

SECTION 26 05 00 – COMMON REQUIREMENTS – ELECTRICAL CONSTRUCTION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes materials and methods that are common to various Electrical Systems.

1.2 SUBMITTALS

- A. Product Data: For the following:

- 1. Fireproofing
- 2. Access Doors

1.3 COORDINATION

- A. Arrange for conduit spaces, chases and openings in building structure during progress of construction to allow for electrical installations.
- B. Coordinate installation of required supporting devices and set sleeves in poured-in-place concrete and other structural components as they are construction as applicable.
- C. Coordinate requirements for access panels and doors for electrical items requiring access that are concealed behind finished surfaces.

PART 2 - PRODUCTS

2.1 FIRESTOPPING

- A. The Contractor shall be responsible for providing permanent, UL approved firestopping systems for all penetrations through fire rated floor or fire rated wall assemblies. For areas that will require future access for the installation of additional cables, repair, or retrofit, the firestopping system shall consist of re-usable intumescent pillows or putty. All firestopping shall meet the requirements of ASTM E-814 and UL 1479.
  - 1. Subject to compliance with project requirements, firestopping materials may be provided by one of the following Manufacturers.
    - a. Specified Technologies Inc. (STI) Somerville, NJ (800) 992-1180
    - b. Tremco, Beechwood, OH (800) 321-7906
    - c. 3M, St. Paul, MN (800) 328-1687
  - 2. Submit for review the following product data.
    - a. Product data sheets.
    - b. UL System Drawings for each firestopping application.
    - c. Manufacturer's Certificates of Conformance for their products.

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2.2 ACCESS DOORS

- A. Refer to Division 8, "Access Doors and Frames" for additional requirements. Access doors furnished and installed under this contractor shall comply with Division 8 requirements in addition to the following.
- B. Manufacturers: Subject to review, provide access doors manufactured by Milcor, Inc or equal.
- C. Description: Steel access doors and frames for installation in masonry and/or drywall/gypsum board assemblies. Provide fire rated access doors when doors are installed in a fire rated assembly.
- D. Frames: minimum 16 gage steel with exposed nominal 1" flange around the perimeter of the unit. Where doors are to be installed in drywall/gypsum board assemblies provide frames with a drywall bead. Doors to be installed in masonry shall be furnished with adjustable metal masonry anchors.
- E. Flush Panel Doors: minimum 14 gage steel with concealed spring or piano hinge(s) with a minimum swing of 175 degrees. Finish to be a factory-applied primer, suitable for field painting. Provide flush cylinder lock with key. Key all locks alike. Verify keying with owner prior to ordering.
- F. Access door schedule: In addition to access door shown on the drawings provide the following access doors to be installed where directed by the architect or engineer:
  - 1. Ten 16" x 16" to be installed in drywall/gypsum construction.
  - 2. Ten 16" x 16" to be installed in masonry construction.

PART 3 - EXECUTION

3.1 ROUGH-IN

- A. Verify final locations for rough-ins with field measurements and with the requirements of the actual equipment to be connected.
- B. Refer to equipment Specifications in Divisions-2 through -25 for rough-in requirements.

3.2 EQUIPMENT INSTALLATION – COMMON REQUIREMENTS

- A. Install systems, materials, and equipment level and plumb, parallel and perpendicular to other building systems and components, where installed exposed in finished spaces.
- B. Install electrical equipment to facilitate servicing, maintenance, and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations.

3.3 FIRESTOPPING

- A. Comply with manufacturer's written instructions for install fire stopping. When mechanical system is used, set securely in place in accessible locations.
- B. Environmental Limitations: Do not install penetration firestopping system when ambient or substrate temperatures are outside limits permitted by penetration firestopping system manufacturers or when substrates are wet because of rain, frost, condensation, or other causes.

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- C. Firestopping shall be installed in all fire rated walls. Review all drawings, including architectural, and site conditions to determine where fire rated walls are located.
- D. Preparation
  - 1. Surface Cleaning: Before installing penetration firestopping systems, clean out openings immediately to comply with manufacturer's written instructions and with the following requirements:
    - a. Remove from surfaces of opening substrates and from penetrating items foreign materials that could interfere with adhesion of penetration firestopping materials.
    - b. Clean opening substrates and penetrating items to produce clean, sound surfaces capable of developing optimum bond with penetration firestopping materials. Remove loose particles remaining from cleaning operation.
    - c. Remove laitance and form-release agents from concrete.
- E. Installation
  - 1. General: Install penetration firestopping systems to comply with manufacturer's written installation instructions and published drawings for products and applications.
  - 2. Install forming materials and other accessories of types required to support fill materials during their application and in the position needed to produce cross-sectional shapes and depths required to achieve fire ratings.
    - a. After installing fill materials and allowing them to fully cure, remove combustible forming materials and other accessories not forming permanent components of firestopping.
  - 3. Install fill materials by proven techniques to produce the following results:
    - a. Fill voids and cavities formed by openings, forming materials, accessories and penetrating items to achieve required fire-resistance ratings.
    - b. Apply materials so they contact and adhere to substrates formed by openings and penetrating items.
    - c. For fill materials that will remain exposed after completing the Work, finish to produce smooth, uniform surfaces that are flush with adjoining finishes.
- F. Identification
  - 1. Wall Identification: Permanently label walls containing penetration firestopping systems with the words "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS," using lettering not less than 3 inches (76 mm) high and with minimum 0.375-inch (9.5-mm) strokes.
  - 2. Locate in accessible concealed floor, floor-ceiling, or attic space at 15 feet (4.57 m) from end of wall and at intervals not exceeding 30 feet (9.14 m).
- G. Cleaning and Protection
  - 1. Clean off excess fill materials adjacent to openings as the Work progresses by methods and with cleaning materials that are approved in writing by penetration firestopping system manufacturers and that do not damage materials in which openings occur.
  - 2. Provide final protection and maintain conditions during and after installation that ensure that penetration firestopping systems are without damage or deterioration at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, immediately cut out and remove damaged or deteriorated penetration firestopping material and install new materials to produce systems complying with specified requirements.

3.4 ACCESS DOORS

- A. Comply with manufacturer's written instructions for installing access doors and frames. Set frames accurately in position and attach securely to supports with plane of face panels aligned with adjacent finish surfaces. Install doors flush with adjacent finished surfaces or recessed to receive finish material.
- B. Adjust doors and hardware after installation for proper operation. Remove and replace doors and frames that are warped, bowed or otherwise damaged.

END OF SECTION 26 05 00