SECTION 06455

SIMULATED WOOD TRIM

Display hidden notes to specifier. (Don't know how? Click Here)

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Simulated wood trim.

1.2 RELATED SECTIONS

A. Section 06200 - Finish Carpentry.

B. Section 06300 - Exterior Finish Carpentry.

C. Section 06400 - Interior Finish Carpentry.

D. Section 09250 - Gypsum Board.

E. Section 09900 - Paints and Coatings.

1.3 REFERENCES

A. ASTM International (ASTM):
1. ASTM D 570 Standard Test Method for Water Absorption of Plastics
2. ASTM D 635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
3. ASTM D 638 Standard Test Method for Tensile Properties of Plastics
4. ASTM D 648 Standard Test Method for Deflection Temperature of Plastics

under Flexural Load in the Edgewise Position.
5. ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 degrees C and 30 degrees C With a Vitreous Silica Dilatometer.
6. ASTM D 1761 Standard Test Method for Mechanical Fasteners in Wood.
7. ASTM D 2240 Standard Test Method for Rubber Property-Durometer Hardness.
8. ASTM D 2395 Test Methods for Specific Gravity of Wood and Wood-based Materials.
9. ASTM D 4726 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Exterior-Profile Extrusions.

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

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.
4. Cleaning and maintenance instructions.

C. Shop Drawings: Provide shop drawings indicating details of construction and installation.

D. Selection Samples: Submit two sets of samples showing all available textures, and finishes.

E. Verification Samples: For each product specified, two samples, representing textures, and finishes to be installed.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum 10 years experience in the manufacture of PVC trim products.

B. Installer Qualifications: Minimum 3 years experience in 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. Include mock-up for each profile combination indicated on the Drawings.
3. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
4. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE AND HANDLING

A. Deliver, store and handle materials and products in strict compliance with manufacturer's instructions and recommendations. Protect from damage.

B. Store products off the ground on a flat, level surface away from direct sunlight and high temperatures in manufacturer's labeled packaging until ready for installation.

1.7 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.

1.8 WARRANTY

A. Manufacturer's Standard Warranty:
   1. Materials Warranty: 25 years against manufacturing defects that cause the product to rot, corrode, delaminate, or excessively swell from moisture.
   2. Finish System Warranty: 10 years against UV discoloration.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Distributor: Vi-Lux Mouldings Inc.; 105 Richmond Blvd.; Napanee, ON; Canada K7R 3Z8. ASD. Toll Free: 866-281-6743. Phone: 613-354-4830. Fax: 613-354-6589. Email: info@vi-lux.com. Web Site: www.vi-lux.com

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SIMULATED WOOD TRIM

A. Simulated Wood Trim, General:
   1. Material: Extruded cellular PVC with solid surface skin; from UV stabilized, high impact, and virgin PVC resin.
   2. Performance Compliance:
      a. ASTM D 696, thermal expansion rate less than rigid PVC and equivalent to pine.
      b. ASTM D 635, flame retardant, will not support combustion,
      c. ASTM D 570, ASTM D 638, ASTM D 648, ASTM D 1761, ASTM D 2240, ASTM D 2395, ASTM D 4726, passes, test values available from manufacturer.
   3. Factory Applied Finish: VI-GUARD coating in natural white.
   4. Auxiliary Field Applied Finish: In addition to factory VI-GUARD coating.
      a. Paint Type, Color for Field Applied Finish.
   5. Insect Resistance: 100 percent; including termites.

B. Windows and Door Trim: Cellular PVC products as manufactured by Vi-Lux Mouldings Inc.
   1. Product Code, Profile, Dimensions: As indicated on Drawings.
   2. Product Code, Profile, Dimensions: 0259, Back Band Casing, 1-3/16 inches by 4-1/2 inches.
   3. Product Code, Profile, Dimensions: 2251, Simulated Divide Lite, 1.225 inches by 0.225 inches.
   4. Product Code, Profile, Dimensions: 2252, Simulated Divide Lite, 2 inches by 0.225 inches.
   5. Product Code, Profile, Dimensions: 0300, Shingle Rake, 3/4 inches by 3-1/8 inches.
   6. Product Code, Profile, Dimensions: 0350, S4STrim Board, 29/32 inches by 3-1/2 inches.
      a. Texture: Smooth.
      b. Texture: Embossed.
   7. Product Code, Profile, Dimensions: 1003, Colonial Casing, 1/2 inches by 2 inches.

8. Product Code, Profile, Dimensions: 1005, Casing, 5/16 inches by 2 inches.
9. Product Code, Profile, Dimensions: 1006, Casing, 9/16 inches by 2-3/4 inches.
10. Product Code, Profile, Dimensions: 1008, Cove, 3/4 inches by 3/4 inches.
11. Product Code, Profile, Dimensions: 1014, Door Stop, 3/8 inches by 1-1/4 inches.
12. Product Code, Profile, Dimensions: 1018, Quarter Round, 5/8 inches by 5/8 inches.
13. Product Code, Profile, Dimensions: 1040 Casing, 11/16 inches by 2-1/4 inches.
14. Product Code, Profile, Dimensions: 0260, Back Band, 1-11/32 inches by 1-13/32 inches.
15. Product Code, Profile, Dimensions: 0101, Inside Corner, 1-1/4 inches by 1-1/4 inches.
16. Product Code, Profile, Dimensions: 0180, Grooved Brickmould, 1-1/4 inches by 2 inches.
17. Product Code, Profile, Dimensions: 2220, Double Door Astragal, 1-3/8 inches by 3-5/16 inches.
18. Product Code, Profile, Dimensions: 4916, Door Frame, 1-1/4 inches by 4-9/16 inches.
    a. Reinforcement: Non-reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
19. Product Code, Profile, Dimensions: 4916, Door Frame, 1-1/4 inches by 4-9/16 inches.
    a. Reinforcement: Reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
20. Product Code, Profile, Dimensions: 6916, Door Frame, 1-1/4 inches by 6-9/16 inches.
    a. Reinforcement: Non-reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
21. Product Code, Profile, Dimensions: 7250, Door Frame, 1-1/4 inches by 7-1/4 inches.
    a. Reinforcement: Reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
22. Product Code, Profile, Dimensions: 7250, Door Frame, 1-1/4 inches by 7-1/4 inches.
    a. Reinforcement: Non-reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
23. Product Code, Profile, Dimensions: 6916, Door Frame, 1-1/4 inches by 6-9/16 inches.
    a. Reinforcement: Reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
24. Product Code, Profile, Dimensions: 0184, Flat Brickmould, 1-1/4 inches by 2 inches.
25. Product Code, Profile, Dimensions; 0181, Paint Grade Brickmould, 1-1/4 inches by 2 inches.
26. Product Code, Profile, Dimensions: 0183, Flanged Brickmould, 1-1/4 inches by 3 inches.
27. Product Code, Profile, Dimensions: 0176, Florida Brickmould, 11/16 inches by 1-5/8 inches.

28. Product Code, Profile, Dimensions: 2400, Historic Sill, 2.375 inches by 1.75 inches.
29. Product Code, Profile, Dimensions: 0182, J-Channel Brickmould, 1-1/4 inches by 3 inches.
30. Product Code, Profile, Dimensions: 0050, Masonry Frame, 2 inches by 6 inches.
    a. Texture: Smooth.
    b. Texture: Embossed.
31. Product Code, Profile, Dimensions: 2240, Patio Door Astragal, 1-3/8 inches by 4-1/8 inches.
32. Product Code, Profile, Dimensions: 0320, RB3 Casing, 1-7/64 inches by 3-7/16 inches.
33. Product Code, Profile, Dimensions: 2300, Sill Nose, 1-3/8 inches by 1-5/8 inches.
34. Product Code, Profile, Dimensions: 2200, Sill, 1-1/4 inches by 5 inches.
35. Product Code, Profile, Dimensions: 2600, Mull, 1-1/16 inches by 1-1/2 inches.
36. Product Code, Profile, Dimensions: 0105, Quarter Round, 3/4 inches by 3/4 inches.
37. Product Code, Profile, Dimensions: 0164, Base Cap, 11/16 inches by 1-1/8 inches.
38. Product Code, Profile, Dimensions: 0197, Drip Cap, 11/16 inches by 1-5/8 inches.
39. Product Code, Profile, Dimensions: 0210, Shingle Mould, 11/16 inches by 1-5/8 inches.
40. Product Code, Profile, Dimensions: 2230, Garage Door Stop, .438 inches by 1.937 inches.
41. Product Code, Profile, Dimensions: 2650, Glass Bead Stop, 0.315 inches by 0.560 inches.
42. Product Code, Profile, Dimensions: 2700, Glazing Sidelite Bead, 0.315 inches by 0.500 inches.
43. Product Code, Profile, Dimensions: 2251, 1-1/4 inch Simulated Divided Lite, 1-1/4 inches by 0.225 inches.
44. Product Code, Profile, Dimensions: 2252, 2 inch Simulated Divided Lite, 2 inches by 0.225 inches.
45. Product Code, Profile, Dimensions: 2675, Window Sill and Casing Combo, 2.22 inches by 6.75 inches.

C. Exterior Millwork: Cellular PVC products as manufactured by Vi-Lux Mouldings Inc.
    1. Product Code, Profile, Dimensions: As indicated on Drawings.
    2. Product Code, Profile, Dimensions: 0259, Back Band Casing, 1-3/16 inches by 4-1/2 inches.
    3. Product Code, Profile, Dimensions: 2251, Simulated Divide Lite, 1.225 inches by 0.225 inches.
    4. Product Code, Profile, Dimensions: 2252, Simulated Divide Lite, 2 inches by 0.225 inches.
    5. Product Code, Profile, Dimensions: 0300, Shingle Rake, 3/4 inches by 3-1/8 inches.
    6. Product Code, Profile, Dimensions: 0100, Outside Corner, 3-1/2 inches by 3-1/2 inches.
        a. Texture: Smooth.
        b. Texture: Embossed.
    7. Product Code, Profile, Dimensions: 0350, S4S Trim Board, 29/32 inches by 3-1/2 inches.

a. Texture: Smooth.
b. Texture: Embossed.

8. Product Code, Profile, Dimensions: 0040, Attic Vent Louver, 11/16 inches by 3-1/2 inches.
9. Product Code, Profile, Dimensions: 0041, Attic Vent Sill, 1-1/8 inches by 3-1/4 inches.
10. Product Code, Profile, Dimensions: 0260, Back Band, 1-11/32 inches by 1-13/32 inches.
11. Product Code, Profile, Dimensions: 0101, Inside Corner, 1-1/4 inches by 1-1/4 inches.
12. Product Code, Profile, Dimensions: 0235, Bead Board, 1/2 inches by 5-1/8 inches.
    a. Texture: Smooth.
    b. Texture: Embossed.
13. Product Code, Profile, Dimensions: 0180, Grooved Brickmould, 1-1/4 inches by 2 inches.
14. Product Code, Profile, Dimensions: 0500, Cove Crown, 11/16 inches by 5-1/4 inches.
15. Product Code, Profile, Dimensions: 2220, Double Door Astragal, 1-3/8 inches by 3-5/16 inches.
16. Product Code, Profile, Dimensions: 4916, Door Frame, 1-1/4 inches by 4-9/16 inches.
    a. Reinforcement: Non-reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
17. Product Code, Profile, Dimensions: 4916, Door Frame, 1-1/4 inches by 4-9/16 inches.
    a. Reinforcement: Reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
18. Product Code, Profile, Dimensions: 6916, Door Frame, 1-1/4 inches by 6-9/16 inches.
    a. Reinforcement: Non-reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
19. Product Code, Profile, Dimensions: 6916, Door Frame, 1-1/4 inches by 6-9/16 inches.
    a. Reinforcement: Reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
20. Product Code, Profile, Dimensions: 7250, Door Frame, 1-1/4 inches by 7-1/4 inches.
    a. Reinforcement: Reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
21. Product Code, Profile, Dimensions: 7250, Door Frame, 1-1/4 inches by 7-1/4 inches.
    a. Reinforcement: Non-reinforced.
    b. Texture: Smooth.
    c. Texture: Embossed.
22. Product Code, Profile, Dimensions: 0184, Flat Brickmould, 1-1/4 inches by 2 inches.
23. Product Code, Profile, Dimensions: 0183, Flanged Brickmould, 1-1/4 inches by 3 inches.
24. Product Code, Profile, Dimensions: 0176, Florida Brickmould, 11/16 inches by 1-5/8 inches.

25. Product Code, Profile, Dimensions: 2400, Historic Sill, 2.375 inches by 1.75 inches.
26. Product Code, Profile, Dimensions: 0182, J-Channel Brickmould, 1-1/4 inches by 3 inches.
27. Product Code, Profile, Dimensions: 1030, Lattice, 1/4 inches by 1-1/2 inches.
28. Product Code, Profile, Dimensions: 0050, Masonry Frame, 2 inches by 6 inches.
    a. Texture: Smooth.
    b. Texture: Embossed.
29. Product Code, Profile, Dimensions: 2240, Patio Door Astragal, 1-3/8 inches by 4-1/8 inches.
30. Product Code, Profile, Dimensions: 0310, Rams Crown, 1-13/64 inches by 2 inches.
31. Product Code, Profile, Dimensions: 0320, RB3 Casing, 1-7/64 inches by 3-7/16 inches.
32. Product Code, Profile, Dimensions: 2300, Sill Nose, 1-3/8 inches by 1-5/8 inches.
33. Product Code, Profile, Dimensions: 2200, Sill, 1-1/4 inches by 5 inches.
34. Product Code, Profile, Dimensions: 2600, Mull, 1-1/16 inches by 1-1/2 inches.
35. Product Code, Profile, Dimensions: 0045, Crown, 9/16 inches by 5-1/4 inches.
36. Product Code, Profile, Dimensions: 0047, Crown, 11/16 inches by 4-5/8 inches.
37. Product Code, Profile, Dimensions: 0049, Crown, 11/16 inches by 3-5/8 inches.
38. Product Code, Profile, Dimensions: 049T, Crown , 9/16 inches by 3-5/8 inches.
39. Product Code, Profile, Dimensions: 0075, Bed Mould, 9/16 inches by 1-5/8 inches.
40. Product Code, Profile, Dimensions: 0105, Quarter Round, 3/4 inches by 3/4 inches.
41. Product Code, Profile, Dimensions: 0164, Base Cap, 11/16 inches by 1-1/8 inches.
42. Product Code, Profile, Dimensions: 0197, Drip Cap, 11/16 inches by 1-5/8 inches.
43. Product Code, Profile, Dimensions: 0210, Shingle Mould, 11/16 inches by 1-5/8 inches.
44. Product Code, Profile, Dimensions: 0287, Rake, 1-1/16 inches by 2 inches.
45. Product Code, Profile, Dimensions: 0356, Casing, 11/16 inches by 2-1/4 inches.
46. Product Code, Profile, Dimensions: 0623, Base, 9/16 inches by 3-1/4 inches.
47. Product Code, Profile, Dimensions: 2230, Garage Door Stop, .438 inches by 1.937 inches.
48. Product Code, Profile, Dimensions: 2650, Shoe Moulding, 0.315 inches by 0.560 inches.

D. Interior Millwork: Cellular PVC products as manufactured by Vi-Lux Mouldings Inc.
    1. Product Code, Profile, Dimensions: As indicated on Drawings.
    2. Product Code, Profile, Dimensions: 0259, Back Band Casing, 1-3/16 inches by 4-1/2 inches.
    3. Product Code, Profile, Dimensions: 0300, Shingle Rake, 3/4 inches by 3-1/8 inches.
    4. Product Code, Profile, Dimensions: 1001, Base, 5/16 inches by 3-1/8 inches.
    5. Product Code, Profile, Dimensions: 1002, Colonial Baseboard, 7/16 inches by 3 inches.
    6. Product Code, Profile, Dimensions: 1003, Colonial Casing, 1/2 inches by 2 inches.

7. Product Code, Profile, Dimensions: 1005, Casing, 5/16 inches by 2 inches.
8. Product Code, Profile, Dimensions: 1006, Casing, 9/16 inches by 2-3/4 inches.
9. Product Code, Profile, Dimensions: 1012, Corner Guard, 3/4 inches by 3/4 inches.
10. Product Code, Profile, Dimensions: 1014, Door Stop, 3/8 inches by 1-1/4 inches.
11. Product Code, Profile, Dimensions: 1018, Quarter Round, 5/8 inches by 5/8 inches.
12. Product Code, Profile, Dimensions: 1030, Burlap, 1/4 inches by 1-1/2 inches.
13. Product Code, Profile, Dimensions: 1035, Base, 9/16 inches by 3-1/4 inches.
14. Product Code, Profile, Dimensions: 1045, Bed Mould, 9/16 inches by 1-5/8.
15. Product Code, Profile, Dimensions: 0235, Bead Board, 1/2 inches by 5-1/8 inches.
    a. Texture: Smooth.
    b. Texture: Embossed.
16. Product Code, Profile, Dimensions: 0500, Cove Crown, 11/16 inches by 5-1/4 inches.
17. Product Code, Profile, Dimensions: 0310, Rams Crown, 1-13/64 inches by 2 inches.
18. Product Code, Profile, Dimensions: 0320, RB3 Casing, 1-7/64 inches by 3-7/16 inches.
19. Product Code, Profile, Dimensions: 0045, Crown, 9/16 inches by 5-1/4.
20. Product Code, Profile, Dimensions: 047, Crown, 11/16 inches by 4-5/8 inches.
21. Product Code, Profile, Dimensions: 0049, Crown, 11/16 inches by 3-5/8 inches.
22. Product Code, Profile, Dimensions: 049T, Crown, 9/16 inches by 3-5/8 inches.
23. Product Code, Profile, Dimensions: 0075, Bed Mould, 9/16 inches by 1-5/8 inches.
24. Product Code, Profile, Dimensions: 0105, Quarter Round, 3/4 inches by 3/4 inches.
25. Product Code, Profile, Dimensions: 0164, Base Cap, 11/16 inches by 1-1/8 inches.
26. Product Code, Profile, Dimensions: 0197, Drip Cap, 11/16 inches by 1-5/8 inches.
27. Product Code, Profile, Dimensions: 0210, Shingle Mould, 11/16 inches by 1-5/8 inches.
28. Product Code, Profile, Dimensions: 0287, Rake, 1-1/16 inches by 2 inches.
29. Product Code, Profile, Dimensions: 1040, Casing, 11/16 inches by 2-1/4 inches.
30. Product Code, Profile, Dimensions: 1035, Baseboard, 9/16 inches by 3-1/4 inches.
31. Product Code, Profile, Dimensions: 2650, Shoe Moulding, 0.315 inches by 0.560 inches.

E. Trimboards: Cellular PVC products
    1. Trimboard Size: As indicated on Drawings.
    2. Trimboard Size: 5/8 inch (16 mm) by 3-1/2 inches (89 mm) by 12 feet (3658 mm).
    3. Trimboard Size: 5/8 inch (16 mm) by 5-1/2 inches (140 mm) by 12 feet (3658 mm).
    4. Trimboard Size: 5/8 inch (16 mm) by 7-1/4 inches (184 mm) by 12 feet (3658 mm).
    5. Trimboard Size: 5/8 inch (16 mm) by 9-1/4 inches (235 mm) by 12 feet (3658 mm).

6. Trimboard Size: 5/8 inch (16 mm) by 11-1/4 inches (286 mm) by 12 feet (3658 mm).
7. Trimboard Size: 3/4 inch (19 mm) by 3-1/2 inches (89 mm) by 12 feet (3658 mm).
8. Trimboard Size: 3/4 inch (19 mm) by 4-1/2 inches (114 mm) by 12 feet (3658 mm).
9. Trimboard Size: 3/4 inch (19 mm) by 5-1/2 inches (140 mm) by 12 feet (3658 mm).
10. Trimboard Size: 3/4 inch (19 mm) by 7-1/4 inches (184 mm) by 12 feet (3658 mm).
11. Trimboard Size: 3/4 inch (19 mm) by 9-1/4 inches (235 mm) by 12 feet (3658 mm).
12. Trimboard Size: 3/4 inch (19 mm) by 11-1/4 inches (286 mm) by 12 feet (3658 mm).
13. Trimboard Size: 1 inch (25 mm) by 3-1/2 inches (89 mm) by 12 feet (3658 mm).
14. Trimboard Size: 1 inch (25 mm) by 4-1/2 inches (114 mm) by 12 feet (3658 mm).
15. Trimboard Size: 1 inch (25 mm) by 5-1/2 inches (140 mm) by 12 feet (3658 mm).
16. Trimboard Size: 1 inch (25 mm) by 7-1/4 inches (184 mm) by 12 feet (3658 mm).
17. Trimboard Size: 1 inch (25 mm) by 9-1/4 inches (235 mm) by 12 feet (3658 mm).
18. Trimboard Size: 1 inch (25 mm) by 11-1/4 inches (286 mm) by 12 feet (3658 mm).
19. Panels: As indicated on Drawings
20. Panels: Matching trimboard, 3/4 inch (19 mm) by 48 inches (1219 mm) by 8 feet (2438 mm).
21. Panels: Matching trimboard, 3/4 inch (19 mm) by 48 inches (1219 mm) by 10 feet (3048 mm).
22. Panels: Matching trimboard, 3/4 inch (19 mm) by 48 inches (1219 mm) by 12 feet (3658 mm).
23. Panels: Matching trimboard, 1 inch (25 mm) by 48 inches (1219 mm) by 8 feet (2438 mm).
24. Panels: Matching trimboard, 1 inch (25 mm) by 48 inches (1219 mm) by 10 feet (3048 mm).
25. Panels: Matching trimboard, 1 inch (25 mm) by 48 inches (1219 mm) by 12 feet (3658 mm).
26. Panel Faces: Smooth on both sides, white.
27. Panel Faces: Smooth on one side, embossed with wood grain on one side, white.

F. Custom Profiles: Cellular PVC products as indicated on Drawings as manufactured by Vi-Lux Mouldings Inc.

PART 3 EXECUTION

3.1 PREPARATION

A. Prepare substrate using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. If substrate preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
   1. Verify adequacy of backing and support framing.

B. Do not proceed with installation until substrates have been properly prepared and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.

3.2 INSTALLATION

A. Install in accordance with manufacturer's written instructions and recommendations including the following.
   1. Cutting: Cut product using standard woodworking power tools. Use blocks when clamping and cutting to avoid marking the products. Manufacturer recommends an a 32-tooth carbide-tipped blade for circular saws; support the trim across its entire length when cutting.
   2. Drilling: Do not use bits made for rigid PVC; avoid heat buildup from excessive friction, remove the shavings from the drill hole frequently.
   3. Routing: Use a carbide-tipped bit on a router.
   4. Bonding: Never use adhesives alone to fasten Vi-Lux mouldings to Vi-Lux mouldings or other PVC or Vi-Lux mouldings to a substrate. Bond joints such as corners, window surrounds, and long fascia runs, using product recommended by manufacturer such as Gorilla PVC or Bond and Fill.
   5. Gaps: In accordance with recommended gap spacing indicated in manufacturer's literature based on length of piece being installed, the overall range of temperatures experienced over the year, exposure to the sun, and the temperature at the time of installation.
   6. Seal Joints and Gaps: To prevent joint separation, fill all joints (butted tight and with a gap) with a urethane acrylic sealant that expands and contracts at the same rate as the product). Manufacturer recommends Pro-Series Quad Window, Siding, Gutter and Roof Sealant from OSI, and Bond and Fill Structural Adhesive and Filler. When sealing a butt joint, apply sealant only to one butt end, and apply to the front half of the butt end only, so the sealant can expand back into the joint. Ensure good contact between the sealant and the two butt ends. Touch up irregular areas with additional sealant, and tool joint.
   7. Adhesives: Prepare surfaces and apply adhesive in accordance with adhesive manufacturer's recommendations. Use exterior-grade, PVC compatible, urethane-based adhesives. Manufacturer recommends two products;

Pro-Series Quad Window, Siding, Gutter and Roof Sealant from OSI, and Bond and Fill Structural Adhesive and Filler. When fastening to PVC substrates, use white PVC gutter cement; PVC gutter cement tends to turn yellow over time outdoors, so it should not be used in visible applications. Do not use silicone-based adhesives. Clamp or use other mechanical fastening as recommended to hold product in place while adhesive cures.

8. Bonding to Other Surfaces: Use contact cement, epoxy, rubber-based adhesives, or urethane-based adhesives as recommended by manufacturers.
9. Fastening: Begin at one end and work to other end or at middle and fasten outwards. Do not fasten from both ends toward the middle, which creates stress and expansion problems. Fasten at 16 inch (406 mm) intervals along the length, and keep nails and screws at least 5/16 inch (8 mm) from ends and edges to avoid splitting. Fastener heads shall be flush with the surface of the trim or slightly indented and no closer than 3/4 inches (19 mm) from the end of the board.
10. Nails: Use corrosion-resistant, smooth-shank, screw, annular-threaded or spiral type nails, at least 6d in size (shank diameter of 0.090 inches (2.3 mm)), and long enough to penetrate substrate by at least 1.5 inches (38 mm). Do not use large-head nails and ring-shank nails due to excessive heat during fastening. When installing, nail flush to avoid the need for finishing holes. In cold weather (below 32 degrees F, 0 degrees C), pre-drilling is recommended to avoid cracking. If using a power air nailer, adjust the length of stroke (not the air pressure) to control nail depth.
11. Screws: Use standard, flat-head, stainless steel wood screws, at least #6, long enough to penetrate substrate by at least 1 inch (25 mm). Use drill bits designed for wood or metal. Slightly countersink screws and finish holes.
12. Window and Door Trim: Cladding and trim are not meant to be watertight barriers. Before installing cladding materials or trim, flash all openings so that they shed water to exterior of the cladding and trim materials.
    a. Install flashing along the bottom of the opening. The width of the flashing shall extend beyond the width of the trim being installed. Be sure the bottom flashing is long enough to direct water over the cladding material.
    b. Install flashing along each side of the opening. Be sure to overlap the bottom flashing. The width of the flashing must extend beyond the width of the trim being installed.
    c. Install the top flashing by overlapping the tops of the side flashing.
    d. To install the trim, miter the joints and use a PVC adhesive to adhere the joints. Fasten the trim to the substrate on both sides of the miter. Use at least two fasteners per board.
    e. Create a scarf joint by cutting a taper on the end of the trim pieces. Gluing the joints between the trim pieces will help eliminate separation caused by expansion and contraction. Place fasteners either through the scarf joint or on both sides of the scarf joint. This will help minimize expansion and contraction.
13. Bending: Convection air-circulating ovens, strip heaters or radiant heaters can be used, using temperature setting of 240 to 300 degrees F (116 to 149 degrees C). Blistered surfaces will not be accepted. Remove product from oven or heater before surface blistering occurs. Apply heat evenly to both sides until product is flexible.
14. Expansion and Contraction: Allow for this movement due to thermal expansion and contraction when fastening mouldings. Allow 1/8 inch (3 mm) per 12 foot (3658 mm) length of product for expansion and contraction (1/16 inch (1.6 mm) at each end). Scarf joints are preferred. Gluing the joints (such as butt joints with approved PVC adhesive such as Bond & Fill Structural, Trimbonder or OSI TeQ Bond) will help eliminate separation caused by

expansion and contraction.

15. Finishing and Painting: Vi-Lux exterior mouldings comes with a factory applied VI-GUARD coating in natural white and do not require painting for protection.
    a. Surfaces shall be clean, dry and free of chalk, grease, oil, dirt and mold or mildew.
    b. Apply a 100 percent acrylic latex paint with an LRV (light reflecting value) of 55 units or higher.
    c. For paint colors with an LRV of 54 or lower, use a paint that has been specifically developed for application on PVC, such as Sherwin-Williams Vinyl Safe Technology.
    d. Comply with paint manufacturer's recommendations for use and application of the paint.
    e. Due to the extended cure times of paint applied to PVC cellular trim, install Vi-Lux mouldings first and then paint unless the trim is painted in a professional prefinishing operation and allowed to cure completely.
    f. Avoid using dark colors of paint (which can lead to increased product expansion due to heat gain), which voids the Vi-Lux warranty. Avoid stains, oils/alkyd paints and primers or vinyl-based paints.

3.3 CLEANING AND MAINTENANCE

A. Clean mouldings with a hose, brush and an ordinary detergent, household cleaner or glass cleaner. For scratches, gently sand out with very fine sandpaper (at least 220 grit), then fill with caulking or filler.

B. Do not use acetones, paint remover, lacquer thinner or harsh cleaners containing glycol ethers or ethanol-type solvents.

3.4 PROTECTION

A. Protect installed products until completion of project.

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

END OF SECTION