**STARC Systems, Inc.**
**Design No. SS/DP 60-01**
**Non-Load Bearing Wall Panel System***
**FireblockWall**
**ASTM E119**
**Rating: 60 min.**
**ASTM E814**
**Rating: F-Rating 60 min.; T-Rating 60 min.****

**Figure 1 – Example Wall Configuration**

1. **FIREBLOCKWALL:** Insulated Steel Panels.

   **CERTIFIED PRODUCT:** STARC Systems, Inc., Interlocking Insulated Steel Panel System; FireblockWall.

   The prefabricated wall panels (Item 1) consist of a fire resistive core and reinforced perimeter. The 4 in. thick panels are available in widths of 6 in., 12 in., 24 in., 48 in., and heights of 6 in., 12 in., 92 in., and 104 in. The panels may be installed in vertical orientation by slotting them within one another along the tongue-and-groove joints and latched together with the imbedded strike/latch points (min. 1 for 6 in. and 12 in. panels and min. 3 per lateral side on larger sizes, per panel). Panels are mounted within the prefabricated panel cover tracks (Item 2). Max. allowable tapered gap of 3/16 in. between panels. *(Not Shown) STARC FireblockWall may be used in conjunction with STARC's FireblockWall Cap, per Intertek Design SS/DP 60-02.

2. **FIREBLOCKWALL TRACK:** STARC's wall system uses telescoping, min. 20 GA steel tracks to form

the perimeter of the wall system. Max. allowable gap of 1/4 in. between track flange and panel face.

A. FLOOR TRACK: 4.5 in. wide telescoping floor tracks use EPDM gaskets that run the length of the tracks on the bottom side. Legs of track to overlap panels min. 0.84 in. Panels rest flush along interior bottom face.

B. WALL/SOFFIT TRACK: 4.5 in. wide telescoping tracks are comprised of four sections including a base track, base extension, shield, and shield extension. Attach base track and base extension to perimeter substrate using min. #10 steel fasteners 12 in. on center (oc). Attach shield and shield extension using min. #10 steel fasteners 12 in. oc. after cavity between tracks and panels are filled. Cavity between tracks and panels may be filled with plastic wrapped, Fireblock Pillows provided by STARC and measuring 2.2 in. thick, 4 in. wide, and 39.5 in long. The Pillows are to be oriented as to run the length of the cavity, with the 4-in. wide face placed against the perimeter of the panels and interior of the track, and the 2.2-in. thick face is perpendicular to the plane of the wall. The Pillows shall be butted together tightly on the edges as they are placed together, completely filling the linear length of the perimeter. Pillows may be compressed up to 50% nominally. The Pillows must maintain a min. ratio of 0.6 in. terms of thickness of Pillows within the cavity-to-cavity space (ex: two Pillows provides a total thickness of 4.4 in. and in a 6.9-in. wide cavity meets the requirement of the 0.6 ratio). When installing in cavities 7 in. to 9 in. wide, use a min. of 3 Pillows. When installing in smaller cavity track systems, a min. single Pillow layer may be used so long as the above conditions are still met (ex: a single Pillow layer in a 3.5-in. wide cavity may be used). Legs of tracks to overlap panels a min. of 2.0 in. or not exceed a max. gap of 9 in. between interior face and adjacent panel.

i. Optional (not shown): Completely fill cavity with nominal 8.5 pcf Rockwool FABROCK 85.

3. **FIREBLOCKWALL CORNER:** Use STARC's prefabricated, steel, 90-deg (max. 6 in. wide) or 135-deg (max. 4 in. wide) corner sections as necessary. The corner sections consist of a fire resistive core and reinforced perimeter. Attach corners to wall panels using the same tongue-and-groove and latch joints.

4. **FIRE DAMPER:** Install a max. of one certified, 1-hr fire rated, UL555 Fire Damper per manufacturer's instructions per side of wall when necessary.

5. **FIRESTOP PENETRATIONS (ASTM E814):** Use certified, Specified Technologies, Inc. (STI) SpecSpeal Ready Sleeves, models FS100 or FS200 and install per this design listing and manufacturer's instructions. Center steel sleeve device within opening of panels (Item 1). Opening for FS100 may range from 1.12 in. to 1.25 in., and FS200 may range from 2.38 in. to 2.50 in. Secure steel sleeve device by using provided steel escutcheon plates installed with supplied gasket gaskets. Install plates on both sides of wall and secure to sleeve with included steel screws. Sleeves may be equipped with steel caps (not shown) with holes for tube and wiring on each end.

A. CABLES: Aggregate cross-sectional area of cables in steel sleeve to be max. 6.36 percent (FS100) or max. 1.59 percent (FS200) percent of the aggregate cross-sectional area of the sleeve when using

provided 1 in. intumescent fill (Item 5B) on each end. Aggregate cross-sectional area of cables may be increased to max. 14.81 percent (FS100 and FS200) when the sleeve is completely filled with SpecSeal SSP Firestop Putty (Item 5B). Cables to be rigidly supported on both sides of wall assembly. Any combination of the following types and sizes of copper conductor cable may be used:

a. No. 24 AWG (or smaller) copper conductor cable with PVC jacketing and insulation: max. 0.0201 in. diameter
b. 3/C No. 2/0 AWG (or smaller) copper conductor service entrance cable with PVC insulation and jacket: max. 0.3648 in. diameter
c. 3/C No. 8 AWG (or smaller) nonmetallic sheathed cable with copper conductors, PVC insulation and jacket: max. 0.1285 in. diameter
d. 7/C No. 2/0 AWG (or smaller) multi-conductor power and control cables with XLPE or PVC insulation and XLPE or PVC jacket: max. 0.3648 in. diameter
e. RG-9/U (or smaller) coaxial cable with fluorinated ethylene insulation and jacketing: max. 0.42 in. diameter
f. 62.5/48 fiber optic cable with PVC insulation and jacketing: max. 0.02 in. diameter
g. No. 24 AWG (or smaller) copper conductor data cable with PVC insulation and jacket: max. 0.0201 in. diameter
h. 4/C No. 2/0 copper conductor steel metal-clad cable or armored-clad cable: max. 0.3648 in. diameter
i. Max. of 1 flexible PVC tube: max. 1/4 in. diameter (I.D.) [max. 3/8 in. O.D.]

B. FILL, VOID, or CAVITY MATERIAL – PUTTY: Fill material supplied with firestop device (Item 5) applied to 1 in. (25 mm) thickness flush with each end of steel sleeve device. At point contact location, min 3/8 in. diameter bead of fill material applied at grouped cable/steel sleeve interface on each side of wall. Alternatively, entire sleeve may be filled with certified, STI, SpecSeal SSP Firestop Putty, maintaining between fill and wiring/cables (Item 5A).

C. **PENETRATION WRAP (NOT SHOWN): A T-Rating of 60 min. may be provided if both sides of the steel sleeve are wrapped with at least one layer of certified, STI, E-Wrap. Use at least a single layer of min. 1/2 in. thick material, overlapping beginning seam by a min. 1 in., with wrap ends flush with surface of tube and in contact and flush with wall, on both sides of the wall/sleeve (Item 5). Seal each seam overlap with foil tape. Secure outermost layer with 16 GA. steel tie wires (2 per side).

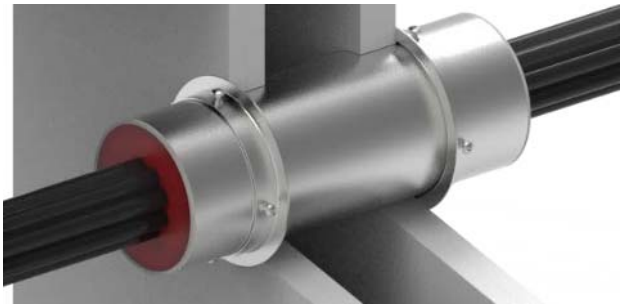

**Figure 2 - Example Ready Sleeve Installation**

*Consult the listing report on the Directory of Building Products (https://bpdirectory.intertek.com) for the edition of the standard(s) evaluated.*

*Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.*