

SECTION 07 46 43
COMPOSITE SIDING

For best results, display hidden notes to specifier.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Super polymer vinyl siding.
- B. Super polymer vinyl soffits.
- C. Vinyl accessories and trim.

1.2 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry: Framing and Sheathing.
- B. Section 07900 - Joint Sealers.

1.3 REFERENCES

- A. ASTM D 256 - Standard Test Methods for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- B. ASTM D 635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position.
- C. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics.
- D. ASTM D 648 - Standard Test Method for Deflection Temperature of Plastics Under Flexural Load.
- E. ASTM D 696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 Degrees C and 30 Degrees C.
- F. ASTM D 790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- G. ASTM D 792 - Standard test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- H. ASTM D 1784 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
- I. ASTM D 1929 - Standard test Method for Ignition Properties of Plastic.
- J. ASTM D 2240 - Standard Test Method for Rubber Property--Durometer Hardness.
- K. ASTM D 3679 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding.

- L. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
- M. Rigid Vinyl Siding Application Manual - Vinyl Siding Institute

1.4 PERFORMANCE REQUIREMENTS

- A. Fire Resistance: Provide vinyl siding, soffit, and accessories that meet or exceed the following ratings:
 1. Flame spread 15, fuel contributed 0, smoke developed 390, when tested in accordance with ASTM E 84.
 2. Average time of burning: Less than 5 seconds, per ASTM D 635.
 3. Average extent of burning: Less than 25 mm, per ASTM D 635.
 4. Flash ignition temperature: 807 degrees F, per ASTM D 1929.
 5. Self ignition temperature: 878 degrees F, per ASTM D 1929.
 6. No detriment to one hour rated wall assembly, tested per ASTM E 119.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Submit manufacturer's standard product information, including detailed installation instructions.
- C. Selection Samples: Submit manufacturer's standard color chips for selection of color and texture.
- D. Verification Samples: Submit 3 samples of siding products in colors specified, each not less than 12 inches in length.

1.6 QUALITY ASSURANCE

- A. Certification: Provide manufacturer's certification that vinyl siding products comply with specified requirements.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver siding packed two squares to the box, with each box color coded for product line and marked with lot number, color, and siding style.
- B. Store siding on level, elevated platform that is kept clean and dry. Cover siding only with clear plastic.

1.8 WARRANTY

- A. Within 30 days of completion of the work of this section, deliver manufacturer's written "Lifetime Plus" or "Lifetime" transferable limited warranty.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Provide vinyl siding products manufactured by Heartland Building Products, Inc.; Booneville, Mississippi 38829. ASD. Tel: (800) HEART-01.

- B. Substitutions: Not permitted.

2.2 MATERIALS

- A. Provide products made of post formed extruded PVC using the exclusive Heartland Super Polymer formulation.
- B. Polyvinyl Chloride (PVC): Provide siding materials made of compounds meeting the requirements of ASTM D 3679 for compound class number 2 and 3 with the following test results:
 1. Cell classification, per ASTM D 1784: 11345.
 2. Izod impact, per ASTM D 256: 32.5 ft-lb/inch of notch at 23 degrees C; 3.5 ft-lb/inch of notch at 0 degrees C.
 3. Specific gravity, per ASTM D 792: 1.452.
 4. Hardness-Durometer, per ASTM D 2240: 72+/-3.
 5. Tensile strength, per ASTM D 638: 7,260 psi.
 6. Modulus of elasticity, per ASTM D 790: 326,718.
 7. Heat deflection temperature, per ASTM D 648: 164 degrees F at 264 psi.
 8. Coefficient of linear expansion, per ASTM D 696: 0.0000312 inch/inch/degree F.
 9. Warp, per ASTM D 3679: Less than 1/8 inch.
 10. Weatherability, per ASTM D 3679: No cracking, peeling, chipping, or surface defects.
 11. Surface distortion, per ASTM D 3679: None
 12. Impact Resistance per ASTM 4226...>60in/Lbs.
 13. Negative Windload per ASTM 5206 >54.088 PSF.

2.3 COMPOSITE SIDING

- A. Cedar MAX: A Thermally Enhanced, Energy Saving and Impact Resistant Super Polymer Vinyl Siding Formulation, "Double Ply" Windload Nailing Hem, Patented Locking System, Enhanced Weathering Characteristics, Low Luster Finish, Multi-Tone Stained Woodgrain Impression. Added "R"- of 3+
 1. Style: Double 6; 12 inches wide; 12 feet, 6 inches long
 2. Style: Double 6; 12 inches wide; 16 feet, 2 1/2 inches long
 3. Style ..Single 7", 7" Wide 16 feet, 2 1/2 inches long
 4. Style...D 4.5" Dutch Lap, 12 inches wide; 16 feet, 2 1/2 inches long
 5. Thickness: D6/S7 .050 inch per VSI Certification Standards
 6. Thickness: D4DL . 046 inch per VSI Certification Standards.
 7. Color: As selected by Architect from manufacturer's standards.
 8. Color: As indicated on drawings.
 9. Color: _____.

2.4 SOFFITS

- A. Heart Tech Soffit (Vertical Paneling): Super Polymer Formulation, SPX-2000 UV Blocker, Standard Windload Nailing Hem, Woodgrain Impression and Low Gloss Natural Patina Finish.
 1. Style: Double 6 Aerated Full Vent Drilled 4.63 sq. in. per sq. ft. NFA
 2. Style: Double 6 Non-Aerated.
 3. Thickness: Nominal 0.046 inch.
 4. Width: 12 inches.

5. Length: 12 feet.
6. Color: As selected by Architect from manufacturer's standards.
7. Color: As indicated on drawings.
8. Color: _____.

B. Universal Soffit: Solid Vinyl Formulation, Standard Windload Nailing Hem, and Matte Impression.

1. Style: Triple 4 Center-Vented. 1.74 sq. in. per sq. ft. NFA
2. Style: Triple 4 Solid.
3. Style: Triple 4 Full Vent. 5.22 sq. in. per sq. ft. NFA
4. Style: Triple 4 Full Lanced Vent. 16.98 sq. in. per sq. ft. NFA
5. Style: Double 5" Solid
6. Style: Double 5" Drilled. 5.29 sq. in. per sq. ft. NFA
7. Thickness: Nominal 0.040 inch.
8. Width: 12 inches.
9. Length: 12 feet.
10. Color: As selected by Architect from manufacturer's standards.
11. Color: As indicated on drawings.
12. Color: _____.

C. Beaded Soffit (Vertical Paneling): Solid Vinyl Formulation, Standard Windload Nailing Hem, Matte Impression.

1. Style: Triple 3 Solid With Bead.
2. Style: Triple 3 Hidden Channel Vented with bead-6.12 sq. in. per sq. ft. NFA
3. Thickness: 0.042 inch.
4. Width: 6.125 inches.
5. Length: 12 feet 6 inches.
6. Color: As selected by Architect from manufacturer's standards.
7. Color: As indicated on drawings.
8. Color: _____.

D. Wood Haven Hidden Vent Soffit: Super Polymer Formulation, Matte Impression, Channel Vented Aeration.

1. Style: Triple 3-1/3 channel vented; 10 inches width; 12 feet length. 7.46 sq. in. per sq. ft. NFA
2. Style: Triple 3-1/3 Solid; 10 inches width; 12 feet length.
3. Thickness: 0.044 inch.
4. Color: As selected by Architect from manufacturer's standards.
5. Color: As indicated on drawings.
6. Color: _____.

2.5 SHAKE PANELS

A. Cedarbrook Rough-Cut Cedar Shake: Injection molded premium quality polypropylene, interlocking panel connection system, UV-inhibitor top coating.

1. Style: 55-1/4 inches by 13 inches exposure; 15 inches width; 59-1/4 inches length.
2. Thickness: 0.09 inch.
3. Color: As selected by Architect from manufacturer's standards.
4. Color: As indicated on drawings.
5. Color: _____.

B. Cedarbrook Ornamental Rounds: Injection molded premium quality polypropylene, interlocking panel connection system, UV-inhibitor top coating.

1. Style: 58-1/8 inches by 25 inches exposure.

2. Thickness: 0.09 inch.
3. Color: As selected by Architect from manufacturer's standards.
4. Color: As indicated on drawings.
5. Color: _____.

2.6 ACCESSORIES

- A. Trim: Provide manufacturer's standard trim and finishing accessories with properties and in colors comparable to vinyl siding products specified.
- B. Fasteners: Corrosion-resistant fasteners as recommended by manufacturer of vinyl siding products.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Prior to commencing work of this section, verify governing dimensions of building.
- B. Examine substrate for flaws and defects. Do not commence work of this section until unacceptable substrate conditions have been corrected.

3.2 INSTALLATION

- A. Install siding, soffits and accessories in strict accordance with "Rigid Vinyl Siding Application Manual."
- B. Upon completion of installation, visually inspect for defective installation procedures or manufacturing defects. Replace and repair components as necessary.

3.3 CLEANING

- A. Upon completion of installation, clean siding and soffits to remove all foreign debris and soiling. Remove packaging and waste material from project site.

END OF SECTION