SECTION 06 65 00 – Simulated Wood Trim

Plastic Simulated Wood Trim

PART 1 GENERAL

1.1 SECTION INCLUDES

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

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 06 64 00 - Plastic Paneling

G. Section 06 65 00 – Plastic Simulated Wood Trim

H. Section 06 66 00 – Custom Ornamental Simulated Woodwork

I. Section 09 90 00 – Painting and Coating

1.3 REFERENCES

A. ASTM D792 - Density and Specific Gravity of Plastics by Displacement.

B. ASTM D570 - Water Absorption of Plastics.

C. ASTM D638 - Tensile Properties of Plastics.

D. ASTM D790 - Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

E. ASTM D1761 - Mechanical Fasteners in Wood.

F. ASTM D5420 - Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by means of a Striker Impacted by a Falling Weight.

G. ASTM D256 - Determining the Pendulum Impact Resistance of Plastics.

H. ASTM D696 - Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C with a Vitreous Silica Dilatometer.

I. ASTM D635 - Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.

J. ASTM E84 - Surface Burning Characteristics of Building Materials.

K. ASTM D648 - Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position.

L. ASTM D3679 - Standard Specification for Rigid Poly Vinyl Chloride (PVC) Siding.

1.4 SUBMITTALS

A. General: Submit under provisions of Section 01 30 00 – Administrative Requirements.

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

C. LEED Submittals: Provide documentation of how the requirements of Credit will be met:
   1. List of proposed materials demonstration that each material was extracted, harvested or recovered, as well as manufactured within 500 miles of the project site.

D. Samples: For each product specified, two samples, minimum size 6 inches long, representing actual product, color, finish.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer with a minimum of 15 years producing PVC trim products.

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

C. Regulatory Requirements: Check with Local Building Code for installation requirements.

D. Allowable Tolerances:

   1. Variation in component length: -0.00 / +1.00"
   2. Variation in component width: ± 1/16"

3. Variation in component thickness: ± 1/16”
4. Variation in component edge cut: ± 2°
5. Variation in Density -0% + 10%

E. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
1. Finish areas designed 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. Trim materials should be stored 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 WARRANTY

A. Provide manufacturer’s Limited Lifetime warranty against defects in manufacturing that cause the products to rot, corrode, delaminate, or excessively swell from moisture.

PART II PRODUCTS

2.1 MANUFACTURES

A. Acceptable products: AZEK® Trimboards manufactured by The AZEK® Company, which is located at: 888 N Keyser Ave Scranton, PA 18508

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/cm³.

- Material shall have a minimum physical and performance properties specified in the following Section C.

C. Performance and physical characteristic requirements:

Property	Units	Value	ASTM Method
PHYSICAL			
Density	g/cm3	0.55	D 792
Water Absorption	%	0.15	D 570
MECHANICAL			
Tensile Strength	psi	2256	D 638
Tensile Modulus	psi	144,000	D 638
Flexural Strength	psi	3329	D 790
Flexural Modulus	psi	144,219	D 790
Nail Hold	Lbf/in of penetration	35	D 1761

Property	Units	Value	ASTM Method
Screw Hold	Lbf/in of penetration	680	D 1761
Staple Hold	Lbf/in of penetration	180	D 1761
Gardner Impact	in-lbs	103	D5420
Charpy Impact (@23°C)	ft-lbs	4.5	D256
THERMAL			
Coefficient of Linear Expansion	in/in/°F	3.2 x 10-5	D 696
Burning Rate	in/min	No burn when flame removed	D 635
Flame Spread Index	--	25	E 84
Heat Deflection Temp 264 psi	°F	150	D 648
Oil Canning (@140°F)	°F	Passed	D 648

2.3 SIMULATED WOOD TRIM

A. PVC Trimboard: AZEK® Trimboard with Sealed Edge, designed with a natural appearance to compliment fiber cement and natural cedar.
   1. Size:
      a. Nominal Width:
         1) 2 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
   2. Finish:
      a. Traditional/Smooth finish
      b. Reversible with Traditional (Smooth)/Frontier (Woodgrain) finish

B. Sheet Board: AZEK® Traditional (Smooth)/Frontier (Woodgrain) finish 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) 3/8 inch
         2) 1/2 inch
         3) 5/8 inch

4) 3/4 inch
5) 1 inch
6) 1-1/4 inch
7) 1-1/2 inch

2. Finish:
    a. Smooth/Traditional finish
    b. Reversible with Traditional (Smooth)/Frontier (Woodgrain) finish

C. PVC Cornerboard: AZEK® Corners: Folded, 90-degree, one-piece assembly produced with a Traditional or Frontier appearance to compliment fiber cement and natural cedar.
1. Size:
    a. Nominal Corner Size:
        1) 4 inches
        2) 6 inches
        3) 8 inches
    b. Nominal Thickness:
        1) 5/4 inch (1 inch actual size)
    c. Length:
        1) 10 feet
        2) 20 feet
2. Finish:
    a. Traditional (Smooth)
    b. Frontier (Woodgrain)

D. PVC Bead Board: AZEK® Beadboard: Tongue-and-Groove and Beaded Sheets.
1. Size:
    a. Thickness/Width/Length:
        1) Regular 5/8 inch by 4 Inches (Actual size 5/8 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 inches (Actual 3/4 inch by 5 1/2 inch). Length 18 feet.
        4) Sheet 1/2 inch by 4 feet (Actual size 1/2 inch by 48-1/8 inches) Length 8 feet.
        5) 1/2 inch by 4 Inches (Actual size 1/2 inch by 3-1/2 inches). Length 18 feet.
        6) 1/2 inch by 6 inches (Actual size 1/2 inch by 5-1/2 inches). Length 18 feet.
        7) 1 inch by 6 inch (Actual size 3/4 inch by 5 1/2 inches). Length 18 feet.
        8) WP4 T & G board 3/4 inch by 5-7/16 inch. Length 18 feet.
        9) Shiplap 1 inch by 6 inches (Actual size ¾” by 5 ½”). Length 18’
        10) Shiplap 1 inch by 8 inches (Actual size ¾” by 7 ¼”). Length 18’
2. Finish:
    a. Traditional/Smooth finish.

E. Mouldings: AZEK® Mouldings designed to complement 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.
    i. Imperial Rake Crown.
    j. Crosshead Pediment.
2. Casings:
    a. Base Cap.
    b. Brick Mould.
    c. Back Band.
    d. Rake Moulding.

e. Adams Casing.
f. Crosshead Pediment.
g. Fluted/Reeded Casing.

3. Cove:
    a. Quarter Round.
    b. Bed Moulding.
    c. Baluster Moulding.
    d. Scotia Cove.
    e. Cove Moulding
4. Sill:
    a. Sill.
    b. Sill Nose.
    c. Heavy Sill.
    d. Sub Sill Nose.
    e. Historic Sill.
    f. Large Historic Sill.
    g. Window Sill Nose
5. Specialty:
    a. Drip Cap.
    b. Shingle Mould.
    c. Garage Door Thermostop.
    d. Water Table.
    e. Beaded Cap.
    f. Panel Mould.
    g. Wainscot Cap.
6. J-Channel Series.
        1) J-Brick
        2) 4” J-Casing
        3) 6” J-Casing
        4) 4” QuickCorner
        5) 6” QuickCorner
7. Length:
    a. 12 feet.
    b. 16 feet.
    c. 18 feet.
8. Finish:
    a. Smooth finish.

2.4 SIMULATED WOOD TRIM

A. PVC Trimboard: AZEK® Rabbeted Trimboard, designed with 3/4 inch pocket to accommodate any siding product including fiber cement, cedar, hardboard and vinyl.
    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. Finish:
        a. Traditional/Smooth finish
        b. Frontier (Woodgrain) finish

B.

C. PVC Cornerboard: AZEK® Rabbeted Corners. Folded 90 degree one piece corner assembly designed with 3/4 inch pocket to accommodate any siding product including fiber cement, cedar, hardboard and vinyl.
    1. Size:
        a. Nominal Corner Width:

1) 4 Inches
2) 6 inches

b. Nominal Thickness:
1) 5/4 inch (1 inch actual size).

c. Length:
1) 10 feet.
2) 20 feet.

D. PVC Skirtboard: AZEK® 1-Piece Skirtboard. Precut trim providing grade clearance and starter strip 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. Finish:
a. Traditional/Smooth finish.
b. Frontier/Woodgrain finish.

E. PVC Skirtboard: AZEK® Universal Skirt Board, A two-piece reversible trimboard with integrated z-flashing and starter.
1. Size:
a. Nominal Width:
1) 5/4 inch by 6 inches
2) 5/4 inch by 8 inches
3) 5/4 inch by 10 inches

b. Length:
1) 18 feet.

2. Finish:
a. Traditional/Smooth finish.
b. Frontier/Woodgrain finish.

F. PVC Bandboard/Skirtboard: AZEK® Integrated Drip Edge, A two-piece reversible trimboard with integrated z-flashing.
1. Size:
a. Nominal Width:
1) 5/4 inch by 6 inches
2) 5/4 inch by 8 inches
3) 5/4 inch by 10 inches

b. Length:
1) 18 feet.

2. Finish:
a. Traditional/Smooth finish.
b. Frontier/Woodgrain finish.

G.

H. PVC Columnwrap: AZEK® 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. Finish:
a. Traditional/Smooth finish.

2.5 SIMULATED WOOD TRIM

A. Paintable PVC Trimboard: AZEK® PaintPro® Trimboard, designed with a natural appearance to compliment fiber cement, engineered wood, natural cedar and is engineered to be painted.

9. Size:
a. Nominal Width:
1) 4 inches
2) 6 inches
3) 8 inches
4) 10 inches
5) 12 inches
6) 4 feet

b. Nominal Thickness:
1) 1 inch (3/4 inch actual size)
2) 5/4 inch (1 inch actual size)

c. Length:
1) 16 feet
2) 8 feet
3) 10 feet

10. Finish:
a. Reversible with Traditional (Smooth)/Frontier (Woodgrain) finish
b. Painting
1) Must be painted within 180 days of UV exposure
2) For lighter colors with a Light Reflective Value (LRV) 55 or greater: paint must be 100% acrylic latex.
3) For darker colors with an LRV less than 55: Paint must be vinyl-safe from a vinyl-safe color palette.
4) For custom color, use a coating with solar reflective pigments

2.6 ACCESSORY PROTDUCTS

A. Fasteners:

1. AZEK® Cortex for Trim
2. Use fasteners design for wood trim and wood siding (thinner shank, blunt point, full round head) with AZEK®.
3. Use a highly durable fastener such as stainless steel or hot-dipped galvanized.
4. Staples, small brads and wire nails must not be used as fastening members.
5. The fasteners should be long enough to penetrate the solid wood substrate a minimum of 1 ½”.
6. Standard nail guns work well with AZEK® trim products.
7. Use 2 fasteners per every framing member for trimboard applications. Trimboards 12” or wider, as well as sheets, will require additional fasteners.
8. Fasteners must be installed no more than 2” from the end of each board.
9. AZEK® should be fastened into a flat, solid substrate. Fastening AZEK® into hollow or uneven areas must be avoided.
10. Pre-drilling is typically not required unless a large fastener is used or product is installed in low temperatures.
11. 3/8” and ½” sheet product is not intended to be ripped into trim pieces. These profiles must be glued to a substrate and mechanically fastened.

B. Adhesives:

1. Glue all AZEK® to AZEK® joints such as window surrounds, long fascia runs, etc. with AZEK® Adhesive, a cellular pvc cement, to prevent joint separation.
2. The glue joint should be secured with a fastener and/or fastened on each side of the joint to allow adequate bonding time.
3. AZEK® Adhesive has a working time of 10 minutes and will be fully cured in 24 hours.
4. If standard pvc cements are used, keep in mind these products typically cure quickly which will result in limited working time and may reduce adhesive strength.
5. Surfaces to be glued should be smooth, clean and in complete contact with each other.
6. To bond AZEK® to other substrates, various adhesives may be used. Consult adhesive manufacturer to determine suitability.

C. Sealants:

1. Use urethane, polyurethane or acrylic based sealants without silicone.

2.7 FINISHES

A. AZEK products do not require paint for protection but may be painted to achieve a custom color.

B. Preparation:
1. No special surface preparations are required prior to painting - sanding is not necessary for paint adhesion.
2. Surface must be clean and dry.
3. Use a 100% acrylic latex paint with a Light Reflective Value (LRV) of 55 or higher.
4. Follow the paint manufacturer's recommendations to apply.

PART III EXECUTION

3.01 INSTALLATION

A. Manufacturer instructions:
1. Comply with manufacturer's product catalog installation instructions and product technical bulletin instructions.

B. Cutting:
1. AZEK® products can be cut using the same tools used to cut lumber.
2. Carbide tipped blades designed to cut wood work well. Avoid fine tooth metal cutting blades.
3. Rough edges from cutting may be caused by excessive friction, poor board support, or worn or improper tooling.

C. Cutting:
1. AZEK® products can be drilled using the same tools used to drill lumber.
2. Drilling AZEK® products is similar to drilling a hardwood. Care should be taken to avoid frictional heat build-up.
3. Use standard woodworking drills. Do not use drills made for normal rigid pvc.
4. Periodic removal of AZEK® shavings from the drill hole may be necessary.

D. Milling:
1. AZEK® products can be milled using standard milling machines used to mill lumber.
2. Relief Angle 20° to 30°
3. Cutting speed to be optimized with the number of knives and feed rate.

E. Routing:

1. AZEK® products can be routed using standard router bits and the same tools used to rout lumber.
2. Carbide tipped router bits are recommended.

F. Edge Finishing:
   1. Edges can be finished by sanding, grinding or filing with traditional woodworking tools.

G. Nail Location:
   1. Use 2 fasteners per every framing member for trimboard applications.
   2. Trimboards over 12” or wider, as well as sheets, will require additional fasteners.
   3. Fasteners must be installed no more than 2” from the end of each board.

H. Thermal Expansion and Contraction:
   1. AZEK® products expand and contract with changes in temperature.
   2. Properly fastening AZEK® material along its entire length will minimize expansion and contraction.
   3. When properly fastened, allow 1/8” per 18 foot of AZEK® product for expansion and contraction.
   4. Joints between pieces of AZEK® should be glued to eliminate joint separation. When gaps are glued on a long run of AZEK®, allow expansion and contraction at ends of the run.

END OF SECTION