PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Mineral fiber safing insulation.
B. Silicone foam seal system.
C. Gypsum fireproofing sealant.
D. Fire stop sealant.

1.02 SYSTEM DESCRIPTION

A. System includes specifications for firestopping and fire-resistant penetration seals for floors, walls, ceilings, and roof where fire-rated walls, shafts, or assemblies are penetrated by plumbing, mechanical, and electrical features, or otherwise, as indicated or required.

1.03 MEASUREMENT AND PAYMENT

A. General: Firestopping will not be measured separately for payment but will be paid for as part of the Contract lump sum price for Architectural Work.

1.04 REFERENCES

A. American Society for Testing and Materials (ASTM):
   1. ASTM C475/C475M Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board

B. Underwriters Laboratories Inc. (UL):
   1. Building Materials Directory
   2. Fire Resistance Directory

C. Warnock Hersey (WH):
   1. Building Products Directory
1.05 REGULATORY REQUIREMENTS
A. In addition to the foregoing referenced standards, the regulatory requirements that govern the work of this Section include the following governing code:

1. California Code of Regulations (CCR), Title 24, Part 2, California Building Code, Chapter 7, “Fire and Smoke Protection Features.”

1.06 QUALITY ASSURANCE
A. Materials and installation shall meet or exceed the following requirements:

1. UL or WH Classification and Listing.
2. One-hour and two-hour fire ratings when tested in accordance with ASTM E119.
3. Class 1 (25 or less) flame-spread rating when tested in accordance with ASTM E814.

1.07 SUBMITTALS
A. General: Refer to Section 01 33 00, Submittal Procedures, and Section 01 33 23, Shop Drawings, Product Data, and Samples, for submittal requirements and procedures.

B. Shop Drawings: Submit details of firestopping and through-penetration firestopping for indicated installations.

C. Product Data: Submit product data and installation instructions for indicated applications.

D. Record Documents: Indicated on record (“as-built”) documents locations of each type of firestopping.

1.08 SITE CONDITIONS
A. Follow manufacturer's instructions for temperature, ventilation, and other conditions required for proper mixing and installing of foam seals and sealants.

1.09 DELIVERY, STORAGE, AND HANDLING
A. Deliver materials in the manufacturer's original unopened containers or packages with manufacturer's name, labels, product identification, lot numbers, and mixing and installation instructions, as applicable.

B. Store materials in the original, unopened containers or packages, and under conditions recommended by the manufacturer.
PART 2 – PRODUCTS

2.01 MATERIALS

A. Requirements: Fire-stopping materials and fire-resistant penetration seals shall conform with the following types, as applicable for the location:

1. Mineral Fiber: Loose or batt mineral-fiber safing insulation, meeting fire-rating and installation requirements indicated.

2. Foam: One-part or two-part silicone foam, manufactured silicone penetrating seal system, meeting fire-rating and installation requirements indicated.
   a. Color for exposed locations shall be as selected by the Engineer from manufacturer's standard colors.
   b. Wherever seals are not exposed to view, provide manufacturer's standard color that has the best overall performance characteristics for the application indicated.
   c. Associated adhesive sealant, damming materials, and solvent shall be as recommended by the foam manufacturer.

3. Gypsum Fireproofing Sealant: Trowelable gypsum compound meeting applicable requirements of ASTM C475/C475M and ASTM E814 for one-hour or two-hour fire rating as indicated for the fire-rated assembly being penetrated.

B. Fire Stop Sealant: Sealant for the sealing of joints packed with mineral fiber or safing insulation shall be fire stop sealant manufactured for the purpose, meeting fire-rating and installation requirements indicated.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine penetrations and openings to be sealed to determine if conditions are satisfactory for the proper installation of fire-resistant materials and seals. If unsatisfactory conditions exist, do not commence work until such conditions have been corrected.

B. Verify that items and apparatus penetrating openings are installed and completed before beginning the firestop installation.

3.02 LOCATIONS

A. Provide firestopping and fire-resistant penetration seals wherever required to preserve fire ratings of building elements at plumbing, mechanical, electrical, and other penetrations.
3.03 INSTALLATION

A. Install materials in clean, dry openings free of loose material and projections.

B. Install materials in accordance with the respective manufacturer's installation instructions, and as required to provide a tight seal and preserve fire ratings at penetrations and openings.

C. Inspect foam seals following 24-hour cure; add additional foam as required for tight seal; reinspect and add foam until installation is satisfactory.

D. Install sealant in accordance with manufacturer's installation instructions.

3.04 CLEANING

A. Remove spilled and excess materials adjacent to penetrations without damaging adjacent surfaces.

B. Leave finished work in neat, clean condition with no evidence of spillovers or damage to adjacent surfaces.

END OF SECTION 07 84 00