SECTION 132001 - PROTECTION PADDING SYSTEM

Note that this section has only been edited for NYSOGS standardization and has not been technically edited. The design engineer shall make all technical edits specific to the project for this section.

1. GENERAL

An allowance is required when using this section. Contact cost control for the amount.

* + - 1. ALLOWANCE
         1. An allowance for the Work of this Section is included in Section 012100.
      2. DESCRIPTION
         1. Synthetic resinous material shop fabricated on oriented strand board (OSB) for walls and doors; cast-in-place for floors with sealed joints and finish coat for monolithic surface.

Edit or delete definition below to match drawing nomenclature.

* + - 1. DEFINITIONS
         1. RWP-1: Protection Padding System.
      2. SUBMITTALS
         1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
         2. Manufacturer’s installation instructions shall be provided along with product data.
         3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
         4. Waiver of Submittals: The "Waiver of Certain Submittals Requirements" in Section 013300 does not apply to this Section.
         5. Submittals Package: Submit the shop drawings, product data, and samples specified below at the same time as a package.
         6. Shop Drawings: Show fabrication details, locations, and sizes of vertical panels. Also show anchorage details and terminations of panels at openings.
         7. Product Data: Catalog sheets, specifications, and installation instructions.
         8. Samples:

Protection Padding Adhered to OSB Backing: 12 inch square pieces.

Resinous Material: One-half pint.

Sealant: One-half pint or standard cartridge tube.

Finish Coat: One-half pint.

Primer: One-half pint, each type.

Fasteners and Anchors: Two each type.

* + - * 1. Contract Closeout Submittals:

Maintenance Data: Deliver two copies, covering the installed products, to the Director's Representative.

* + - 1. QUALITY ASSURANCE
         1. Manufacturer's Qualifications:

The manufacturer shall have been actively marketing the proposed protection padding system for a minimum of 2 years.

The manufacturer shall require that the proposed protection padding system be installed by licensed installers.

The proposed protection padding system shall have previously been installed on a minimum of 10 projects of comparable scope and complexity to the Work of this Section.

* + - * 1. Installer's Qualifications:

The installer of the proposed protection padding system shall be licensed by the proposed protection padding system manufacturer.

* + - 1. MAINTENANCE
         1. Extra Materials: Furnish one quart each of primer, resinous material, sealant, and finish coat for repairing the protection padding system. Store the materials at the site where directed.

1. PRODUCTS
   * + 1. ACCEPTABLE SYSTEM
          1. Gold Medal Resilient Safety Padding by Marathon Engineering Corporation, PO Box 310, 8443 Hidden Valley Road, Mountain Ranch, CA 95246, (209) 754-5121.
          2. Approved equivalent.
       2. MATERIALS
          1. Resinous Material: Isocyanate resin material containing a flame retardant additive meeting the following minimum physical properties when cured:

Flame Spread: 25 or less, ASTM E 84.

Fuel Contribution: 20 or less, ASTM E 84.

Smoke Developed: 200 or less, ASTM E 84.

Weight: Approximately 5 psf per one inch thickness.

Tensile Strength: ASTM D 412.

230 psi minimum, 1/4 inch "surface".

24 psi minimum, 3/4" "base".

Hardness; ASTM D 2240:

60 + 2 Shore A, 1/4 inch "surface".

9 + 2 Shore A, 3/4 inch "base".

Temperature Stability: Unaffected from 35 degrees F to 135 degrees F.

Density: 1.4 g/cm3 typical.

Moisture Absorption: 0.8 percent to 1.05 percent by weight.

Compression Set: 90 percent recovery after 72 hours at 50 percent compression at 72 degrees F, ASTM D 395.

Compression Properties: 30 psi to 70 psi at 10 percent modulus. 300 psi to 500 psi at 50 percent modulus.

Elongation at Break: 150 percent typical, ASTM D 412.

Complete fungus resistance.

Self-extinguishing.

* + - * 1. Sealant: Two component, solvent free, moisture insensitive epoxy resin jointing compound, non-sagging or self-leveling consistencies as required, unless otherwise recommended by the system material manufacturer.
        2. Finish Coat: VOC compliant coating material recommended by the system material manufacturer.
        3. Oriented Strand Board: American Plywood Association (APA) Rated Panels; ANSI A208.1, exterior glue, unless otherwise recommended by the system manufacturer.

Manufacturers Recommended Thickness: 7/16 inch.

* + - * 1. Primer: System or resinous material manufacturers' recommended type for substrates involved.
        2. Aluminum Edge Trim: Extruded Aluminum, Alloy 6063, hardness T5 or T6, mill finish. Profile as indicated on the Drawings.
        3. Fasteners:

Bolts, Nuts, Washers, Lags, and Screws: Medium carbon steel; size and type to suit application, galvanized, zinc, or cadmium plated.

Anchors: Toggle bolt type for anchorage to hollow masonry; expansion wedge type anchors for anchorage to solid masonry or concrete; galvanized or stainless steel.

Self- Threading Masonry Screws:

The Rawlplug Co., Inc., Zinc plated, Rawl Tapcon. by, New Rochelle, NY 10802, (800) 243-8160 or

Elco Industries, Inc., Tapcon Fasteners. by Elco Industries, Inc., 1111 Samuelson Rd., PO Box 7009, Rockford, IL 61125, (815) 397-5151.

Approved equivalent.

Delete subparagraph below if powder actuated tools are not allowed at the facility.

Powder Actuated Fasteners: Type and size to suit application.

* + - 1. FABRICATION
         1. Fabricate wall panels in factory or shop from 7/16 inch oriented strand board with one inch protection padding adhered to the strandboard.
         2. Fabricate aluminum edge trim to length required. Drill holes 3 inches from each end of the edge trim and intermediate holes 12 inches maximum oc for required fasteners. Prepare holes for countersunk fasteners.

1. EXECUTION
   * + 1. EXAMINATION
          1. Verification of Conditions: Examine surfaces to receive protection padding system for defects that will adversely affect the execution and quality of the Work. Report unsatisfactory conditions to the Director's Representative.
       2. PREPARATIONPREPARATION
          1. Surface Preparation:

Perform all preparation and cleaning procedures in accordance with the system manufacturer's printed instruction and as otherwise specified.

Cast-In-Place Protection Padding: Remove dirt, grease, oil, and other contaminants which may impair the full bonding of the materials.

Floors: Fill cracks with sealant and level uneven surfaces.

Immediately before application of the system vacuum clean the prepared surfaces.

* + - 1. INSTALLATIONINSTALLATION
         1. Vertical Panel Installation:

Mechanically fasten panels to wall. Space fasteners maximum 16 inches on center, vertically and horizontally and within one inch of panel edges. Unless otherwise indicated or required by the system manufacturer secure the panels as follows:

Delete "powder actuated fasteners" from 2 subparagraphs below if powder actuated fasteners are not included in part 2.

To Cast-In-Place Concrete, Solid Concrete Masonry Units, or Brick: Use expansion anchors, powder actuated fasteners, or self threading masonry screws.

To Hollow Concrete Masonry Units, Hollow Tile, or Plaster on Lath: Use toggle bolts or powder actuated fasteners.

To Wood: Use screws.

To Metal: Use self-tapping screws.

Allow 1/8 inch to 1/4 inch space between panels.

At fastener locations predrill holes through resinous material surfacing. Holes shall be slightly larger than the fastener heads.

Fill fastener heads, joints between panels, and voids at top of panels with sealant. After sealant has cured sand sealant flush to match adjacent surfaces.

* + - * 1. Comply with padding system manufacturer's printed instruction for covering metal trim and accessories.

Aluminum Edge Trim: Level and align edge trim with doors. Secure to substrate with system manufacturer's recommended fasteners.

* + - * 1. Floor Padding Installation:

After vertical panels are installed overpour floor surfaces with resinous material. Provide a minimum cured thickness of one inch.

Overpour resinous material to meet and join all vertical surfaces to produce a monolithic surface, free of voids or cracks.

* + - * 1. Door Padding Installation:

Comply with padding system manufacturer's printed instructions to provide a minimum cured thickness of one inch. Adhere padding panels to door while door is in place.

* + - * 1. After padding is installed and cured apply one coat of finish coat material.

Minimum Dry Film Thickness of Finish Coat: 3 mils.

* + - 1. CLEANING
         1. Remove surface blemishes and dirt from completed installation.

END OF SECTION 132001