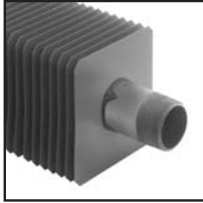
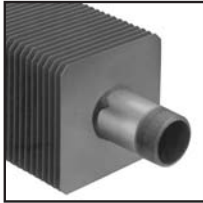
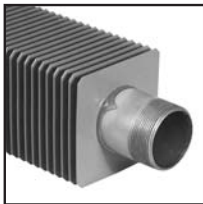
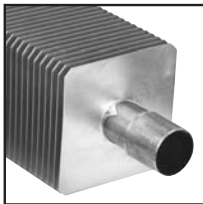
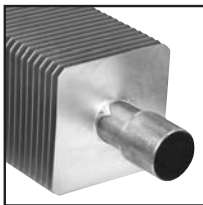
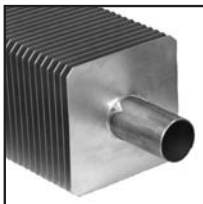
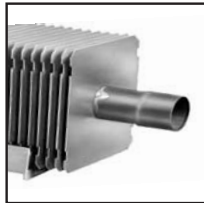
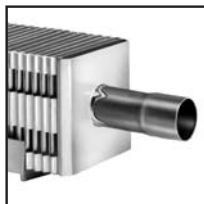
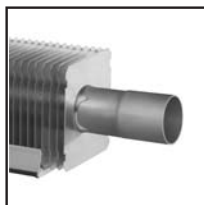
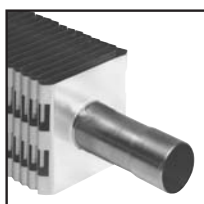


# BARE ELEMENTS

## 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

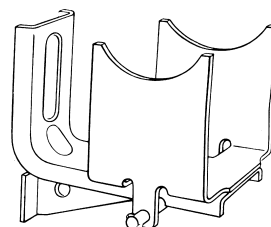
**PACKAGING:** Factory packaged in individual cartons (except E-75 which is packaged 3 elements to a carton). "E" and "H" elements include plastic expansion cradles.

**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 1PSI Btu/Hr. Per Foot | HOT WATER RATINGS*<br>BTU/HR./FT. (Flow Rate 3 Ft./Sec.) |        |        |        |        |        |        |        |
|--------------|------------------------|--------------------------------------|---------------|--------------------|-----------------|-----------------------------|----------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|
|              |                        |                                      |               |                    |                 |                             | 150° F                                                   | 160° F | 170° F | 180° F | 190° F | 200° F | 210° F | 220° F |
| S-532        | 1½" IPS steel          | 4¼" x 4¼" x .024" electro-gal. steel | 32            | 1                  |                 | 1340                        | 603                                                      | 710    | 817    | 925    | 1045   | 1152   | 1273   | 1407   |
|              |                        |                                      |               | 2                  | 420             | 2410                        | 1085                                                     | 1277   | 1470   | 1663   | 1880   | 2073   | 2290   | 2531   |
|              |                        |                                      |               | 3                  |                 | 3170                        | 1427                                                     | 1680   | 1934   | 2187   | 2473   | 2726   | 3012   | 3329   |
| S-540        | 1½" IPS steel          | 4¼" x 4¼" x .024" electro-gal. steel | 40            | 1                  |                 | 1490                        | 671                                                      | 790    | 909    | 1028   | 1162   | 1281   | 1416   | 1565   |
|              |                        |                                      |               | 2                  | 420             | 2530                        | 1139                                                     | 1341   | 1543   | 1746   | 1973   | 2176   | 2404   | 2657   |
|              |                        |                                      |               | 3                  |                 | 3220                        | 1449                                                     | 1707   | 1964   | 2222   | 2512   | 2769   | 3059   | 3381   |
| S-832        | 2" IPS steel           | 4¼" x 4¼" x .024" electro-gal. steel | 32            | 1                  |                 | 1360                        | 612                                                      | 721    | 830    | 938    | 1061   | 1170   | 1292   | 1428   |
|              |                        |                                      |               | 2                  | 252             | 2420                        | 1089                                                     | 1283   | 1476   | 1670   | 1888   | 2081   | 2299   | 2541   |
|              |                        |                                      |               | 3                  |                 | 3190                        | 1436                                                     | 1691   | 1946   | 2201   | 2488   | 2743   | 3031   | 3350   |
| C-340        | ¾" copper              | 4¼" x 4¼" x .020" aluminum           | 40            | 1                  |                 | 1724                        | 776                                                      | 914    | 1052   | 1189   | 1344   | 1482   | 1638   | 1810   |
|              |                        |                                      |               | 2                  | 708             | 3033                        | 1366                                                     | 1608   | 1851   | 2094   | 2366   | 2609   | 2882   | 3186   |
|              |                        |                                      |               | 3                  |                 | 3881                        | 1747                                                     | 2057   | 2367   | 2678   | 3027   | 3338   | 3687   | 4075   |
| C-440        | 1" copper              | 4¼" x 4¼" x .020" aluminum           | 40            | 1                  |                 | 1830                        | 824                                                      | 970    | 1116   | 1263   | 1427   | 1574   | 1739   | 1922   |
|              |                        |                                      |               | 2                  | 504             | 3210                        | 1445                                                     | 1701   | 1958   | 2215   | 2504   | 2761   | 3050   | 3371   |
|              |                        |                                      |               | 3                  |                 | 4110                        | 1850                                                     | 2178   | 2507   | 2836   | 3206   | 3535   | 3905   | 4316   |
| C-540        | 1¼" copper             | 4¼" x 4¼" x .020" aluminum           | 40            | 1                  |                 | 1790                        | 806                                                      | 949    | 1092   | 1235   | 1398   | 1539   | 1701   | 1880   |
|              |                        |                                      |               | 2                  | 396             | 3150                        | 1418                                                     | 1670   | 1922   | 2174   | 2457   | 2709   | 2993   | 3308   |
|              |                        |                                      |               | 3                  |                 | 4030                        | 1814                                                     | 2136   | 2458   | 2781   | 3143   | 3466   | 3829   | 4232   |
| H-1          | ¾" copper              | 3" x 3¼" x .024" aluminum            | 48            | 1                  |                 | —                           | 505                                                      | 595    | 685    | 775    | 876    | 966    | 1067   | 1179   |
|              |                        |                                      |               | 2                  | 708             | —                           | 717                                                      | 844    | 972    | 1099   | 1243   | 1370   | 1513   | 1673   |
|              |                        |                                      |               | 3                  |                 | —                           | 1134                                                     | 1336   | 1537   | 1739   | 1966   | 2167   | 2394   | 2646   |
| H-5X         | 1¼" copper             | 3" x 3¼" x .020" aluminum            | 48            | 1                  |                 | 1085                        | 488                                                      | 575    | 662    | 749    | 846    | 933    | 1031   | 1139   |
|              |                        |                                      |               | 2                  | 396             | 1540                        | 693                                                      | 816    | 939    | 1063   | 1201   | 1324   | 1463   | 1617   |
|              |                        |                                      |               | 3                  |                 | 2435                        | 1096                                                     | 1291   | 1485   | 1680   | 1899   | 2094   | 2313   | 2557   |
| H-6X         | 1½" IPS steel          | 3" x 3¼" x .028" aluminized steel    | 48            | 1                  |                 | 950                         | 428                                                      | 504    | 580    | 656    | 741    | 817    | 903    | 998    |
|              |                        |                                      |               | 2                  | 420             | 1440                        | 648                                                      | 763    | 878    | 994    | 1123   | 1238   | 1368   | 1512   |
|              |                        |                                      |               | 3                  |                 | 2050                        | 923                                                      | 1087   | 1251   | 1415   | 1599   | 1763   | 1948   | 2153   |

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

For ratings at lower water temperatures, refer to conversion table on page 33.

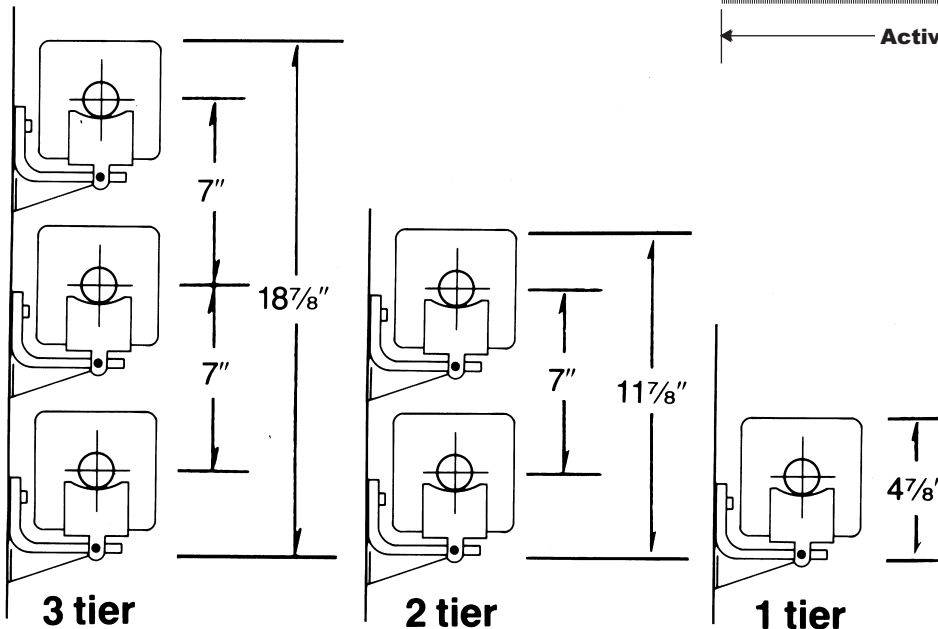
\* Based on 65°F entering air temperature

† Millinches per foot, based on flow rate of 3FPS; according to ASHRAE fundamentals handbook, 2001.

Active length of each element is as follows:

S and C series — 5¼" less than total length.

E and H series — 3" 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 5¾" from finished floor to bottom of fins of lowest element.

