



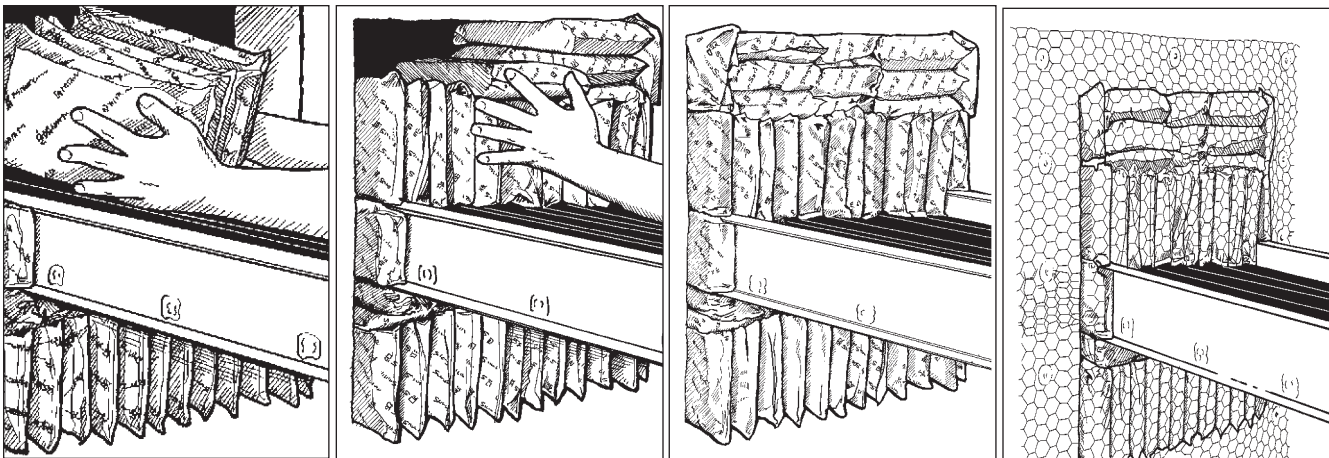
Specified Technologies, Inc.

## PRODUCT ESTIMATION AND INSTALLATION

### INSTALLATION OF SPECSEAL® FIRESTOP PILLOWS

Measure the size of the opening to be sealed and calculate the total area of the opening in square inches. Measure and calculate the approximate area occupied by the penetrants. Calculate the net area to be sealed by subtracting the area occupied by the penetrants from the total area of the opening. To allow for the required compression of the pillows, multiply the net area by 1.4. This will provide a compression factor of 29%.

In the example shown above, the opening is 12" x 24" with an 18" wide tray. The cable depth in the tray is about 3". The area of the opening is  $12 \times 24 = 288$  sq. in. The approximate area of the cables is  $3 \times 18 = 54$  sq. in. Subtracting the area of the cables from the total area of the opening yields a net area of 234 sq. in.  $234 \times 1.4 =$  approx. 328 sq. in. to be filled by pillows. Using the table above to determine the nominal area of the various pillows, we can determine that approximately 28 ( $328 \div 12$ ) SSB26 pillows would be required. The number of pillows required will of course vary by the size of the pillow being utilized. Generally, a small percentage of smaller pillows will be required along with the larger ones. A test opening of this size utilized 24 SSB26 pillows, along with 4 SSB24's and 4 SSB14's.



1. Install pillows lengthwise through the opening. Pillows may be stacked and installed in groups as shown above.
2. Pillows installed on edge will follow the contour of the cables more closely. Pillows may be installed laying flat as shown at the top of the penetration or on edge.
3. Smaller pillows are used to pack the smaller voids such as the space created by the tray rail. SpecSeal® Firestop Putty is used to seal any small voids at the cable line.
4. Check to make sure pillows are tightly compressed and all voids are closed. (If required by design, attach mesh using suitable fasteners to cover pillows and prevent unintentional or unauthorized removal).

### PILLOW ESTIMATION INFORMATION

#### NOMINAL CROSS-SECTIONAL AREA OF PILLOWS

CAT. NO.	SSB14	SSB24	SSB26	SSB36
Nom. Dim <sup>A</sup>	1" x 4"	2" x 4"	2" x 6"	3" x 6"
in cm	2.54 x 10.2	5.1 x 10.2	5.1 x 15.24	7.6 x 15.24
Nom. Area <sup>B</sup>	4 in <sup>2</sup>	8 in <sup>2</sup>	12 in <sup>2</sup>	18 in <sup>2</sup>
Effective Yield <sup>C</sup>	25.8 cm <sup>2</sup>	51.6 cm <sup>2</sup>	77.4 cm <sup>2</sup>	116 cm <sup>2</sup>
	2.9 in <sup>2</sup>	5.7 in <sup>2</sup>	8.6 in <sup>2</sup>	12.9 in <sup>2</sup>
	18.7 cm <sup>2</sup>	36.8 cm <sup>2</sup>	55.5 cm <sup>2</sup>	83.2 cm <sup>2</sup>

NOTES: PILLOW LENGTH = 9" (22.9cm).

<sup>A</sup> Nom dimensions (uncompressed)

<sup>B</sup> Cross-sectional area (uncompressed)

<sup>C</sup> Cross-sectional area (compressed)

### CALCULATING PILLOW REQUIREMENT

