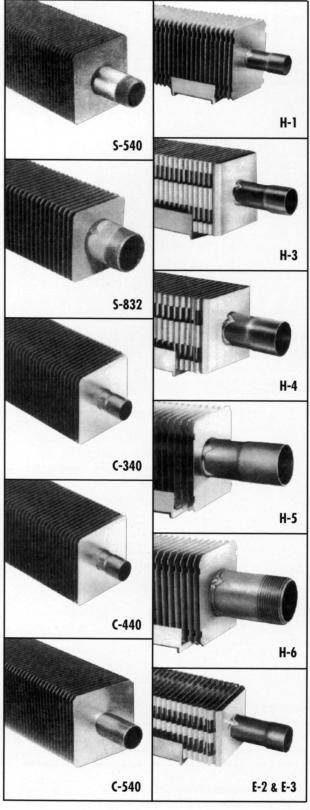
## Slant/Fin®

# BARE ELEMENTS COPPER/ALUMINUM FLEMENTS



## SPECIFICATIONS

## C-540 Element

Furnish and install C-540 fin-tube heating elements as manufactured by Slant/Fin, consisting of 32 mm (11/4") nominal copper seamless-drawn tubing with 108 mm x 108 mm x 0.5 mm (41/4" x 41/4" x .020") aluminum fins spaced 131/m (40 per linear foot). The aluminum fins have spacing fingers on all four corners of the fin, for precise accurate spacing of fins. The fins are made with collar to produce a tight fitting mechanical bond when tubing is expanded. One end of each element shall be expanded to receive the unexpanded end of another, without couplings.

## C-340 and C-440 Element

Furnish and install C-440 fin-tube heating elements as manufactured by Slant/Fin, consisting of 25 mm (1") nominal\* copper seamless-drawn tubing with 108 mm x 108 mm x 0.5 mm ( $4^1/4^n$  x  $4^1/4^n$  x .020") aluminum fins spaced 131/m (40 per linear foot). The tubing 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. One end of each element shall be unexpanded to receive the expanded end of another, without couplings.
\*C-340 is 19 mm (³/,") copper pipe

S-540 and S-832 Element Furnish and install S-540 fin-tube heating element as manufactured by Slant/Fin, consisting of 32 mm (1¹/₄\*) IPS steel pipe\* (Schedule 40), with 108 mm x 108 mm x 0.6 mm (4¹/₄\*" x 4¹/₄\*" x .024\*) steel fins spaced 131/m (40 per linear foot) for S-540 and 105/m (32 per linear foot) for S-832. The pipe shall be forced through undersized fin holes to obtain a forcefit 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 51 mm (2") IPS steel pipe.

Furnish and install H-1 baseboard heating element as manufactured by Slant/Fin consisting of 19 mm (3/4") nominal copper tubing, with 76 mm x 83 mm x 0.6 mm (3" x 31/4" x .024") aluminum fins spaced 157/m (48 per linear foot). The tubing 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. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings.

Furnish and install H-3 baseboard heating element as manufactured by Slant/Fin, consisting of 19 mm (3/4") nominal copper tubing, with 80 mm x 64 mm x 0.3 mm (35/32" x 21/2" x .011") aluminum fins bent to 70 mm x 64 mm (2°/4" x 2°/2"), spaced 180/m (55 per linear foot). The tubing shall be forced through

### H-3 Element cont'd

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

Furnish and install H-4 baseboard heating element as manufactured by Slant/Fin, consisting of 25 mm (1") nominal copper tubing, with 88 mm x 64 mm x 0.3 mm (315/32" x 21/2" x .011") aluminum fins bent to 76 mm x 64 mm (3" x 21/2"), spaced 157/m (48 per linear foot). The tubing 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. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings.

### H-5 Element

Furnish and install H-5 baseboard heating element as manufactured by Slant/Fin, consisting of 32 mm (11/4") nominal copper tubing, with 76 mm x 83 mm x 0.5 mm (3" x 31/4" x .020") aluminum fins, spaced 157/m (48 per linear foot). The tubing shall be forced through undersized fin holes to obtain a forcefit 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. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings

Furnish and install H-6 baseboard heating element as manufactured by Slant/Fin, consisting of 32 mm (1¹/₄") IPS steel pipe (Schedule 40), with 76 mm x 83 mm x 0.6 mm (3" x 3¹/₄" x .025") steel fins, spaced 157/m (48 per linear foot). The pipe shall be forced through undersized fin holes to obtain a forcefit 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

Furnish and install E-3 baseboard heating element as manufactured by Slant/Fin, consisting of 19 mm (3/4") nominal\* copper tubing with 67 mm x 54 mm x 0.2 mm (25/8" x 21/8" x .009") aluminum fins, bent to 59 mm x 54 mm (25/16" x 21/8"), spaced 180/m (55 per linear foot). The tubing 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. One end of each element tube shall be expanded to receive the unexpanded end of another, without couplings E-2 is 12.6 mm (1/2") copper tube

## Slant/Fin Heating Elements

LENGTHS: Precut standard lengths

S and C Series: 610, 914, 1067, 1219, 1524, 1829, 2134,

2438 mm (2, 3, 3<sup>1</sup>/<sub>2</sub>, 4, 5, 6, 7, 8 ft.)

E and H Series: 610, 914, 1067, 1219, 1524, 1829, 2134,

2438 mm (2, 3, 3<sup>1</sup>/<sub>2</sub>, 4, 5, 6, 7, 8 ft.)

FINISH: Copper/aluminum elements—natural finish.

Steel elements—natural finish.

## **BARE ELEMENT RATINGS**

								NOTE. Ratings are at specific criteria and any alterations will affect the output														
Model Number	Tube Size & Material	Fin Size and Material	Fins	No. of Tiers 178 mm	Steam*  Watts BTUH		104°C (220°F) Watts BTUH		99°C (210°F) Watts BTUH		NGS Flow Rate 93°C (200°F) Watts BTUH		88°C (190°F) Watts BTUH		82°C (180°F) Watts BTUH		ased on 18°C (170°F)  Watts BTUH		65°F) entering 71°C (160°F) Watts 81UH		66°C (150°F) Watts BTU+	
S-540	32 mm (1¼") IPS steel	108 x 108 x 0.6 mm 41/4" x 41/4" x .024" electro gal. steel	131/m 40/ft.	(7") 1 2 3	/m 1432 2431 3094	/ft. 1490 2530 3220	1504 2554 3250	1565 2657 3381	2311	1416 2404 3059	1231 2092 2662	1281 2176 2769	1117 1897 2415	/ft. 1162 1973 2512	988 1678 2136	1028 1746 2222	874 1483 1888	909 1543 1964	759 1289 1641	790 1341 1707	645 1095 1393	671 1139 1449
S-832	51 mm (2") IPS steel	108 x 108 x 0.6 mm 41/4" x 41/4" x .024" electro gal. steel	105/m 32/ft.	1 2 3	1307 2326 3066	1360 2420 3190	2443	1428 2541 3350	2210	1292 2299 3031	2001	1170 2081 2743	1020 1815 2392	1061 1888 2488	902 1605 2116	938 1670 2201	798 1419 1871	830 1476 1946	693 1233 1626	721 1283 1691	588 1047 1380	612 1089 1436
C-340	19 mm (¾") copper	108 x 108 x 0.6 mm 4¼" x 4¼" x .024" aluminum	131/m 40/ft.	1 2 3	1657 2915 3730	1724 3033 3881	3063	1810 3186 4075	l	1638 2882 3687	1425 2508 3209	1482 2609 3338	1292 2274 2910	1344 2366 3027	1143 2013 2575	1189 2094 2678	1011 1779 2275	1052 1851 2367	879 1546 1977	914 1608 2057	746 1313 1679	776 1366 1747
C-440	25 mm (1") copper	108 x 108 x 0.6 mm 4½" x 4½" x .024" aluminum	131/m 40/ft.	1 2 3	1759 3085 3950	1830 3210 4110	3241	1922 3371 4316	2932			2761	1372 2407 3082	1427 2504 3206	1214 2129 2726	1263 2215 2836	1073 1882 2410	1116 1958 2507	932 1635 2094	970 1701 2178	792 1389 1778	824 1445 1850
C-540	32 mm (11/4") copper	108 x 108 x 0.6 mm 41/4" x 41/4" x .024" aluminum	131/m 40/ft.	1 2 3	1720 3027 3873	1790 3150 4030	1807 3180 4068	1880 3308 4232	l	1701 2993 3829	_	1539 2709 3466	1342 2362 3021	1396 2457 3143	1187 2090 2673	1235 2174 2781	1050 1848 2363	1922	912 1605 2053	949 1670 2136	775 1363 1744	806 1418 1814
H-1	19 mm (¾,") copper	76 x 83 x 0.5 mm 3" x 3¼" x .020" aluminum	157/m 48/ft.	1 2 3	- - -	 	1133 1608 2544	1179 1673 2646		1067 1513 2394		966 1370 2167	842 1195 1890	876 1243 1966	745 1056 1672	775 1099 1739	658 934 1477	685 972 1537	572 811 1284	595 844 1336	485 689 1090	505 717 1134
H-5	32 mm (1 <sup>1</sup> / <sub>4</sub> ") copper	76 x 83 x 0.6 mm 3" x 3¼" x .025" aluminum	157/m 48/ft.	1 2 3	1043 1480 2340	1085 1540 2435		1139 1617 2557	1406	1031 1463 2313	897 1273 2013	933 1324 2094	813 1155 1826	846 1201 1899	720 1022 1615	749 1063 1680	636 903 1428	662 939 1485	553 784 1241	575 816 1291	469 666 1054	488 693 1096
H-6	32 mm (11/4") steel	76 x 83 x 0.6 mm 3" x 31/4" x .024" electro-galvanized steel	157/m 48/ft.	1 2 3	913 1384 1970	950 1440 2050	1	998 1512 2153		903 1368 1948	785 1190 1695	817 1238 1763	712 1080 1537	741 1123 1599	630 955 1360	656 994 1415	557 844 1203	580 878 1251	484 733 1045	504 763 1087	411 623 887	428 648 923

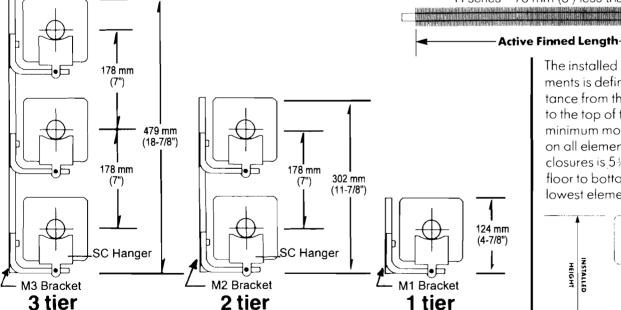
NOTE H:3, H:4 and E:2 E:3 elements are not recommended for bare-element installation H:1 is not recommended for sleam applications.

For ratings of lower water temperatures, refer to conversion table on Engineering Data Sheet

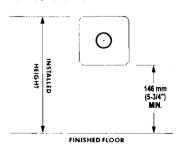
At 6.895 kPa (1 psi)

† Flow Rate 914 mm/sec (3 ft./sec.), Based on 18°C (65°F) entering air

Active length of each element is as follows: S and C series—133 mm (51/4") less than total length. H series—76 mm (3") less than total length



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 5¾" from finished floor to bottom of fins of lowest element.



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

Manufacturer reserves the right to change product specifications without notice



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