

Part 1 General

1.1 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM A653/A653M-15, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .2 ASTM A792/A792M-10, Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
- .2 Canadian Standards Association (CSA International)
 - .1 CAN/CSA G164-M92(R2013), Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .2 CAN/CSA S136S1-04, North American Specification for the Design of Cold-Formed Steel Structural Members.
- .3 Canadian Sheet Steel Building Institute (CSSBI)

1.2 SUBMITTALS

- .1 Make submittals in accordance with Section 01 33 00 – Submittal Procedures
- .2 Shop Drawings:
 - .1 Indicate design loads, member sizes, materials, design thickness exclusive of coatings, coating specifications, connection and bracing details, screw sizes and spacing, and anchors.
 - .2 Indicate locations, dimensions, openings and requirements of related work.
 - .3 Indicate welds by welding symbols as defined in CSA W59.
 - .4 Stamp drawings by Engineer licensed to practice in the Province of Quebec.
- .3 Prior to beginning Work, submit: two certified copies of mill reports covering material properties.

1.3 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Storage and Handling Requirements:
 - .1 Store materials in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Handle and protect galvanized materials from damage to zinc coating.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Steel: to CAN/CSA S136, fabricated from ASTM A653/A653M340
- .2 Zinc coated steel sheet: quality to ASTM A653/A653M, with Z275 designation coating.
- .3 Screws: low profile head, self-drilling, self-tapping sheet metal screws, corrosion protected with minimum zinc coating thickness of 0.008 mm, length as required.
- .4 Bolts, nuts, washers: hot dipped galvanized to ASTM A123/A123M, 380 g/m² zinc coating.
- .5 Anchors: concrete expansion anchors or other suitable drilled type fasteners.

2.2 METAL FRAMING

- .1 Steel Z-girts: to CAN/CSA S136, fabricated from metallic coated steel, depth as indicated.
 - .1 Minimum steel thickness as indicated on reviewed shop drawings but not less than 1.22 mm.
- .2 Steel studs: to CSA S136, fabricated from metallic coated steel, depth as indicated.
 - .1 Minimum steel thickness as required meet project wind loads and to limit cladding deflection to maximum
 - .1 L/600 for masonry
 - .2 L/180 for all other cladding systems
- .3 Stud tracks: fabricated from same material and finish as steel studs, depth to suit.
 - .1 Bottom track: single piece.
 - .2 Top track: single piece with slotted screw connections at 25mm intervals within 75mm height flanges.
- .4 Bridging: fabricated from same material and finish as studs, 38 x 12 x 1.09 mm minimum thickness.
- .5 Angle clips: fabricated from same material and finish as studs, 38 x 38 mm x depth of steel stud, 1.22 mm minimum thickness.
- .6 Tension straps and accessories: as recommended by manufacturer.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate is acceptable for installation in accordance with reviewed engineered shop drawings and cladding manufacturer's written instructions.
 - .1 Inform Departmental Representative of unacceptable conditions immediately upon discovery.

3.2 ERECTION

- .1 Erect components to requirements of reviewed shop drawings and cladding manufacturer.
- .2 Anchor securely to existing steel studs in accordance with reviewed engineered shop drawings.
- .3 Erect studs level, aligned and securely attached with 2 screws minimum,.
- .4 Seat studs into bottom tracks and single piece top track.
- .5 Install studs at not more than 50 mm from abutting walls, openings, and each side of corners and terminations with dissimilar materials.
- .6 Brace steel studs with horizontal internal bridging.
 - .1 Fasten bridging to steel clips fastened to steel studs with screws.
- .7 Frame openings in stud walls to adequately carry loads by use of additional framing members and bracing as detailed on shop drawings.
- .8 Touch up welds with coat of zinc rich primer.

3.3 ERECTION TOLERANCES

- .1 Plumb: not to exceed 1/500th of member length.
- .2 Camber: not to exceed 1/1000th of member length.
- .3 Spacing: not more than +/- 3 mm from design spacing.

3.4 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by structural metal stud installation.

END OF SECTION