

MATERIALS LIST

Following is a list of materials suitable for firestopping cable penetrations of fire-rated barriers. The suitability of the various materials and their application are covered in Part 2 of this section. Products other than the following may be used based on their composition, form, application, and performance, including being stable up to a range of 2000 to 2200 degrees Fahrenheit:

(a) **KS Bags:** These Western Electric supplied bags are approximately 12 inches by 12 inches by 1 inch having a mineral wool content of not less than 24 ounces. These bags are furnished as KS-5048.

(b) **Mineral Wool Batting:** One acceptable batting material, a nonasbestos compound, may be procured from distributors of the U.S. Gypsum Corporation under the trade name of "Thermafiber Safing—4 lbs/cubic foot." On the East coast, the material is provided with a maximum size of 2 feet by 5 feet by 3 inches. On the West coast, the maximum size is 2 feet by 44-1/2 inches by 3 inches. Note that batting varying in thickness up to 4 inches is commonly produced and may be used when the 3-inch thickness is not available. Batting with foil facing (FSK) should be used.

(c) **Ceramic Fiber:** This material, available as batting or in bulk form, is a high-quality material with a high-temperature rating. It is easily packed into spaces of odd shapes and sizes much like loose cotton and is available in bags or bales. Three acceptable suppliers are:

- Kaowool Ceramic Fiber—Bulk by Babcock & Wilcox Co.
- Fiberfax Bulk Fiber—by Carborundum Co.
- Cerafiber Bulk III—by Johns-Manville

(d) **Cable Penetration Module:** This recently developed, cast-in-place cable

penetration unit is available through Western Electric as KS-21947, L1 for use in lieu of cable slots under main distributing frames in new buildings or building enlargements. For complete information on use, availability, and cost, see Section 760-630-420 (Modular, Cast-In-Place Firestop for Distributing Frame Openings).

(e) **Lightweight Concrete:** Field mixed 4 parts by volume of vermiculite or perlite to 1 part portland cement with sufficient water to achieve 4-inch slump. One pint of Air Entrainment Agent should be added per bag of cement to increase workability and reduce volume of water required to achieve a 4-inch slump. (See Fig. 2 of Section 760-630-410.)

(f) **High-Temperature Caulking Compound:** Acceptable materials are as follows:

- SE-411F Non-flammable Sealer, Uniseal Company, 11181 Diamond Avenue, Evansville, Indiana 47711
- Standard Duxseal, Johns-Manville Company, Greenwood Plaza, Denver, Colorado 80217.

These products may be obtained through Western Electric on special purchase order, by name, or purchased locally. Western Electric stocks a high-temperature caulking compound as Specification AT-8832, B caulking compound (fire rated).

(g) **High-Temperature Grout:** An acceptable fast-setting grout is available as Hallemite Por-Rok ready mixed. It has a 60-minute setting time.

(h) **Waterplug Mortar:** Waterplug is commonly used by outside plant forces to seal around cables in manholes and vaults. It expands on setting, forming a tight seal.