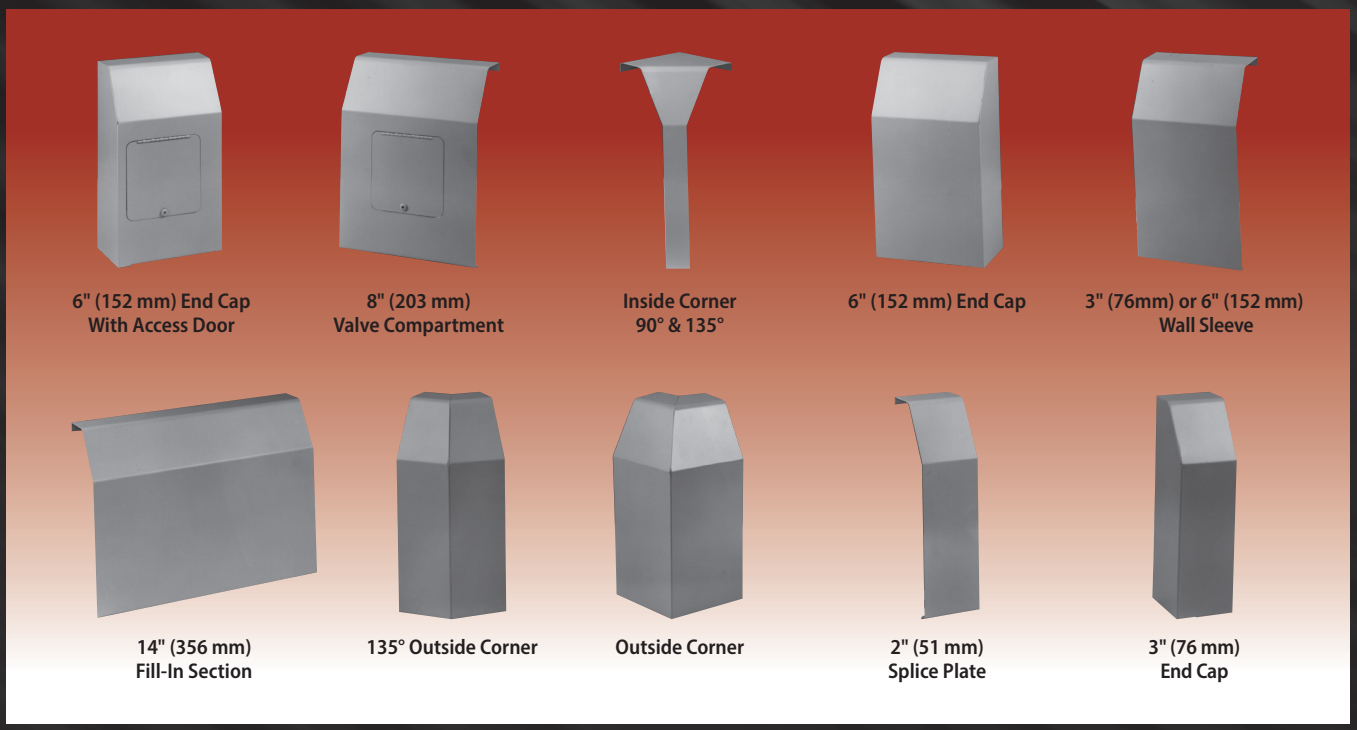
CAT NO.	C	D
R02	5 25/32 (147)	3 1/2 (89)
R03	5 25/32 (147)	3 1/2 (89)
R04	6 7/32 (156)	N/A
R05	6 7/32 (156)	N/A
R06 R07	7 1/32 (176)	N/A
R08	6 7/32 (156)	N/A
R09 R010	7 1/32 (176)	N/A
R11	6 7/32 (156)	N/A
R15 R16	7 1/32 (176)	N/A



*** Consult factory for 2-tier steam applications**

Dimensions are in inches. Dimensions in parentheses are in millimeters

ACCESSORIES



SPECIFICATIONS FOR THE LCS-10

Furnish and install where shown on all plans/drawings, Sterling LCS-10 Finned Tube Enclosure and Element as described or approved equal of both quality and BTU capacity.

The finned tube enclosure, as called out LCS-10, will be manufactured from 18-gauge (16-gauge optional) bonderized C.R.S. with a baked powder prime finish. The air discharge louvers are to be die formed stamped into the steel enclosure. The louver openings are to be "Pencil Proof". All lateral bends are to be formed on bottoming dies to ensure continuity of all adjoining enclosures and accessories. The enclosure lengths are to be provided in 6 inch increments from 2 feet through 8 feet long. The enclosure is to fully engage in a continuous full length mounting strip mounted to the wall. A two (2) inch joiner strip is to be used where two pieces of enclosure are adjoining each other in a run.

All accessories will be die formed 20-gauge cold rolled steel and finished with the baked prime finish described above. The accessories will overlap the installed enclosure and are to provide adjustment for make-up in the installed runs of enclosure.

The brackets are to be of a one piece, die formed construction. The material is to be 14-gauge C.R.S. with a baked prime finish. The bracket is to be self locating for vertical positioning at installation. The bottom horizontal leg is to snap into bottom bend of the enclosure and is to support the element when slide shoes are used. The top horizontal leg is to support the adjustable element hanger. Adjustable rod hangers are to be supplied when specified. These will be used in conjunction with the various elements that do not incorporate a nylon slide. They will also be used when the installation requires pitch adjustment for steam applications.

The mounting strip is to be supplied in eight (8) foot lengths. It will be die formed heavy gauge, galvannealed material.

All elements are to be of the mechanically expanded type to ensure that proper fin to tube bonding is maximized. Copper/Aluminum elements are to be provided with one end mechanically swaged (flared) for proper assembly. Steel/Steel element are to be provided with both ends threaded to accept all domestic NPT fittings or cut square and chamfered for field welding.

In the interest of product improvement, we reserve the right to make changes without notice.

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