

SPECIFICATION NOTE: This combined metric and imperial specification is written in accordance with Construction Specifications Canada (CSC) Three-Part Section Format. Square brackets [] indicate choice, alternatives, data required or need for the specifier to make a decision.

PART 1- GENERAL

WORK IN-CLUDED

Provide labour, materials and other services to complete the fabrication and installation of the projected and casement windows, including all materials and components required for the operation of any window units included, in the manner, direction and performance shown on the shop drawings and specified herein.

QUALITY ASSURANCE

Drawings and specification of this section are based on casement (CA 50100 SERIES) windows manufactured by Cahill Commercial. Whenever alternative products are offered, submit supporting technical literature, samples, drawings and performance data for comparison 1 day prior to tender closing date. Work of this trade shall be executed by a company with a minimum of 5 years proven first class experience in this type of work, having adequate equipment and skilled personnel to expediently complete the job in an efficient and workmanlike manner.

SHOP DRAWINGS

All work of this section shall be executed in strict accordance with approved shop drawings. These shall be complete details of all conditions, construction and interfacing.

TEST REPORTS

Submit test reports from independent testing laboratories indicating that windows meet or exceed the performance requirements of Canadian Standards Association [CAN/CSA-A440-00 (Classification FIXED, B7, C5)]
And
[ASTME283, ASTME547, ASTME331 AND ASTME330]

Condensation resistance
For Casement (CA 50100 SERIES) windows is $I_f = 63$,
 $I_g = 65$

MAINTENANCE DATA

Provide maintenance data for maintenance and cleaning in accordance with instructions under General Conditions.

WARRANTY

The work of this division shall be guaranteed against defects of materials and workmanship for a period of 1 year following the date of delivery.

PROTECTION

Protect adjacent surfaces from damage resulting from work of this trade.

PART2-PRODUCTS

MATERIALS

Aluminum curtain wall (CA 50100 SERIES)
thermally broken, rain screen system to CAN/CSA-A440-00 Classification A3, B7, C5, and I = 63
Aluminum sections of 6063-T5 alloy, minimum 2.3mm (0.091") wall thickness.

Thermal break

Extruded EPDM Thermal Barrier.

Do not use connecting screws, clips or other devices which would bridge the frame thermal break.

Sealant

A 50mm bead of butyl sealant is applied to each side of interior corners of sealed unit and held in place with extruded aluminum pressure plates. Aluminum pressure plates are fitted with an extruded EPDM gasket fastened at 150mm o/c with machine screws.

Joints are sealed with flexible sealant described below, reinforced with EPDM corner plug.

Sealant to be [1-part silicone] [1-part polyurethane] to CGSB L] and suitable for job conditions,
L-I color as selected.

Glass and glazing materials.

Factory sealed double glazed unit 25.4mm (1") overall thickness to CAN/CGSB-12.8-M, glazed in accordance with manufacturer's instructions. Glass thickness sized to National Building Code requirements.

Weather stripping

Extruded flexible EPDM to ASTM 0-2000. Install all weather-stripping in specially extruded ports and secure to prevent shrinkage or movement.

Fasteners

Non-magnetic, stain and corrosion resistant stainless steel to ASTM E-149. Source Quality Control Windows supplied under this specification shall have been tested by an independent testing agency indicating compliance with the performance requirements of Canadian Standards Association CAN/CSA-A440-00.

FABRICATION

GENERAL

Fabricate window frame using extruded components joined by means of a thermal break. Assemble all joints in main frame, neatly, in weather tight manner and secure by means of screws anchored into integral screw ports. Debur and make smooth all sharp edges and corners. Provide hollow extruded sections for all rail sash members. Fabricate entire window in a manner that will allow easy replacement of any defective, damaged or worn components, hardware or weather-stripping.

FINISH

Comply with Aluminum Association Designation System for Aluminum Finishes. Provide Clear anodized finish, designated [AA-A41 class I 18um (.0007")] [AA-A31 class 2 10um (.0004")] finish

OR

Provide AA-A44 [standard bronze] [light bronze] [black] electrolytic anodized class I 18um (.0007") finish.

OR

Provide a factory applied thermosetting fluoropolymer coating in accordance with American Architectural Manufacturers Association specification AAMA 2603(Duracron), 2604(Acrynar), 2605(Duramar), to all exposed aluminum sections. Colour shall match... (Specifier provides color reference number).

PART 3 - EXECUTION

PREPARATION

Protect adjacent surfaces from damage resulting from work under this specification.

INSTALLATION

Windows shall be installed, glazed and adjusted by personnel having a minimum 5 years proven experience and in accordance with the manufacturer's instructions and approved shop drawings. All items in this section shall be set in their correct location and shall be set level, square plumb and at proper elevations and alignment with other work. Do not exceed 3mm in 3050mm (1/8" in 10'-0") variation from plumb and level.

Seal joints between frame members and window openings with sealant to provide weather-tight seal at outside and air vapour seal at inside.

PROTECTION AND CLEANING

Aluminum shall be isolated from concrete, mortar, plaster and dissimilar metals with bituminous paint or epoxy solution.

Framing shall be protected from other building materials during and after installation until acceptance by the General Contractor. Thereafter, it shall be the responsibility of the General Contractor to maintain protection and provide final cleaning.