

PART 1 - GENERAL

1.1 Related Work

- |    |                               |                     |
|----|-------------------------------|---------------------|
| .1 | Structural                    | Structural Drawings |
| .2 | Modified Bituminous Roofing : | Section 07 52 16    |
| .3 | Sheet Metal Roofing:          | Section 07 61 13    |
| .4 | Metal Flashing and Trim:      | Section 07 62 00    |
| .5 | Electrical                    | Electrical Drawings |

1.2 References

- .1 CAN/ULC-S101, ASTM E 119, Standard Test Methods for Fire Tests of Building Construction and Materials
- .2 American Society for Testing and Materials (ASTM)  
ASTM A 653/A 653M, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- .3 CGSB -19.13, Sealing Compound, One Component, Elastomeric, Chemical Curing
- .4 CAN/CGSB -19.24, Sealing Compound, Multicomponent, Chemical Curing Compound.

1.3 Design Criteria

- .1 Design metal cladding to provide for thermal movement of component materials caused by ambient temperature range of 80°C without causing buckling, failure of joint seals, undue stress on fasteners or other detrimental effects.
- .2 Design wall system to resist wind loads, positive and negative, to meet requirements of the 2012 Ontario Building Code.

1.4 Qualification of Installer

- .1 Installation of fabricated wall panels to be certified by Structural Panels Inc.

1.5 Shop Drawings

- .1 Submit shop drawings in accordance with the conditions of the contract.
- .2 Indicate dimensions and thickness of panels, fastening and anchoring methods, detail and location of joints, trim pieces, thermal movement provision, wall openings, head and jamb details, materials and finish and requirements of related work.

- .3 Provide shop drawings stamped by a professional engineer indicating compliance with design criteria and the Ontario Building Code.

1.6 Delivery, Storage and Handling

- .1 Store and protect material in accordance with panel manufacturer's recommendations.
- .2 Do not expose panels with strippable film to direct sunlight or extreme heat.

PART 2 - PRODUCTS

2.1 Wall Panels

- .1 Rockwall Insulated Panels, manufactured by Structural Panels Inc., 2 hour fire rated insulated steel sandwich panel system with interlocking "Therm-L-Loc" tongue and groove edge, 1168 wide by full height, minimum RSI 3.52, composed of steel panels permanently bonded with heat polymerizing adhesive to a laminated mineral wool core.
  - .1 2 hour rated to CAN/ULC S101, ASTM E119 (Warnock Hersey, Intertek Design No. SPI/FWPA 180-01
  - .2 Exterior Sheet:
    - .1 Fabricated from Z275 galvanized sheet steel conforming to ASTM A653M Grade 33 pre-coated with nominal 0.025mm thick modified silicone polyester finish, colour - Imperial White, micro-rib finish.
    - .2 Thickness: 0.478mm (26ga.).
  - .3 Core:
    - .1 Ridgid stone wool insulation board, density 136Kg/m<sup>3</sup>, Conrock by Roxul.
    - .2 Thickness: to achieve specified fire rating and RSI.
  - .4 Interior Sheet:
    - .1 Fabricated from Z275 galvanized sheet steel conforming to ASTM A653M Grade 33 pre-coated with nominal 0.025mm thick modified silicone polyester finish, colour - Imperial White, smooth, shadow line profile.
    - .2 Thickness: 0.478mm (26ga.).
  - .5 Panel Adhesive: in conformance with Intertek Design No. SPI/WPA 180-01
  - .5 Panel weight: 127mm thick: ±24.36kg/m<sup>2</sup>.
  - .6 Sealants:
    - .1 For panel joints: silicone, Dow 999A white.
    - .2 For base channel to concrete: Type II (non sag) Tremco DYmeric, Tremco Dymonic, Sikaflex or approved equal.
  - .7 Accessories: in conformance with Intertek Design No. SPI/WPA 180-01

- .1 Fasteners, backer plates, bolts and clips: in accordance with the panel manufacturer recommendations.
- .2 Inside and outside corner trim: to match panels, as recommended by the panel manufacturer.
- .8 Base channel: with weep holes to the exterior at 800 on centre, colour matched to panel.

### PART 3 - EXECUTION

#### 3.1 Inspection

- .1 Review Rockwall Installation Manual and Rockwall Handling Manual.
  - .1 Replace panels damaged by improper handling or installation.
- .2 Before installation examine alignment of steel structure and notify project manager in writing if substrate does not comply with requirements of panel installer.
- .3 Ensure base wall flashings are in place before commencing installation.
- .4 Coordinate work with other sections.
  - .1 Provide openings and reinforcing for scuppers, wall mounted lighting, structural members etc.

#### 3.2 Installation

- .1 Install panels in accordance with manufacturer's written instructions and shop drawings. Allow for thermal movement.
- .2 Do not install panels in wet weather.
- .3 Ensure base channel is designed to permit any moisture that might enter the panel will drain to the exterior through weep holes at the bottom of the panel.
- .4 Use vacuum lift equipment recommended by the panel manufacturer in the placing of panels.
- .5 Follow installation sequence recommended by the panel manufacturer.
- .6 Install panels on square and level and ensure they remain vertical, use edge protector to prevent tear back.
  - .1 Replace any panels that suffer panel buckling, edge damage or steel separation during installation.
- .7 Use a two continuous concealed beads of caulking to the female side of the panel joint, one on the inner and one on the outer steel rolled edge as recommended by the panel manufacturer.

- .8 Comply with installation tolerances recommended by panel manufacturer.
- .9 Remove strippable coating from panels as they are erected.
- .10 Protect top and edges of installed panels from moisture at the end of each day with a temporary watertight covering and until flashings are in place.

3.3 Clean-up

- .1 Leave work areas clean, free from grease, finger marks and stains. B

END OF SECTION 07 42 63