# GENERAL

## Summary

### Provide all services, labor, materials, tools, and equipment required for the complete and proper installation of firestopping for communications systems as called for in these specifications and related drawings.

### Contractor must coordinate firestop solution used so that it follows the guidelines or specific solutions determined by UNL FMP for the building.

### A through-penetration is created when a cable tray, cable, conduit, or sleeve passes through an opening in a fire-rated wall or floor. The opening offers a path for fire and smoke to spread. A firestop is a special seal designed and tested to restore the fire integrity of the barrier.

## System Description

### Provide firestops for any cable tray system or riser system as required by the latest NEC.

### Sealing of openings between floors, through rated fire and smoke walls, existing or created by the Contractor for cable pass through shall be the responsibility of the wiring Contractor.

### Provide penetrations through fire-rated walls and partitions and firestopping of the penetrating items.

### Sealing material and application of this material shall be accomplished in such a manner that is acceptable to the UNL Building Systems Maintenance, local fire, and building authorities having jurisdiction over this work.

## Submittals

### Submit Product Data: Manufacturers’ specifications and technical data for each material including the composition and limitations documentation of UL firestop systems to be used and manufacturer’s installation instructions.

### Manufacturers’ engineering judgment identification number and drawing details when no UL system is available for an application. Engineering judgment must include both project name and Contractor’s name who will install the firestop system as described in drawing.

### Submit material safety data sheets provided with product delivered to the job-site.

### Product Data: Provide product data for each type of product specified.

### Provide certification from the firestopping manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs) and are nontoxic to building occupants.

### Provide shop drawings detailing materials, installation methods, and relationships to adjoining construction for each through-penetration firestop system and each kind of construction condition penetrated and kind of penetrating item.

### Submit documentation, including illustrations, from a qualified testing and inspecting agency that is applicable to each through-penetration firestop configuration for construction and penetrating items.

### Where project conditions require modification of the qualified testing and inspecting agency’s illustration to suit a particular through-penetration firestop condition, submit an illustration approved by the firestopping manufacturer’s fire protection engineer with modifications marked.

## Quality Assurance

### Comply with section 270000.

### Firestop system installation must meet requirements of ASTM E 814, UL 1479 or UL 2079 tested assemblies that provide a fire rating equal to that of construction being penetrated. Fire Stopping 07840-3

## Delivery, Storage, and Handling

### Comply with section 270000.

### Deliver firestopping products to the project site in original, unopened containers or packages with intact and legible manufacturers’ labels identifying project and manufacturer; date of manufacture; lot number; shelf life, if applicable; qualified testing and inspecting agency’s classification marking applicable to the project; curing time; and mixing instructions for multi-component materials.

### Coordinate delivery of materials with the scheduled installation date to allow minimum storage time at the job site.

### Store and handle firestopping materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, or other causes.

### Do not use damaged or expired materials.

# PRODUCTS

## Manufacturers

### Coordinate with UNL FMP

## Materials and Fabrication

### Coordinate with UNL FMP

# EXECUTION

## Examination

### Comply with section 270000.

### Verify that openings are ready to receive the work of this section. Sequence work to permit firestopping materials to be installed after adjacent and surrounding work is complete.

## Installation

### Creation of such openings, as necessary, for cable passage between locations as shown on the drawings shall be the responsibility of the selected wiring Contractor.

### Any openings created by or for the Contractor and left unused shall also be sealed as part of this work.

### Environmental requirements

#### Do not install firestopping when ambient or substrate temperatures are outside limits permitted by firestopping manufacturers or when substrates are wet due to rain, frost, condensation, or other causes.

#### Ventilate firestopping per the firestopping manufacturer’s instructions by natural means or, where this is inadequate, forced air circulation.

#### During installation, provide masking and drop cloths to prevent firestopping materials from contaminating any adjacent surfaces.

#### Do not use materials that contain flammable solvents.

### Preparation

#### Clean out openings and joints immediately prior to installing firestopping to comply with recommendations of the firestopping manufacturer and the following requirements:

#### Remove all foreign materials from surfaces of openings and joint substrates and from penetrating items that could interfere with adhesion of firestopping.

#### Clean openings and joint substrates and penetrating items to produce clean, sound surfaces capable of developing the optimum bond with firestopping. Remove loose particles remaining from the cleaning operation.

### Labeling

#### Coordinate with UNL FMP and follow their standard for labeling firestopping locations.

#### For installations that are outside the scope of UNL FMP, label the firestop locations as follows:

#### When the firestop system has been installed, place a label next to the system. The label should contain the following items:

##### UL rating and any other pertinent certification information

##### The date the firestop was installed

##### Name of Contractor who installed the firestop

### Protection

#### Protect firestopping during and after the curing period from contact with contaminating substances or form damage resulting from construction operations or other causes so that they are without deterioration or damage at the time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated firestopping immediately and install new materials to produce firestopping complying with specified requirements.

## Adjustments

### Keep areas of work accessible until inspection by applicable code authorities.

### Comply with section 270000.

END OF SECTION 270541