

Seaside Rehabilitation and Health Care Center
Portland, Maine

SECTION 074630 - VINYL SIDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Vinyl siding.
 - 2. Vinyl soffit.
 - 3. Vinyl vents for existing sheds.
- B. Related Sections include the following:
 - 1. Division 06 Section "Finish Carpentry" for PVC corner boards and for exterior trim.
 - 2. Division 07 Section "Weather Barriers" for building weather barrier.
 - 3. Division 07 Section "Joint Sealants."

1.3 SUBMITTALS

- A. General: Submit in accordance with Division 1 Section "Submittal Procedures."
- B. Product Data: For each type of product indicated. Include manufacturer's printed installation instructions.
 - 1. Submit siding manufacturer fastener requirements to demonstrate 100 mph wind load design, with 36 psf positive and negative wind pressure for components and cladding.
 - 2. Submit manufacturer's recommendation for size of truss head screws.
- C. Samples for Initial Selection: Submit manufacturer's color charts showing the full range of colors, textures, and patterns available for siding, soffit, and vents.
- D. Submit ICC-ES Evaluation Report for siding fasteners.

1.4 QUALITY ASSURANCE

- A. Source Limitations for Siding and Soffit: Obtain each type, color, texture, and pattern of siding and soffit, including related accessories, through one source from a single manufacturer.
- B. Installer: Engage Installer with not less than three years of experience with products specified.
- C. Fire-Test-Response Characteristics: Provide vinyl siding with the fire-test-response characteristics indicated, as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.
 - 1. Flame Spread Index: ASTM E 84, 20 or less.
- D. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Meet at Project site with Owner,

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Architect, Installer, siding manufacturer representative, and installers of related Work. Review specified requirements, proper sequence and installation of all related products. Record discussions and agreements and furnish copy to each participant. Provide at least 5 business days advance notice to participants prior to convening preinstallation conference.

- E. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
 - 1. Build mockup of typical wall area, as directed by Architect.
 - a. Construct a mockup location for clapboard siding and a separate mockup for shingle siding.
 - 2. Build mockup for siding including accessories, over completed air barrier waterproofing and rigid insulation.
 - a. Include outside corner on one end of mockup, a window and water table trim.
 - 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion. If mockup is rejected, remove materials and rigid insulation, repair air barrier waterproofing and replace insulation.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver vinyl siding, components, and other manufactured items so as not to be damaged or deformed. Package vinyl siding for protection during transportation and handling.
- B. Store materials in a dry, well-ventilated, weathertight place.
- C. Comply with each manufacturer's recommendations for storage and handling of materials, including accessory products.

1.6 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with siding installation only if substrate is completely dry and if existing and forecasted weather conditions permit siding to be installed according to manufacturer's written instructions.
- B. Substrate: Proceed with siding work only after substrate construction and penetrating work have been completed.

1.7 SEQUENCING

- A. Coordinate installation with flashings, rigid insulation, air barrier waterproofing, weather barrier and other adjoining construction to ensure proper sequencing.

1.8 WARRANTY

- A. General: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace siding and soffits that does not comply with requirements or that fail within specified

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warranty period. Failures include, but are not limited to, cracking, deforming, fading, or otherwise deteriorating beyond normal weathering.

1. Fading is defined as loss of color, after cleaning with product recommended by manufacturer, of more than 4 Hunter color-difference units as measured according to ASTM D 2244.
2. Warranty Period: 50 years from date of Substantial Completion, prorated, with first five years nonprorated and covering 100 percent material and labor costs.

PART 2 - PRODUCTS

2.1 SIDING

- A. Vinyl Clapboard Siding: Integrally colored, vinyl siding complying with ASTM D 3679.
1. Product: Cedar Reflections XL; Norandex/Reynolds.
 2. Horizontal Pattern: 8-inch exposure in plain, double 4-inch board style.
 3. Texture: Wood grain.
 4. Length: Not less than 16 feet 8 inches.
 5. Minimum Nominal Thickness: 0.046 inch.
 6. Minimum Profile Depth (Butt Thickness): 3/4 inch.
 7. Nailing Hem: Reinforced double thickness edge.
 8. Wind Load Resistance: Fasten siding at 16 inches o.c. to withstand negative wind load pressure of 40 psf when tested according to ASTM D 5206, standard test method.
 9. Flame Spread and Smoke Development Index: Class 1, flame spread less than 25 and smoke developed less than 450 when tested in accordance with ASTM E 84.
 10. Rate of Burning: ASTM D 635; Classified CC1, self-extinguishing.
 11. Colors for Vinyl Siding: To be selected.
- B. Shingle Siding: Integrally colored, vinyl siding complying with ASTM D 3679.
1. Product: Home Accents; Norandex/Reynolds Single 7 Inch Straight Edge Perfection Shingle.
 2. Pattern: Replicates straight edge cedar shingles with 7-inch exposure.
 3. Length: Not less than 10 feet
 4. Texture: Split shake.
 5. Profile Depth (Butt Thickness): 3/4 inch.
 6. Wind Load Resistance: Fasten siding at 16 inches o.c. to withstand negative wind load pressure of 36 psf when tested according to ASTM D 5206, standard test method.
 7. Flame Spread and Smoke Development Index: Class 1 when tested in accordance with ASTM E 84.
 8. Rate of Burning: ASTM D 635; self-extinguishing with no measurable extent of burn.
 9. Colors for Vinyl Siding: To be selected from standard colors.

2.2 SOFFIT

- A. Vinyl Soffit: Integrally colored, vinyl soffit complying with ASTM D 4477.
1. Pattern: 10-inch exposure, double 5 inch -inch board style with 3/4-inch grove, hidden perforations.
 2. Texture: Smooth.
 3. Ventilation: Provide soffit with concealed perforations.
 - a. Net Free Air Space: 10 sq. in./square foot.
 4. Minimum Nominal Thickness: 0.048 inch.
 5. Minimum Profile Height: 3/4 inch.

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6. Colors for Vinyl Soffit: As selected by Architect from manufacturer's standard colors.
7. Product: Norandex Cedar Reflections T4 Dual Hidden Ridge Soffit

2.3 EXTERIOR VINYL LOUVERS

- A. Louvers: Integrally colored, UV stabilized, through color copolymer round units, fixed blades with insect screen on inside, configurations and sizes as indicated.
 1. Manufacturer: Accent Building Products; phone: 800-237-7470.

2.4 ACCESSORIES

- A. Siding Accessories: Provide starter strips, edge trim, corner cap, and other items as recommended by siding manufacturer for building configuration.
 1. Provide accessories made from same material as adjacent siding, unless otherwise indicated.
 2. Provide accessories matching color and texture of adjacent siding, unless otherwise indicated.
- B. Vinyl Accessories: Where vinyl accessories are indicated, provide integrally colored vinyl accessories complying with ASTM D 3679 except for wind-load resistance.
 1. Texture: Wood grain.
- C. Fasteners:
 1. For fastening to Z-furring, use truss head with a 3/8-inch minimum head and of sufficient length to penetrate through the plywood sheathing and the rigid insulation and into the Z-furring a minimum of 1/2 inch with not less than 3 screw-threads engagement.
 2. For fastening to metal studs, use truss head with a 3/8-inch minimum head and of sufficient length to penetrate through the insulation and sheathing and into the cold-formed steel framing a minimum of 1/2 inch with not less than 3 full screw-threads engagement.
 3. Fasteners: ASTM C 1513, self-drilling 410, truss head screws with minimum 3/8-inch diameter head, or round head screws with 5/8-inch diameter nylon washers, ASTM C 1513, in size recommended by siding manufacturer for conditions indicated above, but not less than #8 x 2-1/4 inches.
 - a. Finish stainless steel or with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of siding.
- B. Verify that building weather barrier has been properly installed and will provide free drainage of water migrating behind panels to exterior. Verify that windows have been taped in and applied over flashing to shed water to exterior. Arrange for satisfactory correction of any breaks, gaps, tears or other defects in the underlayment material before installing siding.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

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3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.

3.3 SIDING INSTALLATION

- A. General: Comply with siding manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply. Center nails in elongated nailing slots without binding siding to allow for thermal movement. Overlap joints to shed water away from approaching pedestrian traffic to minimize appearance of joints. Install subsequent courses to form a weathertight surface.

- B. Install vinyl siding, soffit, and accessories according to ASTM D 4756.

1. Do not install damaged components.
2. Install starter strip and trim as indicated and as recommended by manufacturer of siding system.
3. Where siding terminates at dissimilar materials, including storefront and doors, provide J-trim around entire opening. Siding butting trim that does not have an integral j-channel receiver, provide continuous vinyl j-channel with color to match siding. Miter intersecting corners of trim.
4. Trim shall be one-piece without joints, except where lengths exceed manufactured lengths. Do not use any piece less than 2 feet long. Provide fasteners within 2 inches of end terminations.
5. Where top of siding is cut, snap lock punch top of panel and secure in undersill trim. Shim undersill trim maintain proper pitch of siding without distortion. Undersill trim shall be concealed within a J-channel trim.
6. Install siding plumb and level with joints properly interlocked.
7. Panel ends abutting roof or similar conditions shall be cut to follow angle and shall be attached to backup; keep panel level and prevent bowing of panel.
8. Spacing: Allow space between both ends of siding panels and trim for thermal movement. Overlap horizontal panel ends 1/8- to 1/4-inch, based on daily temperature of siding at time of installation.
9. Where top course of siding terminates at eaves, soffits, and similar conditions, provide L-cover and L-receiver to conceal top attachment.
10. Fasten siding as recommended by manufacturer for the indicated wind speeds. Provide fasteners within 2 inches of end terminations at trims.

- C. Lap Joints: Stagger lap joints in random pattern as successive courses of siding are installed. Provide at least three vertical courses between lap joints aligning vertically and at least 4 feet horizontally between adjacent courses. Do not lap siding above or below windows, or above doors. Siding shall be one-piece without joints, except where lengths exceed manufactured lengths. Do not use any piece less than 3 feet long.

1. Clapboard siding runs 16 feet 8 inches and less shall be installed as full length, one-piece sections.
2. Shingle siding runs 5 feet and less shall be installed as full length, one-piece sections.

3.4 INSTALLATION OF VENTS

- A. Comply with manufacturer's written installation instructions.

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3.5 ADJUSTING AND CLEANING

- A. Remove damaged, improperly installed, or otherwise defective siding materials and replace with new materials complying with specified requirements.
- B. Clean finished surfaces according to siding manufacturer's written instructions and maintain in a clean condition during construction.

END OF SECTION 074630