



Slant/Fin[®]
COMMERCIAL
FIN-TUBE
Radiation Selection Guide

- **Ideal for use with High Efficiency Boilers**
- **Very Efficient Operation**

Output Ratings Range:

- 110°F through 220°F Water Temperature
- 1 P.S.I. Steam

MULTI/PAK® 90 SERIES

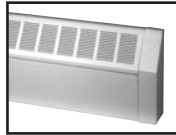
2-piece fin-tube enclosure. Factory packaged. Prepainted. In stock.

Style: Slope-top and flat-top. Aluminum grille optional (90 & 95).
 Application: Commercial heating. Hot water or steam.
 Output: 373 to 3140 Btu/hr.
 Elements: Choice of 12. Copper/aluminum or steel.
 Finish: USA: Nu-White baked enamel or custom colors.
 CANADA: Galvanized steel standard

On your commercial heating jobs, select the product that installs faster, looks better, lasts longer and saves money -- Multi/Pak 90. These 2-piece fin-tube enclosures are fully packaged and in stock at our factory and local Slant/Fin wholesale distributors.

Multi/Pak 90 provides what you need:

- slope-top and flat-top styling
- wide choice of elements for hot water or steam
- precision built accessories

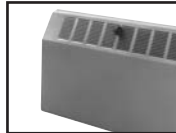


Multi/Pak 90 Series
page 4-10

J SERIES

1-piece fin-tube enclosure.

Style: Slope-top
 Application: Commercial heating. Hot water or steam.
 Output: 599 to 3854 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Galvanized or custom colors.

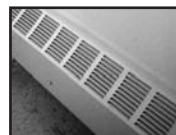


page 10-11 J

HD SERIES & LC SERIES

Heavy duty slope-top baseboard.

Style: Slope-top, louvered baseboard.
 Application: Rugged duty residential or light commercial heating. Hot water or steam.
 Output: 360 to 1660 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Galvanized or custom colors.



page 12-13 HD

350 SERIES

High output slope-top baseboard.

Style: Slope-top, louvered baseboard.
 Application: Light commercial heating. Hot water or steam
 Output: 460 to 2250 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Nu-White baked enamel or galvanized.



page 14-15 350

R SERIES

1-piece fin-tube enclosure.

Style: Flat-top. Aluminum grille optional.
 Application: Commercial heating. Hot water or steam.
 Output: 554 to 3770 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Galvanized or custom colors.



page 16-17 RF

FS SERIES

Free standing fin-tube enclosure.

Style: Pedestal mounted enclosure.
 Application: Commercial heating. Hot water or steam.
 Output: 581 to 3339 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Galvanized or custom colors.

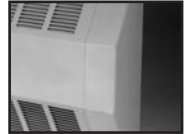


page 18-19 FS

TBG SERIES

1-piece fin-tube enclosure.

Style: Slope top and bottom.
 Application: Commercial heating. Hot water or steam.
 Output: 540 to 2548 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Galvanized or custom colors.



page 20-21 TBG

MULTI/PAK® 80 SERIES

High output baseboard radiation.

Style: Low-profile baseboard.
 Application: Light commercial or deluxe residential heating. Hot water or steam.
 Output: 420 to 1200 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Nu-White baked enamel.

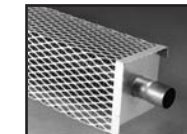


page 22-23 80

F&EM SERIES

1-piece element covers.

Style: F-Series: Louvered top.
 EM Series: Expanded metal
 Application: Industrial hot water or steam.
 Output: F Series: 563 to 3497 Btu/hr.
 EM Series: 581 to 4158 Btu/hr.
 Elements: Choice of 6. Copper/aluminum or steel.
 Finish: Galvanized or custom colors.



page 24-25 F/EM

BARE ELEMENTS

Highest quality fin-tube for single or multi-tier installation.

Application: With Slant/Fin enclosures or as bare element installation.
 Output: To 4316 Btu/hr.
 Elements: Choice of 12. Copper/aluminum or steel.



page 26-27

ENGINEERING DATA

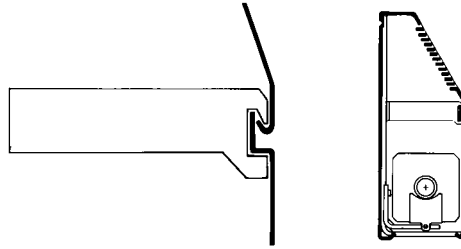
Ratings data
 Specifications



page 28-30

Cover panels

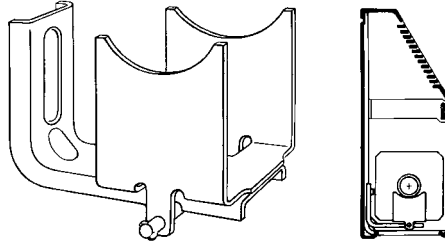
18 gauge top cover and front cover interlock in rigid support arm channel. Lateral bends in top and front cover, plus strength of support arm, give assembled enclosure exceptional rigidity.



MULTI/PAK® 90 SERIES

Element support

- Electro-galvanized bracket has fastening slot that allows 1/8" pitch adjustment.
- Electro-galvanized cradle supports finned or bare tubing at same height.
- Sliding guide rod provides full cradle width support. 1/16" lateral movement permits smooth, noiseless expansion.

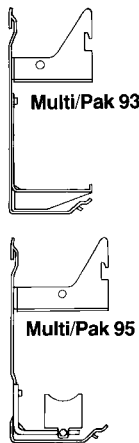


Pencil-proof louvers

Minimize "see through."

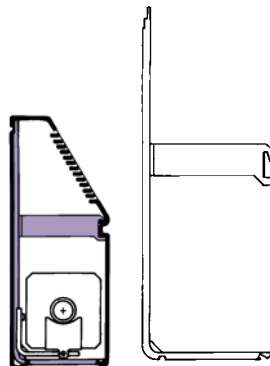
Multi/Pak 93 and 95 wall brackets

- Extra-heavy 11 gauge wall bracket and panel support arm are die formed with multiple bends that add strength.
- Multi/Pak 93 element hanger permits 7/8" pitch adjustment. Self-adjusting polypropylene expansion cradle on "H" and "E" elements allow silent lateral expansion movement
- Multi/Pak 95 element support and cradle are identical to Multi/Pak 90



Multi/Pak 90 wall brackets

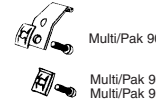
- Heavy duty 14 gauge wall bracket is drawn die formed with multi-directional bends that add strength.
- Mounting slots provide 3/4" height adjustment.
- Large recessed "flat" prevents bracket from crushing wall surface when back panel is not used.



OPTIONAL EQUIPMENT



Hanging Strip
Provides additional rear support and seal



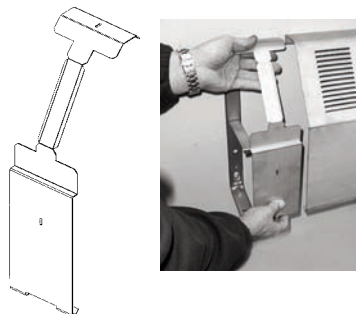
Tamper-proof lock
Locks front cover to lower arm of bracket



Wall Gasketing
For dustproof seal between top of cover and wall

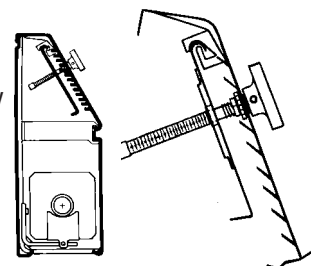
Internal Splice Plate

Cover sections butt to each other with a nearly seamless fit using the internal splice plate, optional for Multi/Pak 90 slope top enclosures. Eliminates need for an external splice plate.



Damper

Knob operated damper (optional) is activated by precision lead screw and brass trunnion pitch block. Provides years of smooth operation. Damper for slope-top models is shown. Flat top models utilize a hinge type construction.



Slant/Fin

MULTI/PAK[®] 90

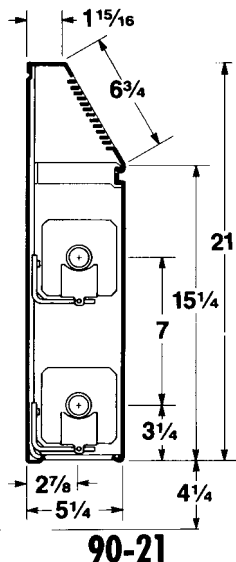
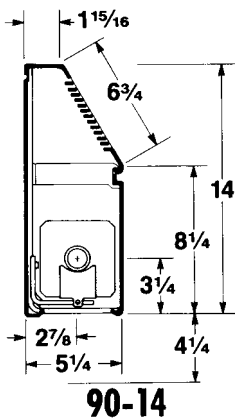
SLOPE-TOP, TWO-PIECE ENCLOSURE

Pre-painted. Factory packaged.



Aluminum grille optional.

MODELS 90-14 AND 90-21



ORDERING DATA

Multi/Pak 90 Complete Enclosure Assembly

PACKAGING: Complete two-piece assembly factory packaged with necessary brackets and hangers.

CONSTRUCTION: Two-piece interlocking top cover/front cover mount on wall brackets. Lock in place to provide the same shape with better rigidity than one-piece covers.

DEPTH: 5 1/4"

HEIGHTS: 14" (one tier), 21" (one or two tier)

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'.

MATERIAL: 18-gauge galvanized steel top and front cover.

FINISH:

USA: Nu-White baked enamel is standard.

CANADA: Galvanized steel finish is standard.

Custom color available on special order.

Anodized architectural aluminum grille optional.

WALL BRACKETS/HANGERS: Packaged with complete assembly. SC hanger has guide rod to provide 1 15/16" lateral expansion movement, 1 1/8" vertical pitch adjustment. Brackets and hangers provided with complete assembly as follows:

Length	90-14		90-21	
	Brackets	Hangers	Brackets	Hangers
2-5 ft.	2	2	2	4
6-8 ft.	3	3	3	6

ELEMENTS: Copper with aluminum fins: C-340, C-440, C-540. Steel with electro-galvanized steel fins: S-532, S-540, S-832. Lengths from 2 to 12 feet. See p. 30.

JOINTS: Cover section joints may be made with internal splice plates or telescopic external splice plates.

With the optional internal splice plate, cover sections butt to each other with a nearly seamless fit.

Telescopic external splice plates, filler sleeves and other accessories make up odd inches and eliminate the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls.

See pages 4-5 for description of features

Multi/Pak 90 Series two-piece fin-tube enclosure. The modern choice in commercial radiation.

- Available as a "stock item".
- Factory packaging protects the cover until ready to install.
- Easy to install. Easy to service.
- Precut lengths, telescopic accessories, speed installations.
- Nu-White baked enamel finish.



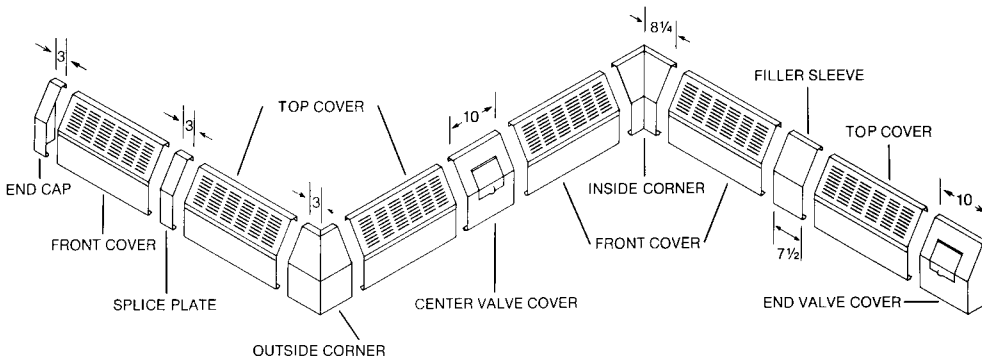
RATINGS

With or without dampers

Cover Type	Enclosure Height	Element Type	Tube Size and Material	Fin Size & Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
90-14	14"	S-532	1½" steel	4¼" steel	32	1380	276	359	455	552	621	731	842	952	1076	1187	1311	1449
		S-540	1½" steel	4¼" steel	40	1550	310	403	512	620	698	822	946	1070	1209	1333	1473	1628
		S-832	2" steel	4¼" steel	32	1400	280	364	462	560	630	742	854	966	1092	1204	1330	1470
		C-340	¾" copper	4¼" alum	40	1839	368	478	607	736	828	975	1122	1269	1435	1582	1748	1932
		C-440	1" copper	4¼" alum	40	1950	390	507	644	780	878	1034	1190	1346	1521	1677	1853	2048
		C-540	1½" copper	4¼" alum	40	1910	382	497	630	764	860	1012	1165	1318	1490	1643	1815	2006
90-21 One-tier element	21"	S-532	1½" steel	4¼" steel	32	1460	292	380	482	584	657	774	891	1007	1139	1256	1387	1533
		S-540	1½" steel	4¼" steel	40	1680	336	437	554	672	756	890	1025	1159	1310	1445	1596	1764
		S-832	2" steel	4¼" steel	32	1520	304	395	502	608	684	806	927	1049	1186	1307	1444	1596
		C-340	¾" copper	4¼" alum	40	2013	399	519	658	798	906	1067	1228	1389	1570	1731	1895	2114
		C-440	1" copper	4¼" alum	40	2130	426	554	703	852	959	1129	1299	1470	1661	1832	2024	2237
		C-540	1½" copper	4¼" alum	40	2090	418	544	690	836	941	1108	1275	1442	1630	1797	1986	2195
90-21 Two-tier element	21"	S-532	1½" steel	4¼" steel	32	2190	438	570	723	876	986	1161	1336	1511	1708	1883	2081	2300
		S-540	1½" steel	4¼" steel	40	2380	476	619	785	952	1071	1261	1452	1642	1856	2047	2261	2499
		S-832	2" steel	4¼" steel	32	2270	454	590	749	908	1022	1203	1385	1566	1771	1952	2157	2384
		C-340	¾" copper	4¼" alum	40	2822	564	734	931	1129	1270	1496	1721	1947	2200	2427	2681	2963
		C-440	1" copper	4¼" alum	40	2990	598	778	987	1196	1346	1585	1824	2063	2332	2571	2841	3140
		C-540	1½" copper	4¼" alum	40	2930	586	762	967	1172	1319	1553	1787	2022	2285	2520	2784	3077

* Based on 65°F entering air temperature. **Note:** Ratings are based on active finned length (5-1/4" less than overall length).

ACCESSORIES



Fourteen accessories let you "fit" Multi/Pak 90 in virtually any space configuration - fast and easily. External cover accessories are all telescopic. They snap in place without screws or other fasteners. All accessories, unless noted, are finished in Nu-White baked enamel. Custom color available on special order.

non-telescopic accessories

Column cover set
Damper (electro galvanized, not available with aluminum grille)*
Damper, field installed
Hanging strip*

*See p.3 for details

Back panel (electro galvanized)
Tamper-proof lock*
Wall gasketing*



Internal Splice Plate for 90-14 and 90-21

Cover sections butt to each other with a nearly seamless fit using the internal splice plate, optional for Multi/Pak 90 slope top enclosures. Eliminates need for an external splice plate.

telescopic accessories



End Cap
End Cap-slotted (not shown)



Splice plate



Filler sleeve



Center valve cover †



Inside corner, 90°



Outside corner, 90°



End valve cover, † slotted, 10"
End valve cover, 10" (not shown)

† Access doors: 6" x 6". Door location depends on model.

Slant/Fin

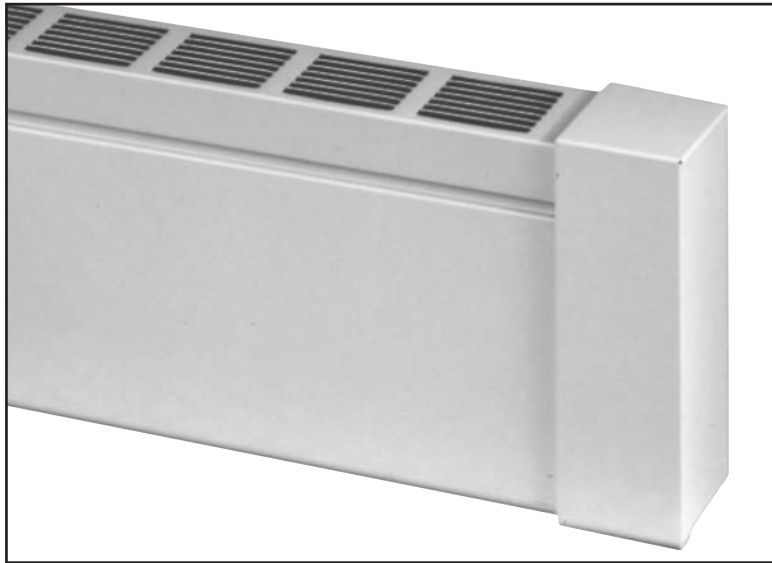


MULTI/PAK[®] 93

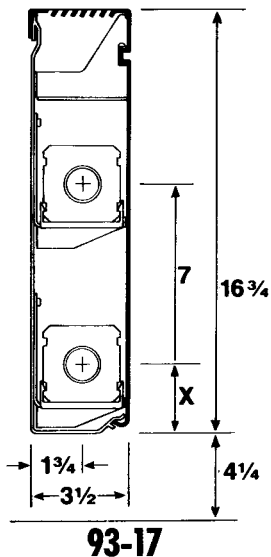
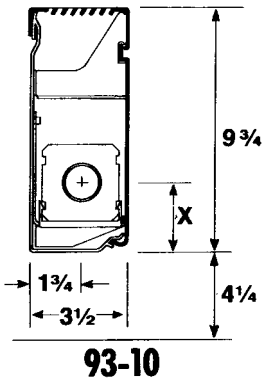
FLAT-TOP, TWO-PIECE ENCLOSURE

Pre-painted. Factory packaged.

MODELS 93-10 AND 93-17



ELEMENT	X
H1	3 ³ / ₁₆
H3	2 ¹³ / ₁₆
H4	2 ¹³ / ₁₆
H5X	3 ³ / ₁₆
H6X	3 ³ / ₁₆
E-75	2 ⁷ / ₈



ORDERING DATA

Multi/Pak 93 Complete Enclosure Assembly

PACKAGING: Complete two-piece assembly factory packaged with necessary brackets and hangers.

CONSTRUCTION: Two-piece interlocking top cover/front cover mount on wall brackets. Lock in place to provide the same shape with better rigidity than one-piece covers.

DEPTH: 3¹/₂"

HEIGHTS: 9³/₄" (one tier), 16³/₄" (one or two tier)

LENGTHS: 2', 3', 3¹/₂', 4', 5', 6', 7', 8'.

MATERIAL: 18-gauge galvanized steel top and front cover. 11-gauge wall brackets.

FINISH: Nu-White baked enamel is standard. Custom color available on special order.

WALL BRACKET/HANGERS: Packaged with complete assembly. Element hangers permit vertical pitch adjustment. Self-adjusting polypropylene element expansion cradles allow silent lateral expansion movement. Brackets and hangers provided with complete assembly as follows:

Length	93-10		93-17	
	Brackets	Hangers	Brackets	Hangers
2-5 ft.	2	2	2	4
6-8 ft.	3	3	3	6

ELEMENTS: Copper with aluminum fins: H-1, H-3, H-4, H-5X, E-75. Steel with electro-galvanized steel fins: H-6X. Lengths from 2 to 8 ft. See p.30.

JOINTS: Telescopic cover accessories eliminate the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls. See pages 4-5 for description of features.

ALUMINUM GRILLES IS NOT AVAILABLE.

Multi/Pak 90 Series two-piece fin-tube enclosure. The modern choice in commercial radiation.

- Available as a "stock item".
- Factory packaging protects the cover until ready to install.
- Easy to install. Easy to service.
- Precut lengths, telescopic accessories, speed installations.
- Nu-White baked enamel finish.



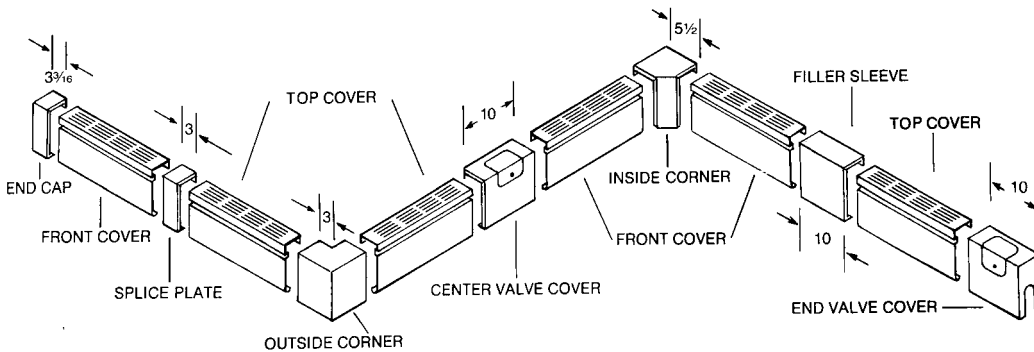
RATINGS

With or without dampers

Cover Type	Enclosure Height	Element Type	Rows of Heating Elements	Tube Size & Material	Fin Size and Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
								110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
93-10	9 1/2"	H-1	1	3/4" copper	3" x 3 3/4" x .024" aluminum	48	1079	216	281	356	432	486	572	658	745	848	928	1025	1133
		H-3	1	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	991	198	258	327	396	446	525	605	684	773	852	941	1041
		H-4	1	1" copper	3" x 2 1/2" x .011" aluminum	48	965	193	251	319	386	434	511	589	666	753	830	917	1013
		H-5X	1	1 1/4" copper	3" x 3 3/4" x .020" aluminum	48	1030	206	268	340	412	464	546	628	711	803	886	979	1082
		H-6X	1	1 1/4" IPS Steel	3" x 3 3/4" x .028" aluminized steel	48	883	177	230	291	353	397	468	539	609	689	759	839	927
		E-75	1	3/4" copper	2 5/8" x 2 1/2" aluminum	55	828	166	215	273	331	373	439	505	571	646	712	787	869
93-17 One-tier element	16 1/2"	H-1	1	3/4" copper	3" x 3 3/4" x .024" aluminum	48	1182	236	307	390	473	532	626	721	816	922	1017	1123	1241
		H-3	1	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1086	217	282	358	435	489	576	662	749	847	934	1032	1140
		H-4	1	1" copper	3" x 2 1/2" x .011" aluminum	48	1057	211	275	349	423	476	560	645	729	824	909	1004	1110
		H-5X	1	1 1/4" copper	3" x 3 3/4" x .020" aluminum	48	1128	226	293	372	451	508	598	688	778	880	970	1072	1184
		H-6X	1	1 1/4" IPS Steel	3" x 3 3/4" x .028" aluminized steel	48	947	189	246	313	379	426	502	578	653	739	814	900	994
		E-75	1	3/4" copper	2 5/8" x 2 1/2" aluminum	55	907	181	236	299	363	408	481	553	626	707	780	862	952
93-17 Two-tier element	16 1/2"	H-1	2	3/4" copper	3" x 3 3/4" x .024" aluminum	48	1679	336	437	554	672	756	890	1024	1159	1310	1444	1595	1763
		H-3	2	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1543	309	401	509	617	694	818	941	1065	1204	1327	1466	1620
		H-4	2	1" copper	3" x 2 1/2" x .011" aluminum	48	1501	300	390	495	600	675	796	916	1036	1171	1291	1426	1576
		H-5X	2	1 1/4" copper	3" x 3 3/4" x .020" aluminum	48	1602	320	417	529	641	721	849	977	1105	1250	1378	1522	1682
		H-6X	2	1 1/4" IPS Steel	3" x 3 3/4" x .028" aluminized steel	48	1435	287	373	473	574	646	761	875	990	1119	1234	1363	1507
		E-75	2	3/4" copper	2 5/8" x 2 1/2" aluminum	55	1288	258	335	425	515	580	683	786	889	1005	1108	1224	1352

* Based on 65°F entering air temperature. **Note:** Ratings are based on active finned length (3" less than overall length).

ACCESSORIES



Fourteen accessories let you "fit" Multi/Pak 93 in virtually any space configuration – fast and easily. Cover accessories are all telescopic. They snap in place without screws or other fasteners. All accessories, unless noted, are finished in Nu-White baked enamel. Custom color available on special order.

non-telescopic accessories

- Column cover set
- Damper (electro galvanized)*
- Hanging strip*
- Tamper-proof lock
- Wall gasketing*

*See p.3 for details

telescopic accessories



End Cap
End Cap-slotted
(not shown)



Splice plate



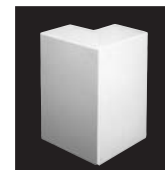
Filler sleeve



Center valve cover †



Inside corner, 90°



Outside corner, 90°



End valve cover, †
slotted, 10"
End valve cover, 10"
(not shown)

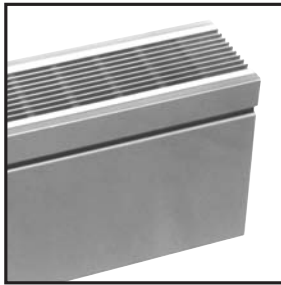
† Access doors: 6" x 6". Door location depends on model.

Slant/Fin

MULTI/PAK[®] 95

FLAT-TOP, TWO-PIECE ENCLOSURE

Pre-painted. Factory packaged.



Aluminum grille optional.

MODELS 95-10 AND 95-17



ELEMENT	X
C-340	3
C-440	3 ¹ / ₈
C-540	3 ¹ / ₄
S-532	3 ³ / ₈
S-540	3 ³ / ₈

ORDERING DATA

Multi/Pak 95 Complete Enclosure Assembly

PACKAGING: Complete two-piece assembly factory packaged with necessary brackets and hangers.

CONSTRUCTION: Two-piece interlocking top cover/front cover mount on wall brackets. Lock in place to provide the same shape with better rigidity than one-piece covers.

DEPTH: 5¹/₄"

HEIGHTS: 9³/₄" (one tier), 16³/₄" (one or two tier)

LENGTHS: 2', 3', 3¹/₂', 4', 5', 6', 7', 8'. Elements from 2 to 12 ft.

MATERIAL: 18-gauge galvanized steel top and front cover. 11-gauge wall brackets.

FINISH: Nu-White baked enamel is standard. Custom color available on special order. Anodized architectural aluminum grille optional.

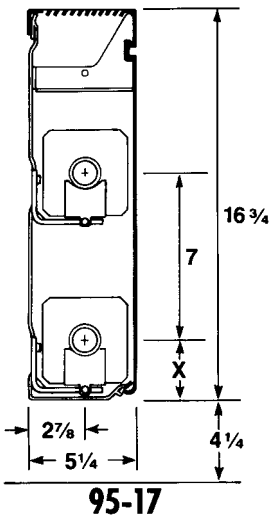
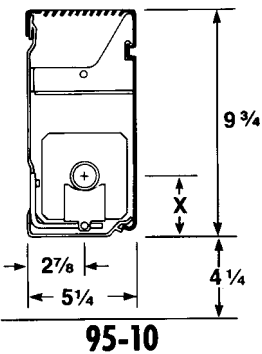
WALL BRACKETS/HANGERS: Packaged with complete assembly. SC-2 hanger has guide rod to provide 1¹⁵/₁₆" lateral expansion movement, 1¹/₈" vertical pitch adjustment. Brackets and hangers provided with complete assembly as follows:

Length	95-10		95-17	
	Brackets	Hangers	Brackets	Hangers
2-5 ft.	2	2	2	4
6-8 ft.	3	3	3	6

ELEMENTS: Copper with aluminum fins: C-340, C-440, C-540. Steel with electro-galvanized steel fins: S-532, S-540. Lengths from 2 to 12 feet. See p. 30.

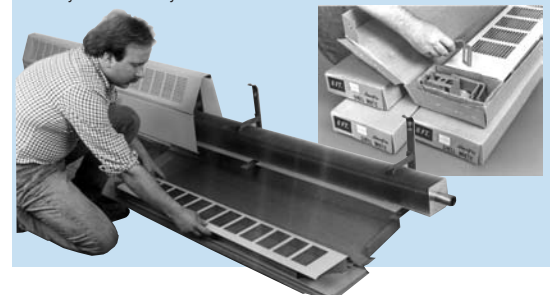
JOINTS: Telescopic cover accessories eliminate the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls.

See pages 4-5 for description of features



Multi/Pak 90 Series two-piece fin-tube enclosure. The modern choice in commercial radiation.

- Available as a "stock item".
- Factory packaging protects the cover until ready to install.
- Easy to install. Easy to service.
- Precut lengths, telescopic accessories, speed installations.
- Nu-White baked enamel finish.



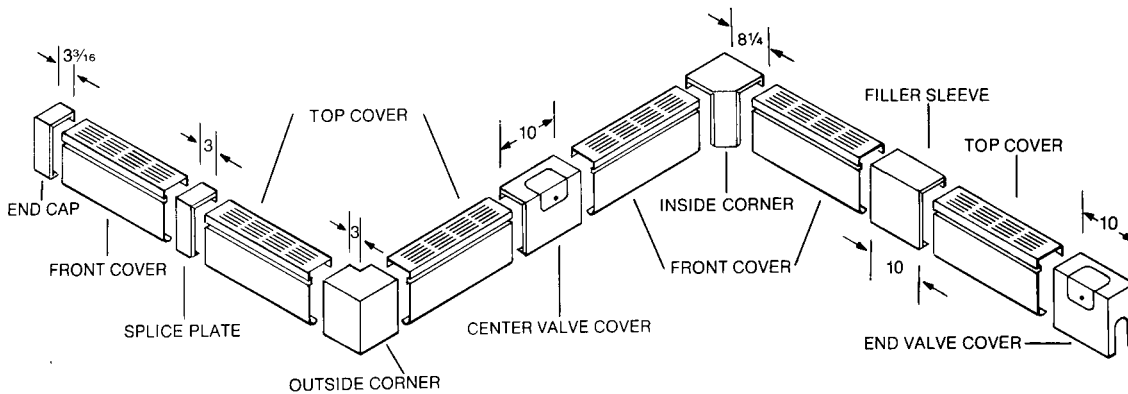
RATINGS

With or without dampers

Cover Type	Enclosure Height	Element Type	Tube Size & Material	Fin Size & Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
95-10	9"	S-532	1 1/4" steel	4 1/4" steel	32	1254	251	326	414	501	564	665	765	865	978	1078	1191	1317
		S-540	1 1/4" steel	4 1/4" steel	40	1470	294	382	485	588	662	779	897	1014	1147	1264	1397	1544
		C-340	3/4" copper	4 1/4" alum.	40	1680	336	437	555	672	756	891	1025	1159	1311	1445	1597	1764
		C-440	1" copper	4 1/4" alum.	40	1780	356	463	587	712	801	943	1086	1228	1388	1531	1691	1869
		C-540	1 1/4" copper	4 1/4" alum.	40	1745	349	454	576	698	785	925	1064	1204	1361	1501	1658	1832
95-17 One-tier element	16 3/4"	S-532	1 1/4" steel	4 1/4" steel	32	1351	270	351	446	540	608	716	824	932	1054	1162	1283	1419
		S-540	1 1/4" steel	4 1/4" steel	40	1577	315	410	520	631	710	836	962	1088	1230	1356	1498	1656
		C-340	3/4" copper	4 1/4" alum.	40	1840	368	478	607	736	828	976	1123	1270	1436	1582	1748	1933
		C-440	1" copper	4 1/4" alum.	40	1950	390	507	644	780	878	1034	1190	1346	1521	1677	1853	2048
		C-540	1 1/4" copper	4 1/4" alum.	40	1911	382	497	630	764	860	1013	1166	1319	1491	1643	1815	2007
95-17 Two-tier element	16 3/4"	S-532	1 1/4" steel	4 1/4" steel	32	2153	431	560	710	861	969	1141	1313	1486	1679	1852	2045	2261
		S-540	1 1/4" steel	4 1/4" steel	40	2390	478	622	789	956	1076	1267	1458	1649	1864	2055	2271	2510
		C-340	3/4" copper	4 1/4" alum.	40	2615	523	680	863	1046	1177	1386	1595	1804	2040	2249	2484	2746
		C-440	1" copper	4 1/4" alum.	40	2770	554	720	914	1108	1247	1468	1690	1911	2161	2382	2632	2909
		C-540	1 1/4" copper	4 1/4" alum.	40	2715	543	706	896	1086	1222	1439	1656	1873	2118	2335	2579	2851

* Based on 65°F entering air temperature. **Note:** Ratings are based on active finned length (5-1/4" less than overall length).

ACCESSORIES



Fourteen accessories let you "fit" Multi/Pak 95 in virtually any space configuration – fast and easily. Cover accessories are all telescopic. They snap in place without screws or other fasteners. All accessories, unless noted, are finished in Nu-White baked enamel. Custom color available on special order.

non-telescopic accessories

- Column cover set
- Damper (electro galvanized, not available with aluminum grille)*
- Hanging strip*

- Tamper-proof lock*
- Wall gasketing*

*See p.3 for details

telescopic accessories



End Cap
End Cap-slotted
(not shown)



Splice plate



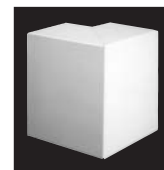
Filler sleeve



Center valve cover †



Inside corner, 90°



Outside corner, 90°



End valve cover, †
slotted, 10"
End valve cover, 10"
(not shown)

† Access doors: 6" x 6". Door location depends on model.

J SERIES

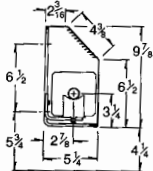
SLOPE-TOP, ONE-PIECE ENCLOSURE

**MODELS: JL-10, JR-10, JA-14, JR-14
JA-21, JR-21, JA-28, JR-28**

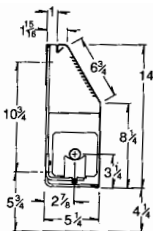


Custom Heights & Configurations Available

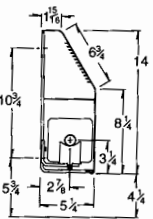
*Details for optional J-Series damper shown on model JAD-28



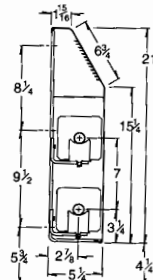
JL-10



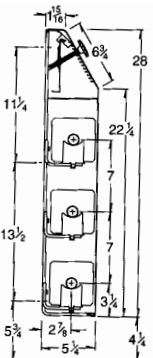
JR-14



JA-14



JA-21



JAD-28*



J-Series with damper



J-Series with Aluminum Grille

ORDERING DATA

CONSTRUCTION: Single-piece cover mounts on wall brackets

DEPTH: 5 1/4"

HEIGHTS: 9 7/8" and 14" (one tier), 21" (one or two tier), 28" (up to three tier)

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'. Other 1/2' lengths available to order.

MATERIAL: 18-gauge front cover. 16 and 14-gauge optional. Optional back panel: 20-gauge.

FINISH: Galvanized is standard. Baked enamel finishes in a variety of colors available on special order, all models.

WALL BRACKETS/HANGERS: Order separately, specify BKT (bracket only) or BKT ASSY (bracket complete with SC hangers) followed by cover stock number and quantity. Recommended bracket spacing is as follows:

Length	Copper Elements	1 1/4" Steel Elements	2" Steel Elements
2-5 ft.	2	1 per 2 1/2' of cover	1 per 2' of cover
6-8 ft.	3		

ELEMENTS: Copper with aluminum fins: C-340, C-440, C-540. Steel with electro-galvanized steel fins: S-532, S-540, S-832. Lengths from 2 to 12 feet. See p. 30.

JOINTS: Slip joint connectors (JR models only) and internal splice plates (JA models only; see p.5) align cover sections which butt to one another, providing a near seamless joint. Use of telescopic accessories with any J Series model eliminates the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment

that might result from uneven floors and walls.

JL-10, JA-14 and JA-21 models mount flush with the wall. For readily available prepackaged two-piece fin-tube radiation refer to Multi/Pak 90, pages 4-11.

JR-10, JR-14, JR-21 and JR-28 models utilize a 4" Top mounting rails (BPT). Allows for 3/4" recess into wall and protects wall covering in case removing of enclosure is necessary. Electro-galvanized finish is standard. Optional baked enamel finish available.

Built for easy installation, long life

J Series fin-tube enclosures are functional, durable units, popular for deluxe commercial installations: schools, offices, hospitals, churches and office buildings. J Series enclosures feature a graceful, sloping louvered top which minimizes apparent bulk, and discourages use of the enclosure as a shelf or window seat.

- Pencil-proof louvers minimize "see through".
- Heavy duty 14-gauge wall bracket is drawn die formed. Secures cover in place with rigid spring lock action. Snap-in center brace supports middle of cover.
- Bracket mounting slots provide 3/4" height adjustment. Large recessed "flat" prevents bracket from crushing wall surface when back panel is not used.
- Element hanger has sliding guide rod that provides full cradle width support. 1 5/16" lateral movement permits smooth, noiseless expansion. Cradle supports finned or bare tubing at same height. Fastening slot in bracket allows 1 1/8" pitch adjustment.
- Knob-operated damper (optional) modulates fully to control output. See page 5 for details.

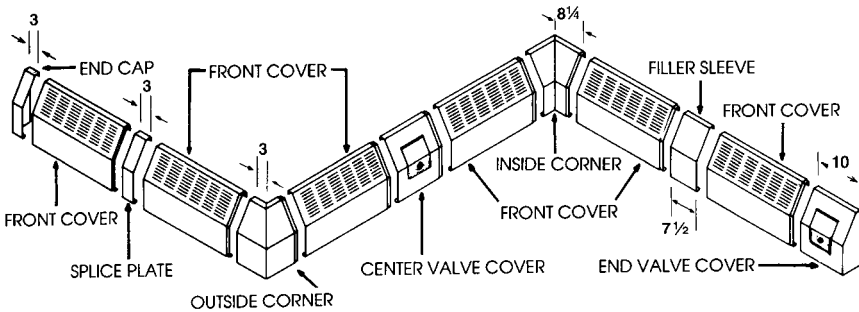
RATINGS

With or without dampers

* Based on 65°F entering air temperature. **Note:** Ratings are based on active finned length (5-1/4" less than overall length).

Cover Type	Enclosure Height	Element Type	Tube Size and Material	Fin Size and Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
JL-10 JR-10	9 7/8"	S-532	1 1/4" steel	4 1/4" steel	32	1330	266	346	439	532	599	705	811	918	1037	1144	1264	1397
		S-540	1 1/4" steel	4 1/4" steel	40	1430	286	372	472	572	644	758	872	987	1115	1230	1359	1502
		S-832	2" steel	4 1/4" steel	32	1350	270	351	446	540	608	716	824	931	1053	1161	1283	1418
		C-340	3/4" copper	4 1/4" alum.	40	1753	351	456	578	701	789	929	1069	1210	1367	1507	1665	1840
		C-440	1" copper	4 1/4" alum.	40	1860	372	484	614	744	837	986	1135	1283	1451	1600	1767	1953
C-540	1 1/4" copper	4 1/4" alum.	40	1820	364	473	601	728	819	965	1110	1256	1420	1565	1729	1911		
JA-14 JR-14	14"	S-532	1 1/4" steel	4 1/4" steel	32	1380	276	359	455	552	621	731	842	952	1076	1187	1311	1449
		S-540	1 1/4" steel	4 1/4" steel	40	1550	310	403	512	620	698	822	946	1070	1209	1333	1473	1628
		S-832	2" steel	4 1/4" steel	32	1400	280	364	462	560	630	742	854	966	1092	1204	1330	1470
		C-340	3/4" copper	4 1/4" alum.	40	1839	368	478	607	736	828	975	1122	1269	1435	1582	1748	1932
		C-440	1" copper	4 1/4" alum.	40	1950	390	507	644	780	878	1034	1190	1346	1521	1677	1853	2048
C-540	1 1/4" copper	4 1/4" alum.	40	1910	382	497	630	764	860	1012	1165	1318	1490	1643	1815	2006		
JA-21 JR-21 One-tier element	21"	S-532	1 1/4" steel	4 1/4" steel	32	1460	292	380	482	584	657	774	891	1007	1139	1256	1387	1533
		S-540	1 1/4" steel	4 1/4" steel	40	1680	336	437	554	672	756	890	1025	1159	1310	1445	1596	1764
		S-832	2" steel	4 1/4" steel	32	1520	304	395	502	608	684	806	927	1049	1186	1307	1444	1596
		C-340	3/4" copper	4 1/4" alum.	40	2013	403	524	665	805	906	1067	1228	1389	1570	1731	1913	2114
		C-440	1" copper	4 1/4" alum.	40	2130	426	554	703	852	959	1129	1299	1470	1661	1832	2024	2237
C-540	1 1/4" copper	4 1/4" alum.	40	2090	418	544	690	836	941	1108	1275	1442	1630	1797	1986	2195		
JA-21 JR-21 Two-tier element	21"	S-532	1 1/4" steel	4 1/4" steel	32	2190	438	570	723	876	986	1161	1336	1511	1708	1883	2081	2300
		S-540	1 1/4" steel	4 1/4" steel	40	2380	476	619	785	952	1071	1261	1452	1642	1856	2047	2261	2499
		S-832	2" steel	4 1/4" steel	32	2270	454	590	749	908	1022	1203	1385	1566	1771	1952	2157	2384
		C-340	3/4" copper	4 1/4" alum.	40	2822	586	762	967	1172	1270	1496	1721	1947	2200	2427	2784	2963
		C-440	1" copper	4 1/4" alum.	40	2990	598	778	987	1196	1346	1585	1824	2063	2332	2571	2841	3140
C-540	1 1/4" copper	4 1/4" alum.	40	2993	586	762	967	1172	1319	1553	1787	2022	2285	2520	2784	3077		
JA-28 JR-28 One-tier element	28"	S-532	1 1/4" steel	4 1/4" steel	32	1480	296	385	488	592	666	784	903	1021	1154	1273	1406	1554
		S-540	1 1/4" steel	4 1/4" steel	40	1710	342	445	564	684	770	906	1043	1180	1334	1471	1625	1796
		S-832	2" steel	4 1/4" steel	32	1550	310	403	512	620	698	822	946	1070	1209	1333	1473	1628
		C-340	3/4" copper	4 1/4" alum.	40	2051	410	533	677	821	924	1087	1251	1416	1600	1764	1949	2154
		C-440	1" copper	4 1/4" alum.	40	2170	434	564	716	868	977	1150	1324	1497	1693	1866	2062	2279
C-540	1 1/4" copper	4 1/4" alum.	40	2130	426	554	703	852	959	1129	1299	1470	1661	1832	2024	2237		
JA-28 JR-28 Two-tier element	28"	S-532	1 1/4" steel	4 1/4" steel	32	2290	458	596	756	916	1031	1214	1397	1580	1786	1969	2176	2405
		S-540	1 1/4" steel	4 1/4" steel	40	2510	502	653	828	1004	1130	1330	1531	1732	1958	2159	2385	2636
		S-832	2" steel	4 1/4" steel	32	2430	486	632	802	972	1094	1288	1482	1677	1895	2090	2309	2552
		C-340	3/4" copper	4 1/4" alum.	40	2937	588	764	970	1175	1322	1557	1792	2027	2291	2526	2791	3084
		C-440	1" copper	4 1/4" alum.	40	3110	622	809	1026	1244	1400	1648	1897	2146	2426	2675	2955	3266
C-540	1 1/4" copper	4 1/4" alum.	40	3050	610	793	1007	1220	1373	1617	1861	2105	2379	2623	2898	3203		
JA-28 JR-28 Three-tier element	28"	S-532	1 1/4" steel	4 1/4" steel	32	2830	566	736	934	1132	1274	1500	1726	1953	2207	2434	2689	2972
		S-540	1 1/4" steel	4 1/4" steel	40	2930	586	762	967	1172	1319	1553	1787	2022	2285	2520	2784	3077
		S-832	2" steel	4 1/4" steel	32	2880	576	749	950	1152	1296	1526	1757	1987	2246	2477	2736	3024
		C-340	3/4" copper	4 1/4" alum.	40	3467	693	901	1144	1387	1560	1837	2115	2392	2704	2981	3293	3640
		C-440	1" copper	4 1/4" alum.	40	3670	734	954	1211	1468	1652	1945	2239	2532	2863	3156	3487	3854
C-540	1 1/4" copper	4 1/4" alum.	40	3600	720	936	1188	1440	1620	1908	2196	2484	2808	3096	3420	3780		

ACCESSORIES



A complete range of accessories lets you "fit" J-series in virtually any space configuration - fast and easily. Cover accessories are all telescopic. They snap in place without screws or other fasteners. All accessories have gray prime finish. Custom color available on special order.

non-telescopic accessories

- Column cover set
- Damper (electro galvanized)*
- Hanging strip*
- Tamper-proof lock
- Wall gasketing*

*See p.3 for details

telescopic accessories



End Cap
End Cap-slotted
(not shown)



Splice plate



Filler sleeve



Center valve cover †



Inside corner, 90°



Outside corner, 90°



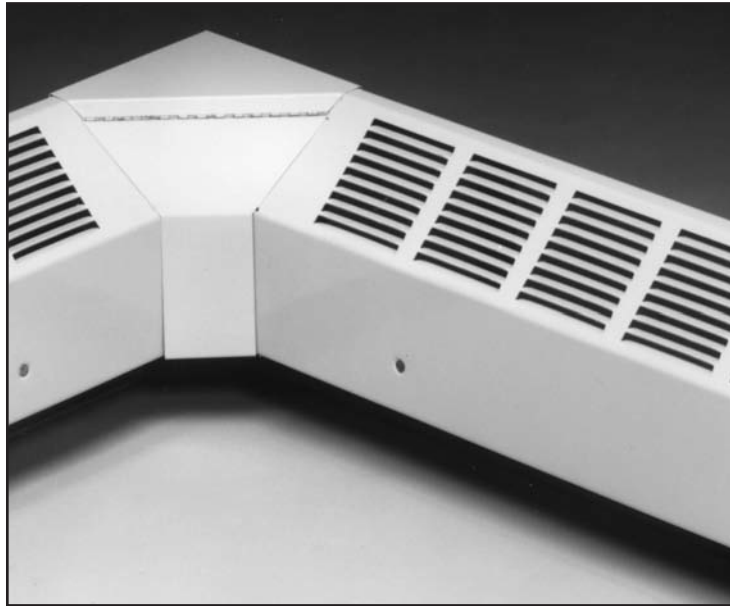
End valve cover, †
slotted, 10"
End valve cover, 10"
(not shown)

† Access doors: 6" x 6". Door location depends on model.

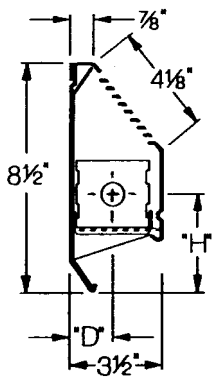


HD SERIES

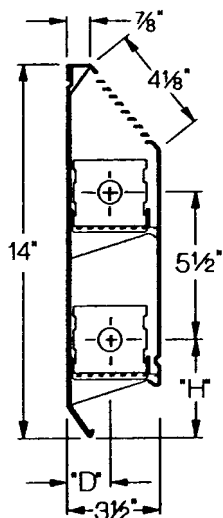
HEAVY DUTY, 16 GAUGE SLOPE-TOP BASEBOARD



Custom Heights & Configurations Available



HD-850



HD-1400

Element	"H"	"D"
H-1	4 1/16"	1 3/4"
H-3, H-4	3 5/8"	1 5/8"
H-5x, H-6x	4"	1 3/4"

The extraordinary strength of HD Series baseboard makes it ideal for installation in sites where rugged treatment is anticipated. HD Series is especially recommended for rental properties, military housing, schools, institutions and public housing. Its compact size and high output make it suitable for a wide range of new and retrofit applications. In addition to heavy gauge enclosure and support brackets, HD Series baseboard cover is secured in place with square drive screws at each bracket location. Optional 1" and 1 1/4" copper/aluminum elements permit higher flow rates, longer series-loop runs and lower pump loads where required. With the 1 1/4" all-steel element, HD Series is perfect for use in one or two pipe steam systems. HD Series is shipped pre-assembled in individual cartons for rapid installations.

ORDERING DATA

PACKAGING: Complete two-piece enclosure assembly factory packaged with necessary brackets and hangers.

CONSTRUCTION: Full back panel with interlocking slope-top front panel. Bracket with element guide spot welded to back panel every 24 inches alternating with cabinet spacer welded to back panel every 24 inches giving rigid support to front every 12 inches. There are dimpled anchoring holes every 12 inches. For fastening front to brackets, use 8 x 3/8" self tapping screws with counter-sunk head as supplied in carton. Pencil proof louvers. Damper optional.

DEPTH: 3 1/2"

HEIGHTS: 8 1/2" (one tier), 14" (one or two tier)

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'. Other 1/2' lengths available to order

MATERIAL: 16-gauge steel front cover, 20-gauge back panel.

FINISH: Galvanized is standard. Custom color available on special order.

ELEMENTS: Choice of five elements. Copper with aluminum fins. Steel with electro-galvanized steel fins. Lengths from 2 to 8 feet. From 710 to 1340 Btu/hr/ft at 200° F water temperature. See p. 30.

JOINTS: Telescopic cover accessories eliminate the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls. Accessories are fastened to cover with pan-head sheet metal screws (supplied by others).

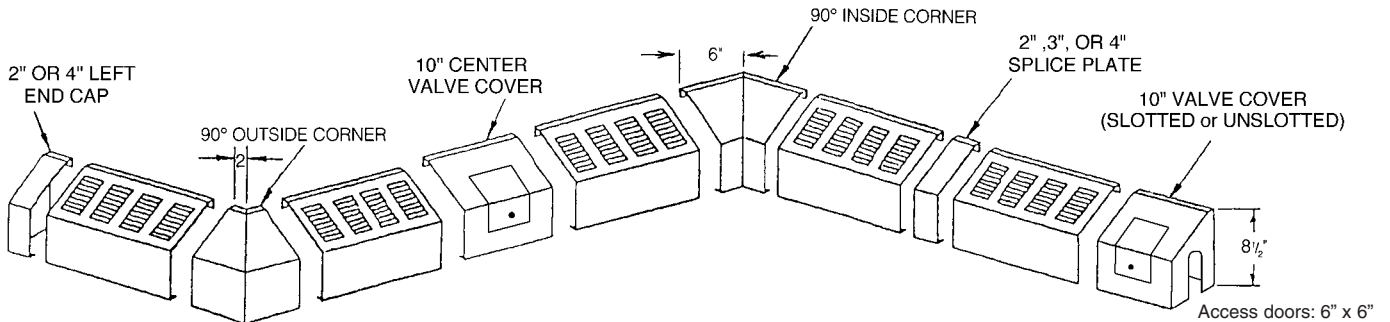
RATINGS

Model Number	Element Type	Tiers of Heating Element	Tube Size and Material	Fin Size and Material	Fins per Foot	Water Flow	Pressure Drop†	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT.											
									110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
HD-850 Single-tier	H-1	1	3/4" copper	3" x 3 1/4" x .024" aluminum	48	1 GPM 4 GPM	47 525	—	190 200	260 270	320 340	390 420	470 500	550 580	640 680	720 760	800 850	890 940	970 1030	1050 1110
HD-850 Single-tier	H-3	1	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1 GPM 4 GPM	47 525	—	170 180	230 240	290 300	350 370	420 440	490 520	570 600	640 680	720 760	790 840	870 920	940 990
HD-850 Single-tier	H-4	1	1" copper	3" x 2 1/2" x .011" aluminum	48	1 GPM 4 GPM	13 145	—	170 180	230 240	280 300	340 360	410 430	460 500	560 590	630 670	710 750	780 830	860 1000	1030 980
HD-850 Single-tier	H-5X	1	1 1/4" copper	3" x 3 1/4" x .020" aluminum	48	1 GPM 4 GPM	6 63	1160	180 190	240 250	300 320	360 390	430 460	550 560	600 640	680 710	770 810	860 880	920 980	1010 1070
HD-850 Single-tier	H-6X	1	1 1/4" IPS steel	3" x 3 1/4" x .028" aluminized steel	48	1 GPM 4 GPM	3 41	980	150 150	200 200	250 260	300 310	360 370	440 450	510 540	570 600	640 680	710 750	780 830	850 900
HD-1400 Single-tier	H-1	1	3/4" copper	3" x 3 1/4" x .024" aluminum	48	1 GPM 4 GPM	47 525	—	260 280	350 370	440 470	540 570	640 680	760 810	870 920	990 1050	1100 1170	1220 1300	1340 1420	1450 1540
HD-1400 Single-tier	H-3	1	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1 GPM 4 GPM	47 525	—	190 200	250 270	320 340	390 410	460 486	540 570	620 660	705 750	780 820	865 900	945 1000	1030 1129
HD-1400 Single-tier	H-4	1	1" copper	3" x 2 1/2" x .011" aluminum	48	1 GPM 4 GPM	13 145	—	180 200	250 260	310 330	380 400	450 480	504 530	613 650	690 730	777 820	854 900	942 1000	1129 1190
HD-1400 Single-tier	H-5X	1	1 1/4" copper	3" x 3 1/4" x .020" aluminum	48	1 GPM 4 GPM	6 63	1160	240 260	320 350	400 440	480 530	576 635	678 748	859 948	952 1041	1045 1154	1139 1257	1233 1361	1326 1464
HD-1400 Single-tier	H-6X	1	1 1/4" IPS steel	3" x 3 1/4" x .028" aluminized steel	48	1 GPM 4 GPM	3 41	980	160 160	210 220	260 270	320 330	383 396	469 488	535 561	607 640	680 719	752 799	831 878	904 957
HD-1400 Two-tier	H-1	2	3/4" copper	3" x 3 1/4" x .024" aluminum	48	1 GPM 4 GPM	47 525	—	280 300	380 400	480 510	580 610	690 730	820 870	940 990	1070 1130	1190 1260	1320 1400	1450 1530	1570 1660
HD-1400 Two-tier	H-3	2	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1 GPM 4 GPM	47 525	—	270 280	360 380	450 480	550 580	650 690	770 810	880 930	1000 1060	1110 1170	1230 1300	1340 1420	1460 1540
HD-1400 Two-tier	H-4	2	1" copper	3" x 2 1/2" x .011" aluminum	48	1 GPM 4 GPM	13 145	—	260 280	350 370	440 470	540 570	640 680	740 790	870 920	990 1050	1100 1160	1220 1290	1330 1400	1440 1480
HD-1400 Two-tier	H-5X	2	1 1/4" copper	3" x 3 1/4" x .020" aluminum	48	1 GPM 4 GPM	6 63	1630	270 280	360 380	450 480	550 580	650 690	820 850	900 950	1030 1080	1160 1220	1290 1340	1400 1480	1530 1620
HD-1400 Two-tier	H-6X	2	1 1/4" IPS steel	3" x 3 1/4" x .028" aluminized steel	48	1 GPM 4 GPM	3 41	1440	240 250	320 330	400 410	490 500	580 600	710 740	810 850	920 970	1030 1090	1140 1210	1260 1330	1370 1450

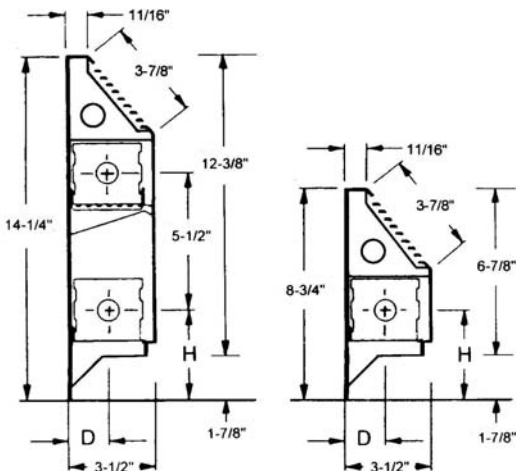
* Based on 65°F entering air temperature. † Millinches per foot.

Note: Ratings are based on active finned length (3" less than overall length), and include 15% heating effect factor. Use 4 GPM rating only when flow is known to be equal to or greater than 4 GPM; otherwise 1 GPM ratings must be used.

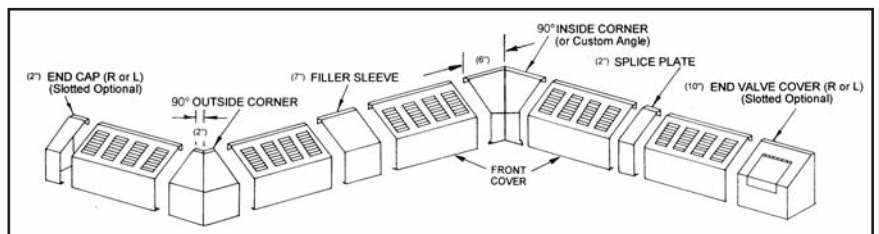
ACCESSORIES

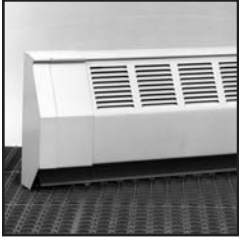


LC SERIES 18 GAUGE SLOPE TOP BASEBOARD



LC-850 and LC-1400 do not have a backpanel. One piece wall mounting bracket/element holder is ordered separately from cover, therefore bracket spacing is determined by system design and installation. The small vertical lip at the bottom of the front cover is where the installer drills a small hole to screw the front cover to the brackets. LC series is ideal for use in replacement applications where you want to use the existing, installed element and just replace the cover. Output ratings are the same as HD series. Contact Slant/Fin for more detailed information.

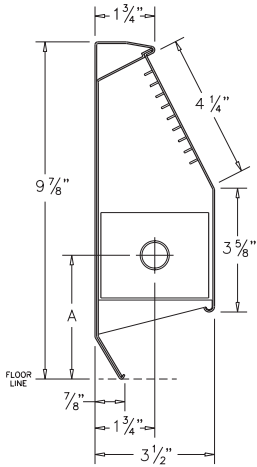
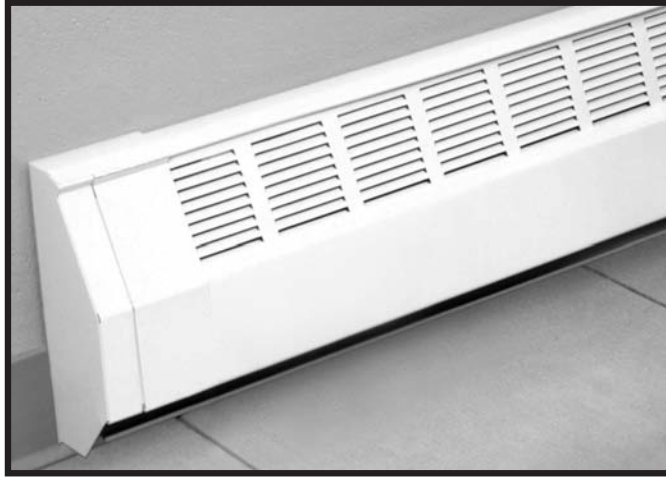




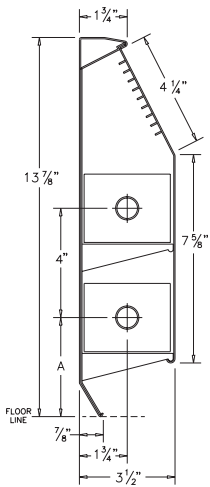
350 SERIES

HIGH-OUTPUT, SLOPE-TOP BASEBOARD

Pre-painted. Factory packaged.



350-10



350-14

350 Series baseboard combines, for the first time, the compactness and economy of baseboard with the high output and heavy-duty construction needed for “in-between” applications. Optional 1" and 1 1/4" copper/aluminum elements permit higher flow rates, longer series-loop runs and lower pump loads where required. With the 1 1/4" all-steel element, 350 Series is perfect for use in one or two pipe steam systems. 350 Series is factory assembled and shipped in individual cartons for rapid installations.

- **Two heights for one or two heating element tiers**
- **Nu-White enamel finish standard**
- **Choice of 5 copper or steel heating elements**
- **Fully assembled and factory packaged**
- **Room control damper optional**
- **Extra backbone**
- **Strong front panel resists kicks and dents**
- **Optional 16-gauge front cover**

HEAVY-DUTY CONSTRUCTION: 350 Series is engineered throughout for maximum strength. Super-strong enclosures. Extra-strength steel brackets. Heavy-duty copper and steel tubing with full mill rated bursting strength. Rock-solid interlocking-fin elements so strong you can stand on them.

“CONTRACTOR-DESIGNED” for fast, economical installation. 350 Series goes straight from carton to wall without disassembling, sorting parts, wasting time. Factory pre-cut lengths of 2 to 8 feet combine with snap-on telescoping accessories to make wall-to-wall installations without cutting.

ORDERING DATA

PACKAGING: Complete 350 Series baseboard enclosures are factory assembled and individually packaged. Cover and heating elements are packaged and sold separately. Cover includes brackets and expansion cradles. Cover may be ordered with optional fully modulating damper.

CONSTRUCTION: Back panel, front cover and optional damper fully assembled at factory, ready to fasten to the wall.

DEPTH: 3 1/2"

HEIGHT: 9 7/8" (one tier) and 13 7/8" (one or two tier)

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'.

MATERIAL: 19-gauge steel or 16-gauge galvanized steel front cover. 24-gauge back cover. 17-gauge brackets.

FINISH: 19-gauge model: Nu-White enamel finish. 16-gauge model: galvanized finish. Custom colors available.

ELEMENT SUPPORT: Self-adjusting, polypropylene expansion cradles are positioned over support brackets, allowing quiet expansion.

ELEMENTS: Choice of five. Copper with aluminum fins: H-1, H-3, H-4 and H-5X; steel with electro-galvanized steel fins: H-6X. See page 30.

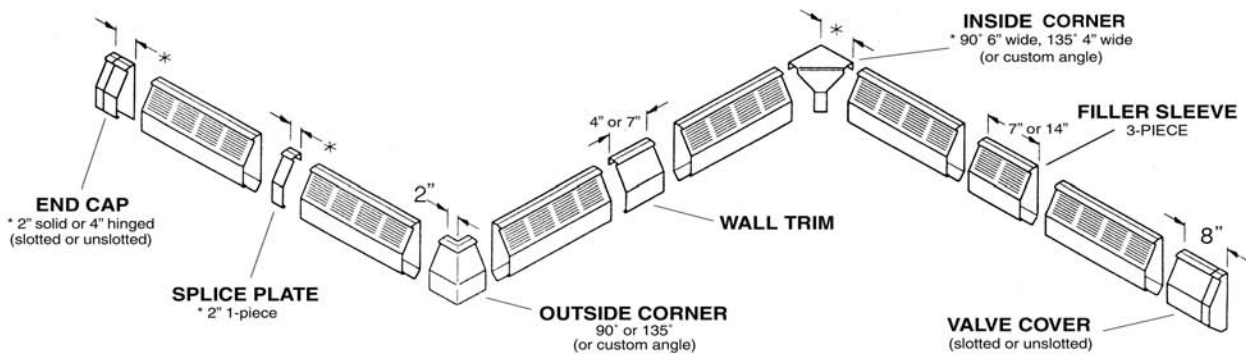
Model	Element	"A"
351	H-1	3 15/16"
353	H-3	3 5/8"
354	H-4	3 5/8"
355	H-5x	3 15/16"
356	H-6x	3 15/16"

RATINGS

Model Number	Element Type	Tiers of Heating Element	Tube Size & Material	Fin Size & Material	Fins Per Foot	Water Flow	Pressure Drop †	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT.												
									110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F	
351-10 Single-tier	H-1	1	3/4 copper	3" x 3/4" x .024 aluminum	48	1 GPM 4 GPM	47 525	—	230 250	310 330	390 410	480 500	570 600	670 700	770 810	870 920	980 1040	1080 1140	1200 1260	1320 1400	
353-10 Single-tier	H-3	1	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1 GPM 4 GPM	47 525	—	210 230	290 300	360 380	440 460	520 550	610 650	710 750	800 850	900 960	1000 1060	1100 1170	1220 1290	
354-10 Single-tier	H-4	1	1" copper	3" x 2 1/2" x .011" aluminum	48	1 GPM 4 GPM	13 145	—	210 230	290 310	360 380	440 460	520 550	610 650	710 750	800 850	900 960	1000 1060	1100 1170	1220 1290	
355-10 Single-tier	H-5X	1	1-1/4" copper	3" x 3/4" x .020" aluminum	48	1 GPM 4 GPM	6 63	1160	220 230	300 310	370 390	450 480	540 570	640 670	730 780	830 880	940 990	1040 1100	1140 1210	1260 1340	
356-10 Single-tier	H-6X	1	1-1/4" IPS steel	3" x 3/4" x .028 aluminized steel	48	1 GPM 4 GPM	3 41	980	190 200	250 270	320 340	390 410	460 490	550 580	630 670	710 750	810 850	890 940	980 1040	1080 1150	
350-14 Single-tier	H-1	1	3/4" copper	3" x 3/4" x .024 aluminum	48	1 GPM 4 GPM	47 525	—	245 259	328 347	412 435	501 530	597 631	704 744	892 984	989 1091	1085 1198	1182 1305	1279 1412	1376 1519	
353-14 Single-tier	H-3	1	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1 GPM 4 GPM	47 525	—	230 243	309 327	388 410	472 499	562 594	661 699	838 925	929 1025	1020 1126	1111 1226	1202 1308	1293 1428	
354-14 Single-tier	H-4	1	1" copper	3" x 2 1/2" x .011" aluminum	48	1 GPM 4 GPM	13 145	—	230 243	309 327	388 410	472 499	562 594	661 699	838 925	929 1025	1020 1126	1111 1226	1202 1308	1293 1428	
355-14 Single-tier	H-5x	1	1-1/2" copper	3" x 3/4" x .020" aluminum	48	1 GPM 4 GPM	6 63	2160	236 249	317 335	397 420	484 512	576 609	678 717	859 948	952 1051	1045 1154	1139 1257	1233 1361	1326 1464	
356-14 Single-tier	H-6x	1	1-1/4" IPS steel	3" x 3/4" x .028 aluminized steel	48	1 GPM 4 GPM	3 41	1870	204 216	273 289	343 363	417 441	497 525	585 618	742 819	822 907	903 997	984 1085	1064 1175	1145 1265	
351-14 Two-tier	H-1	2	3/4" copper	3" x 3/4" x .024 aluminum	48	1 GPM 4 GPM	47 525	—	360 380	480 510	610 640	740 780	880 970	1040 1150	1290 1420	1440 1590	1590 1750	1740 1920	1890 2080	2030 2250	
353-14 Two-tier	H-3	2	3/4" copper	2 3/4" x 2 1/2" x .011" aluminum	55	1 GPM 4 GPM	47 525	—	340 360	460 490	570 600	700 740	830 910	980 1080	1210 1340	1350 1490	1490 1650	1630 1800	1770 1960	1910 2110	
354-14 Two-tier	H-4	2	1" copper	3" x 2 1/2" x .011" aluminum	48	1 GPM 4 GPM	13 145	—	340 360	460 490	570 600	700 740	830 910	980 1080	1210 1340	1350 1490	1490 1650	1630 1800	1770 1960	1910 2110	
355-14 Two-tier	H-5x	2	1-1/4" copper	3" x 3/4" x .020" aluminum	48	1 GPM 4 GPM	6 63	2160	350 370	470 500	590 620	710 750	850 940	1000 1100	1240 1370	1390 1530	1530 1690	1670 1850	1820 2010	1960 2160	
356-14 Two-tier	H-6x	2	1-1/4" IPS steel	3" x 3/4" x .028 aluminized steel	48	1 GPM 4 GPM	3 41	1870	300 320	400 420	500 530	610 640	730 810	860 950	1070 1190	1200 1320	1320 1460	1450 1600	1570 1730	1690 1870	

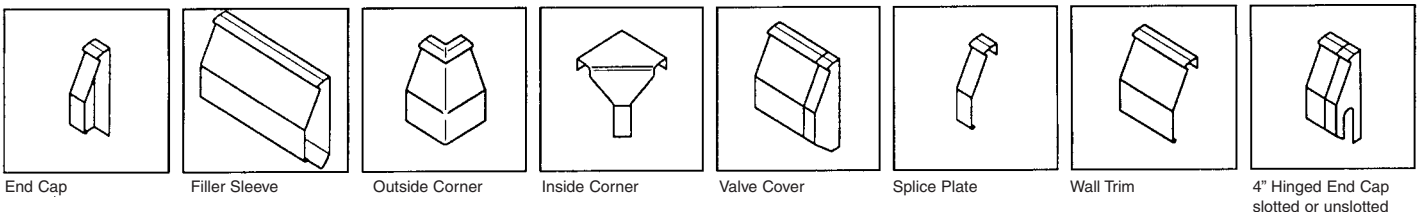
* Based on 65°F entering air temperature † Millinches per foot.
 Note: Ratings are based on active finned length (3" less than overall length), and include 15% heating effect factor.
 Use 4 GPM ratings only when flow is known to be equal to or greater than 4 GPM; otherwise 1 GPM ratings must be used.

ACCESSORIES



Matching snap-on accessories let you speed through virtually any job condition without custom cutting and fitting. Piano hinged accessories permit easy access with flush or recessed installations.

telescopic accessories



All accessories are available for 10" and 14" high cabinets.

R SERIES

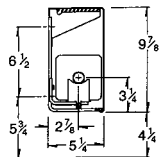
FLAT-TOP ENCLOSURE



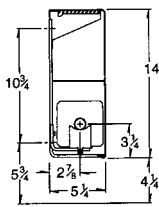
Aluminum grille optional.

Custom Heights & Configurations Available

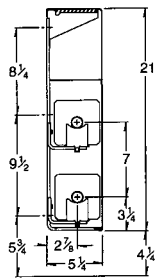
*Details for optional R-Series Damper shown on model RTD-28



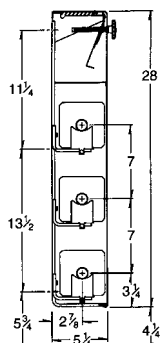
RL-10



RT-14



RT-21

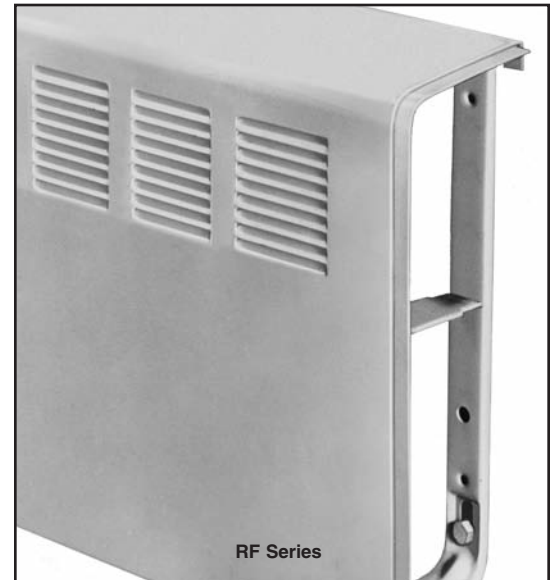


RTD-28*

MODELS RL-10, RT-14, RT-21, RT-28



R Series



RF Series

ORDERING DATA

CONSTRUCTION: Single piece cover mounts on wall brackets.

DEPTH: 5 1/4"

HEIGHTS: 9 7/8", 14" (one tier), 21" (one or two tier), 28" (up to three tier).

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'. Other 1/2' lengths available to order.

MATERIAL: 18-gauge cover, 16 and 14-ga optional.

FINISH: Galvanized standard. Custom color baked enamel available on special order. Anodized architectural aluminum grille optional.

WALL BRACKETS/HANGERS: Order separately, specify BKT (bracket only) or BKT ASSY (bracket complete with SC hangers) followed by cover stock number and quantity.

Element	Recommended number of brackets and hangers for given length.		
	2	3	4
S-532	2-4 ft.	5-7 ft.	8 ft.
S-540	2-4 ft.	5-7 ft.	8 ft.
S-832	2-4 ft.	5-6 ft.	7-8 ft.
C-340	2-5 ft.	6-8 ft.	—
C-440	2-5 ft.	6-8 ft.	—
C-540	2-5 ft.	6-8 ft.	—

NOTE: When using end brackets on short run supply and return pipes, additional bracket(s) may be required.

ELEMENTS: Copper with aluminum fins: C-340, C-440, C-540. Steel with electro-galvanized steel fins: S-532, S-540, S-832. Lengths from 2 to 12 feet. See p. 30.

JOINTS: Slip joint connectors align cover sections which butt to one another, providing a near seamless joint. Use of telescopic accessories eliminates the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls.

OPTIONS

Louver locations

R-Series enclosures may be ordered with these alternate louver locations:

Model RF: Louvered front (N/A on RL-10 & RAG-10)

Model RB: Louvered top and front (N/A on RL-10 & RAG-10)

OTHER OPTIONS

Damper, field installed
(not available with aluminum grille)

Back panel.

16 and 14-gauge cover.

Access door, field installed.

Inlet grille.

Architectural aluminum grille.

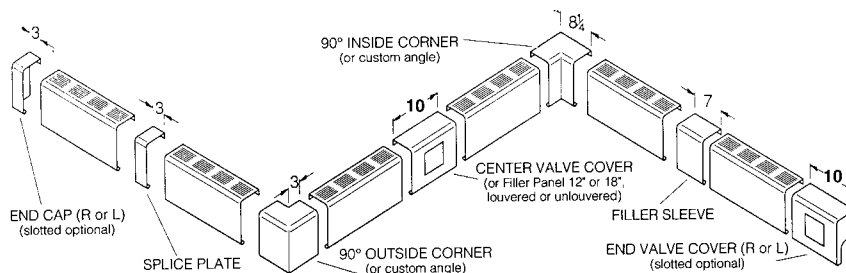
Custom color.

RATINGS

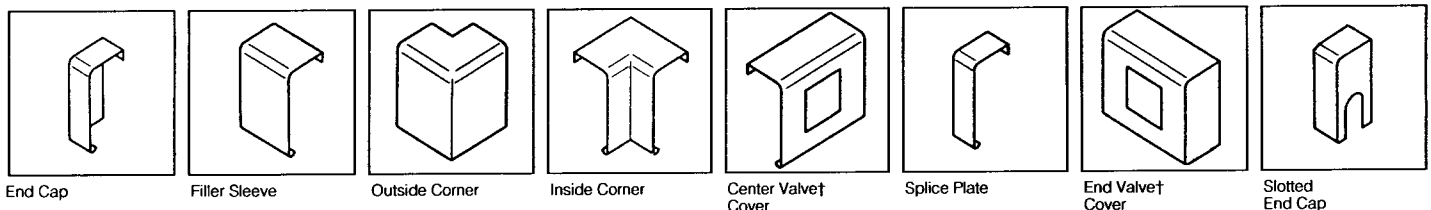
Cover Type	Enclosure Height	Element Type	Tube Size and Material	Fin Size and Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS*											
							BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
RL-10 RR-10	9 7/8"	S-532	1 1/4" steel	4 1/4" steel	32	1230	246	320	406	492	554	652	750	849	959	1058	1169	1292
		S-540	1 1/4" steel	4 1/4" steel	40	1330	266	346	439	532	599	705	811	918	1037	1144	1264	1397
		S-832	2" steel	4 1/4" steel	32	1270	254	330	419	508	572	673	755	876	991	1092	1207	1334
		C-340	3/4" copper	4 1/4" alum.	40	1647	329	428	544	659	742	872	1004	1136	1285	1417	1565	1730
		C-440	1" copper	4 1/4" alum.	40	1740	348	452	574	696	783	922	1061	1201	1357	1496	1653	1827
C-540	1 1/4" copper	4 1/4" alum.	40	1710	342	445	564	684	770	906	1043	1180	1334	1471	1625	1796		
RT-14 RR-14	14"	S-532	1 1/4" steel	4 1/4" steel	32	1280	256	333	422	512	576	678	781	883	998	1101	1216	1344
		S-540	1 1/4" steel	4 1/4" steel	40	1500	300	390	495	600	675	795	915	1035	1170	1290	1425	1575
		S-832	2" steel	4 1/4" steel	32	1320	264	343	436	528	594	700	805	911	1030	1135	1254	1386
		C-340	3/4" copper	4 1/4" alum.	40	1714	343	446	566	685	771	908	1046	1183	1337	1474	1628	1800
		C-440	1" copper	4 1/4" alum.	40	1820	364	473	601	728	819	965	1110	1256	1420	1565	1729	1911
C-540	1 1/4" copper	4 1/4" alum.	40	1780	356	463	587	712	801	943	1086	1228	1388	1531	1691	1869		
RT-21 RR-21 One-tier element	21"	S-532	1 1/4" steel	4 1/4" steel	32	1380	276	359	455	552	621	731	842	952	1076	1187	1311	1449
		S-540	1 1/4" steel	4 1/4" steel	40	1610	322	419	531	644	725	853	982	1111	1256	1385	1530	1691
		S-832	2" steel	4 1/4" steel	32	1460	292	380	482	584	657	774	891	1007	1139	1256	1387	1533
		C-340	3/4" copper	4 1/4" alum.	40	1878	376	488	620	751	846	996	1146	1296	1465	1615	1784	1972
		C-440	1" copper	4 1/4" alum.	40	1990	398	518	657	796	896	1055	1214	1373	1552	1711	1891	2090
C-540	1 1/4" copper	4 1/4" alum.	40	1950	390	507	644	780	878	1034	1190	1346	1521	1677	1853	2048		
RT-21 RR-21 Two-tier element	21"	S-532	1 1/4" steel	4 1/4" steel	32	2200	440	572	726	880	990	1166	1342	1518	1716	1892	2090	2310
		S-540	1 1/4" steel	4 1/4" steel	40	2440	488	634	805	976	1098	1293	1488	1684	1903	2098	2318	2562
		S-832	2" steel	4 1/4" steel	32	2230	446	580	736	892	1004	1182	1360	1539	1739	1918	2119	2342
		C-340	3/4" copper	4 1/4" alum.	40	2668	534	694	881	1067	1201	1414	1627	1840	2081	2294	2535	2801
		C-440	1" copper	4 1/4" alum.	40	2830	566	736	934	1132	1274	1500	1726	1953	2207	2434	2689	2972
C-540	1 1/4" copper	4 1/4" alum.	40	2770	554	720	914	1108	1247	1468	1690	1911	2161	2382	2632	2909		
RT-28 RR-28 One-tier element	28"	S-532	1 1/4" steel	4 1/4" steel	32	1400	280	364	462	560	630	742	854	956	1092	1204	1330	1470
		S-540	1 1/4" steel	4 1/4" steel	40	1680	336	437	554	672	756	890	1025	1159	1310	1445	1596	1764
		S-832	2" steel	4 1/4" steel	32	1480	296	385	488	592	666	784	903	1021	1154	1273	1406	1554
		C-340	3/4" copper	4 1/4" alum.	40	1907	381	496	629	763	858	1010	1163	1315	1487	1640	1811	2002
		C-440	1" copper	4 1/4" alum.	40	2020	404	525	667	808	909	1071	1232	1394	1576	1737	1919	2121
C-540	1 1/4" copper	4 1/4" alum.	40	1980	396	515	653	792	891	1049	1208	1366	1544	1703	1881	2079		
RT-28 RR-28 Two-tier element	28"	S-532	1 1/4" steel	4 1/4" steel	32	2260	452	588	746	904	1017	1198	1379	1559	1763	1944	2147	2373
		S-540	1 1/4" steel	4 1/4" steel	40	2460	492	640	812	984	1107	1304	1501	1697	1919	2116	2337	2583
		S-832	2" steel	4 1/4" steel	32	2270	454	590	749	908	1022	1203	1385	1566	1771	1952	2157	2384
		C-340	3/4" copper	4 1/4" alum.	40	2860	572	744	944	1144	1288	1516	1745	1973	2231	2460	2718	3004
		C-440	1" copper	4 1/4" alum.	40	3030	606	788	1000	1212	1364	1606	1848	2091	2363	2606	2879	3182
C-540	1 1/4" copper	4 1/4" alum.	40	2970	594	772	980	1188	1337	1574	1812	2049	2317	2554	2822	3119		
RT-28 RR-28 Three-tier element	28"	S-532	1 1/4" steel	4 1/4" steel	32	2580	516	671	851	1032	1161	1367	1574	1780	2012	2219	2451	2709
		S-540	1 1/4" steel	4 1/4" steel	40	2800	560	728	924	1120	1260	1484	1708	1932	2184	2408	2660	2940
		S-832	2" steel	4 1/4" steel	32	2660	532	692	878	1064	1197	1410	1623	1835	2075	2288	2527	2793
		C-340	3/4" copper	4 1/4" alum.	40	3390	678	881	1119	1356	1525	1797	2068	2339	2644	2915	3220	3559
		C-440	1" copper	4 1/4" alum.	40	3590	718	934	1185	1436	1616	1903	2190	2477	2800	3087	3411	3770
C-540	1 1/4" copper	4 1/4" alum.	40	3520	704	915	1162	1408	1584	1866	2147	2429	2746	3027	3344	3696		

*Based on 65°F entering air temperature.
Note: Ratings are based on active finned length (5-1/4" less than overall length.)

ACCESSORIES



telescopic accessories



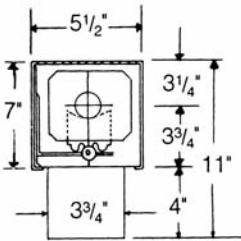
† Access doors: 6" x 6". Door location depends on model.

FS SERIES

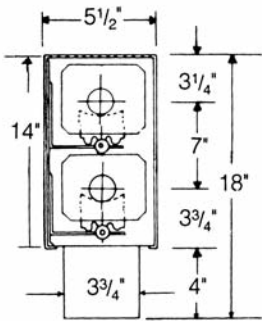
FREE STANDING ENCLOSURE

Custom Heights & Configurations Available

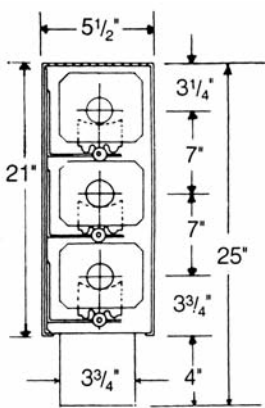
MODELS FS-21, FS-14 AND FS-7



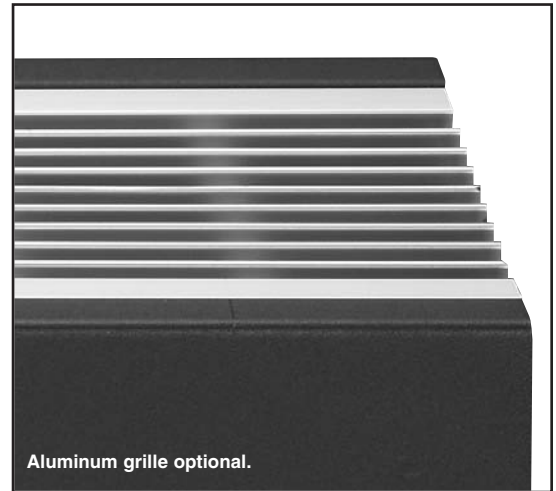
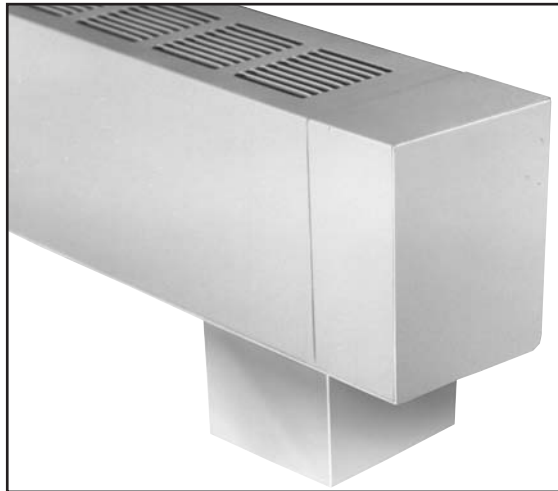
FS-7



FS-14



FS-21



Aluminum grille optional.

ORDERING DATA

CONSTRUCTION: Single piece cover mounts on floor pedestals.

DEPTH: 5 1/2"

INSTALLED HEIGHTS: 11" (one tier), 18" (one or two tier), 25" (up to three tier)

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'. Other 1/2' lengths available to order.

MATERIAL: FS-7: 18-ga std., 16-ga and 14-ga optional. FS-14 and FS-21: 16-ga std., 14-ga optional.

FINISH: Galvanized standard. Custom color baked enamel available on special order. Anodized architectural aluminum grille optional. Stainless steel escutcheon for pedestals standard.

PEDESTAL BRACKETS/HANGERS: Order separately. Adjustable height floor pedestal supports the elements and enclosure. Uses standard SC hangers. Large hole in base to bring supply and return piping into cover without showing. Stainless steel escutcheon around base for neat finish.

ELEMENTS: Copper with aluminum fins: C-340, C-440, C-540. Steel with electro-galvanized steel fins: S-532, S-540. Lengths from 2 to 12 feet. See p. 30.

JOINTS: Slip joint connectors align cover sections which butt to one another, providing a near seamless joint. Use of telescopic accessories eliminates the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls.

NOTE: Pedestals used as a pipe chase for individual vertical supply or return pipes (max 1-1/4" pipe) must be dedicated for pipe chase use and will not be able to support element or horizontal piping. SC hangers will not fit into pedestals used for this function.

OPTIONS

- Heavier gauge cover.
- Access door, field installed.
- Architectural aluminum grille.
- Custom color.

Element	Recommended number of brackets and hangers for given length.		
	2	3	4
S-532	2-5 ft.	6-7 ft.	8 ft.
S-540	2-5 ft.	6-7 ft.	8 ft.
C-340	2-5 ft.	6-7 ft.	8 ft.
C-440	2-5 ft.	6-7 ft.	8 ft.
C-540	2-5 ft.	6-7 ft.	8 ft.

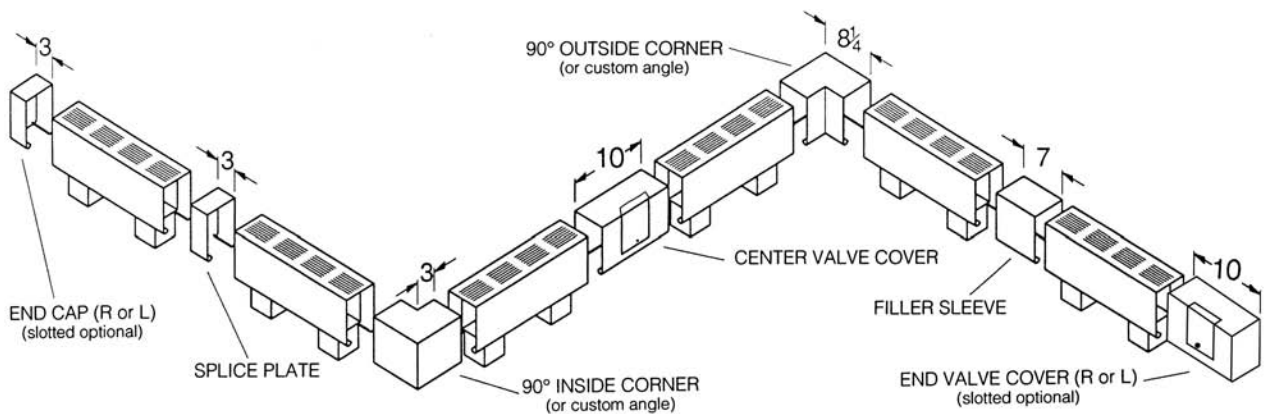
NOTE: When using end brackets on short run supply and return pipes, additional bracket(s) may be required.

RATINGS

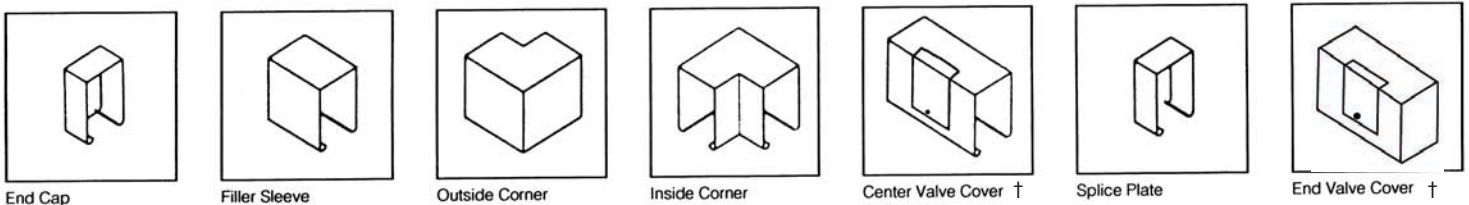
Cover Type	Enclosure Height	Element Type	Tube Size & Material	Fin Size & Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
FS-7	7"	S-532	1/4" steel	4 1/4" steel	32	1290	258	336	426	516	581	684	787	890	1006	1109	1226	1355
		S-540	1/4" steel	4 1/4" steel	40	1390	278	362	459	556	626	737	848	959	1084	1195	1321	1460
		C-340	3/8" copper	4 1/4" alum.	40	1579	316	411	521	632	711	837	963	1090	1232	1358	1500	1658
		C-440	1" copper	4 1/4" alum.	40	1670	334	434	551	668	752	885	1019	1152	1303	1436	1587	1754
		C-540	1 1/4" copper	4 1/4" alum.	40	1640	328	426	541	656	738	869	1000	1132	1279	1410	1558	1722
FS-14 One-tier element	14"	S-532	1/4" steel	4 1/4" steel	32	1330	266	346	439	532	599	705	811	918	1037	1144	1264	1397
		S-540	1/4" steel	4 1/4" steel	40	1540	308	400	508	616	693	816	939	1063	1201	1324	1463	1617
		C-340	3/8" copper	4 1/4" alum.	40	1782	356	463	588	713	802	945	1087	1230	1390	1532	1693	1871
		C-440	1" copper	4 1/4" alum.	40	1890	378	492	624	756	851	1002	1153	1304	1474	1625	1796	1985
		C-540	1 1/4" copper	4 1/4" alum.	40	1850	370	481	611	740	833	981	1129	1277	1443	1591	1758	1943
FS-14 Two-tier element	14"	S-532	1/4" steel	4 1/4" steel	32	1850	370	481	611	740	833	981	1129	1277	1443	1591	1758	1943
		S-540	1/4" steel	4 1/4" steel	40	1955	391	508	645	782	880	1036	1193	1349	1525	1681	1857	2053
		C-340	3/8" copper	4 1/4" alum.	40	2311	462	601	763	925	1040	1225	1410	1595	1803	1988	2196	2427
		C-440	1" copper	4 1/4" alum.	40	2450	490	637	809	980	1103	1299	1495	1690	1911	2107	2328	2573
		C-540	1 1/4" copper	4 1/4" alum.	40	2400	480	624	792	960	1080	1272	1464	1656	1872	2064	2280	2520
FS-21 One-tier element	21"	S-532	1/4" steel	4 1/4" steel	32	1610	322	419	531	644	725	853	982	1111	1256	1385	1530	1691
		S-540	1/4" steel	4 1/4" steel	40	1675	335	435	553	670	754	888	1022	1156	1307	1441	1591	1759
		C-340	3/8" copper	4 1/4" alum.	40	2008	402	522	663	803	903	1064	1225	1386	1566	1727	1908	2108
		C-440	1" copper	4 1/4" alum.	40	2130	426	554	703	852	959	1129	1299	1470	1661	1832	2024	2237
		C-540	1 1/4" copper	4 1/4" alum.	40	2085	417	542	688	832	938	1105	1272	1439	1626	1793	1981	2189
FS-21 Two-tier element	21"	S-532	1/4" steel	4 1/4" steel	32	2140	428	556	706	856	963	1134	1305	1477	1669	1840	2033	2247
		S-540	1/4" steel	4 1/4" steel	40	2245	449	584	741	898	1010	1190	1369	1549	1751	1931	2133	2357
		C-340	3/8" copper	4 1/4" alum.	40	2648	528	686	871	1056	1192	1404	1616	1827	2066	2277	2516	2781
		C-440	1" copper	4 1/4" alum.	40	2810	562	731	927	1124	1265	1489	1714	1939	2192	2417	2670	2951
		C-540	1 1/4" copper	4 1/4" alum.	40	2750	550	715	908	1100	1238	1458	1678	1897	2145	2365	2613	2888
FS-21 Three-tier element	21"	S-532	1/4" steel	4 1/4" steel	32	2380	476	619	785	952	1071	1261	1452	1642	1856	2047	2261	2499
		S-540	1/4" steel	4 1/4" steel	40	2540	508	660	838	1016	1143	1346	1549	1753	1981	2184	2413	2667
		C-340	3/8" copper	4 1/4" alum.	40	3005	601	781	991	1202	1352	1593	1833	2073	2344	2584	2854	3155
		C-440	1" copper	4 1/4" alum.	40	3180	636	827	1049	1272	1431	1685	1940	2194	2480	2735	3021	3339
		C-540	1 1/4" copper	4 1/4" alum.	40	3120	624	811	1030	1248	1404	1654	1903	2153	2434	2683	2964	3276

*Based on 65°F entering air temperature.
Note: Ratings are based on active finned length (5-1/4" less than overall length.)

ACCESSORIES



telescopic accessories



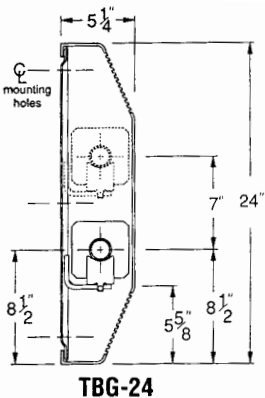
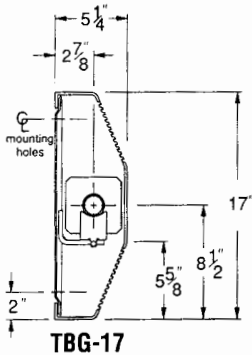
† Access doors: 6" x 6". Door location depends on model.

TBG SERIES

SLOPE-TOP/BOTTOM ENCLOSURES



Custom Heights
& Configurations
Available



ORDERING DATA

CONSTRUCTION: Single piece cover mounts on wall brackets.

DEPTH: 5 1/4"

HEIGHTS: 17" (one tier), 24" (one or two tier)

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'. Other 1/2' lengths available to order

MATERIAL: 16-ga cover standard, 14-ga optional.

FINISH: Galvanized standard. Custom color baked enamel available on special order. Anodized architectural aluminum grille optional.

WALL BRACKET/HANGERS: Order separately, specify BKT (bracket only) or BKT ASSY (bracket complete with SC hangers) followed by cover stock number and quantity.

Element	Recommended number of brackets and hangers for given length.		
	2	3	4
S-532	2-5 ft.	6-7 ft.	8 ft.
S-540	2-5 ft.	6-7 ft.	8 ft.
S-832	2-5 ft.	6 ft.	7-8 ft.
C-340	2-5 ft.	6-7 ft.	8 ft.
C-440	2-5 ft.	6-7 ft.	8 ft.
C-540	2-5 ft.	6-7 ft.	8 ft.

NOTE: When using end brackets on short run supply and return pipes, additional bracket(s) may be required.

ELEMENTS: Copper with aluminum fins: C-340, C-440, C-540. Steel with electro-galvanized steel fins: S-532, S-540, S-832. Lengths from 2 to 12 feet. See p. 30.

JOINTS: Slip joint connectors align cover sections which butt to one another, providing a near seamless joint. Use of telescopic accessories eliminates the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls.

OPTIONS

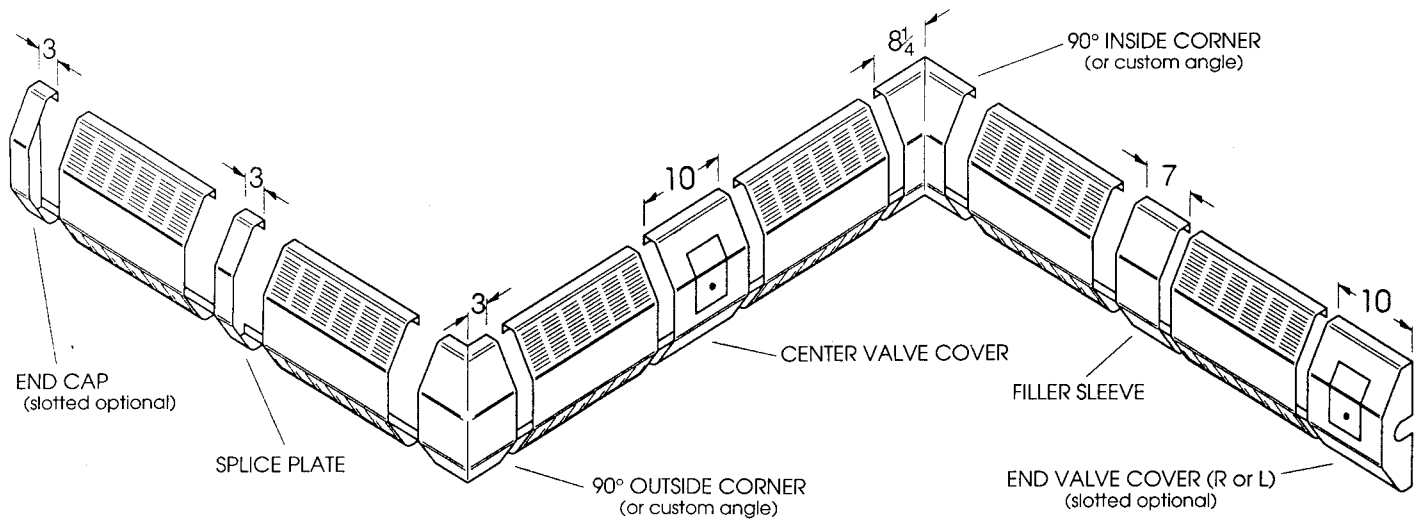
- 14-gauge cover.
- Access door, field installed.
- Architectural aluminum grille.
- Damper, field installed (not available with aluminum grille)
- Custom color.

RATINGS

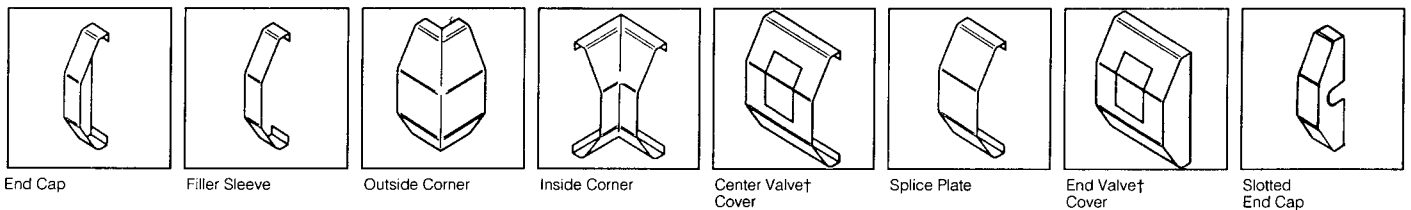
Cover Type	Enclosure Height	Element Type	Tube Size & Material	Fin Size & Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
TBG-17	17"	S-532	1 1/4" steel	4 1/4" steel	32	1250	250	325	413	500	563	663	763	862	975	1075	1188	1313
		S-540	1 1/4" steel	4 1/4" steel	40	1344	269	349	444	538	605	712	820	927	1048	1156	1277	1411
		S-832	2" steel	4 1/4" steel	32	1201	240	312	396	480	540	637	733	829	937	1033	1141	1261
		C-340	3/4" copper	4 1/4" alum.	40	1595	319	415	526	638	717	846	973	1101	1244	1371	1515	1675
		C-440	1" copper	4 1/4" alum.	40	1690	338	440	558	676	761	896	1031	1166	1318	1453	1606	1775
C-540	1 1/4" copper	4 1/4" alum.	40	1656	331	431	546	662	745	878	1010	1143	1292	1424	1573	1739		
TBG-24 One-tier element	24"	S-532	1 1/4" steel	4 1/4" steel	32	1460	292	380	482	584	657	774	891	1007	1139	1256	1387	1533
		S-540	1 1/4" steel	4 1/4" steel	40	1505	301	391	497	602	677	798	918	1038	1174	1294	1430	1580
		S-832	2" steel	4 1/4" steel	32	1345	269	350	444	538	605	713	820	928	1049	1157	1278	1412
		C-340	3/4" copper	4 1/4" alum.	40	1798	360	468	594	720	810	953	1097	1241	1403	1547	1709	1888
		C-440	1" copper	4 1/4" alum.	40	1910	382	497	630	764	860	1012	1165	1318	1490	1643	1815	2006
C-540	1 1/4" copper	4 1/4" alum.	40	1868	374	486	617	747	841	990	1139	1289	1457	1606	1775	1961		
TBG-24 Two-tier element	24"	S-532	1 1/4" steel	4 1/4" steel	32	1980	396	515	653	792	891	1049	1208	1366	1544	1703	1881	2079
		S-540	1 1/4" steel	4 1/4" steel	40	2102	420	547	694	841	946	1114	1282	1450	1640	1808	1997	2207
		S-832	2" steel	4 1/4" steel	32	1890	378	492	624	756	851	1002	1153	1304	1474	1625	1796	1985
		C-340	3/4" copper	4 1/4" alum.	40	2337	468	608	772	935	1052	1238	1425	1613	1823	2010	2221	2454
		C-440	1" copper	4 1/4" alum.	40	2427	485	631	801	971	1092	1286	1480	1675	1893	2087	2306	2548

*Based on 65°F entering air temperature.
Note: Ratings are based on active finned length (5-1/4" less than overall length.)

ACCESSORIES



TELESCOPIC ACCESSORIES



† Access doors: 6" x 6". Door location depends on model.

Slant/Fin



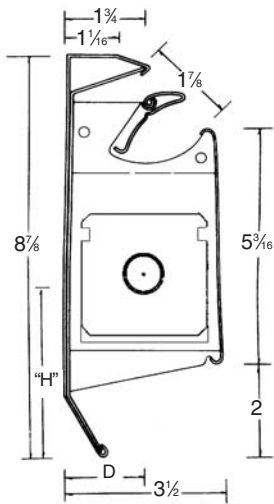
MULTI/PAK[®] 80

HIGH-OUTPUT, LOW-PROFILE BASEBOARD



NOT AVAILABLE IN CANADA

**Made with
Rust-Resistant
Galvanized Steel.**



ELEMENT	"H"	"D"
H-1	3 7/8"	1 3/4"
H-3	3 1/2"	1 9/16"
H-4	3 1/2"	1 9/16"
H-5X	3 7/8"	1 3/4"
H-6X	3 7/8"	1 3/4"

The industry standard for heavy-duty, high-output baseboard heating, Multi/Pak 80 is trusted by contractors and engineers for its performance and durability. Multi/Pak 80 combines the compactness, economy, and ease of installation of baseboard with the high capacity, rugged construction and design versatility needed for industrial and commercial use. Multi/Pak 80 is engineered for maximum strength throughout. Dent-proof 18-gauge front panels. Massive steel brackets. Heavy wall tubing with full mill-rated bursting strength. For fast, economical installation, Multi/Pak 80 enclosures are factory pre-assembled in "Zip Strip" cartons. Factory pre-cut lengths of 2 to 14 feet combine with snap-on telescoping accessories to produce wall-to-wall installations without cutting.

- Galvanized steel cover resists rust
- Engineered for maximum strength and good looks
- 18-gauge front panel resists damage
- Massive steel brackets
- Fully modulating damper
- Choice of 5 interchangeable heating elements
- Packaged in individual Zip-Strip cartons
- Modern replacement for hot water or steam radiators

INTERCHANGEABLE HEATING ELEMENTS:

Available with a choice of five heating elements, Multi/Pak 80 meets a wide variety of heating requirements. With the optional *high-output* 3/4" copper/aluminum element, it is the perfect alternative to costly, bulky commercial enclosures in "problem areas" of high heat loss. Optional 1" and 1 1/4" copper/aluminum elements permit higher flow rates, longer series-loop runs and lower pump loads. The 1 1/4" elements are suitable for use in one or two pipe steam systems.

ORDERING DATA

PACKAGING: Complete assembly - Model 83A2: Factory assembled, packaged in individual Zip-Strip cartons. Includes H-3 element, enclosure, brackets, plastic expansion cradles and damper. Model 81A, 84A3, 85A and 86A: Cover and element packaged and shipped separately.

CONSTRUCTION: Back panel, front cover and damper fully assembled at factory, ready to fasten to the wall.

DEPTH: 3 1/2"

HEIGHT: 8 7/8"

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8', 10', 12', 14'.

MATERIAL: 18-gauge galvanized steel front cover. 21-gauge galvanized steel back cover. 16-gauge brackets.

FINISH: Nu-White baked enamel.

ELEMENT SUPPORT: Self-adjusting, polypropylene expansion cradles are positioned over support brackets, allowing quiet expansion.

ELEMENTS: Choice of five. Copper with aluminum fins: H-1, H-3, H-4 and H-5X; steel with electro-galvanized steel fins: H-6X. See page 30.

RATINGS



Model Number	Element Type	Tube Size and Material	Fin Size and Material	Fins per Foot	Water Flow	Pressure Drop†	Steam 1 PSI ‡ Btu/Hr. Per Foot	HOT WATER RATINGS ‡ BTU/HR./FT.											
								110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
81 A	H-1	¾" copper	3 x 3¼" x .024" aluminum	48	1 GPM 4 GPM	47 525	—	210* 220*	290* 310*	360* 380*	440* 470*	520 550	610 640	700 740	790 840	880 930	970 1030	1060 1120	1140 1200
83-A2	H-3	¾" copper	2¾" x 2½" x .011" aluminum	55	1 GPM 4 GPM	47 525	—	200* 210*	270* 290*	340* 360*	410* 430*	490 520	570 600	650 690	730 770	810 860	890 940	970 1030	1050 1110
84-A3	H-4	1" copper	3" x 2½" x .011" aluminum	48	1 GPM 4 GPM	13 145	—	200* 210*	260* 270*	330* 350*	400* 420*	480 510	560 610	640 680	720 760	800 850	880 930	960 1010	1040 1100
85-AX	H-5X	1¼" copper	3" x 3¼" x .020" aluminum	48	1 GPM 4 GPM	6 63	1130	190* 200*	260* 270*	320* 340*	390* 410*	470 500	560 590	650 690	740 780	830 890	920 970	1010 1070	1100 1160
86-AX	H-6X	1¼" IPS steel	3" x 3¼" x .028" aluminized steel	48	1 GPM 4 GPM	3 41	990	— —	— —	— —	— —	410 430	490 520	560 590	640 680	710 750	790 840	860 910	940 990

† Millinches per foot. *Ratings at 140°F and lower temperatures determined by multiplying 150°F rating by the applicable factor specified in Table E in the I=B=R Testing and Rating Standard for Baseboard radiation.

‡ With 65°F entering air.

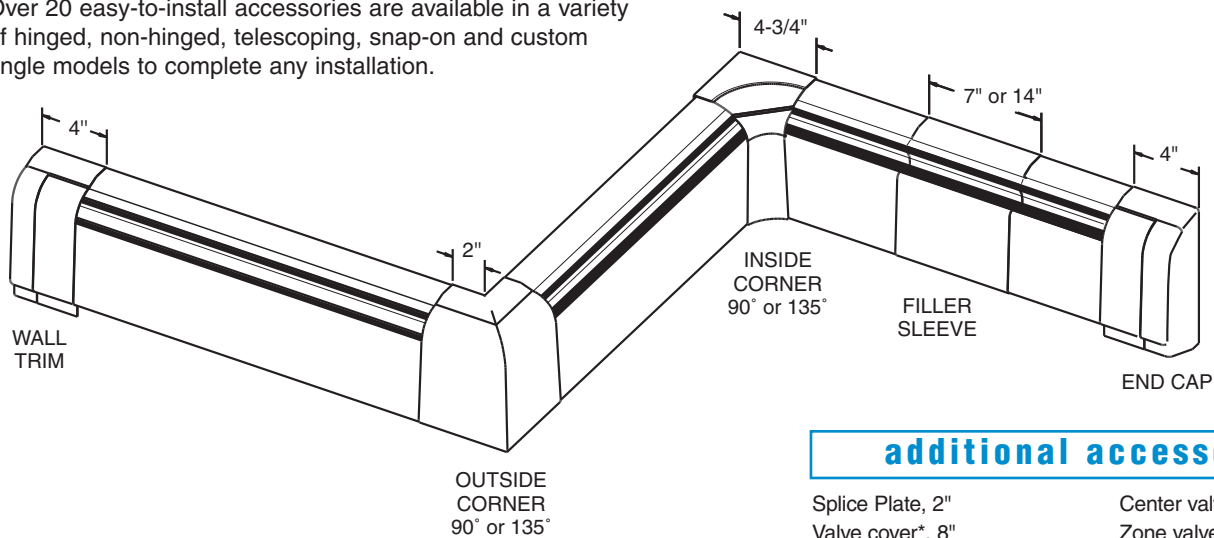
NOTE: Ratings are for element installed as per drawing shown in "Dimensional Data" window (open "Dimensional Data" window to view) with damper open, with expansion cradles. Ratings are based on active finned length (5" to 6" less than overall length) and include 15% heating effect factor.

Ratings are also based on:

- 81-A: ¾" nominal copper tubing with 3" x 3-1/4" x .024" aluminum fins spaced 48 per linear foot (unpainted);
 - 83-A2: ¾" nominal copper tubing with 2-3/4" x 2-1/2" x .011" aluminum fins spaced 55 per linear foot (unpainted);
 - 84-A3: 1" nominal copper tubing with 3" x 2-1/2" x .011" aluminum fins spaced 48 per linear foot (unpainted);
 - 85-AX: 1-1/4" nominal copper tubing with 3" x 3-1/4" x .020" aluminum fins spaced 48 per linear foot (unpainted);
 - 86-AX: 1-1/4" IPS steel with 3" x 3-1/4" x .028" aluminized steel fins spaced 48 per linear foot (unpainted);
- Use 4 gpm ratings only when flow is known to be equal to or greater than 4 gpm; otherwise, 1 gpm ratings must be used.

ACCESSORIES

Over 20 easy-to-install accessories are available in a variety of hinged, non-hinged, telescoping, snap-on and custom angle models to complete any installation.



additional accessories

- Splice Plate, 2"
- Valve cover*, 8"
- Valve cover, slotted*, 8"
- Inside corner*, custom angle
- Outside corner*, custom angle
- Center valve cover*, 8"
- Zone valve box
- Back panel for inside corner
- Column cover set

*Telescopic accessories

TELESCOPIC ACCESSORIES



Filler Sleeve



Hinged End Cap



Hinged Wall Trim



Hinged Valve Cover



Hinged Inside Corner

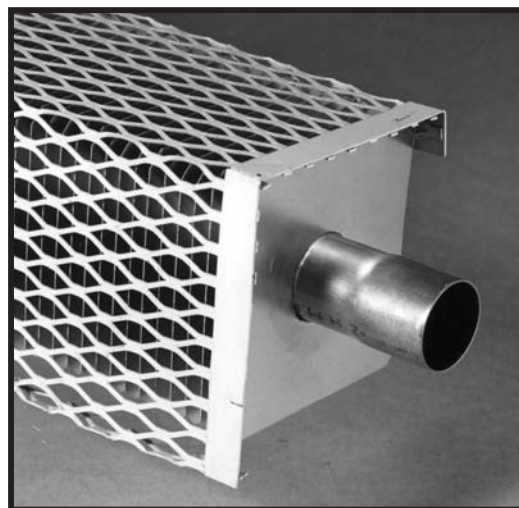
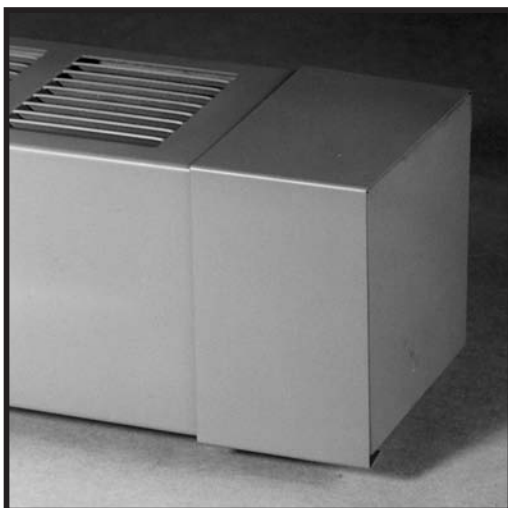
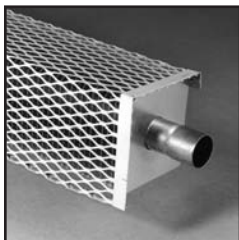


Outside Corner

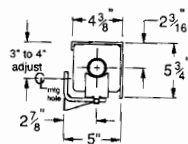
F & EM SERIES

LOUVERED AND EXPANDED METAL ELEMENT COVERS

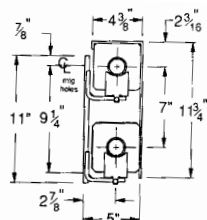
F and EM Series are industrial covers where the cover hangs directly on the 4-1/4" by 4-3/4" finned tube element. Available from the factory in a protective galvanized finish or baked enamel over the protective galvanized finish.



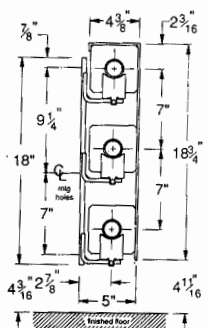
Custom Heights & Configurations Available



**F-5
EM-5**



**F-12
EM-12**



**F-19
EM-19**

Element positions shown maximize output of enclosure. Single or double rows of elements may be placed in any of the two or three positions. Element position is adjustable vertically by 1/8" and horizontally by 1/16".

F SERIES

EM SERIES

ORDERING DATA

CONSTRUCTION: Single piece cover attaches directly to element.

DEPTH: 4 3/8"

HEIGHTS: 4 3/4" (one tier), 11 3/4" (two tier), 18 3/4" (three tier)

LENGTHS: 2', 3', 3 1/2', 4', 5', 6', 7', 8'. Other 1/2' lengths available to order.

MATERIAL: **F:** 18 or 16-ga cover. **EM:** 16-ga cover.

FINISH: Galvanized standard. Available in baked enamel.

WALL BRACKETS/HANGERS: Order separately, specify BKT (bracket only) or BKT ASSY (bracket complete with SC hangers) followed by cover stock number and quantity.

ELEMENTS: Copper with aluminum fins: C-340, C-440, C-540. Steel with electro-galvanized steel fins: S-532, S-540, S-832. Lengths from 2 to 12 feet. See p. 26.

JOINTS: Telescopic accessories eliminate the need to perfectly butt one length of cover to the next. Critical linear and vertical tolerances are eliminated because telescopic assembly absorbs misalignment that might result from uneven floors and walls.

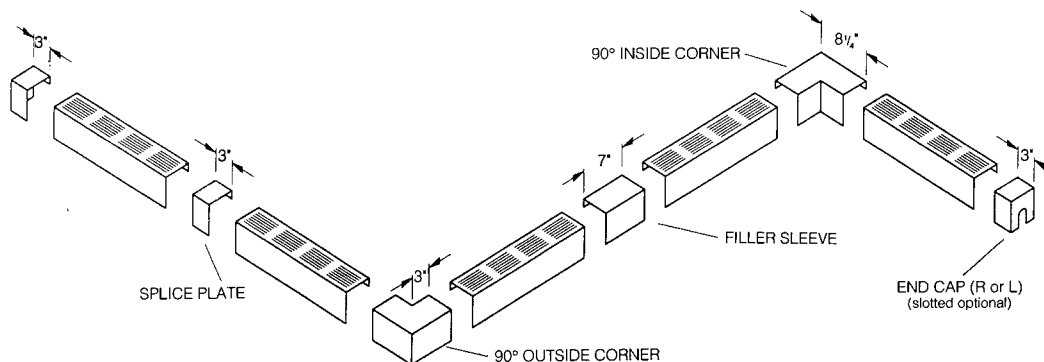
Element	Recommended number of brackets and hangers for given length.		
	2	3	4
S-532	2-4 ft.	5-7 ft.	8 ft.
S-540	2-4 ft.	5-7 ft.	8 ft.
S-832	2-4 ft.	5-6 ft.	7-8 ft.
C-340	2-5 ft.	6-8 ft.	—
C-440	2-5 ft.	6-8 ft.	—
C-540	2-5 ft.	6-8 ft.	—

RATINGS

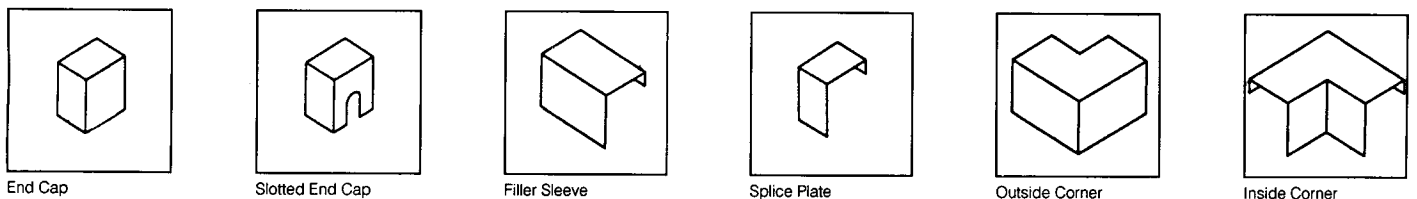
Model Number	Enclosure Height	Element Type	Tube Size and Material	Fin Size and Material	Fins Per Foot	Steam 1 PSI* Btu/Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
F-5	4¾"	S-532	1¼" steel	4¼" steel	32	1250	250	325	413	500	563	663	763	862	975	1075	1188	1313
		S-540	1¼" steel	4¼" steel	40	1340	268	348	442	536	603	710	817	925	1045	1152	1273	1407
		S-832	2" steel	4¼" steel	32	1280	256	333	422	512	576	678	781	883	998	1101	1216	1344
		C-340	¾" copper	4¼" alum.	40	1560	312	406	515	624	702	827	951	1077	1217	1341	1482	1638
		C-440	1" copper	4¼" alum.	40	1650	330	429	545	660	743	875	1007	1139	1287	1419	1568	1733
		C-540	1¼" copper	4¼" alum.	40	1620	324	421	535	648	729	859	988	1118	1264	1393	1539	1701
F-12 Two-tier element	11¾"	S-532	1¼" steel	4¼" steel	32	2070	414	538	683	828	932	1097	1263	1428	1615	1780	1967	2174
		S-540	1¼" steel	4¼" steel	40	2160	432	562	713	864	972	1145	1318	1490	1685	1858	2052	2268
		S-832	2" steel	4¼" steel	32	2090	418	544	690	836	941	1108	1275	1442	1630	1797	1986	2195
		C-340	¾" copper	4¼" alum.	40	2600	520	676	858	1040	1170	1378	1586	1794	2028	2236	2470	2730
		C-440	1" copper	4¼" alum.	40	2750	550	715	908	1100	1238	1458	1678	1897	2145	2365	2613	2888
		C-540	1¼" copper	4¼" alum.	40	2700	540	702	891	1080	1215	1431	1647	1863	2106	2322	2565	2835
F-19 Three-tier element	18¾"	S-532	1¼" steel	4¼" steel	32	2580	516	671	851	1032	1161	1367	1574	1780	2012	2219	2451	2709
		S-540	1¼" steel	4¼" steel	40	2690	538	700	888	1076	1211	1426	1641	1856	2098	2313	2556	2825
		S-832	2" steel	4¼" steel	32	2610	522	679	861	1044	1175	1383	1592	1801	2036	2245	2480	2741
		C-340	¾" copper	4¼" alum.	40	3139	628	816	1036	1256	1413	1664	1915	2166	2449	2700	2982	3296
		C-440	1" copper	4¼" alum.	40	3330	666	866	1099	1332	1499	1765	2031	2298	2597	2864	3164	3497
		C-540	1¼" copper	4¼" alum.	40	3260	652	848	1076	1304	1467	1728	1989	2249	2543	2804	3097	3423
EM-5	4¾"	S-532	1¼" steel	4¼" steel	32	1290	258	336	426	516	581	684	787	890	1006	1109	1226	1355
		S-540	1¼" steel	4¼" steel	40	1370	274	356	452	548	617	726	836	945	1069	1178	1302	1439
		S-832	2" steel	4¼" steel	32	1310	262	341	432	524	590	694	799	904	1022	1127	1245	1376
		C-340	¾" copper	4¼" alum.	40	1656	331	431	547	663	745	878	1010	1143	1292	1424	1574	1739
		C-440	1" copper	4¼" alum.	40	1750	350	455	578	700	788	928	1068	1208	1365	1505	1663	1838
		C-540	1¼" copper	4¼" alum.	40	1720	344	447	568	688	774	912	1049	1187	1342	1479	1634	1806
EM-12 Two-tier element	11¾"	S-532	1¼" steel	4¼" steel	32	2270	454	590	749	908	1022	1203	1385	1566	1771	1952	2157	2384
		S-540	1¼" steel	4¼" steel	40	2390	478	622	789	956	1076	1267	1458	1649	1864	2055	2271	2510
		S-832	2" steel	4¼" steel	32	2290	458	596	756	916	1031	1214	1397	1580	1786	1969	2176	2405
		C-340	¾" copper	4¼" alum.	40	2918	584	759	963	1167	1314	1547	1780	2014	2276	2510	2772	3064
		C-440	1" copper	4¼" alum.	40	3090	618	804	1020	1236	1391	1638	1885	2132	2410	2657	2936	3245
		C-540	1¼" copper	4¼" alum.	40	3030	606	788	1000	1212	1364	1606	1848	2091	2363	2606	2879	3182
EM-19 Three-tier element	18¾"	S-532	1¼" steel	4¼" steel	32	3060	612	796	1010	1224	1377	1622	1867	2111	2387	2632	2907	3213
		S-540	1¼" steel	4¼" steel	40	3140	628	816	1036	1256	1413	1664	1915	2167	2449	2700	2983	3297
		S-832	2" steel	4¼" steel	32	3080	616	801	1016	1232	1386	1632	1879	2125	2402	2649	2926	3234
		C-340	¾" copper	4¼" alum.	40	3736	747	972	1233	1495	1681	1980	2279	2578	2914	3214	3550	3923
		C-440	1" copper	4¼" alum.	40	3960	792	1030	1307	1584	1782	2099	2416	2732	3089	3406	3762	4158
		C-540	1¼" copper	4¼" alum.	40	3880	776	1009	1280	1552	1746	2056	2367	2677	3026	3337	3686	4074

* Based on 65°F entering air temperature. **Note:** Ratings are based on active finned length (5-1/4" less than overall length).

ACCESSORIES



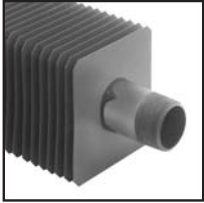
TELESCOPIC ACCESSORIES



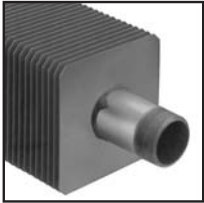
BARE ELEMENTS

STEEL ELEMENTS

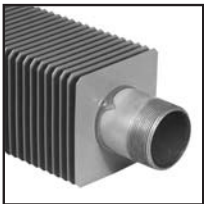
COPPER/ALUMINUM ELEMENTS



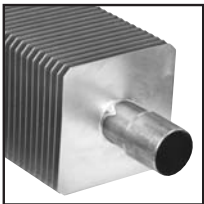
S-532



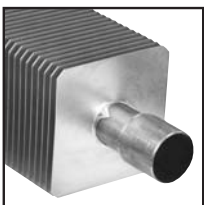
S-540



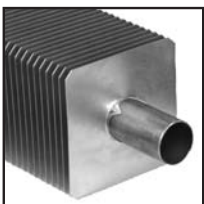
S-832



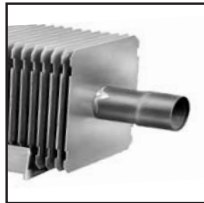
C-340



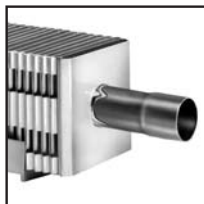
C-440



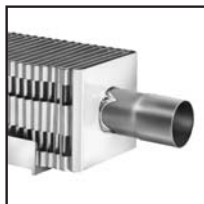
C-540



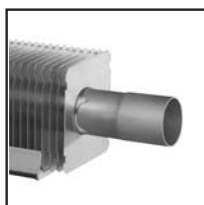
H-1



H-3



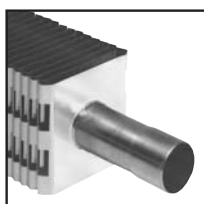
H-4



H-5X



H-6X



E-75

STRONGER, EASY TO JOIN ELEMENTS

Slant/Fin makes 12 types of fin-tube which may be used with the various enclosures shown in this catalog. Instead of light-wall tubing, Slant/Fin uses only copper seamless-drawn tubing or Schedule 40 steel pipe. Each fin has a tongue-and-groove collar which interlocks with the next fin for accurate and uniform spacing and prevents fins from twisting loose. This full wall thickness and strength of copper tubing and IPS steel pipe are maintained by forcing tubing through undersized fin holes under high hydraulic pressure. A force-fit mechanical bond is attained which maintains maximum heat transfer indefinitely.

Compact models (E-75, H-3 and H-4) feature double bent aluminum fins, providing extra heating surface in a slimmer profile. Edges of each fin are wedged against the next. Fins reinforce each other - won't be crushed, bent or twisted. End fins are of plated steel for extra ruggedness.

Expanded copper tubing ends eliminate couplings, reduce soldering. Steel elements are factory threaded at both ends.

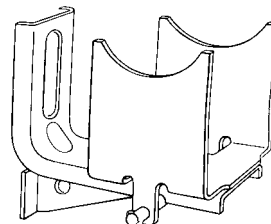
ORDERING DATA

PACKAGING: Factory packaged in individual cartons (except E-75 which is packaged 3 elements to a carton). "E" and "H" elements include plastic expansion cradles.

LENGTHS: Precut standard lengths
S and C Series: 2, 3, 3½, 4, 5, 6, 7, 8, 9, 10, 11, 12 feet. (C-340 up to 10 ft.)

E and H Series: 2, 3, 3½, 4, 5, 6, 7, 8 feet.

FINISH: Copper/aluminum elements - natural finish.
Steel elements - natural finish.



M-1 Expansion Hanger:

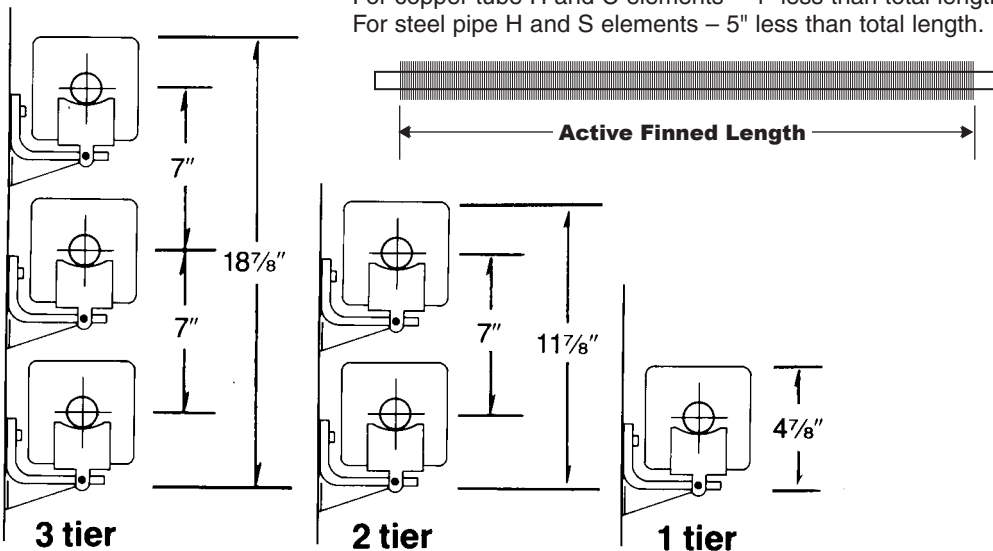
Specify for bare element installations.

BARE ELEMENT RATINGS

Model Number	Tube Size and Material	Fin Size and Material	Fins per Foot	No. of Tiers 7" cl	Pressure Drop †	Steam 1 PSI* Btu./Hr. Per Foot	HOT WATER RATINGS* BTU/HR./FT. (Flow Rate 3 Ft./Sec.)											
							110°F	120°F	130°F	140°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F
							S-532	1 1/4" IPS steel	4 1/4" x 4 1/4" x .024" electro-gal. steel	32	1 2 3	420	1080 1950 2560	216 390 512	281 507 666	356 644 845	432 780 1024	486 878 1152
S-540	1 1/4" IPS steel	4 1/4" x 4 1/4" x .024" electro-gal. steel	40	1 2 3	420	1300 2210 2810	260 442 562	338 575 731	429 729 927	520 884 1124	585 995 1265	689 1171 1489	793 1348 1714	897 1525 1939	1014 1724 2192	1118 1901 2417	1235 2100 2670	1365 2321 2951
S-832	2" IPS steel	4 1/4" x 4 1/4" x .024" electro-gal. steel	32	1 2 3	252	1130 2010 2650	226 402 530	294 523 689	373 663 875	452 804 1060	509 905 1193	599 1065 1405	689 1226 1617	780 1387 1829	881 1568 2067	972 1729 2279	1074 1910 2518	1187 2111 2783
C-340	3/4" copper	4 1/4" x 4 1/4" x .020" aluminum	40	1 2 3	708	1610 2830 3620	322 566 724	419 736 941	531 934 1195	644 1132 1448	725 1274 1629	853 1500 1919	982 1726 2208	1111 1953 2498	1256 2207 2824	1385 2434 3113	1530 2689 3439	1691 2972 3801
C-440	1" copper	4 1/4" x 4 1/4" x .020" aluminum	40	1 2 3	504	1650 2890 3710	330 578 742	429 751 965	545 954 1224	660 1156 1484	743 1301 1670	875 1532 1966	1007 1763 2263	1139 1994 2560	1287 2254 2894	1419 2485 3191	1568 2746 3525	1733 3035 3896
C-448	1" copper	4 1/4" x 4 1/4" x .020" aluminum	48	1 2 3	504	1690 2970 3790	338 594 758	439 772 985	558 980 1251	676 1188 1516	761 1337 1706	896 1574 2009	1031 1812 2312	1166 2049 2615	1318 2317 2956	1453 2554 3259	1606 2822 3601	1775 3119 3980
C-540	1 1/4" copper	4 1/4" x 4 1/4" x .020" aluminum	40	1 2 3	396	1700 2990 3830	340 598 766	442 777 996	561 987 1264	680 1196 1532	765 1346 1724	901 1585 2030	1037 1824 2336	1173 2063 2643	1326 2332 2987	1462 2571 3294	1615 2841 3639	1785 3140 4022
H-1	3/4" copper	3" x 3 3/4" x .024" aluminum	48	1 2 3	708	— — —	218 392 640	283 510 832	360 647 1056	436 784 1280	491 882 1440	578 1039 1696	665 1196 1952	752 1352 2208	850 1529 2496	937 1686 2752	1036 1862 3040	1145 2058 3360
H-5X	1 1/4" copper	3" x 3 3/4" x .020" aluminum	48	1 2 3	396	940 1330 2110	188 266 422	244 346 549	310 439 696	376 532 844	423 599 950	498 705 1118	573 811 1287	649 918 1456	733 1037 1646	808 1144 1815	893 1264 2005	987 1397 2216
H-6X	1 1/4" IPS steel	3" x 3 3/4" x .028" aluminized steel	48	1 2 3	420	850 1290 1840	170 258 368	221 335 478	281 426 607	340 516 736	383 581 828	451 684 975	519 787 1122	587 890 1270	663 1006 1435	731 1109 1582	808 1226 1748	893 1355 1932

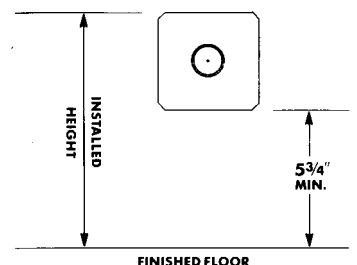
* Based on 65°F entering air temperature. † Millinches per foot, based on flow rate of 3FPS; according to ASHRAE fundamentals handbook, 2001
NOTE: H-3, H-4 and E-3 elements are not recommended for bare-element installation. H-1 is not recommended for steam applications.
Ratings are based on active finned length (S & C series 5-1/4" less than overall length.) (H series—3" less than overall length.)

Active length of each element is as follows:
For copper tube H and C elements – 4" less than total length.
For steel pipe H and S elements – 5" less than total length.



Dimensions for bare element installation without enclosures ("S" and "C" elements).

The installed height for elements is defined as the distance from the finished floor to the top of the fin. The minimum mounting height on all elements without enclosures is 5 3/4" from finished floor to bottom of fins of lowest element.



ENGINEERING DATA*

SPECIFICATIONS

Ratings are based on active (finned) length. Active length of "S" and "C" elements is 5 1/4" less than total length. Fin size of "S" and "C" elements is 4 1/4" x 4 1/4". Active length of "H" and "E" elements is 3" less than total length. See p. 26-27 for the specifications of individual "H" and "E" elements.

Water Ratings And Flow Rates

The hot water ratings shown in this catalog are based on the following

Water velocity:	3 or more feet per second
Entering air temp:	65°
Steam temperature:	215°

Proceed as follows to determine output under conditions different than above:

Water velocity less than 3 feet per second: multiply the hot water ratings by the factors shown in Table 1.

TABLE 1

FACTORS FOR DETERMINING OUTPUTS AT WATER FLOW RATES OF LESS THAN 3 FEET PER SECOND

Flow Rate Ft./Sec.	Factor	Flow Rate Ft./Sec.	Factor
3.0	1.00	1.5	.973
2.75	.996	1.25	.966
2.5	.992	1.0	.957
2.25	.988	.75	.946
2.0	.984	.5	.931
1.75	.979	.25	.905

TABLE 2

CORRECTION FACTORS FOR WATER TEMPERATURES† AND AIR TEMPERATURES OTHER THAN STANDARD

AVERAGE WATER TEMP. °F	ENTERING AIR TEMPERATURE								
	45	50	55	60	65	70	75	80	85
90	.19	.16	.13	.11	.08	.06			
100	.25	.22	.19	.16	.13	.11	.08	.06	
110	.31	.28	.25	.22	.19	.16	.13	.11	.08
120	.38	.34	.31	.28	.25	.22	.19	.16	.13
130	.45	.42	.38	.34	.31	.28	.25	.22	.19
140	.53	.49	.45	.42	.38	.34	.31	.28	.25
150	.61	.57	.53	.49	.45	.42	.38	.34	.31
155	.65	.61	.57	.53	.49	.45	.42	.38	.34
160	.69	.65	.61	.57	.53	.49	.45	.42	.38
165	.73	.69	.65	.61	.57	.53	.49	.45	.42
170	.78	.73	.69	.65	.61	.57	.53	.49	.45
175	.82	.78	.73	.69	.65	.61	.57	.53	.49
180	.86	.82	.78	.73	.69	.65	.61	.57	.53
185	.91	.86	.82	.78	.73	.69	.65	.61	.57
190	.95	.91	.86	.82	.78	.73	.69	.65	.61
195	1.00	.95	.91	.86	.82	.78	.73	.69	.65
200	1.05	1.00	.95	.91	.86	.82	.78	.73	.69
205	1.09	1.05	1.00	.95	.91	.86	.82	.78	.73
210	1.14	1.09	1.05	1.00	.95	.91	.86	.82	.78
215	1.20	1.14	1.09	1.05	1.00	.95	.91	.86	.82
220	1.25	1.20	1.14	1.09	1.05	1.00	.95	.91	.86
225	1.32	1.25	1.20	1.14	1.09	1.05	1.00	.95	.91
230	1.39	1.32	1.25	1.20	1.14	1.09	1.05	1.00	.95
235	1.41	1.39	1.32	1.25	1.20	1.14	1.09	1.05	1.00
240	1.44	1.41	1.39	1.32	1.25	1.20	1.14	1.09	1.05

† Also applies to equivalent saturated steam temperatures.
 Entering air temperature other than 65°F: multiply the catalog steam rating by the factors shown in Table 2.
 Water temperature other than 215°F: multiply the catalog steam rating by the factors shown in Table 2.

Steam Ratings

Steam ratings are expressed in BTU per hour per lineal foot of activelength, based on steam or 215°F, 1 PSI, (101.5°C) and 65°F (18.3°C) entering air.

Recommended Installed Height

(Does not apply to units with horizontal outlet)

Ratings include the factor shown in Table 3 for the recommended installed height. If the unit is to be installed at a height other than that recommended, the rating must be adjusted as follows:

$$\left[\frac{\text{Factor from Table 3 for actual installed height}}{\text{Factor from Table 3 for recommended installed height}} \right] \times \text{Rating shown on pages 5, 11, 13, 15, 21 \& 27}$$

Example for installed heights other than recommended (example based on Multi/Pak 95-10):

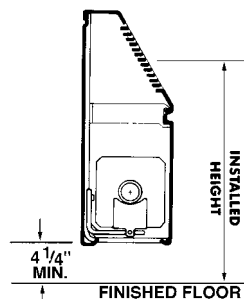
Given:

Installed height	36"	[1.00 ÷ 1.15] x 1500 = 1304 Btu/Hr./Ft.
Recommended height	14"	
Water Temperature	200°F	
Cover type	95-10	
Element	C-540	

† Use the values in Table 3 below for both the "RECOMMENDED HEIGHT" factors and for the "ACTUAL HEIGHT" factors.

TABLE 3

Height †	Factor	Height †	Factor
36" or more	1.00	25"	1.08
34"	1.01	24"	1.09
32"	1.02	23"	1.10
30"	1.03	22"	1.11
29"	1.04	21"	1.12
28"	1.05	20"	1.13
27"	1.06	19"	1.14
26"	1.07	18" or less	1.15



The **installed height** for enclosures is defined as the distance from the finished floor to the center of the outlet. Recommended height is based on a minimum mounting height for all covers and enclosures of 4 1/4" from finished floor to bottom of front panel.

Dampers

Dampers are available as options on most enclosures, and are shown in diagrams wherever applicable. Ratings are for enclosures without dampers, or with dampers in fully open position.

Water Content

Slant/Fin commercial radiation elements contain the following volume of water: 3/4" copper tube0.023 gal./ft.
 Model C440, 1" copper tube0.040 gal./ft.
 Model C540, 1 1/4" copper tube0.063 gal./ft.
 Model S532, S540, 1 1/4" steel pipe0.077 gal./ft.
 Model S832, 2" steel pipe0.174 gal./ft.

NOTE:

All ratings have been determined in the Slant/Fin Environmental Laboratory in conformance with accepted industry practice concerning testing and rating procedures for finned tube (commercial) radiation. Fin-tube must be installed in accordance with installation diagrams on Form CP-10 and 90-40 to obtain the ratings indicated. Use of material or installation methods other than those specified by Slant/Fin may result in a change in the ratings.

* Engineering data pertains to all products in this publication except Multi/Pak 80 and H and E Series bare elements.

ENGINEERING DATA

SPECIFICATIONS

Multi/Pak 90

Furnish and install as shown on the plans Multi/Pak® 90—slope-top fin-tube enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation. Cover shall be of two interlocking sections: a top cover and front cover. Top cover will be common to one-tier (90-14) and two-tier (90-21) models. (Optional: A knob-actuated damper shall be provided.) Top cover shall consist of stamped grille with pencil-proof air discharge louvers. Front cover shall interlock with top cover to form lateral decorative panel. Front cover shall be removable without removal of the top cover.

Interlocking top cover and front cover shall both be fabricated from 18-gauge galvanized steel in pre-painted Nu-White baked enamel finish or color as per specification. Brackets and hangers shall have a galvanized finish.

Provide and install Slant/Fin's internal splice plate. The internal splice plate shall provide an internal slip connection without creating unsightly weld marks on the front of the cover. The resultant joint will be a neat butt joint; the need for an external splice plate is eliminated.

Fin-tube element(s) shall be Model_____. Provide lengths and capacities as scheduled on plans. Furnish required channeled bracket-hanger assemblies with heavy flag brace for rigid front panel and element support. Provide all required accessories for complete installation. Cover accessories shall be telescopic and shall match enclosure color.

Multi/Pak 93

Furnish and install as shown on the plans Multi/Pak® 93—flat-top fin-tube enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation.

Cover shall be of two interlocking sections: a top cover and front cover. Top cover will be common to one-tier (93-10) and two-tier (93-17) models. (A knob-actuated damper shall be provided.) Top of enclosure shall consist of stamped grille pre-painted and with pencil-proof air discharge louvers. Front skirt shall interlock with top panel to form lateral decorative panel. Front skirt shall be removable.

Interlocking top cover and front cover shall both be fabricated from 18-gauge steel in Nu-White baked enamel or as custom matched as per specification. Brackets and hangers have electro-galvanized finish.

Fin-tube element(s) shall be Model_____. Provide lengths and capacities as scheduled on plans. Furnish required channeled bracket-hanger assemblies with heavy flag brace for rigid front skirt and element support. Provide all required accessories for complete installation. Cover accessories shall be telescopic and shall match enclosure color.

Multi/Pak 95

Furnish and install as shown on the plans Multi/Pak® 95—flat-top fin-tube enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation.

Cover shall be of two interlocking sections: a top cover and front cover. Top cover will be common to one-tier and two-tier models. (A knob-actuated damper shall be provided.) Top of enclosure shall consist of stamped grille pre-painted and with pencil-proof air discharge louvers. Front skirt shall interlock with top panel to form lateral decorative panel. Front skirt shall be removable.

Interlocking top cover and front cover shall both be fabricated from 18-gauge steel in Nu-White baked enamel or as custom matched as per specification. Brackets and hangers have electro-galvanized finish.

Fin-tube element(s) shall be Model_____. Provide lengths and capacities as scheduled on plans. Furnish required channeled bracket-hanger assemblies with heavy flag brace for rigid front skirt and element support. Provide all required accessories for complete installation. Cover accessories shall be telescopic and shall match enclosure color.

JA-14, JA-21 or JA-28 Series

Furnish and install as shown on the plans JA slope-top fin-tube enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation. Cover shall be of one-piece construction. (A knob-actuated damper shall be provided.) Top part of enclosure shall consist of stamped grille with pencil-proof air discharge louvers. (Optional: A knob-actuated damper shall be provided.)

Cover shall be fabricated from 18 (16 or 14) gauge galvanized steel. Cover finish shall be galvanized or powder coated to a color as per specification. Brackets and hangers shall have a galvanized finish. Cover panels to join using Internal Splice Plates, resultant joint has covers butting to one another resulting in a clean joint without unsightly weld marks on front of cover.

(Optional: Cover with anodized aluminum grill in place of pencil-proof louvers. Cover shall be fabricated from 18 (16 or 14) gauge galvanized steel. Cover finish shall be galvanized or powder coated to a color as per specification. Brackets and hangers shall have a galvanized finish. Covers panels shall join using slip joint resulting in a clean joint.) Please note that knob-actuated damper is not available on aluminum grill cover.

(Optional: A full height back panel shall be provided of 20 gauge galvanized steel.)

Provide all required accessories for complete installation. Cover accessories shall be telescopic and shall match enclosure color.

Fin-tube element(s) shall be Model_____. Provide lengths and capacities as scheduled on plans. Furnish required channeled bracket-hanger assemblies with heavy flag brace for rigid front panel and element support.

JL-10 Series

Furnish and install as shown on the plans JL-10 slope-top fin-tube enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation.

Cover shall be of one-piece construction. Top part of enclosure shall consist of stamped grille with pencil-proof air discharge louvers. (Optional: A knob-actuated damper shall be provided.)

Cover shall be fabricated from 18 (16 or 14) -gauge galvanized steel finish or powder coated to a color as per specification. Brackets and hangers shall have a galvanized finish.

(Optional: Cover with anodized aluminum grill in place of pencil proof louvers. Cover shall be fabricated from 18 (16 or 14)-gauge galvanized steel. Cover finish shall be galvanized or powder coated to a color as per specification. Brackets and hangers shall have a galvanized finish. Cover panels shall join using slip joint resulting in a clean joint.) Please note that damper is not available on aluminum grill cover.

(Optional: A full height back panel shall be provided of 20-gauge galvanized steel.)

Provide all required accessories for complete installation. Cover accessories shall be telescopic and shall match enclosure color.

Fin-tube element(s) shall be Model_____. Provide lengths and capacities as scheduled on plans. Furnish required channeled bracket-hanger assemblies with heavy flag brace for rigid front panel and element support.

FS Series

Furnish and install as shown on the plans "FS" Series free standing enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation.

Cover shall be of one piece construction. Enclosure shall be (FS-7, FS-14, FS-21) and shall have (1,2 or 3) tier element. Top part of enclosure electro galvanized shall consist of stamped grille with pencil-proof air discharge louvers. All enclosures shall have female-to-female slip joint connection with interlocking internal splice. The internal splice provides additional strength with a nearly invisible joint.

Cover shall be fabricated from 18 (16 or 14) gauge galvanized steel or as custom color matched as per specification.

Brackets and hangers shall be channeled steel in hot dipped wiped coat galvanized finish. Brackets and hangers shall be Model_____. Provide lengths and capacities as scheduled on plans.

Furnish required channeled bracket-hanger assemblies with heavy floor mounting flange for rigid front skirt and element support.

Provide all required accessories for a complete installation. Enclosure accessories in electro galvanized steel shall be telescopic and match enclosure color.

TBG Series

Furnish and install as shown on the plans "TBG" Series top & bottom slope enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation. Cover shall be of one piece construction. Enclosure shall be (TBG-17, TBG-24) and shall have (1 or 2) tier element. (A knob actuated damper shall be provided.) Top and bottom slope of enclosure shall consist of stamped grille with pencil-proof air discharge louvers. All enclosures shall have female-to-female slip joint connection with interlocking internal splice. The internal splice provides additional strength with a nearly invisible joint. (Optional: A full height back panel shall be provided of 20-gauge steel in hot dipped wiped coat galvanized finish.)

Cover shall be fabricated from 16 gauge (14 gauge option) steel in galvanized finish or as custom matched as per specification.

Brackets and hangers shall be channeled steel in hot dipped wiped coat galvanized finish. Fin-tube element(s) shall be Model_____. Provide lengths and capacities as scheduled on plans.

Furnish required channeled bracket-hanger assemblies with heavy channeled bracket for rigid front skirt and element support.

Provide all required accessories for a complete installation. Enclosure accessories in electro-galvanized steel shall be telescopic and match enclosure color.

R Series

Furnish and install as shown on the plans "R" Series round top enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation.

Cover shall be of one piece construction. Enclosure shall be (RL-10, RT-14, RT-21 or RT-28) and shall have (1, 2 or 3) tier element. (A knob actuated damper shall be provided.) Top part of enclosure shall consist of stamped grille with pencil-proof air discharge louvers. All enclosures shall have female-to-female slip joint connection with interlocking internal splice. The internal splice provides additional strength with a nearly invisible joint. (Optional: A full height back panel shall be provided of 20-gauge electro galvanized steel finish.)

Cover shall be fabricated from 18 (16 or 14) gauge steel in hot dipped wiped coat galvanized finish or as custom color matched as per specification.

Brackets and hangers shall be channeled steel in hot dipped wiped coat galvanized finish. Fin-tube element(s) shall be Model_____. Provide lengths and capacities as scheduled on plans.

Furnish required channeled bracket-hanger assemblies with heavy flag brace for rigid front skirt and element support.

Provide all required accessories for a complete installation. Enclosure accessories in electro galvanized steel shall be telescopic and match enclosure color.

350 Series

Furnish and install 350 Series Model _____ baseboard cover assembly as manufactured by Slant/Fin Corporation, consisting of one-piece bottom, back and top panel, and one-piece 19 (16) gauge front panel, formed of cold rolled steel. Bottom and top edges of back panel shall be formed to provide channels along entire length, to receive full-height support brackets.

Brackets shall be die formed of electro-galvanized cold rolled steel, for rigid bracing and spring locking. Slide-action expansion cradles, formed of polypropylene, shall be inserted between heating element and support bracket. Cradles shall protect element bottom and sides from contact with brackets or cover, confining element to free lateral expansion for noiseless operation.

Provide all required accessories for a complete installation. Cover accessories shall be telescopic and shall match enclosure color.

All cover components shall be painted in Nu-White, oven baked melamine cross-linked polyester enamel.

HD Series

Furnish and install as shown on the plans model _____ HD Series slope-top baseboard with element, required mounting components and accessories as manufactured by Slant/Fin Corporation. Complete two-piece enclosure assembly shall consist of full back panel with interlocking slope top front panel, factory packaged with necessary brackets.

Front cover shall be fabricated from 16-gauge galvanized steel, back panel from 20-gauge galvanized steel. The front panel & accessories shall be finished in galvanized finish or as custom color matched as per specifications. Fin-tube element(s) shall be Model _____. Provide lengths, heights and capacities as scheduled on plans.

Bracket with element hanger shall be spot welded to back panel every 12 inches. There shall be dimpled anchoring holes every 12 inches on front cover. Use 8 x 3/8" self-tapping screws with countersunk heads to fasten front cover to brackets. Screws recess into dimpled anchoring holes on front cover. Screws are supplied in carton with cover.

Provide all required accessories for a complete installation. Cover accessories shall be telescopic to eliminate the need to perfectly butt one length of cover to the next. Accessories to be fastened with screws (pan-head) supplied by others.

LC Series

Furnish and install as shown on the plans model (LC-850, LC-1400) LC Series-slope top baseboard with element, required brackets and accessories as manufactured by Slant/Fin Corporation.

Front cover shall be fabricated from 18-gauge galvanized steel. Top horizontal lip of cover shall be no wider than 7/8 inch, this is to prevent standing on the cover. Outlet louvers shall be located on the front sloped face of the cover, louvers located on the top of the cover are not acceptable. Cover finish shall be galvanized finish or custom color matched as per specification.

Front cover to be mounted on the wall with one piece wall brackets. Brackets shall be spaced no further than 2 feet apart with bracket secured to wall studs and not to the wall board. Slide-action expansion cradles shall be inserted between heating element and cover brackets. Slide-action expansion cradles are supplied with heating element. Installer shall secure front cover to mounting brackets by drilling hole into vertical flange on lower front cover and screwing front cover to each wall bracket. Screws are field supplied.

Finned tube heating element shall be Model _____. (One, Two) tiers of element to be installed within cover. Provide lengths, heights and capacities as scheduled on plans. (Add specification for model of element being specified)

Provide all required accessories for a complete installation. Accessories shall be telescopic to eliminate the need to perfectly butt one length of cover to the next. Accessories to be fastened with pan head screws to front cover, screws are field supplied.

Multi/Pak 80

Furnish and install Multi/Pak® 80 baseboard cover assembly as manufactured by Slant/Fin Corporation, consisting of one-piece 21-gauge back and top panel, and one-piece 18-gauge front panel, formed of cold rolled galvanized steel. Bottom and top edges of back panel shall be formed to provide channels along entire length, to receive full-height support brackets.

Brackets shall be die formed of zinc-bonded 16-gauge quarter-hard cold rolled steel, for rigid bracing and spring locking. Slide-action expansion cradles, formed of polypropylene, shall be inserted between heating element and support bracket. Cradles shall protect element bottom and sides from contact with brackets or cover, confining element to free lateral expansion for noiseless operation. Room-control damper vane, of quarter-hard cold rolled steel, shall be provided for each length of enclosure, and shall modulate fully and freely, yet retain any setting through its arc without protruding knobs or other devices. Support bracket shall be formed to retain and support damper vane without use of additional pivots. All cover components shall be painted in Nu-White, oven baked melamine cross-linked polyester enamel.

F & EM Series

Furnish and install as shown on the plans "F" or "EM" Series flat-top enclosures with elements, required mounting components and all accessories as manufactured by Slant/Fin Corporation. Cover shall be of one piece construction. Enclosure shall be EM-5, EM-12, EM-19, F-5, F-12 or F-19 and shall have (1,2 or 3) tier element. EM enclosure shall be made of expanded steel. F enclosure shall consist of stamped top grille with pencil-proof air discharge louvers.

Covers shall be fabricated from 18-gauge (16-gauge for EM) steel in electro galvanized finish or as custom color matched as per specification.

Brackets and hangers shall be channeled steel in electro galvanized finish. Fin-tube element(s) shall be Model _____. Provide lengths and capacities as scheduled on plans.

Furnish required channeled bracket-hanger assemblies for rigid element support.

Provide all required accessories for complete installation. Enclosure accessories in bonded zinc steel shall be telescopic and match enclosure color.

C-540, C-440 and C-340 Element

Furnish and install C-540, C-440 and C-340 fin-tube heating elements as manufactured by Slant/Fin Corporation, consisting of 1/4" nominal* copper seamless-drawn tubing* with 4 1/4" x 4 1/4" x .020" aluminum fins spaced 40 per linear foot. Fins shall be mechanically bonded to the tubing to increase thermal contact and to space and lock the fins uniformly in place. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place. One end of each element shall be expanded to receive the expanded end of another, without couplings.

* C-440 is 1" copper pipe. C-340 is 3/4" copper pipe.

S-540, S-532 and S-832 Element

Furnish and install S-540 and S-532 fin-tube heating element as manufactured by Slant/Fin Corporation, consisting of 1/4" IPS steel pipe* (Schedule 40), with 4 1/4" x 4 1/4" x .024" steel fins spaced 40 per linear foot for S-540 and 32 per linear foot for S-532 and S-832. The pipe shall be forced through undersized fin holes to obtain a force-fit mechanical bond. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place. Both ends of each element pipe shall be threaded with IPS standard threads.

* S-832 is 2" IPS steel pipe.

H-1 Element

Furnish and install H-1 baseboard heating element as manufactured by Slant/Fin Corporation, consisting of 3/4" nominal copper tubing, with 3" x 3 1/4" x .024" aluminum fins, spaced 48 per linear foot. Fins shall be mechanically bonded to the tubing to increase thermal contact and to space and lock the fins uniformly in place. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place.

One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings.

H-3 Element

Furnish and install H-3 baseboard heating element as manufactured by Slant/Fin Corporation, consisting of 3/4" nominal copper tubing, with 3 1/2" x 2 1/2" x .011" aluminum fins bent to 2 1/4" x 2 1/2", spaced 55 per linear foot. Fins shall be mechanically bonded to the tubing to increase thermal contact and to space and lock the fins uniformly in place. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings.

H-4 Element

Furnish and install H-4 baseboard heating element as manufactured by Slant/Fin Corporation, consisting of 1" nominal copper tubing, with 3 5/8" x 2 1/2" x .011" aluminum fins bent to 3" x 2 1/2", spaced 48 per linear foot. Fins shall be mechanically bonded to the tubing to increase thermal contact and to space and lock the fins uniformly in place. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings.

H-5X Element

Furnish and install H-5 baseboard heating element as manufactured by Slant/Fin Corporation, consisting of 1 1/4" nominal copper tubing, with 3" x 3 1/4" x .020" aluminum fins, spaced 48 per linear foot. Fins shall be mechanically bonded to the tubing to increase thermal contact and to space and lock the fins uniformly in place. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings.

H-6X Element

Furnish and install H-6 baseboard heating element as manufactured by Slant/Fin Corporation, consisting of 1 1/4" IPS steel pipe (Schedule 40), with 3" x 3 1/4" x .028" steel fins, spaced 48 per linear foot. Fins shall be mechanically bonded to the pipe to increase thermal contact and to space and lock the fins uniformly in place. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place. Both ends of each element pipe shall be threaded with IPS standard threads.

E-75E Element

Furnish and install E-75 baseboard heating element as manufactured by Slant/Fin Corporation, consisting of 3/4" nominal copper tubing with 2 5/8" x 2 1/2" x .009" aluminum fins, bent to 2 5/8" x 2 1/2", spaced 55 per linear foot. A flange with four teeth shall be formed on each fin to increase thermal contact and to space and lock the fins uniformly in place. End fins are of plated steel for extra ruggedness. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings.

UNITED STATES

SLANT/FIN CORPORATION, Greenvale, NY
Phone: 516-484-2600 Fax: 516-484-5921
www.slantfin.com

CANADA

SLANT/FIN LTD/LTEE, Mississauga, Ontario
Phone: 905-677-8400 Fax: 905-677-1829
www.slantfin.ca

Slant/Fin[®]

Copyright © 2012 Publication: FT-10