

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Vinyl siding, Polymer shingle siding.
- B. Vinyl soffits.
- C. Accessories and trim.

1.2 RELATED SECTIONS

- A. Section 07260 - Vapor Retarders.

1.3 REFERENCES

- A. ASTM D 635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
- B. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics.
- C. ASTM D 648 - Test Method for Deflection Temperature of Plastics under Flexural Load.
- D. ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics between -30 Degrees C and 30 Degrees C.
- E. ASTM D 790 -- Standard Test Methods for Flexural Properties of Un-reinforced and Reinforced Plastics and Electrical Insulating Materials.
- F. ASTM D 1435 - Standard Practice Method for Outdoor Weathering of Plastics.
- G. ASTM D 1929 - Standard Test Method for Ignition Properties of Plastics.
- H. ASTM D 2843 - Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics.
- I. ASTM D 3679 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding.
- J. ASTM D 4101 - Standard Specification for Propylene Plastic Injection and Extrusion Materials.
- K. ASTM D 4216 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Related Plastic Building Product Compounds.
- L. ASTM D 4226 - Standard Test Method for Impact Resistance of PVC Building Products.
- M. ASTM D 4477 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Soffit.

- N. ASTM D 5206 - Standard Windload Resistance Test.
- O. ASTM E 84 - Standard test Method for Surface Burning Characteristics of Building Materials.
- P. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.

1.4 PERFORMANCE REQUIREMENTS

- A. PVC Fire Resistance: Provide vinyl siding products that meet or exceed the following ratings:
 - 1. Flame spread index 20, fuel contribution 0, smoke development rating 360, per ASTM E 84.
 - 2. Self-ignition temperature: 824 degrees F (440 degrees C) per ASTM D 1929.
 - 3. Fire endurance classification of 1 hour, per ASTM E 119 as wall assembly.
- B. Cedar Impressions shingle siding: TPO Fire Resistance: Provide thermoplastic polyolefin siding products that meet or exceed the following ratings:
 - 1. Minimum self-ignition temperature of 650 degrees F (343 degrees C), per ASTM D 1929.
 - 2. Smoke density rating of 40, per ASTM D 2843.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01340.
- 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. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- D. Verification Samples: For each finish product specified, two samples, minimum size 12 inches (300 mm) long, representing actual product, color, and patterns.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Provide installer with not less than three years of experience with products specified or has obtained Master Craftsman credentials from CertainTeed.
- B. Mock-Up: Provide a mock-up for evaluation of installation techniques and workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship and color is approved by Architect.
 - 3. Reinstall mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.

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 standard lifetime limited warranty on siding products, transferable to new owners.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: CertainTeed Corporation, Siding Products Group, P.O. Box 860, Valley Forge, Pennsylvania 19482. ASD. Tel: (800) 233-8990. Fax: (610) 341-7940; Email: ctsiding@certainteed.com; Web: www.certainteed.com.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600. Note: The vinyl siding color selection for this project is determined. Any substitutions of the vinyl siding, trim and accessories will need to be a major, established siding manufacturer and colors will need to match those selected.

2.2 MATERIALS

- A. Vinyl Siding, Soffit and Components: Provide products made of extruded polyvinyl chloride as specified in this section and manufactured to comply with requirements of ASTM D 3679.
 - 1. Provide elongated nailing slots on nailing flanges to allow for movement.
 - 2. Factory-notch ends of horizontal panels to form overlapping joints.
 - 3. Provide products that meet weathering requirements of ASTM D 3679.
- B. Polymer Shingle Siding (Cedar Impressions): Thermoplastic Polyolefin (TPO): Provide siding materials made of modified polypropylene copolymer with cell classification of PP300A11220F00W2020103, as defined by ASTM D 4101, meeting or exceeding the following properties:
 - 1. Tensile strength: 3,500 psi (24,133 kPa), per ASTM D 638.
 - 2. Tensile modulus: 180,000 psi (1,241,100 kPa), per ASTM D 638.
 - 3. Flexural modulus: 180,000 psi (1,241,100 kPa), per ASTM D 790.
 - 4. Coefficient of linear thermal expansion: .000053 in/in/degree F, per ASTM D 696.
 - 5. Deflection temperature at 264 psi (1820 kPa): 160 degrees F (71 degrees C).

- C. Cedar Impressions D6.25 Half Round Shingles:
1. Design: Double 6.25 inch (159 mm) shingle; cedar grain finish.
 2. Lock: Molded Perimeter Lock.
 3. Width: 12.5 inch (318 mm).
 4. Length: 32 inches (813 mm) plus or minus .025 inch (6 mm).
 5. Average Thickness: 0.100 inch (2.54 mm).
 6. Panel Projection: 3/4 inch (19 mm).
 7. Panel Exposure: 6.25 inches (159 mm) plus or minus .062 inch (1.57 mm).
 8. Maximum Warp (per 2 panels): 0.250 inch (6 mm).
 9. Color: As selected by Architect from manufacturer's standards and noted on drawings

2.3 VINYL SIDING

- A. Monogram 46:
1. Design: Double 4 inch (102 mm) clapboard; rough cedar finish with STUDfinder Installation System.
 2. Nail Hem: RigidForm 220 Technology Roll Over Nail Hem.
 3. Lock: CertiLock self aligning post formed positive lock.
 4. Width: 8 inch (203 mm).
 5. Length: 12 feet 6 inches (3.81 m) plus or minus .025 inch (6 mm).
 6. Average Thickness: 0.046 inch (1.17 mm).
 7. Panel Projection: 3/4 inch (19 mm).
 8. Panel Exposure: 4 inch (102 mm) plus or minus .062 inch (1.57 mm).
 9. Maximum Warp (per 2 panels): 0.250 inch (6 mm).
 10. Color: As selected by Architect from manufacturer's standards and noted on the drawings.
- B. Triple 3-1/3 inch (85 mm) InvisiVent soffit – Invisibly Vented.
1. Design: Triple 3-1/3 inch (85 mm) invisibly vented; matte finish.
 2. Width: 10 inches (254 mm) plus or minus .062 inch (1.57 mm).
 3. Length: 12 feet (3.66 m) plus or minus .025 inch (6 mm).
 4. Ventilation: >10.0" N.F.A. /sq. ft.
 5. Average Thickness: 0.044 inch (1.1 mm).
 6. Exposure: 3-1/3 inches (84.66 mm) single nailing hem.
 7. Maximum Warp (per 2 panels): 0.250 inch (6 mm).
 8. Color: As selected by Architect from manufacturer's standards and noted on the drawings.
- C. Soffit Accessories:
1. J-Channel: 3/8 inch (10 mm) by 12 feet, 6 inch (3.81 m) length, for vertical and eave applications.
 2. F-Channel: 5/8 inch (15.88 mm) and 3/4 inch (19 mm) by 12 feet 6 inches (3.81 m) length.
 3. Soffit Double Channel Lineal: 3/8 inch (10 mm) or 1/2 inch (12.7 mm) by 12 feet, 6 inches (3.81 m) length, for eave applications.
 4. Soffit Cove Trim: 1/2 inch (12.7 mm) by 12 feet, 6 inches (3.81 m) length.
 5. Color: Match soffit color.

2.4 VINYL CARPENTRY ACCESSORIES

- D. Standard Accessories:
1. Corner post: Standard width face 3-1/3", 10 feet (3.05 m) and 12 feet (3.66 m) lengths.
 2. Inside corner post: Standard width face 1-1/2" quarter round, 10 feet (3.05 m) length.
 3. J-Channel: Standard width, 12 feet, 6 inches (3.81 m) length.
 4. Undersill trim.
 5. Standard starter strips.
 6. Color: As selected by Architect from manufacturer's standards and noted on the drawings.
- E. Optional Accessories:
1. 5 inch (127 mm) Lineal: 5 inch by 20 feet (127 mm by 6.1 m) length.
 2. 3-1/2 inch (89 mm) Lineal: 3-1/2 inches by 12 feet, 6 inches (89 mm by 3.81 m) length.
 3. Band Board: 7-1/4"(184 mm) width by 16'8" (5.08m) length
 4. Vinyl escutcheon blocks for all existing exterior wall penetrations, such as at hose-bibs, dryer vents, electrical meters, cable and security system items.
 5. Color: As selected by Architect from manufacturer's standards and noted on the drawings.

2.5 FASTENERS

Provide galvanized or other corrosion-resistant nails as recommended by manufacturer of siding products.

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. Examine, clean, and repair as necessary any substrate conditions which would be detrimental to proper installation.
- B. Do not begin installation until unacceptable conditions have been corrected.

3.3 INSTALLATION

- A. Install products in accordance with the latest printed instructions of the manufacturer. Installer should have current Master Craftsman credentials.

- B. Install products with all components true and plumb.
- C. Nail horizontal panels by placing nail in center of slot. Nail vertical panels by placing first nail at top of top slot and remaining nails in center of slots. Drive nails straight, leaving 1/16 inch (1.6 mm) space between nail head and flange of panel.
- D. Allow space between both ends of siding panels and trim for thermal movement. Overlap horizontal panel ends one-half the width of factory pre-cut notches.
- E. Stagger lap joints in horizontal siding in uniform pattern as successive courses of siding are installed.
- F. Install J-channel and flashing to accommodate successive courses of vertical siding. Install wood shims at building corners to bring cut edges of vertical siding out to correct plane.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

3.5 CLEANING

- A. At completion of work, remove debris caused by siding installation from project site.

END OF SECTION 07464