

## SECTION 07 46 33

### VINYL 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. Class A Rating
  - 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 fomulation.
- 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 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.
  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: \_\_\_\_\_.
- B. Cedar Peaks: Super Polymer, Weather Barrier Shield, Rough Cedar Woodgrain, Impression, Low Gloss Natural Patina Finish, Patented Twister Lock and Cyclonic Locking System with Doubled-Over Windload (0.092 inch) Nailing Hem with Nailing Depth Guide.
  1. Style: Double 4.5; 9 inches wide, 12 feet 1 inch length.
  2. Style: Double 4.5 Dutch Lap; 9 inches wide, 12 feet 1 inch length.
  3. Style: Single 6-1/2 Beaded. (.048 Thickness)
  4. Thickness: 0.046 inch per VSI Certification Standards.
  5. Color: As selected by Architect from manufacturer's standards.
  6. Color: As indicated on drawings.
  7. Color: \_\_\_\_\_.

- C. Traditional: Super Polymer Weather Barrier Shield, Standard Windload Nailing Hem, Traditional Woodgrain Impression and Low Gloss Natural Patina Finish.
1. Style: 8 inches wide; 12 feet, 6 inches long.
  2. Thickness: 0.046 inch per VSI Certification Standards.
  3. Color: As selected by Architect from manufacturer's standards.
  4. Color: As indicated on drawings.
  5. Color: \_\_\_\_\_.
- D. Board 'N Batten: Solid Vinyl Formulation, Standard Windload Nailing Hem, Wood Grain Low Gloss Finish, Surface Concentration of Anti-Weathering Agents.
1. Style: 7" Vertical panel; 7" inch width; 10 feet length.
  2. Thickness: 0.046 inch, per VSI Certification Standards.
  3. Color: As selected by Architect from manufacturer's standards.
  4. Color: As indicated on drawings.
  5. Color: \_\_\_\_\_.
- E. Heart Tech: Super Polymer Formulation "Double Ply" Windload Nailing Hem, Woodgrain Impression and Low Gloss Natural Patina Finish.
1. Style: Double 5; 10 inch width; 12 feet length.
  2. Style: Double 4 Dutch Lap; 8 inches width; 12 feet, six inches length.
  3. Style: Double 5 Dutch Lap; 10 inches width; 12 feet length.
  4. Thickness: 0.044 inch per VSI Certification Standards.
  5. Color: As selected by Architect from manufacturer's standards.
  6. Color: As indicated on drawings.
  7. Color: \_\_\_\_\_.
- F. Arbor Glen: Super Polymer Vinyl Formulation, Standard Windload Nailing Hem, Woodgrain Impression, Low Gloss Natural Patina Finish.
1. Style: Double 4.5; 9 inches width; 12 feet 1 inch or 16 feet length.
  2. Style: Double 4.5 Dutch Lap; 9 inches width; 12 feet 1 inch or 16 feet length.
  3. Thickness: 0.042 inch per VSI Certification Standards.
  4. Color: As selected by Architect from manufacturer's standards.
  5. Color: As indicated on drawings.
  6. Color: \_\_\_\_\_.
- G. Autumnwood: Super Polymer Vinyl Formulation, Standard Windload Nailing Hem, Woodbark Impression and Latex - Soft Low Gloss Finish.
1. Style: Double 4; 8 inches width; 12 feet, 6 inches length.
  2. Style: Double 5; 10 inches width; 12 feet length.
  3. Style: Double 4 Dutch Lap; 8 inches width; 12 feet, 6 inches length.
  4. Style: Double 5 Dutch Lap; 10 inches width; 12 feet length.
  5. Style: Triple 3; 9 inches width; 12 feet 1 inch length.
  6. Thickness: 0.042 inch per VSI Certification Standards.
  7. Color: As selected by Architect from manufacturer's standards.
  8. Color: As indicated on drawings.
  9. Color: \_\_\_\_\_.
- H. Ultra Premium: Super Polymer Vinyl Formulation, Standard Windload Nailing Hem, Soft Mill Grain Impression and Low Luster Finish.
1. Style: Double 4; 8 inches width; 12 feet, 6 inches length.
  2. Style: Double 4 Dutch Lap; 8 inches width; 12 feet, 6 inches length.
  3. Style: Double 5; 10 inches width; 12 feet length.
  4. Style: Double 5 Dutch Lap; 10 inches width; 12 feet length.
  5. Thickness: 0.040 inch per VSI Certification Standards.

6. Color: As selected by Architect from manufacturer's standards.
7. Color: As indicated on drawings.
8. 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