

Part 1 General

1.1 SECTION INCLUDES

- .1 This Section includes requirements for supply of rigid polyvinylchloride (PVC) interlocking siding boards with laminated PVC film on exposed surfaces and its installation on exterior walls [and [beams] [and] [columns]].

1.2 RELATED REQUIREMENTS

- .1 Section [07 25 00 - Weather Barriers].
- .2 Section [07 60 00 – Flashing and Sheet Metal].
- .3 Section [07 92 00 - Joint Sealants].

1.3 REFERENCES

- .1 CCMC Registry of Product Evaluations.
- .2 CAN/CGSB-41.24-95, Rigid Vinyl Siding, Soffits and Facia.
- .3 CAN/ULC-S101-14 Standard Methods of Fire Endurance Tests of Building Construction Materials.
- .4 CAN/ULC-S102-2018, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.
- .5 CAN/ULC-S102.2-2018, Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies.
- .6 CAN/ULC-S134-13-REV1, Standard Method of Fire Tests of Exterior Wall Assemblies.
- .7 ASTM D3679-17, Standard Specification for Rigid PVC Siding.
- .8 ASTM E119 -22, Standard Test Methods for Fire Tests of Building Construction and Materials.
- .9 ASTM E330/E330M-14(2021), Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- .10 ASTM G154- 16, Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials.
- .11 ASTM G155-21, Standard Practice for Operating Xenon Arc Lamp Apparatus for Exposure of Materials.
- .12 ASTM D635-18, Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.

- .13 American Architectural Manufacturers Association (AAMA):
 - .1 AAMA 303-19, Voluntary Specification for Rigid Polyvinyl Chloride (PVC) Exterior Profiles.
 - .2 AAMA 307-16, Voluntary Specification for Laminates Intended for Use on AAMA Certified Profiles.
 - .3 AAMA 664-21, Voluntary Specification for In-Process Quality Control Requirements for Applicators of Synthetic Interior and Exterior Laminates.

1.4 COORDINATION

- .1 Coordinate work of this Section with installation of flashings to provide drainage to exterior.

1.5 ACTION SUBMITTALS

- .1 Submit proof of manufacturer's CCMC listing and listing number.
- .2 Product data: Submit manufacturer's printed product literature, specifications and data sheets in accordance with Section [01 33 00 - Submittal Procedures] [____].
- .3 Samples:
 - .1 Submit samples [in accordance with Section [01 33 00 - Submittal Procedures] [____]].
 - .2 [Submit colour samples for colour/pattern selection]. Submit duplicate samples of actual siding material, full profile width x [200] [____] mm long, of specified colour/pattern and profile.
 - .3 [Submit samples of all exposed accessories and trims].
- .4 Installation Instructions: Submit manufacturer's printed installation instructions.
- .5 Installer Qualifications: Submit proof of installer compliance with installer qualifications specified under Quality Assurance.
- .6 Sustainable Design Submittals: Submit required documentation in accordance with Project sustainable design requirements in Section [01 35 64 – LEED Requirements] [01 35 67 – Sustainability Certification Requirements] [____].

1.6 CLOSEOUT SUBMITTALS

- .1 Submit in accordance with Section [01 78 00 – Closeout Submittals] [____].
- .2 Maintenance Data: Submit manufacturer's printed instructions for cleaning and repair procedures. Include names and contact information of Product manufacturer and installer.
- .3 Warranty Documentation: Submit manufacturer's warranty.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- .1 Submit in accordance with Section [01 78 00 – Closeout Submittals] [____].
- .2 Supply:

- .1 One manufacturer's touch-up pen for each colour of siding material.
 - .2 [1%] [__%] of installed boards in manufacturer's maximum standard board length.
 - .3 [One] [____] of each accessory and trim shape in manufacturer's maximum standard length.
- .3 Package materials with protective coverings and label.

1.8 QUALITY ASSURANCE

- .1 Comply with AAMA 664-21.
- .2 Test Reports: Submit certified test reports showing Product compliance with specified performance characteristics and physical properties.
- .3 Installer Qualifications: Minimum [one] [three] [____] year[s] experience installing specified Products or similar products, on projects of similar size to this Project.
- .4 Pre-Installation Meeting: Conduct pre-installation meeting to verify installation requirements, manufacturer's installation instructions, and manufacturer's warranty requirements.
- .5 Mock-Up: In accordance with Section [01 40 90 – Quality Requirements] [____].
 - .1 Construct a [____] mm x [____] mm mock-up of siding installation [not] forming part of the Work for Consultant's review.
 - .2 Include each accessory and trim type, [an [outside] [inside] corner] [an intersection with [adjacent material] [a door] [a window]].
 - .3 [Construct a mock-up of [beams] [and] [columns].]
 - .4 Approved mock-up establishes an acceptable standard for the Work.

1.9 DELIVERY, STORAGE, AND HANDLING

- .1 Comply with manufacturer's instructions.

1.10 SITE CONDITIONS

- .1 Proceed with installation only when ambient temperature is above -20 C.

1.11 WARRANTY

- .1 Provide the following manufacturer's limited warranty coverages:
 - .1 That Product will be free from initial manufacturing defects in material or workmanship and against warping, blistering, and peeling for 50 years, prorated.
 - .2 Against unreasonable discolouration for 15 years, non-prorated.

Part 2 Products

2.1 MANUFACTURER

- .1 ChamClad, 10235 – 184 St., Edmonton, AB, T5S 2J4. chamclad.com Ph. 780-454-4430.

- .2 [Substitutions will not be considered.] [Substitutions will be considered during bidding period as specified in Section [00 21 13 – Instructions to Bidders] [____].] [Substitutions will be considered as specified in Section [01 25 00 – Substitution Procedures] [____].]

2.2 SIDING MATERIALS

- .1 PVC Extrusions: Engineered, rigid, PVC extrusions with 100% pre-consumer recycled content, to AAMA 303-19.
- .2 Rigid, interlocking, PVC panels with hollow core profile and factory laminated PVC film, to CAN/CGSB-41.24-95 and ASTM D3679-17.
- .3 Classic Board Profile: Nominally 150 mm wide x 13 mm thick.
- .4 Shadowline Board Profile: [Nominally 150 mm wide x 13 mm thick with [150 mm] [75 mm reveal.] [Nominally 300 mm wide x 13 mm thick with 50 mm reveal.]
- .5 Board Lengths: [maximum standard lengths to minimize joints] [custom lengths to minimize joints and minimize waste].
- .6 Colour/pattern: [Barn Board Grey] [Beach Wood Grey] [Black Sand] [Black Wood] [Barrel Oak] [Brown Oak] [Brushed Metallic] [Brushed Silver] [Canadian Pine] [Charred Black] [Cinnamon Walnut] [Smoke Grey] [Spanish Cedar] [Speckled Graphite] [Sun Bleached Oak] [Teak] [Bamboo] [Toffee] [Black Walnut] [California Redwood] [Chocolate Walnut] [Atlantic White] [Chai Cedar] [Desert Oak] [Golden Oak] [Brushed Titanium] [Honey] [Iron Glimmer White] [Modern Walnut] [Monument Oak] [Mountain Oak] [Mountain Pine] [Natural Oak] [Navy] [Pure White] [Toffee] [Tofino] [Dark Wood] [Harvest Walnut] [Brushed Metallic] [Crystal White] [Warm Autumn] [Pebble Brook] [Sand Dollar] [Grey Asphalt].
- .7 Accessories and Trims: [PVC] [Aluminum] starter strip, aluminum/PVC two-piece J-trim, [aluminum/PVC two-piece outside corner] [aluminum H Mold] [PVC one piece J-trim] [PVC inside corner], matching finish to siding, pre-punched nailing holes, [maximum standard lengths to minimize joints] [custom lengths to minimize joints and minimize waste].
- .8 Furring: [____mm] x [____mm] [pressure treated wood furring strips] [galvanized steel] [aluminum] [furring channels] [as indicated on Drawings].
- .9 Fasteners: [galvanized] [stainless] steel.

2.3 [BEAM] [AND] [COLUMN] MATERIALS

- .1 Beam Cladding: Same material as siding, size and profile to suit beam substrate size(s). Color/pattern: [same as siding] [____].
- .2 Faux Beams: Same material as siding, size as indicated on Drawings. Color/pattern: [same as siding] [____].
- .3 Column Cladding: Same material as siding, size and profile to suit column size(s), complete with column cap and base trim kit. Cap and base widths as indicated on Drawings. Color/pattern: [same as siding] [____].

2.4 PERFORMANCE CRITERIA

- .1 Material Characteristics: to CAN/CGSB-41.24-95.
- .2 Dimensional Tolerances: to CCMC TG 07 46 33.07.
- .3 Flammability: Category HB when tested to ASTM D635-18.
- .4 Acid Rain Resistance: to CCMC TG 07 46 33.07.
- .5 Wind Load Resistance: to CCMC TG 07 46 33.07 and to ASTM E330/E330M-14(2021).
- .6 Durability: to CCMC TG 07 46 33.07.
- .7 Accelerated Weathering Resistance: Meets ASTM G155-21 and ASTM G154-16. Meets ASTM D3679 for weathering after 24 month exposure.
- .8 Surface Burning Characteristics: Flame spread rating < 75 and smoke developed classification <450 when tested to CAN/ULC-S102-2018. Flame spread rating \leq 120 when tested to CAN/ULC-S102.2-2018.
- .9 Flammability: Category HB when tested to ASTM D635-18.
- .10 Fire Test of Wall Assembly: Meets CAN/ULC-S101-14, ASTM E119, and CAN/ULC-S134-13.
- .11 PVC Film: to AAMA 307-16.

Part 3 Execution

3.1 VERIFICATION OF CONDITIONS.

- .1 Verify that substrates are suitable for installation of the Work of this Section. Commencement of Work denotes acceptance of conditions.

3.2 SIDING INSTALLATION

- .1 Install furring [strips] [channels] to provide rainscreen.
- .2 [Install Classic siding [horizontally] [vertically] [diagonally] [as indicated on Drawings] for [U-Channel] [V-Groove] appearance.]
- .3 [Install Shadowline siding [horizontally] [vertically] [diagonally] [with mix and match of different profiles] [as indicated on Drawings].]
- .4 Install siding, accessories and trim in strict accordance with manufacturer's printed instructions.
- .5 Scribe and cut as required to neatly fit abutting walls and adjacent surfaces, and to accommodate other materials penetrating through boards.
- .6 Secure boards, accessories, and trim in place, rigid, plumb and square.

3.3 [BEAM] [AND] [COLUMN] INSTALLATION

- .1 Install [[beam] [and] [column] cladding] [faux beams] in strict accordance with manufacturer's printed instructions.

3.4 ADJUSTING

- .1 Where minor surface damage has occurred, touch-up by methods recommended by manufacturer. Remove and replace damaged materials that cannot be satisfactorily repaired.

3.5 CLEANING

- .1 Upon completion of installation, remove surplus materials, rubbish, tools and equipment, and clean as specified in Section 01 74 00 – Cleaning and Waste Management.
- .2 Where necessary, remove dirt and other contaminants in accordance with manufacturer's cleaning instructions.

END OF SECTION