

SECTION 07464

VINYL SIDING

PART GENERAL

SECTION INCLUDES

Vinyl siding.

Polypropylene siding.

Vinyl soffits.

Vinyl accessories and trim.

RELATED SECTIONS

Section 06100 - Rough Carpentry: Framing and Sheathing.

Section 07900 - Joint Sealers.

REFERENCES

ASTM D 638 -- Standard Test Method for Tensile Properties of Plastics.

ASTM D 696 -- Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30 Degrees C and 30 Degrees C.

ASTM D 790 -- Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.

ASTM D 1435 -- Standard Test Method for Outdoor Weathering of Plastics.

ASTM D 1784 -- Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.

ASTM D 1929 -- Standard Test Method for Ignition Properties of Plastics.

ASTM D 2843 -- Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics.

ASTM D 3679 -- Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding.

ASTM D 4101 -- Standard Specification for Propylene Plastic Injection and Extrusion Materials.

ASTM D 4226 -- Standard Test Method for Impact Resistance of PVC Building Products.

ASTM D 5206 -- Standard Test Method for Windload Resistance of Rigid Poly(Vinyl Chloride) (PVC) Siding

ASTM E 84 -- Standard Test Method for Surface Burning Characteristics of Building Materials.

ASTM E 119 -- Standard Test Methods for Fire Tests of Building Construction and Materials.

#### PERFORMANCE REQUIREMENTS

PVC Fire Resistance: Provide vinyl siding products that meet or exceed the following ratings:

Flame spread 25, fuel contribution 0, smoke density 330, per ASTM E 84.

Minimum self-ignition temperature of 824 degrees F, per ASTM D 1929.

Fire endurance classification of 1 hour, per ASTM E 119.

TPO Fire Resistance: Provide thermoplastic polyolefin siding products that meet or exceed the following ratings:

Minimum self-ignition temperature of 650 degrees F, per ASTM D 1929.

Smoke density rating of 40, per ASTM D 2843.

#### SUBMITTALS

Make submittals under provisions of Section 01300.

Product Data: Provide manufacturer's printed information and installation instructions on siding products and accessories.

Samples: Provide 3 samples of siding products in colors specified, not less than 12 inches in length.

#### QUALITY ASSURANCE

Installer: Provide installer with not less than three years of experience with products specified.

#### WARRANTY

Provide manufacturer's standard lifetime limited warranty on siding products, transferable to new owners.

#### PART PRODUCTS

##### MANUFACTURER

CertainTeed Corporation, Vinyl Building Products Group, P.O. Box 860, Valley Forge, Pennsylvania 19482. ASD.

Substitutions: Not permitted.

##### MATERIALS

Polyvinyl Chloride: Provide siding materials made of PVC resin with cell classification of 13344-B, as defined by ASTM D 1784, meeting or exceeding the following properties:

Impact strength: 2.20 ft-lbs per inch at test temperature of 73 degrees F., and 1.30 ft-lbs per inch at test temperature of 32 degrees F, per ASTM D 4226.

Tensile strength: 7,344 psi.

Flexural modulus of elasticity in tension: 455,750 psi.

Deflection temperature under load of 264 psi: 168 degrees F.

Coefficient of expansion: 0.000034 in/in/degree F.

Chemical resistance: Excellent.

Vinyl Components: Provide products made of extruded polyvinyl chloride as specified in this section and manufactured to comply with requirements of ASTM D 3679.

Provide elongated nailing slots on nailing flanges to allow for movement.

Factory-notch ends of horizontal panels to form overlapping joints.

Provide products that meet weathering requirements of ASTM D 1435.

Thermoplastic Polyolefin (TPO): Provide siding materials

made of modified polypropylene copolymer with cell classification of PP300A11220F00W00201203, as defined by ASTM D 4101, meeting or exceeding the following properties:

Tensile strength: 3,500 psi, per ASTM D 638.  
Tensile modulus: 180,000 psi, per ASTM D 638.  
Flexural modulus: 180,000 psi, per ASTM D 790.  
Coefficient of linear thermal expansion:  
0.000053 in/in/degree F, per ASTM D 696.  
Deflection temperature at 264 psi: 160 degrees F.

#### SOLID COLOR BOARD STYLE VINYL SIDING

Provide siding panels tested per ASTM D 5206 to withstand 85 psf negative wind pressure.

Nominal Panel Thickness: 0.044 inches, with 0.088 inch nail hem thickness.

Nominal Butt Height: 3/4 inches, with interlocking, self-aligning joint system.

Style: Double 4 inch clapboard profile, smooth-brushed finish.

Style: Double 4 inch clapboard profile, rough cedar finish.

Style: Double 5 inch clapboard profile, rough cedar finish.

Style: Double 5 inch shiplap profile, rough cedar finish.

Color: \_\_\_\_\_.

Color: As indicated on drawings.

Color: As selected by Architect from manufacturer's standard colors after award of contract.

Acceptable Product: CertainTeed Monogram siding.

#### SOLID COLOR BEADED STYLE VINYL SIDING

Nominal Panel Thickness: 0.044 inches.

Nominal Butt Height: 3/4 inches, with post-formed

locking system for secure installation.

Finish: Low-gloss, smooth-brushed texture.

Style: Single 6-1/2 inch beaded clapboard profile.

Color: \_\_\_\_\_.

Color: As indicated on drawings.

Color: As selected by Architect from manufacturer's standard colors after award of contract.

Acceptable Product: CertainTeed Carolina Beaded siding.

#### SOLID COLOR BOARD STYLE VINYL SIDING

Provide siding panels tested per ASTM D 5206 to withstand 65 psf negative wind pressure.

Nominal Panel Thickness: 0.042 inches.

Nominal Butt Height: 1/2 inches, with post-formed locking system for secure installation.

Finish: Low-gloss, woodgrained texture.

Style: Double 4 inch clapboard profile, woodgrain texture.

Style: Double 4 inch clapboard profile, smooth-brushed texture.

Style: Triple 3 inch clapboard profile, smooth-brushed texture.

Style: Double 5 inch clapboard profile, woodgrain texture.

Style: Double 4 inch shiplap profile, woodgrain texture.

Style: Double 5 inch shiplap profile, woodgrain texture.

Style: Single 6.5 inch beaded profile, smooth-brushed texture.

Style: Single 8 inch clapboard profile, woodgrain texture.

Color: \_\_\_\_\_.

Color: As indicated on drawings.

Color: As selected by Architect from manufacturer's standard colors after award of contract.

Acceptable Product: CertainTeed MainStreet siding.

#### SOLID COLOR BOARD STYLE VINYL SIDING

Provide siding panels tested per ASTM D 5206 to withstand 43.6 psf negative wind pressure.

Nominal Panel Thickness: 0.040 inches.

Nominal Butt Height: 1/2 inches, with post-formed locking system for secure installation.

Finish: Low-gloss, woodgrained texture.

Style: Double 4 inch clapboard profile, woodgrain texture.

Style: Double 5 inch clapboard profile, woodgrain texture.

Style: Triple 3 inch clapboard profile, woodgrain texture.

Style: Double 4.5 inch shiplap profile, woodgrain texture.

Color: \_\_\_\_\_.

Color: As indicated on drawings.

Color: As selected by Architect from manufacturer's standard colors after award of contract.

Acceptable Product: CertainTeed Hamilton Park siding.

#### SOLID COLOR BOARD STYLE VINYL SIDING

Nominal Panel Thickness: 0.038 inches.

Nominal Butt Height: 1/2 inches, with post-formed

locking system for secure installation.

Finish: Low-gloss, woodgrained texture.

Style: Double 4 inch clapboard profile, woodgrain texture.

Style: Double 5 inch shiplap profile, woodgrain texture.

Color: \_\_\_\_\_.

Color: As indicated on drawings.

Color: As selected by Architect from manufacturer's standard colors after award of contract.

Acceptable Product: CertainTeed Southampton siding.

#### SIMULATED CEDAR SHINGLE SIDING

Provide siding panels tested per ASTM D 5206 to withstand 73 psf negative wind pressure and meeting weathering requirements of ASTM D 1435.

Nominal Panel Thickness: 0.100 inches, with molded lock lugs and integral water drainage flanges.

Nominal Butt Height: 3/8 inches, with integral side locking tabs to provide virtually invisible seams between panels.

Perfection Shingles: 48 inch by 14 inch double course panels, molded from authentic cedar shingle impressions, spectrophotometer controlled color throughout.

Half-Round Shingles: 32 inch by 15 inch double course panels, molded from authentic cedar shingle impressions.

Color: Antique Linen.

Color: Desert Tan.

Color: Sterling Gray.

Color: Colonial White.

Color: Rustic Cedar.

Color: Granite Gray.

Color: Natural Clay.

Color: As indicated on the drawings.

Color: As selected by Architect from manufacturer's standards after award of the contract.

Acceptable Product: CertainTeed Cedar Impressions siding.

#### VINYL SOFFIT PANELS

Provide vinyl soffit panels designed to simulate finished wood.

Style: Beaded Porch Panel, triple 2 inch panels, 0.039 inches nominal thickness, matte finish.

Solid type.

Invisibly vented type, with 1.2 square inches free air space per square foot of soffit.

Color: \_\_\_\_\_.

Style: IRONMAX, double 5 inch panels, 0.046 inches nominal thickness, woodgrain finish.

Solid type.

Fully vented type, with 6.4 square inches free air space per square foot of soffit.

Color: \_\_\_\_\_.

Style: IRONMAX, double 5 inch panels, 0.046 inches nominal thickness, smooth finish.

Solid type.

Fully vented type, with 6.4 square inches free air space per square foot of soffit.

Color: \_\_\_\_\_.

Style: Certavent T4, triple 4 inch panels, 0.040 inches nominal thickness, matte finish.

Solid type.

Center vented type, with 1.9 square inches free air space per square foot of soffit.

Fully vented type, with 5.9 square inches free air space per square foot of soffit.

Color: \_\_\_\_\_.

Style: Certavent 16, triple 5 inch panels, 0.040 inches



nominal thickness, matte finish.

Center vented type, with 2.0 square inches free air space per square foot of soffit.

Color: Colonial White.

#### VINYL ACCESSORIES

Provide coordinating vinyl accessories for complete and proper installation, whether or not specifically shown on the drawings.

Color: Provide accessories in color matching adjacent siding or soffit panels.

Color: Provide accessories in contrasting color, as follows: \_\_\_\_\_.

Profiles: Provide types as indicated on the drawings.

#### Schedule of Accessories

Starter strip: Aluminum.

Starter strip: Vinyl.

Undersill trim: Standard type.

Undersill trim: Dual type.

Outside corners: 4-piece system, including 5 inch lineals, quarter round insert, and universal corner starter.

Outside corners: Single piece corner.

Inside corner post.

Window starters.

5 inch lineals.

3-1/2 inch lineals.

Corner block to receive 3-1/2 inch lineals around windows.

Rosette: Decorative effect applied to Corner Block.

Window and door trim: 2-1/2 inch standard casing.

Gable trim: 5 inch lineals.

Frieze board: 5 inch lineals.

Soffit trim: F-channels.

Soffit trim: Soffit cove molding.

Miscellaneous J-channels and dividers to suit project conditions.

#### FASTENERS

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

## PART EXECUTION

### EXAMINATION

Prior to commencing installation, verify governing dimensions of building and condition of substrate.

### PREPARATION

Examine, clean, and repair as necessary any substrate conditions that would be detrimental to proper installation.

Do not begin installation until unacceptable conditions have been corrected.

### INSTALLATION

General: Install products in accordance with the latest printed instructions of the manufacturer, with all components true and plumb.

Nailing: 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 space between nail head and flange of panel.

Spacing: 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.

Joints in Horizontal Siding: Stagger lap joints in uniform pattern as successive courses of siding are installed.

Joints in Vertical Siding: 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.

### CLEANING

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

END OF SECTION