SECTION 07464

VINYL SIDING

PART 1 GENERAL

- 1.1 SECTION INCLUDES
 A. Solid vinyl siding.
 - B. Solid vinyl soffit.
 - C. Vented vinyl soffit.
 - D. Vinyl trim.
- 1.2 RELATED SECTIONS
 - A. Section 06100 Rough Carpentry: Framing and Sheathing.
 - B. Section 07260 Vapor Retarders.
 - C. Section 07900 Joint Sealers.
- 1.3 REFERENCES
 - A. ASTM D 256 Standard Test Method 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 1784 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
 - G. ASTM D 2843 Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics.

- H. ASTM D 3679 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding.
- I. ASTM D 4477 Standard Specification for Rigid Unplasticized Poly(Vinyl Chloride) (PVC) Soffit.
- J. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's standard printed product data and installation instructions for specified vinyl products.
- C. Selection Samples: Submit color chips of manufacturer's full range of colors for Architect's selection.
- D. Verification Samples: Submit three samples, each 12 inches in length, of each specified vinyl product in specified color.
- E. Quality Assurance Submittals: Submit evidence of Code compliance specified in QUALITY ASSURANCE Article of this section.

1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Code compliance in accordance with the following:
 - 1. BOCA.
 - 2. ICBO.
 - 3. SBCCI.
 - 4. Metropolitan Dade County, Florida.
- 1.6 DELIVERY, STORAGE, AND HANDLING
 - A. Deliver vinyl products to project site in original packaging.
 - B. Store vinyl siding products in original packaging, on flat surface under cover, stacked no more than 12 boxes high. Do not store in location where temperatures may exceed 130 degrees F.
- 1.7 WARRANTY

A. Provide manufacturer's standard limited lifetime warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Mastic(R), 2600 Campbell Road, P.O. Box 902, Sidney, OH 45365-0902; ASD. Tel: (800) MASTIC6 (627-8426).
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.

2.2 MATERIALS

- A. Polyvinyl Chloride: Supply polyvinyl chloride products having material properties meeting the following:
 - 1. Siding classification in accordance with ASTM D 3679: Class 2.
 - Cell classification in accordance with ASTM D 1784: 13334.
 - 3. Coefficient of linear expansion in accordance with ASTM D 696: 0.000029 inch per inch per degree F.
 - 4. Tensile strength when tested in accordance with ASTM D 638: Minimum 7,100 pounds per square inch.
 - 5. Modulus of elasticity when tested in accordance with ASTM D 638: Minimum 360,000 pounds per square inch, average.
 - Izod impact, standard 1/8 inch bar when tested in accordance with ASTM D 256: 3.30 foot-pounds per inch, average.
 - 7. Shore D Hardness: Minimum 73.
 - 8. Specific Gravity: Minimum 1.39.
 - Deflection temperature when tested in accordance with ASTM D 648: 170 degrees F, 264 pounds per square inch.
 - 10. Smoke density rating when tested in accordance with ASTM D 2843: 48 percent, average.
 - 11. Horizontal flammability, when tested in accordance with ASTM D 635:
 - a. Burn distance: 20 mm.
 - b. Burn time: Less than 5 seconds.

- 12. Surface burning characteristics when tested in accordance with ASTM E 84: Flame spread less than 20, fuel contribution 0, smoke density 400.
- B. Fasteners: Aluminum nails, alloy 5056 or 6110, having minimum tensile strength 63,000 pounds per square inch.
- C. Vapor Retarder: Specified in Section 07260.
- D. Joint Sealers: Specified in Section 07900.
- 2.3 VINYL SIDING AND TRIM
 - A. Vinyl Siding Type :
 - 1. Acceptable Product: Barkwood Siding.
 - Product Description: Double 4 profile, 8 inches exposure; nominal 0.048 inch material thickness; nominal 12 feet 6 inch piece length.
 - Product Description: Double 5 profile, 10 inches exposure; nominal 0.048 inch material thickness; nominal 12 feet piece length.
 - Product Description: Double 5 Dutch Lap profile, 10 inches exposure; nominal 0.048 inch material thickness; nominal 12 feet piece length.
 - Product Description: Triple 2-2/3 inches profile, 9 inches exposure, nominal 0.046 inch material thickness; nominal 12 feet 6 inch piece length.
 - Product Description: 8-inch profile, 8 inches exposure; nominal 0.048 inch material thickness; nominal 12 feet 6 inch piece length.
 - Barkwood Corner Post: 3-inch by 3-inch, 7/8 inch wide siding receiver.
 - 8. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
 - 9. Finish: Woodgrain texture.
 - 10. Color: Selected by Architect from manufacturer's full range of available colors.
 - 11. Color: _____.
 - B. Vinyl Siding Type :
 - 1. Acceptable Product: Brushedwood Siding.
 - Product Description: Double 4 profile, 8 inches exposure; nominal 0.042inch material thickness; nominal 12 feet 6 inch piece length.
 - Product Description: Double 4-1/2 Dutch Lap profile,
 9 inches exposure; nominal 0.042 inch material thickness; nominal 12 feet 1 inch piece length.

- Product Description: Triple 3 profile, 9 inches exposure; nominal 0.042 inch material thickness; nominal 12 feet 1 inch piece length.
- Brushedwood Corner Post: 4-inch by 4-inch, 5/8 inch wide siding receiver.
- 6. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
- 7. Finish: Low gloss brushed texture.
- 8. Color: Selected by Architect from manufacturer's full range of available colors.
- 9. Color: _____.
- C. Vinyl Siding Type ___:
 - 1. Acceptable Product: Carvedwood Siding.
 - Product Description: Double 4 profile, 8 inches exposure; nominal 0.042 inch material thickness; nominal 12 feet 6 inch piece length.
 - 3. Product Description: Double 4 Dutch Lap profile, 8 inches exposure; nominal 0.042 inch material thickness; nominal 12 feet 6 inch piece length.
 - Product Description: Double 5 profile, 10 inches exposure; nominal 0.042 inch material thickness; nominal 12 feet piece length.
 - 5. Product Description: Double 5 Dutch lap profile, 10 inches exposure; nominal 0.042 inch material thickness; nominal 12 feet piece length.
 - Product Description: 6-1/2 inch Beaded profile, 6-1/2 inches exposure; nominal 0.042 inch material thickness; nominal 12 feet 4 inch piece length.
 - Carvedwood Corner Post: 4-inch by 4-inch, 5/8 inch wide siding receiver.
 - 8. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
 - 9. Finish: Cedar woodgrain texture.
 - Color: Selected by Architect from manufacturer's full range of available colors.
 - 11. Color: _____.
- D. Vinyl Siding Type :
 - 1. Acceptable Product: Brentwood Siding.
 - Product Description: Double 4 profile, 8 inches exposure; nominal 0.040 inch material thickness; nominal 12 feet 6 inch piece length.
 - Product Description: Double 4-1/2 inch Dutch Lap profile, 9 inches exposure; nominal 0.040 inch material thickness; nominal 12 feet 1 inch piece length.

- Product Description: Double 5 profile, 10 inches exposure; nominal 0.040 inch material thickness; nominal 12 feet piece length.
- Brentwood Corner Post: 3-inch by 3-inch, 5/8 inch wide siding receiver.
- 6. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
- 7. Finish: Woodgrain texture.
- 8. Color: Selected by Architect from manufacturer's full range of available colors.
- 9. Color: _____.
- E. Vinyl Siding Type ___:
 - 1. Acceptable Product: Glenwood Siding.
 - Product Description: Double 4 profile, 8 inches exposure; nominal 0.040 inch material thickness; nominal 12 feet 6 inch piece length.
 - Product Description: Double 4-1/2 Dutch Lap profile,
 9 inches exposure; nominal 0.040 inch material thickness; nominal 12 feet 1 inch piece length.
 - Product Description: Double 5 profile, 10 inches exposure; nominal 0.040 inch material thickness; nominal 12 feet piece length.
 - Glenwood Corner Post: 3-inch by 3-inch, 5/8 inch wide siding receiver.
 - 6. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
 - 7. Finish: Woodgrain texture.
 - 8. Color: Selected by Architect from manufacturer's full range of available colors.
 - 9. Color:
- F. Vinyl Trim:

 - 2. Traditional Outside Corner Post: 6-1/2 inches by 6-1/2 inches post, 3/8 inch wide siding recess; color.
 - 3. Fluted Outside Corner Post: 6-1/2 inches by 6-1/2 inches post, 3/8 inch wide siding recess; ______ color.
 - 4. Standard Outside Corner Post: 3 inches by 3 inches post, 7/8 inch wide siding recess; _____ color.
 - 5. Standard Outside Corner Post: 3 inches by 3 inches post, 5/8 inch wide siding recess; ______ color.

- Standard Inside Corner Post: 1-1/2 inches by 1-1/2 inches coved projection, 5/8 inch wide siding recess; color.
- 7. J-Trim: Channel, 1-1/2 inches nailing leg, 3/4 inch forward leg, 5/8 inch channel width; _____ color.
- 8. J-Trim: Channel, 1-1/2 inches nailing leg, 3/4 inch forward leg, 7/8 inch channel width; color.
- 9. J-Trim: Channel, 1-1/2 inches nailing leg, 3/4 inch forward leg, 1-1/4 inch channel width; ______ color.
- 10. J-Trim: Channel, 1-1/2 inches nailing leg, 3/4 inch
 forward leg, 1-1/2 inch channel width; ______
 color.
- 11. Finishing Trim: 1-1/2 inches nailing leg, 3/4 inch
 forward leg; _____ color.
- 12. Double Finishing Trim: 1-1/2 inches nailing leg, 3/4 inch forward leg, double channel 7/8 inch total width; color.
- 13. Wide Window Casing: 3-1/2 inches nailing leg, 2-1/2 inch forward leg with 1/4 inch return; White color.
- 14. Starter Strip: Single-row nailing hem with elongated nailing holes 1-1/4 inches long 18 inches on center; White color.
- 15. Starter Strip: Single-row nailing hem with elongated nailing holes 1-1/4 inches long 18 inches on center, 1-1/4 inch base projection; White color.
- 2.4 VINYL SOFFIT AND TRIM
 - A. Vinyl Soffit Type :
 - 1. Acceptable Product: Lasting Dimensions Double 5 Soffit.
 - Product Description: Double 5 V-groove profile, 10 inches exposure, 5/8 inch depth; nominal 0.046 inch material thickness; nominal 12 feet piece length.
 - 3. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
 - 4. Finish: Low-gloss brushed texture.
 - 5. Color: Selected by Architect from manufacturer's full range of available colors.
 - 6. Color: _____
 - Supply ventilating type soffit material having 1/8 inch diameter holes or lanced openings for 7.53 square inches free air space per square foot of soffit area.
 - 8. Supply non-ventilating type soffit material.
 - 9. Supply both ventilating type and non-ventilating type soffit materials to achieve indicated patterns.

- B. Vinyl Soffit Type :
 - 1. Acceptable Product: Lasting Dimensons Triple 4 Soffit.
 - Product Description: Triple 4 V-groove profile, 12 inches exposure, 5/8 inch depth; nominal 0.040 inch material thickness; nominal 12 feet piece length.
 - 3. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
 - 4. Finish: Low-gloss matte texture.
 - 5. Color: Selected by Architect from manufacturer's full range of available colors.
 - 6. Color:
 - Supply ventilating type soffit material having 1/8 inch diameter holes or lanced openings for 5.87 square inches free air space per square foot of soffit area.
 - 8. Supply non-ventilating type soffit material.
 - 9. Supply both ventilating type and non-ventilating type soffit materials to achieve indicated patterns.
- C. Vinyl Soffit Type ___:
 - 1. Acceptable Product: Lasting Dimensions Beaded Soffit.
 - Product Description: Triple 2-2/3 Bead profile, 8 inches exposure, 3/8 inch depth; nominal 0.040 inch material thickness; nominal 12 feet 6 inches piece length.
 - 3. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
 - 4. Finish: Low-gloss matte texture.
 - 5. Color: Selected by Architect from manufacturer's full range of available colors.
 - 6. Color:
 - 7. Supply ventilating type soffit material having 1/8 inch diameter holes or lanced openings for 1.54 square inches free air space per square foot of soffit area.
 - 8. Supply non-ventilating type soffit material.
 - 9. Supply both ventilating type and non-ventilating type soffit materials to achieve indicated patterns.
- D. Vinyl Soffit Type :
 - 1. Acceptable Product: Universal Soffit.
 - Product Description: Triple 4 V-groove profile, 12 inches exposure, 1/2 inch depth; nominal 0.036 inch material thickness; nominal 12 feet piece length.

- 3. Nailing Hem: Single-row, with elongated nailing holes 1-1/4 inches long at 18 inches on center.
- 4. Finish: Low-gloss matte texture.
- 5. Color: Selected by Architect from manufacturer's full range of available colors.
- 6. Color: _____.
- E. Vinyl Fascia:
 - 1. Acceptable Product: Fascia.
 - 2. Physical Characteristics:
 - a. Size: 7-3/4 inches face, 7/8 inch channel width, 1/4 inch return leg.
 - b. Color: White.
- F. Vinyl Trim:
 - Soffit J-Trim: Channel, 1-1/2 inches nailing leg, 3/4 inch forward leg, 1/2 inch channel width; color.
 - Soffit J-Trim: Channel, 1-1/2 inches nailing leg, 3/4 inch forward leg, 5/8 inch channel width; color.
 - 3. T-Channel: 1-3/4 inches batten, 5/8 inch recess; color.
 - 4. Frieze Runner F-Channel: ; _____ color.
 - 5. Pro-Bead Soffit J: ; _____ color.
 - 6. Crown Mold: 3 inches face, 5/8 inch recess; White color.
 - 7. Traditional Quarter-Round Mold: 3/4 inch radius, 5/8 inch recess; White color.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrate conditions before beginning installation of vinyl products; verify dimensions and acceptability of substrate.
- B. Do not proceed with installation of vinyl products until unacceptable conditions have been corrected.

3.2 INSTALLATION

A. Installation of vapor retarder is specified in Section 07260.

- B. Install vinyl products in accordance with manufacturer's printed installation instructions.
- C. Attach vinyl products to substrate for weathertight installation; ensure that horizontal components are installed true to level, that vertical components are installed true to plumb.
- D. Installation of joint sealers is specified in Section 07900.
- 3.3 ADJUSTING AND CLEANING
 - A. Clean dirt from surface of installed products, using mild soap and water.
 - B. After completing installation of vinyl products, remove from project site excess materials and debris resulting from installation of vinyl products.

END OF SECTION