

[SPEC NOTE: This document is intended as a short form guide to develop specifications for hidden fastened **WS Series** cladding products manufactured by WESTMAN STEEL INDUSTRIES. It is not be viewed as a complete source of information about our product(s). Please refer to our product literature for additional recommendations. <http://westmansteel.com/>]

[SPEC NOTE: Part 1 General to be edited for specific project requirements. This section includes performance, proprietary, and descriptive type specifications; edit text to avoid conflicting requirements. Delete all **SPEC NOTES** and brackets at final edit.]

Part 1 General

1.1 SECTION INCLUDES

- .1 Formed metal wall panels.
- .2 Accessories.

1.2 RELATED REQUIREMENTS

[SPEC NOTE: Revise to suite project requirements.]

- .1 Section 05 12 00 - Structural Steel: Structural steel building frame
- .2 Section 07 62 00 - Sheet Metal Flashings and Trims
- .3 Section 07 92 00 - Joint Sealants

1.3 REFERENCE STANDARDS

[SPEC NOTE: Only include the reference standards below that are applicable to the project.]

- .1 American Society for Testing and Materials (ASTM):
 - .1 ASTM A653/A653M-23, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
 - .2 ASTM A792/A792M-23, Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process
 - .3 ASTM A755/A755M-18(2024), Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products
 - .4 [ASTM C834-17(2023), Standard Specification for Latex Sealants]
 - .5 [ASTM C920-18(2024), Standard Specification for Elastomeric Joint Sealants]
 - .6 [ASTM D2244-23, Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates]
 - .7 [ASTM D4214-23, Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films]
- .2 Canadian Standards Association (CSA):
 - .1 CSA-S136-16, North American Specification for the Design of Cold-Formed Steel Structural Members

- .3 Canadian Sheet Steel Building Institute (CSSBI):
 - .1 CSSBI 20M-17, Standard for Sheet Steel Cladding for Architectural, Industrial and Commercial Building Applications
 - .2 CSSBI S8-18, Quality and Performance Specification for Prefinished Sheet Steel Used for Building Products

1.4 QUALITY ASSURANCE

- .1 Structural design in accordance with CSA-S136.
- .2 Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum 5 years documented experience.
- .3 Installer Qualifications: Company specializing in performing the work of this section with minimum 5 years documented experience [and approved by the manufacturer].

1.5 DELIVERY, STORAGE, AND HANDLING

- .1 Section [01 61 00]: Transport, handle, store, and protect products
- .2 Protect panels from weathering by removing or venting sheet plastic shipping wrap.
- .3 Store prefinished materials off ground, protected from weather, to prevent twisting, bending, and abrasion, and to provide passive ventilation. Slope metal sheets to ensure drainage.
- .4 Prevent contact with other materials which will cause discolouration, staining or corrosion.

1.6 WARRANTY

- .1 Section [01 78 00]: Warranties

[SPEC NOTE: CCDC contacts use Substantial Performance. Revise term below to suit the definition in the Project's contract.]

- .2 Provide manufacturer's 2-year warranty against manufacturer's defects and deficiencies from the date of Substantial Performance of the Work.

[SPEC NOTE: CSSBI S8-18 - Quality and Performance Specification for Prefinished Sheet Steel Used for Building Products, provides paint qualification tests and weathering per ASTM standards, including 40-year film integrity and 30-year chalk and colour change.]

- .3 Provide manufacturers panel finish warranty including degradation of paint finish under normal atmospheric conditions including colour fading caused by exposure to weather.
 - .1 [40-year film integrity and 30-year chalk and colour change in accordance with CSSBI S8-18]

Part 2 Products

2.1 MANUFACTURERS

- .1 Westman Steel Industries; Product: WS Series.

[SPEC NOTE: WESTMAN STEEL David Forsey Architectural Representative
david.forsey@westmansteel.ca (800) 661-2823. Delete on final edit.]

- .2 Other acceptable manufacturers offering functionally [and aesthetically] equivalent products.
 - .1 []; Product: [].
 - .2 []; Product: [].
 - .3 []; Product: [].
- .3 Substitutions: [Refer to Section 01 62 00] [Not permitted].

2.2 DESCRIPTION

- .1 System Description:
 - .1 Wall System: Preformed [and prefinished] single skin metal siding panels with [vertical] [horizontal] profile and hidden fasteners.

2.3 STEEL SHEET MATERIALS

- .1 Aluminum-Zinc Alloy-Coated (Galvalume) Steel Sheet: ASTM A792/A792M, structural quality (SS), minimum Grade 230, AZM150 coating designation.

2.4 ACCESSORIES

- .1 Flashing and Trim: As specified in Section 07 62 00, of same material, colour and gloss as cladding in exposed locations.
- .2 Closures: Manufacturer's standard metal closures and trims, to suit cladding profile.
- .3 Gaskets: Manufacturer's standard type, suitable for use with system, permanently resilient; ultraviolet and ozone resistant.
- .4 Sealants: As specified in Section 07 92 00, and as follows:
 - .1 Concealed Sealant: Tape or compound, non-skinning, non-drying, butyl rubber.
 - .2 Exposed Sealant: [ASTM C920, silicone] [ASTM C834, acrylic co-polymer], single component, [colour matching cladding].
- .1 Fasteners: Suitable for design loads and application, [manufacturer's standard] [colour matching panels where exposed to view].
- .2 Site Touch-up Paint: Air-dry paint finish specifically designed for repainting of sheet steel.
- .3 Bituminous Paint: Asphaltic base
- .4 Expansion Joints: Same material, thickness and finish as exterior sheets type, of profile to suit system.
- .5 Anchors: Galvanized steel.

2.5 COMPONENTS

[SPEC NOTE: WESTMAN STEEL uses high quality Silicon Modified Polyester (SMP) coating systems for solid colours and Fluoropolymer (PVDF) for metallic paint colours. Contact WESTMAN

STEEL for paint coating recommendations based on the project's application and location. Delete Coating and Colour, if specifying unfinished Galvalume steel.]

- .1 Cladding Panels: [Prefinished Galvalume steel] [Galvalume], interlocking edges with concealed (hidden) fasteners, panel joints.
 - .1 Panel Profile: [WS200, 204mm wide] [WS300, 305mm wide] [WS279, 279.4mm wide with 25.4mm edge reveal] [with centre V groove] [without centre V groove].

[SPEC NOTE: To minimize oil canning effect on WS panels for wall applications, WESTMAN STEEL recommends 0.76mm core steel thickness in lengths less than 3658mm for profiles with no V groove and less than 7315mm for profiles with V groove.]

- .2 Thickness: 0.76mm core steel thickness.
- .3 [Coating: Sheet steel coil coated to ASTM A755 [Silicon Modified Polyester] [Fluoropolymer] coating.]

[SPEC NOTE: Review WESTMAN STEEL Colour Chart or Steel Profile Sheet for manufacturer's standard stocked colour range. Custom colours available with lead time and approval of colour match sample.]

- .4 [Colour: [QC# ____] [As selected from manufacturer's standard range].]

Part 3 Execution

3.1 EXAMINATION

- .1 Verify existing conditions before starting work.
- .2 Verify dimensions, tolerances, and method of attachment with other work.
- .3 Verify that site measurements [are as indicated on Drawings] [are as indicated on Shop Drawings] [meet manufacturer's minimum requirements].
- .4 Report unsatisfactory conditions to [Consultant] in writing; Do not start work of this section until unsatisfactory conditions are rectified.

3.2 INSTALLATION

- .1 Install components to CSSBI 20M and manufacturer's written instructions.
- .2 Flashing: Install starter flashing, drip and other flashing, corners, edgings, and window and door flashings as shown on Drawings.
- .3 Exterior Cladding:
 - .1 Install wall cladding to manufacturer's standard installation procedures, providing proper laps true to line, and tight fitting to ensure a weather-tight face.
 - .2 Install finishing flashing, cap flashing, trims and closures.
 - .3 Attach components in manner not restricting thermal movement.
- .4 Sealants: Install sealants at junctions with adjoining work and as shown on Drawings, in accordance with Section 07 92 00.

3.3 CLEANING

- .1 Section 01 74 00: Final Cleaning, and as follows:
 - .1 Remove site cuttings from finished surfaces, edges, trims and flashings.
 - .2 Clear weep hole obstructions.
 - .3 Remove temporary protective coverings and strippable films, if any, as soon as each panel is installed.
 - .4 [Clean and wash prefinished surfaces with mild soap and water; rinse with clean water.]
- .2 Repair and touch up minor surface damage.
- .3 Replace damaged panels and components that cannot be repaired.

END OF SECTION

[SPEC NOTE: Additional reference documents;

WESTMAN STEEL Cladding & Roofing Brochure

WESTMAN STEEL Colour Chart

WESTMAN STEEL Load Tables

WESTMAN STEEL Profile Sheets

WESTMAN STEEL Commercial Components, Flashings and Accessories

WESTMAN STEEL 40 Year Warranty Pre-Painted Galvanized & Galvalume Steel Roofing & Siding Panels

CSSBI Glossary of Commonly Used Terms for Structural Building Products]