VERSATEX®
TRIMBOARD

TRIM SMARTER.

SECTION 06 65 00 - Plastic Simulated Wood Trim
SIMULATED WOOD TRIM

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Free-Foam Cellular PVC Trim Boards for:
1. Corner boards.
2. Soffits.
3. Fascia.
4. Battens.
5. Door pilasters.
6. Frieze boards.
7. Rake boards.
8. Pilasters.
9. Water tables.
10. Architectural millwork.
11. Door trim.
12. Window trim.
13. Wainscoting.
14. Pergolas.
15. Cupolas.
16. Porch Ceilings.
17. Hot tub surrounds.
18. Arbors.
19. Fencing.
20. Column wraps.
21. Skirtboards.

1.2 RELATED SECTIONS

A. Section 06 11 16 - Mechanically Graded Lumber.

B. Section 06 20 00 - Finish Carpentry.

C. Section 06 30 00 - Exterior Carpentry*.

D. Section 06 40 00 - Architectural Woodwork.

E. Section 06 43 16 - Wood Railings.

F. Section 07 91 16 - Joint Gaskets.

G. Section 09 29 00 - Gypsum Board.

H. Section 09 90 00 - Painting and Coating.

1.3 REFERENCES

A. ASTM D 792 - Density and Specific Gravity of Plastics by Displacement.

B. ASTM D 570 - Water Absorption of Plastics.

C. ASTM D 638 - Tensile Properties of Plastics.

D. ASTM D 790 - Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

E. ASTM D 1761 - Mechanical Fasteners in Wood.

F. ASTM D 5420 - Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by means of a Striker Impacted by a Falling Weight.

G. ASTM D 256 - Determining the Pendulum Impact Resistance of Plastics.

H. ASTM D 696 - Coefficient of Linear Thermal Expansion of Plastics Between minus 30 degrees C and plus 30 degrees C with a Vitreous Silica Dilatometer.

I. ASTM D 635 - Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.

J. ASTM E 84 - Surface Burning Characteristics of Building Materials.

K. ASTM D 648 - Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.

L. ASTM D 3679 - Standard Specification for Rigid Poly Vinyl Chloride (PVC) Siding.

M. ASTM D 2240 - Rubber Property - Durometer Hardness

N. ASTM D 3345 - Standard Test Method for Laboratory Evaluation of Wood and Other Cellulosic Materials for Resistance to Termites.

1.4 SUBMITTALS

A. Submit under provisions of Section 01 30 00 - Administrative Requirements.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Preparation instructions and recommendations.
   2. Storage and handling requirements and recommendations.
   3. Installation methods.

C. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
   1. List of proposed materials with recycled content. Indicate post-consumer recycled content and pre-consumer recycled content for each product having recycled content.
   2. Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content.
   3. List of proposed materials demonstrating that each material was extracted, harvested or recovered, as well as manufactured within 500 miles of the project site.

D. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and finish.

E. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer with a minimum of 5 years producing PVC trim products.

B. Installer Qualifications: Installer with a minimum of 3 years experience with the installation of PVC trim products.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
   1. Finish areas designated by Architect.
   2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
   3. Refinish mock-up area as required to produce acceptable work.
   4. Accepted mock-ups shall be comparison standard for remaining Work

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products on a flat and level surface on a full shipping pallet. Handle materials to prevent damage to product edges and corners.

B. Store materials under a protective covering to prevent jobsite dirt and residue from collecting on the boards.

1.7 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.8 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 WARRANTY

A. Provide manufacturer's transferable limited lifetime warranty against defects in manufacturing that causes the products to rot, corrode, delaminate, or excessively swell from moisture.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Versatex, which is located at: 400 Steel St.; Aliquippa, PA 15001; Tel: 724-857-1111; Fax: 724-857-1171; Email:request info (sales@versatex.com); Web:www.versatex.com

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 MATERIALS

A. PVC: Free Foam Cellular PVC material with a small-cell microstructure and density of .55 grams/cm^3.
   1. Performance and physical characteristic requirements:
      a. Physical:

1) Density: 0.55 g/cm^{3}when tested in accordance with ASTM D 792.
2) Water Absorption: Less then 0.50 percent when tested in accordance with ASTM D 570

b. Mechanical:
1) Tensile Strength: 3582 psi when tested in accordance with ASTM D 638.
2) Tensile Modulus: 107,000 psi when tested in accordance with ASTM D 638.
3) Flexural Strength: 5179 psi when tested in accordance with ASTM D 790.
4) Flexural Modulus: 215,600 psi when tested in accordance with ASTM D 790.
5) Modulus of Elasticity: 209,500 psi when tested in accordance with ASTM D 638.
6) Elongation: 9.0 percent when tested in accordance with ASTM D 638.
7) Nail Hold: 398 lbf/in of penetration when tested in accordance with ASTM D 1761.
8) Compressive Strength: 6,553 psi (thickness dependent)
9) Compressive modulus: 2,305 lbf/in (thickness dependent)
10) Screw Hold: 240 lbf/in of penetration when tested in accordance with ASTM D 1761.
11) Staple Hold: 69 lbf/in of penetration when tested in accordance with ASTM D 1761.
12) Gardner Impact: 34 In-lbs when tested in accordance with ASTM D 5420.
13) Notched Izod Impact: 0.270 Ft-lbs/inch when tested in accordance with ASTM D 256.
14) Termite Resistance: Rating of 10 as tested in accordance with ASTM D 3345.
15) Hardness: 60+ when tested in accordance with ASTM D 2240.
16) Parking Garage Ceiling Soffit System: 225 psf when tested in accordance with UL 580.

c. Thermal:
1) Coefficient of Linear Expansion: 3.25 x 10-5 in/in/degrees F when tested in accordance with ASTM D 696.
2) Burning Rate: Failed to Ignite when tested in accordance with ASTM D 635.
3) Flame Spread Index: 20 when tested in accordance with ASTM E 84.
4) Heat Deflection Temp (264 psi): 146 degrees F when tested in accordance with ASTM D 648.
5) Heat Deflection Temp (66 psi): 153 degrees F when tested in accordance with ASTM D 648.
6) Oil Canning (@ 140 degrees F: Passed when tested in accordance with ASTM D 648.

2. Manufacturing Tolerances:
a. Variation in component length: Minus 0.00 / plus 1.00.
b. Variation in component width: plus or minus 1/32 inch.
c. Variation in component thickness: plus or minus 1/32 inch.
d. Variation in component edge cut: plus or minus 2 degrees.
e. Variation in Density plus or minus 0.02 grams per cubic centimeter.

3. Workmanship, Finish, and Appearance:
a. Free Foam Cellular PVC that is homogeneous and free of voids, holes, cracks, foreign inclusions and other defects. Edges must be square and top and bottom surfaces shall be flat with no convex or concave deviation.
b. Uniform surface free from cupping, warping, and twisting.

2.3 SIMULATED WOOD TRIM

A. PVC Trimboard: Versatex Trimboard with Sealed Edge, designed with a natural appearance to compliment fiber cement and natural cedar.
   1. Size:
      a. Nominal Width:
         1) 3 inches
         2) 4 inches
         3) 5 inches
         4) 6 inches
         5) 8 inches
         6) 10 inches
         7) 12 inches
         8) 16 inches
      b. Nominal Thickness:
         1) 5/8 inch (5/8 inch actual size)
         2) 1 inch (3/4 inch actual size)
         3) 5/4 inch (1 inch actual size)
         4) 6/4 inch (1-1/4 inch actual size)
         5) 8/4 inch (1-1/2 inch actual size)
      c. Length:
         1) 12 feet
         2) 18 feet
         3) Custom lengths
   2. Finish:
      a. Smooth/Smooth finish
      b. Reversible with Smooth/Timber Ridge finish

B. Sheet Board: Versatex S4S (Smooth) Sheet. For use as sheet materials or to create columns and gingerbread millwork.
   1. Size:
      a. Width/Length:
         1) 4 foot by 8 foot
         2) 4 foot by 10 foot
         3) 4 foot by 12 foot
         4) 4 foot by 18 foot
         5) 4 foot by 20 foot
      b. Thickness:
         1) 1/4 inch
         2) 3/8 inch
         3) 1/2 inch
         4) 5/8 inch
         5) 3/4 inch
         6) 1 inch
         7) 1-1/4 inch
         8) 1-1/2 inch
   2. Finish:
      a. Smooth/Smooth finish

C. PVC Cornerboard: Versatex Corners: Folded, 90 degree, one-piece assembly produced with a smooth or timber ridge appearance to compliment fiber cement and natural cedar.
   1. Size:
      a. Nominal Corner Size:
         1) 4 Inches
         2) 6 inches
         3) 8 inches
         4) 10 inches (Smooth only)
      b. Nominal Thickness:

1) 5/4 inch (1 inch actual size)
2) 3/4 inch

c. Length:
1) 10 feet
2) 12 feet
3) 20 feet
4) 22 feet

2. Finish:
a. Smooth
b. Timber Ridge

D. PVC Bead Board: Versatex Beadboard: Tongue-and-Groove Beaded Sheets.
1. Size:
a. Thickness/Width/Length:
1) Regular 1/2 inch by 4 Inches (Actual size 1/2 inch by 3-1/2 inches). Length 18 feet.
2) Regular 1/2 inch by 6 inches (Actual size 1/2 inch by 5-1/2 inches). Length 18 feet.
3) Regular 1 inch by 6 inch (Actual 3/4 inch by 5 1/2 inch). Length 18 feet.
4) T-Mould 5/8 inch by 3 inch (Actual size 5/8 inch by 2-1/2 inch). Length 12 feet.
5) Sheet 1/2 inch by 4 foot (Actual size 1/2 inch by 48-1/8 inches) Length 8 and 10 foot.
6) Stealth 1/2 inch by 4 Inches (Actual size 1/2 inch by 3-1/2 inches). Length 18 feet.
7) Stealth 1/2 inch by 6 inches (Actual size 1/2 inch by 5-1/2 inches). Length 18 feet.
8) Stealth 1 inch by 6 inch (Actual size 3/4 inch by 5 1/2 inches). Length 18 feet.
9) WP4 T & G board 3/4 inch by 5-7/16 inch. Length 18 feet.

2. Finish:
a. Smooth/Smooth finish.

E. Mouldings: Versatex Mouldings designed to compliment exterior trim.
1. Crowns:
a. 3 inches.
b. 4 Inches.
c. 5 inches.
d. 6 inches.
e. 8 inches.
f. Bed Mould.
g. Rams Crown.
h. Solid Crown.

2. Casings:
a. Base Cap.
b. Brick Mould.
c. J-Brick.
d. Back Band.
e. Rake Moulding.
f. Adams Casing.
g. Crosshead Pediment.
h. Stealth Hidden Fastener Surround.

3. Cove:
a. Quarter Round.
b. Bed Moulding.
c. Baluster Moulding.

d. Scotia Cove.

4. Sill:
   a. Sill.
   b. Sill Nose.
   c. Heavy Sill.
   d. Sub Sill Nose.
   e. Historic Sill.
   f. Double Hung Sill.
5. Specialty:
   a. Drip Cap.
   b. Shingle Mould.
   c. Garage Door Surround.
   d. Water Table.
   e. Beaded Cap.
   f. Panel Mould.
6. Length:
   a. 16 feet.
   b. Custom lengths.
7. Finish:
   a. Smooth finish.

2.4 SIMULATED WOOD TRIM

A. PVC Cornerboard: Versatex Stealth Advantage Stealth Corners. Folded 90 degree one piece corner assembly designed with 3/4 inch or 1 inch pocket to accommodate any siding product including fiber cement, cedar, and vinyl.
   1. Size:
      a. Nominal Corner Width:
         1) 4 Inches
         2) 6 inches
         3) 8 inches
         4) 10 inches (Smooth Only)
      b. Nominal Thickness:
         1) 5/4 inch (1 inch actual size).
      c. Length:
         1) 10 feet.
         2) 12 feet.
         3) 20 feet.
         4) 22 feet.

B. PVC Window and Door Surround: Versatex Stealth Advantage Stealth Window and Door Surround, pre cut window trims designed with 3/4 inch or 1 inch pocket to accommodate any siding product.
   1. Size:
      a. Nominal Width:
         1) 4 Inches
         2) 6 inches
         3) 8 inches
      b. Nominal Thickness:
         1) 5/4 inch (1 inch actual size).
      c. Length:
         1) 18 feet.
         2) Custom lengths.
   2. Finish:
      a. Smooth finish.
      b. Timber Ridge finish.

C. PVC Skirtboard: Versatex Stealth Advantage Stealth Skirtboard. Precut trim providing 6 inch grade clearance for fiber cement sidings as well as composite sidings.
   1. Size:
      a. Nominal Width:
         1) 5/4 inch x 4 inches
         2) 5/4 inch by 6 inches
         3) 5/4 inch by 8 inches
         4) 1 inch by 4 inches
         5) 1 inch by 6 inches
         6) 1 inch by 8 inches
         7) 1 inch by 10 inches
      b. Length:
         1) 18 feet.
         2) Custom lengths.
   2. Finish:
      a. Smooth finish.
      b. Timber Ridge finish.

D. PVC Frieze and Fascia: Versatex Soffit Advantage Frieze and Notched Fascia. Trims designed with 3/4 inch pocket to accommodate Vented or Solid Soffit product.
   1. Fascia Size:
      a. Nominal Width:
         1) 1 inch by 8 inches
         2) 1 inch by 10 inches
      b. Length:
         1) 18 feet.
         2) Custom lengths.
   2. Frieze Size:
      a. Nominal Width:
         1) 5/4 inch by 6 inches
         2) 5/4 inch by 8 inches
      b. Length:
         1) 18 feet.
         2) Custom lengths.
   3. Finish:
      a. Smooth finish.
      b. Timber Ridge finish.

E. PVC Soffit: Versatex Soffit Advantage.
   1. Type:
      a. Vented
      b. Solid.
   2. Size:
      a. Actual Width:
         1) 1/2 inch 12 inches
         2) 1/2 inch by 16 inches
      b. Length: 18 feet.
   3. Finish:
      a. Smooth finish.

F. PVC Columnwrap: Versawrap one-piece column wraps.
   1. Size:
      a. Nominal Width:
         1) 4 inches by 4 inches (inside dimensions 3-3/4 inches)
         2) 6 inches by 6 inches (inside dimensions 5-3/4 inches)
         3) 8 inches by 8 inches (inside dimensions 7-1/2 inches)

b. Length:
1) 8 feet 6 inches
2) 10 feet
c. Thickness:
1) 1/2 inch
2) 3/4 inch
2. Finish:
a. Smooth finish.

G. PVC Columnwrap: Versawrap Accessories.
1. Accent Wrap Size:
a. Nominal Width:
1) 4 inches by 4 inches (inside dimensions 4-3/4 inches)
2) 6 inches by 6 inches (inside dimensions 6-3/4 inches)
3) 8 inches by 8 inches (inside dimensions 8-1/2 inches)
b. Length:
1) 10 inches.
c. Thickness:
1) 1/2 inch
2) 3/4 inch
2. Post Caps Nominal Sizes:
a. 4-3/4 inches by 4-3/4 inches
b. 6-3/4 inches by 6 inches-3/4
3. Trim Kits
a. Base Cap
b. Bed Mould
c. Bed Mould XL
d. 4 inch Crown Moulding
e. 4 inch Crown Moulding XL
4. Finish:
a. Smooth finish.

2.5 ACCESSORIES

A. Fasteners:
1. Use 12 gauge stainless steel fasteners designed for wood trim and siding. Fastener should have sufficient flexural and tensile strength to resist bending.
2. Use fasteners with thin shanks, blunt points, and full round heads that are long enough to penetrate the substrate a minimum of 1-1/4 inches.
3. Do not use staples, small brads and wire nails. Avoid using fine threaded wood screws and ring-shank fasteners.
4. Use standard nail guns with a pressure setting between 70 psi and 100 psi. The recommended pressure depends on the type of gun, type of nail, ambient temperature, and the substrate. Care should be taken not to overdrive the nail into the material.
5. Pre-drilling is not typically required unless large fasteners are used or the product is installed during temperatures below 40 degrees F.
6. Use two fasteners for every framing member for trimboard applications. Sheet and trimboards 8 inches and wider require additional fasteners.
7. Install fasteners no more than 2 inches from the end of each board.
8. Avoid fastening simulated wood trim over hollow or uneven areas. Fasten onto flat, solid substrates.
9. 3/8 inch and 1/2 inch thick Sheet and Beadboard is not designed to be ripped and used for trim applications. These products must be glued and mechanically fastened to the substrate.

B. Adhesives: Finishing System.
   1. All bonded surfaces must be smooth, clean, and in complete contact with each other for best results.
   2. Adhere simulated wood trim to itself with PVC cement or cellular PVC adhesives to prevent joint separation. Acceptable adhesives are PVC Trim Welder, IPS Weld-On 705 (white), and Zevo PVC Trim adhesive.
   3. PVC cements cure quickly (3-5 minutes or less), and have a limited working time.
   4. Scarf cut joints are recommended where applicable.
   5. Bonded joints should be secured with fasteners and fastened with two rows on each side of the joint.
   6. When bonding simulated wood trim to other substrates, consult the adhesive manufacturer to determine suitability.

C. Nail Hole Filler: Cortex plug system by Fasten Master.

D. Sealants:
   1. Use urethane, polyurethane, polymer blends or acrylic based sealants that do not contain silicone as specified in Section 07 91 16 - Joint Gaskets.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Cutting:
   1. Simulated wood trim can be cut using standard woodworking saws. Conventional carbide-tipped blades designed for cutting wood are preferred. Avoid using fine-tooth metal-cutting blades.
   2. Rough-cut edges are typically caused by excessive friction, poor board support, or worn or improper tooling.

C. Drilling:
   1. Simulated wood trim can be drilled using standard woodworking drill bits. Do not use drill bits made for rigid PVC.
   2. Avoid frictional heat build-up.
   3. Remove shavings periodically from a drill hole as necessary.

D. Milling and Moulding:
   1. Simulated wood trim can be milled or moulded using standard milling or moulding machines found in millwork shops.
   2. Rake angle 20 to 30 degrees. 25 degrees is recommended.
   3. Cutting speed to be optimized with the number of knives and feed rate.

E. Routing:
1. Simulated wood trim can be routed with virtually any piece of equipment used to rout wood.
2. Carbide tipped router bits are recommended.
3. Machinery that allows for multiple cutting speeds will allow you to optimize the process obtaining a smoother finished part.

F. Edge Finishing:
1. Traditional sanding, grinding or filing tools used for woodworking are preferred.

G. Nail Location:
1. For trimboard applications use two fasteners per framing member.
2. Use additional fasteners (3/4 inch preferred) for trimboard 8 inches and wider.
3. Install fasteners a maximum of 2 inches from the end of each board.

H. Expansion and Contraction:
1. Simulated wood trim expands and contracts with changes in temperature. Properly fastening along the entire length is required to minimize expansion and contraction.
2. Allow 3/16 inch space per 18-foot run of trim for expansion and contraction.
3. Bond joints between pieces of simulated wood trim to eliminate separation.
4. Allow expansion and contraction space at the ends of long runs.

I. Cleaning:
1. Clean simulated wood trim with mild detergent and water.
2. Products with pumice, such as Soft Scrub, may be applied with a nylon brush.
3. For more stubborn stains use a mild household cleaner and degreaser like Clorox Cleanup, Clorox Outdoors, Denatured Alcohol, Bleach, Mr. Clean Magic Eraser or Corte Clean with nylon brush.

J. Painting:
1. Be sure surface to be painted is clean, dry, and free of dirt, loose or peeling paint, mildew, chalk, grease and any other surface contaminants before paint application.
2. Finish nail holes with nail hole filler or a UV resistant acrylic caulk.
3. Paint as specified in Section 09 90 00 - Painting and Coating.
    a. Use 100 percent acrylic latex or 100 percent acrylic latex with urethane additive paint with a light reflective value (LRV) equal to or greater than 55 units.
    b. Follow the paint manufacturer's application recommendations.

3.4 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

3.5 SCHEDULES

A. :

B. :

END OF SECTION