SECTION 09 72 31
POLYPROPYLENE FABRIC WALL COVERING

SPEC WRITER NOTES:
1. Delete between //   // if not applicable to project. Also delete any other item or paragraph not applicable in the section and renumber the paragraphs.
2. Show on the drawings designated spaces and areas that require fabric wall covering.
3. Polypropylene fiber wrapped with nylon has a soft non-gloss texture.

PART 1 - GENERAL

1.1 DESCRIPTION:
A. This section specifies fabric wall covering of polypropylene fiber wrapped with nylon.

1.2 RELATED WORK:
//A. Sustainable Design Requirements: Section 01 81 13, SUSTAINABLE DESIGN REQUIREMENTS. //
B. Color, pattern, type and location of wall fabric: Section 09 06 00, SCHEDULE FOR FINISHES.
C. Vinyl coated fabric wall coverings: Section 09 72 16, VINYL-COATED FABRIC WALL COVERINGS.

1.3 SUBMITTALS:
A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
//B. Sustainable Design Submittals as described below:
//1. Volatile organic compounds per volume as specified in PART 2 - PRODUCTS.// //
C. Samples:
1. Fabric wall covering, each type and pattern as specified in Section 09 06 00, SCHEDULE FOR FINISHES, size, 450 mm (18 inch) long, full width of mill run, each color.
2. Molding, each type.
D. Manufacturer's Literature and Data:
1. Wall covering primer and adhesive.
2. Adhesive for edge guards // and wainscot cap //.
3. Complete instructions for installation of wall covering.
3. Maintenance instructions for each type of wall covering.
E. Certificate: Flame spread, and smoke density factors.
F. Tests: Substrate moisture.

1.4 QUALITY ASSURANCE:
A. Before proceeding with the work under this Section, and in coordination with other trades, finish one complete wall (full height, not less than 2438 mm (8 feet) in length of each type (color and pattern) of wall covering showing selected colors, textures, materials and workmanship.
B. After Contracting Officer Representative (COR) approval, the sample installation will serve as a standard for similar work throughout the project.

1.5 DELIVERY, STORAGE AND HANDLING:
A. Deliver wall coverings, sealers, adhesive and accessories specified, to the job site in sealed, labeled containers, each bearing the manufacturer's names, brand names and color designations.
B. Store wall covering materials laid flat, not upright, in a dry area with heat maintained at 16 degrees C (60 degrees F) minimum with humidity normal to the space or area where wall covering is to be installed.

1.6 APPLICABLE PUBLICATIONS:
A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in text by the basic designation only.
B. ASTM International (ASTM):
   E84-14...............Surface Burning Characteristics of Building Materials
   40 CFR 59............Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating

PART 2 - PRODUCTS

SPEC WRITER NOTE: Make material requirements agree with applicable requirements specified in the referenced Applicable Publications. Update and specify only that which applies to the project.

2.1 FABRIC WALL COVERING:
A. Facing of polypropylene fiber // wrapped with nylon // and backing of 100 percent acrylic.
B. Flame spread rating of 0-20 and smoke development rating of 0-25 when
tested in accordance with ASTM E84.

C. Mildew Resistant

SPEC WRITER NOTE: Fill in fabric properties listed in the following
schedule. To specify other fabric types on the same project, expand types, 1WF, 2WF, with additional paragraphs and
tables as needed.

<table>
<thead>
<tr>
<th>Fabric Type Properties</th>
<th>1WF</th>
<th>2WF</th>
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</thead>
<tbody>
<tr>
<td>1. Construction</td>
<td>//</td>
<td>//</td>
</tr>
<tr>
<td>2. Face Yarn Surface Texture</td>
<td>//</td>
<td>//</td>
</tr>
<tr>
<td>3. Yarn Type</td>
<td>//</td>
<td>//</td>
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<tr>
<td>4. Yarn Ply</td>
<td>//</td>
<td>//</td>
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<tr>
<td>5. Dye Method</td>
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<td>//</td>
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<td>7. Stitches per mm (inch)</td>
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<td>//</td>
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<tr>
<td>8. Weight Kg/square meter (ounces per square yard)</td>
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<tr>
<td>9. Width mm (inch)</td>
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</tr>
</tbody>
</table>

D. Color and pattern as indicated in Section 09 06 00, SCHEDULE FOR FINISHES.

2.2 PRIMER AND ADHESIVE FOR WALL COVERING:

A. Mildew resistant and germicidal inhibiting type recommended by the wall
covering manufacturer for use on substrate to receive the fabric wall
covering. Submit manufacturer’s literature and data documenting
physical, mildew and germicidal characteristics.

//1. Wall Covering Adhesive to have a VOC content of // 50 // // //
g/L or less when calculated according to 40 CFR 59,
(EPA Method 24)./ /

SPEC WRITER NOTE: Specify wall lining
where wall covering is installed directly
over masonry.

2.3 WALL LINER:

A. Provide a non-woven polyester cellulose blend having a minimum weight
of 0.125 Kg/sq. meter (3.7 oz./sq. yard) and a total minimum thickness
of 0.325 mm (0.013 inches). Provide wall liner with a flame spread
rating of 0-20 and smoke development rating of 0-25 when tested in accordance with ASTM E84.

SPEC WRITER NOTES:
1. Edge guards are not desired. Preferred installation is corner to corner or a termination point that does not leave wall covering edge exposed to potential damage.
2. Detail edge guard or wainscot cap trim if used.
3. Coordinate with Section 09 06 00, SCHEDULE FOR FINISHES.

2.4 EDGE GUARDS:
A. Provide edge guards that are 2 mm (3/32 inch) thick and provide cover 19 mm (3/4 inch) each side of corner at right angles. Edge guards are to be // clear// // // // polycarbonate // // vinyl // // rubber // from the same lot and color.

SPEC WRITER NOTE: Delete wainscot cap if not used for project.

//2.5 WAINSCOT CAP:
A. Provide wainscot cap of satin-finished extruded aluminum // //; not more than 19 mm (3/4 inch) high, feathered at bottom edge, with not more than 5 mm (3/16 inch) exposed face on top edge, and grooved to receive the covering. //

2.6 ADHESIVE - GUARDS // AND WAINSCOT CAP //:
A. Provide corner guard // and wainscot cap // adhesive to install corner guards // and wainscot cap // per manufacturer recommendation of the corner guard // and wainscot cap //.

//1. Special Purpose Corner Guard and Wainscot Cap Adhesive to have a VOC content of // 250 // // g/L or less when calculated according to 40 CFR 59, (EPA Method 24). //

PART 3 - EXECUTION

3.1 JOB CONDITIONS:
A. Temperatures:
   1. Do not perform work until surfaces and materials have been maintained at minimum of 16 degrees C (60 degrees F) for three (3) days before work begins.
   2. Maintain minimum temperatures of 16 degrees C (60 degrees F) until adhesives are dried or cured.

B. Lighting:
1. Do not proceed unless a minimum lighting level of 15 candela per 0.09 square meter (15 candela per square foot) is provided.
2. Measure light level at mid-height of wall.

C. Ventilation: Provide continuous ventilation as required to rid the spaces in which the wall coverings are being installed of volatile compounds given off by the wall coverings, sealers and adhesives and as recommended by the product manufacturer for full drying or curing of adhesive.

D. Protect other surfaces from damage resulting from installation of wall coverings. Provide drop cloths, shields and protective equipment to prevent primers, adhesives or wall covering from fouling adjacent surfaces and in particular, storage and preparation areas.

E. Store flammable rubbish, waste, cloths and materials which may constitute a fire hazard, in closed metal containers. Daily remove and properly dispose of flammable wastes from the site.

3.2 SURFACE CONDITION AND PREPARATION:

A. Carefully remove electrical outlet and switch plates, mechanical diffusers, escutcheons, registers, surface hardware, fittings, and fastenings, prior to starting work. Store items for installation.

B. Do not apply wall covering to rough surfaces or which have stains that will bleed through the wall covering. Fill cracks and holes and sand rough spots smooth. Masonry and concrete walls are to have flush joints. Coat these walls with cement plaster or wall/liner as substrate preparation.

C. Surfaces to receive wall covering are to be dry. Test moisture content of plaster, concrete, and masonry walls with an electric moisture meter. The moisture content is not permitted to be more than 5 percent. Submit test results.

D. Prime surfaces of walls as required by manufacturer's instructions. Primer is to be completely dry before adhesive is applied.

E. Existing surfaces should be clean; free of mildew or loose or flakey paint; and, smooth before the application of primer, and adhesive.

3.3 INSTALLATION:

A. Install according to manufacturer's installation instructions.

B. Use wall covering of same batch or run in each area. Use fabric rolls in consecutive numerical sequence of manufacture.

C. Install material completely adhered, smooth, and clean, without wrinkles, air pockets, gaps or overlaps.
D. Extend wall covering continuous behind non-built-in casework and other items which are not bolted to walls.

E. Install wall covering before installation of resilient base. Extend wall covering not more than 6 mm (1/4 inch) below top of resilient base.

F. Install panels consecutively in order in which they are cut from the roll including filling spaces above or below windows, doors, or similar penetrations.

G. Do not install horizontal seams.

H. Except on match patterns, hang fabric by reversing alternate strips, except as recommended by the manufacturer.

I. Cutting:
   1. Cut on a work table with a straight edge.
   2. Joints or seams that are not cut clean are unacceptable.
   3. Trim additional selvage to achieve a color and pattern match at seams. Overlapped seams are not allowed.
   4. Do not double cut seams on wall unless specified.
   5. If double cutting on the wall is necessary, place a three inch strip of light duty [Type I 237 g/meter (7 oz./square yard)] wall covering under pasted edge.
      a. Do not cut into wall surface.
      b. After cutting, remove strip and excess adhesive from seam before proceeding to next seam.
      c. Smooth down seam in adhesive for tight bond and joint.

J. Trim strip-matched patterns which are not factory pre-trimmed.

K. Inside Corners:
   1. Wrap wall covering around corners.
   2. Do not seam within 50 mm (2 inches) of inside corners.
   3. Double cut seams.

L. Outside Corners:
   1. Wrap wall covering around corners.
   2. Do not seam within 152 mm (6 inches) of outside corners.
   3. Double cut seams.

M. Clean up adhesive spillage from wall covering seams and face with recommended cleaners as work proceeds. Install edge guards and // wainscot cap // where shown with adhesive. Run corner guards form top of base to // wainscot cap // // ceiling // // // in a continuous length.
N. When installation is complete, vacuum wall covering with a ceiling to floor motion.

3.4 PATCHING:
A. Replace surface damaged wall covering in a space as specified for new work:
   1. Replace full height of surface.
   2. Replace from break in plane to break in plane when same batch or run is not used. Double cut seams.
   3. Adjoining differential colors form separate batches or runs is not acceptable.
B. Correct loose or raised seams with adhesives to lay flat with tight bonded joint as specified for new work.

3.5 CLEAN-UP:
A. Remove adhesives where spilled, splashed or splattered on wall coverings or adjacent surfaces in a manner not to damage surface from which it is removed.
B. Upon completion of work, leave wall covering free of dirt or soil.
C. Remove all debris associated with wall covering installation.
D. Reinstall previously removed electrical outlet and switch plates, mechanical diffusers, escutcheons, registers, surface hardware, fittings and fastenings.

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