## **METAL CLADDING**

#### 1. GENERAL

# 1.1 Performance Requirements

- .1 Expansion and Contraction: Design work to accommodate expansion and contraction within design temperature range.
- .2 Design Wind and Temperatures: In accordance with requirements of the governing building code.
- .3 Deflection: Maximum L/240 of clear span at design loads.
- .4 Design work to maintain profile specified.

# 1.2 Quality Assurance

- .1 Installer: Trained and approved by the manufacturer and having a minimum five years experience in the installation of the work described in this Section and can show evidence of satisfactory completion of projects of similar size, scope and type. If requested, provide letter of certification from manufacturer stating that installer is certified applicator of its products, and is familiar with proper procedures and installation requirements required by the manufacturer.
- .2 Maintenance Seminars: Provide, to the City, training seminars and recommendations on Product maintenance procedures.
- .3 Pre-Installation Meeting: Two weeks prior to commencing work of this Section, arrange for manufacturer's technical representative to visit the site and review preparatory and installation procedures to be followed, conditions under which the work will be done, and inspect the surfaces to receive the work of this Section. Advise the Contract Administrator of the date and time of the meeting.
- .4 Manufacturer's Site Inspection: Have the Manufacturer's Technical Representative inspect the Work at suitable intervals during application and at conclusion of the work of this Section, to ensure the Work is correctly installed. When requested, submit manufacturer's inspection reports and verification that the work of this Section is correctly installed.
- .5 Source Limitations: Obtain each type of product from a single manufacturer.

#### 1.3 Submittals

- .1 Samples: Duplicate 50 mm x 75 mm (2" x 3") samples of each type of cladding material, in colour and profile specified.
- .2 Shop Drawings: Clearly indicate type of metal cladding being supplied, surface finish, type and thickness of insulation, thicknesses of metal cladding components, size, spacing and location of structural supports, connections, types and locations of fastenings. Indicate provisions for structural and thermal movement between metal cladding and adjacent materials.

# 2. PRODUCTS

## 2.1 Materials

.1 Roll Formed Metal Cladding Panel: Sheet steel coil coated to ASTM A755, galvanized by the hot dip process to ASTM A653M, Z275. Prefinish sheet to meet or exceed requirements of Baycoat Metallic Series. Colour later selected by Contract

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Administrator not necessarily from manufacturer's standard offering; apply colours on top side only. Vicwest profile L800.

- .1 High performance fluoropolymer finish: AA-C12C40R1x, chemical finish: cleaned with inhibited chemicals; chemical finish: conversion coatings; organic coating: manufacturer's standard three coat, thermocured system consisting of specially formulated inhibitive primer, fluoropolymer color coat, and clear fluoropolymer topcoat, with both color coat and clear topcoat containing not less than 70% polyvinylidene fluoride resin by weight. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with AAMA 2605 and with coating and resin manufacturers' written instructions.
- .2 Flashings, Trims and Closures: Steel core thickness and finish to match siding. Inside corners, outside corners, cap strip, drip cap, undersill trim, starter strip and window/door trim of same material and colour as cladding, with fastener holes pre-punched.
- .3 Fasteners: Non-corrosive concealed fasteners of stainless steel, aluminium or cadmium plated steel, as recommended by the manufacturer. Where exposed fasteners are required, provide fasteners in colours matching cladding work.
- .4 Sealant: CAN/CGSB-19.24, Dymeric by Tremco Ltd. or other approved equivalents.
- .5 Backer rod: Non-absorbent, non-gassing, closed cell polyolefin foam, over sized 25%.

## 2.2 Fabrication

- .1 Co-ordinate and verify at job site dimensions affecting work of this Section. Ensure suitability of adjacent building components in relation to work of this Section.
- .2 Accurately fit joints and intersecting members to true planes, adequately and securely fastened and made completely water and weathertight. Component fastening devices shall be of adequate strength and concealed, except as specified otherwise.
- .3 Fabricate work to profiles and sizes indicated complete with rabbets, interlocks, flashings, cappings, trim, filler sections as required to interface with work of other Sections. Make provisions for thermal and structural movements.
- .4 Fabricate all devices required for erection and adequate anchorage and attachment required to be built into or attached to substrate and framing members for proper support.
- .5 Accurately cut and form flashing true and straight without waves or buckles. Make adequate provision for thermal movement and make joints watertight.
- .6 Reinforce work to meet specified requirements and prevent undue deflection. Provide concealed corrosion resistant fastening and continuous formed prefinished cleats.

## 3. EXECUTION

#### 3.1 Installation - General

.1 Install work in accordance with manufacturer's written instructions, plumb with intersecting parts joined together to provide tight, accurately fitted joints with adjoining surfaces in true planes. Attach components in manner not restricting

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thermal movement.

#### 3.2 Installation

- .1 Install insulation on liner sheets with adhesive. Butt each board against adjacent boards, with joints staggered. Fit neatly with tight joints around obstructions, openings and corners. Fill voids behind flashings and trim with neatly cut blocks of insulation.
- .2 Fasten cladding to studs with concealed fasteners where possible and at spacings to suit loading requirements. Ensure complete nesting of exterior siding sheets on studs and sealed side lap joints.
- .3 Align units end-to-end to provide accurate fit with corresponding sections parallel and straight. Keep exposed fasteners to a minimum. Maintain minimum end overlap of 50 mm (2") and locate directly over supports.

# 3.3 Installation - Flashing, Closure, Trim And Accessories

- .1 Cut and flash openings for louvres, doors, windows and the like. Provide all necessary closures, flashings, gutter, downspouts, drips and trims, sealed to stop direct weather penetration.
- .2 Install soffit and fascia cladding as indicated.

## 3.4 Sealing

- .1 Seal junctions with adjoining work with sealant. Apply and cure sealant in accordance with manufacturer's instructions.
- .2 Use backer rod to maintain correct sealant width/depth ratio as recommended by the sealant manufacturer.
- .3 Apply sealant in continuous beads, using gun with proper size nozzle and sufficient pressure to fill voids and joints solid.
- .4 Form surface of sealant with full bead, smooth, free from ridges, wrinkles, sags, air pockets, embedded impurities.
- .5 Tool exposed surfaces to give slightly concave shape.

#### **END OF SECTION**