Specifiers: Click on the ¶ icon in the WORD toolbar to reveal detailed instructions

PART 1 - General

1.1 SUMMARY

1. Section Includes
    1. Hidden fastener, prefinished Bellara steel sidings, Board & Batten and Lap Siding with related trim and accessories.
    2. [Supporting steel subgirts]

1.2 REFERENCES

1. Reference Standards:
    1. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
    2. CAN/CSA S136 - North American Specification for The Design Of Cold-Formed Steel Structural Members.
    3. ANSI/AISI S100 - North American Specification for The Design Of Cold-Formed Steel Structural Members.
    4. CSSBI 20M - Standard for Sheet Steel Cladding for Architectural, Industrial and Commercial Building Applications.
    5. CSSBI 23M - Standard for Residential Steel Cladding
    6. ASTM E1592 – Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference
    7. ASTM A370 – Standard Test Methods and Definitions for Mechanical Testing of Steel Products
    8. ASTM E8 – Tension Testing of Metallic Materials
    9. CSA/ULC-S135 – Standard Test Method for the Determination of Combustibility Parameters of Building Materials Using and Oxygen Consumption Calorimeter

1.3 ADMINISTRATIVE REQUIREMENTS

1. Pre-installation Meetings:
    1. [Pre-installation Meeting: Refer to Section 013100.][One (1) week][Two (2) weeks] before starting work of this Section, arrange a site meeting attended by the Consultant, the Contractor, Subcontractors affected by the work for which the pre-installation meeting is being conducted and Inspection and testing company as applicable.
        1. Discuss surface conditions, application procedures, suitability of materials and alternative recommendations.

2. Coordination:

1. Coordinate with installers of wall mounted items, equipment, and mechanical and electrical work so that installation will not compromise the performance and aesthetics of the steel siding.
2. Coordinate work of Division 07 Sections, openings and penetrations.

3. Sequencing: Sequence work to permit installation of materials in conjunction with related materials and seals.

1.4 ACTION SUBMITTALS

1. Submit manufacturer's printed literature, data sheets and specifications.

2. Submit Material Safety Data Sheets (MSDSs).

3. Samples:
   1. Submit 2 - 305 mm (12") long size samples of siding [and soffit] profile, each colour and profile specified.
   2. Colour Samples: 63.5 mm x 124 mm (2.5" x 4-7/8") chips or 305 mm (12") sample cut from finished product.
   3. Samples to be approved by Consultant prior to fabrication

4. Delegated Design Submittals for commercial buildings:
   1. [Engineered shop drawings in accordance with Section 013100][Provide engineered shop drawings signed and stamped by a professional engineer licensed in the province of the work. Ensure that the proposed systems comply with the requirements of the Building Code][, and with the seismic requirements for the project location].
      1. Submit shop drawings for each item showing:
         1) Indicate dimensions, siding profiles, attachment methods, trim and closure pieces, fascia, material finishes and colours, and related work.
         2) Provide installation sequence.

5. Sustainable Design Submittals:
   1. Submit documentation to verify compliance with sustainable objectives and requirements.
   2. Environmental Product Declaration (EPD): For each product.

1.5 CLOSEOUT SUBMITTALS

1. Operation and Maintenance Data: Submit maintenance and cleaning instructions for systems for incorporation into the maintenance manuals.

1.6 QUALITY ASSURANCE

1. Qualifications
   1. Manufacturer: Two (2) years before award of Subcontract Manufacturer has fabricated product of types under this Section, for projects of similar size and scope, for a continuous period of not less than two (2) years before award of Subcontract, has personnel and plant

equipment capable of fabricating product of the types specified and has a written quality control system in place.

2. Installer Qualification: Execute the work of this Section only by a Contractor who has adequate equipment and skilled workers to perform it expeditiously and is known to have been responsible for satisfactory installations similar to that specified in the recent past.
3. **[Optional]**Licensed Professional: Retain a Professional Engineer experienced with providing delegated-design engineering services of the kind indicated, including documentation confirming that engineer is licensed in the jurisdiction in which Project is located.

2. **[Optional]**Mock-ups:
    1. Before proceeding with final purchase of steel siding components, materials and fabrication, prepare a mock-up of work.
        1. Build mock-ups for siding [and soffit] including accessories.
        2. Incorporate materials and methods of fabrication and installation identical with project requirements.
        3. Size: Coordinate with the Consultant in a later day.
        4. Provide mock-up of sufficient size and scope to show typical pattern of seams, fastening details, edge construction, and finish texture and colour.
    2. Install mock-up at location directed by Consultant. Retain accepted mock-up as quality standard for acceptance of completed metal siding.

1.7 DELIVERY, STORAGE, AND HANDLING

1. Delivery and Acceptance Requirements: Deliver packaged materials in original containers with labels intact until time of use.

2. Storage and Handling Requirements:
    1. Store components and materials indoors in accordance with panel manufacturer’s recommendations and protect from elements and moisture.
    2. Protect prefinished steel during fabrication, transportation, site storage and erection, in accordance with Vicwest Installation Guidelines for Bellara sidings.

1.8 SITE CONDITIONS

1. Existing Conditions:
    1. Take measurements at the Place of the Work to ensure that the work of this section is fabricated to fit structure, surrounding construction, around obstructions and projections in place.
    2. Verify that backup construction is solid for a secure attachment and aligned for proper installation of prefinished metal siding [and soffit] system before commencing erection.

1.9 WARRANTY

1. Finish Warranty: Furnish siding manufacturer’s written warranty covering failure of factory-applied exterior finish within the warranty period.

1. Period: Forty (40) years from the date of purchase of the Product. The values below are based on normal environments and exclude any aggressive atmospheric conditions.
2. Weather XL - Silicone Modified Polyester (SMP):
    1. The Product will not chip, crack, peel or otherwise lose adhesion for a period of forty (40) years following the original date of purchase of the Product.
    2. The colour will not chalk in excess of number eight (8) rating as determined by ASTM D4214 Method D659, and the colour will not change more than five (5.0) Hunter ΔE units as determined by ASTM Method D-2244 for a period of thirty (30) years from installation or thirty and half (30.5) years from the date of purchase.

3. For further information on Vicwest paint systems please refer to the website.

PART 2 - Products

2.1 MANUFACTURERS

1. Acceptable Manufacturer:
    1. Vicwest Inc., head office located at 5050 S Service Rd #200, Burlington, ON L7L 5Y7, phone number (905) 825-2252, https://vicwest.com/

2.2 PERFORMANCE / DESIGN CRITERIA

1. Design, fabricate and install work of this Section in accordance with the [National Building Code][Ontario] Building Code of Canada, [International][Residential][Florida] Building Code or other applicable codes, requirements or governing authorities.

2. Design to CAN/CSA S136 or ANSI/AISI S100

3. Design for expansion and contraction of component materials of the Work produced by an exterior surface temperature range of [-35°C to +60°C] without causing buckling, failure of joint seals, undue stress on fasteners or other detrimental effects.

4. Design siding system to accommodate and withstand the following without permanent deformation or damage to, or failure of, siding system:
    1. Deflection of siding system due to wind loads shall not exceed L/180 of the siding span.
    2. Design expansion joints to accommodate movement within siding system, and between siding system and building structure.
    3. Siding system dead loads, ice loads, and wind loads, and combinations thereof, in accordance with the applicable building codes.
        1. Design wind loads shall be based on 1/50 hourly wind pressure values as indicated in NBCC, or as per applicable codes.

5. Design to allow positive drainage of condensation occurring within siding system to exterior of building envelope or drainage outlet.

6. Design system to meet tolerances specified.

2.3 STEEL SIDING

1. Basis of Design Products: Bellara steel sidings, Board & Batten and Lap Siding by Vicwest Inc.
   1. Substitutions: [Refer to Section 012500][Not permitted].

2. Prefinished steel siding, concealed fastener system for exterior application and as follows:
   1. Metal sheet: Zinc coated (galvanized) sheet steel to the requirements of ASTM A653/A653M with a minimum metallic coating designation Z275 (G90).
   2. Preformed metal thickness: 0.47 mm (26 gauge) nominal steel thickness.
   3. Exposed preformed steel profile:
      1. Siding Length: 3657.6 mm (12’)
      2. Board & Batten 140:
         1) Coverage Width: 142.2 mm (5.60”)
         2) Profile Total Size: 175.3 mm x 18.5mm (6.82” x 0.73”)
         3) Siding pieces per carton: 10 pieces
      3. Board & Batten 260:
         1) Coverage Width: 258.6 mm (10.18”)
         2) Profile Total Size: 291.7 mm x 18.5 mm (11.48” x 0.73”)
         3) Siding pieces per carton: 6 pieces
      4. Lap Siding 155:
         1) Coverage Width: 156.9 mm (6.18”)
         2) Profile Total Size: 190.0 mm x 18.8 mm (7.48” x 0.74”)
         3) Siding pieces per carton: 10 pieces

   4. Colour:
      1. Signature Matte finishes (Weather XL), colour [Ebony 9822][Graphite 9821][Greek Villa 11168] and [Regent Grey 10939]
   5. Slotted fastening track:
      Fastening slots: 4.76 mm (3/16”) x 16 mm (5/8”) spaced at 51 mm (2”) c/c, to allow for thermal expansion and adjustability during construction.

3. **[Optional]**Subgirts: Minimum 1.21 mm (0.048”) galvanized sheet steel conforming to ASTM A653M/A653 Grade 230 (Grade 33) with Z275 (G90) zinc-coating.

4. **[Optional]**Insulation: [Semi-rigid in accordance with Section 072100.][Rigid in accordance with Section 072100.]

5. **[Optional]**Air barrier membrane: In accordance with [Section 072700].

6. Exposed sealants: In accordance with [Section 079200].

2.4 ACCESSORIES

1. Accessories and hardware: As required to meet specified requirements.

2. Fasteners:
   1. #10 Self-drilling, Pancake head screws to steel subgirts.
   2. #10 Self-tapping, Pancake head screws (fully threaded) to wood supports.

3. Screw length as required:
    1. Minimum 9.5 mm (3/8”) below wood substrate, or.
    2. Minimum 3 thread past the steel support material.
4. Do not over torque fastener.

3. Trim and Flashing: 0.47 mm (26 gauge) material. Finish and colour to match prefinished metal siding [and soffit].

4. Provide standard Bellara trims and flashings as per manufacturer.

5. Provide additional flashing complying with [Section 076200] where indicated.

2.5 FINISH

1. Weather XL - Silicone Modified Polyester (SMP): Colour selected by Consultant from manufacturer’s range.
    1. Acceptable Products: Sherwin Williams WeatherXL.

2.6 FABRICATION

1. Factory fabricate all components of the system, ready for field installation.

2. Cladding is fabricated in 3657.6 mm (12ft) lengths and to be cut to suit on site.

3. **[Optional]**Subgirts are fabricated in 3048 mm (10ft) lengths and to be cut to suit on site.

PART 3 - Execution

3.1 EXAMINATION

1. Verification of Conditions:
    1. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of steel siding[, soffit] and related accessories.
    2. Report all discrepancies to the Consultant before beginning the Work on the wall system.
    3. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

1. Patterned Finishes: Each box contains Bellara panels with 5 different patterns. Pre-arrange panels in a layout that creates the desired appearance. Once satisfactory layout is achieved, proceed with wall installation.

3.3 STEEL SIDING INSTALLATION

1. Comply with manufacturer's [written Installation Guidelines][approved shop drawings] and project drawings.

2. Where steel siding contacts dissimilar metals, protect against galvanic action.

3. Erect panels in straight lines that are true, level, square, and plumb to comply with installation tolerances[and layout indicated on approved shop drawings].

4. Fasten metal siding to supports with fasteners at each location indicated [on approved shop drawings], at spacing and with fasteners recommended by manufacturer.

5. Place trim and flashing as indicated per details [on the approved shop drawings].

6. Install sealants at junctions with adjoining work, and where shown on the drawings in accordance with Section [079200 - Sealants]

7. Requirements for substrate installation tolerances:
    1. Maintain the following installation tolerances:
        1. Maximum variation from plane or location shown on reviewed shop drawings: 3 mm/10 m of length and up to 30 mm/100 m maximum.
        2. Maximum offset from true alignment between two adjacent members abutting end to end or side-by-side, inline: 1 mm (0.039").

3.4 CLEANING

1. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

END OF SECTION 074619

DISCLAIMER:

Vicwest Inc. Guide Specifications have been written as an aid to the professionally qualified Specifier and Design Professional. The use of this Guideline Specification requires the sole professional judgment and expertise of the qualified Specifier and Design Professional to adapt the information to the specific needs for the Building Owner and the Project, to coordinate with their Construction Document Process, and to meet all the applicable building codes, regulations and laws. VICWEST INC. EXPRESSLY DISCLAIMS ANY WARRANTY, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OF THIS PRODUCT FOR THE PROJECT.

[Architect Company Name]

To ensure you are viewing the most recent and accurate product information, please scan the QR code or click here to visit the product page on our website.
Vicwest Inc. reserves the right to amend product specifications without prior notice. Product specifications shown in this document should not be taken as being available in all regions. Recommendations for the uses described herein should be verified for suitability and compliance with actual requirements of any local building codes, applicable laws and regulations.
vicwest-vic-295-bellara-bb140-bb260-ls155-specification-en-can-us-2024-06-05
vicwest.com
Learn more about our Planet Passionate strategy. Visit vicwest.com/ca/en/planet-passionate
vicwest PLANET PASSIONATE