

DIVISION 08 OPENINGS

Section 08 00 00 Openings - General

- 1 Information relates to Department technical requirements regarding doors and frames, specialty doors, entrances and storefronts, windows, skylights, hardware, glazing and glazed curtain wall.
- 2 Extended Warranty:
 - 2.1 Manufacturer's warranty to be provided which guarantees the all interior and exterior doors, including overhead sectional doors and interior and exterior door hardware, for a minimum period of four (4) years extended beyond the expiration of the performance assurance requirements specified in the General Conditions.
 - 2.2 Manufacturer's warranty to be provided which guarantees all aluminum windows and window and sidelite glazing for a period of four (4) years extended beyond the expiration of the performance assurance requirements specified in the General Conditions.
 - 2.3 Consultant shall confirm with manufacturers that warranties of combined locking hardware components will be covered when different products are used in combination.
 - 2.4 Refer also to Part 1 Section 2, 08 50 00 Windows for additional extended warranty requirements.

Section 08 10 00 Doors & Frames

- 1 Doors manufactured from the following materials are acceptable:
 - 1.1 Aluminum
 - 1.2 Wood
 - 1.3 Hollow metal
 - 1.4 Refer to the specific section in this document for more details. The designer is required to select the material most suitable to the specific job requirements.
- 2 Frames manufactured from the following materials are acceptable:
 - 2.1 Aluminum
 - 2.2 Pressed steel

- 2.3 Wood
- 2.4 Refer to the specific section in this document for more details. The designer is required to select the material most suitable to the specific job requirements.
- 2.5 All exterior frames shall be thermally broken units.
- 3 Doors and door frames shall be coloured by an appropriate manufactured process or by painting with suitable products on site.
- 4 Glazing in all exterior doors shall be, as a minimum, double glazed insulated units, argon filled with low-e coating and non-metallic spacers, except as noted otherwise in Part 2, Section 2, Division 08.
- 5 Ensure fire doors carry an Underwriters Laboratory label of the classes required.
- 6 Where double doors are incorporated into exterior door design, ensure that a maximum of three (3) exits are designed with removable mullions at locations where a greater entry width is required. Otherwise provide permanent mullions to ensure positive latching.

Section 08 11 00 Metal Doors and Frames

1 Design Criteria

- 1.1 Fabricate steel doors and frames in accordance with Canadian Steel Door and Frame Manufacturer's Association, "Canadian Manufacturing Specifications for Steel Doors and Frames", except where noted otherwise in this document.
- 1.2 For offices, meeting rooms, and other similar rooms identified in the project specific requirements (excluding washrooms and storage rooms) provide:
 - 1.2.1 Solid entry door
 - 1.2.2 A door sidelight, 600mm wide x height matching associated door, c/w horizontal metal window blinds.

2 Materials

2.1 Steel Hollow Metal Doors

2.1.1 Sheet steel

- 2.1.1.1 18 ga base thickness, commercial grade steel to ASTM

A1008/A1008M-18, Class 1 finished to ASTM A653/A653M-18 W25 wiped zinc finish.

2.1.2 Glazing stops

2.1.2.1 Minimum 20 ga. base thickness sheet steel with W25 wiped zinc finish to ASTM A653/A653M-18 or ASTM A924/A924M-18 screw fixed.

2.1.3 Door Core

2.1.3.1 Exterior Doors:

2.1.3.1.1 Hollow steel, vertically stiffened with steel ribs and all voids filled with incombustible, semi-rigid fibrous insulation or urethane, 1.5 lb./cu.ft., minimum density.

2.1.3.2 Interior Doors

2.1.3.2.1 Honeycomb, structural core consisting of kraft paper having 3/4" cell size to thickness indicated.

2.1.3.2.2 Provide coloured door framing.

2.1.3.3 Fire Doors

2.1.3.3.1 Fire doors shall carry a Fire Underwriter's Laboratory label of classes as required by the drawings.

2.1.3.4 Primer

2.1.3.4.1 For touch up to CAN/CGSB 1.181-99.

2.2 Pressed Steel Frames

2.2.1 Sheet steel

2.2.1.1 Commercial grade steel to ASTM A1008/A1008M-18, Class 1 finished to ASTM A653/A653M-18 W25 wiped zinc finish.

2.2.2 Frames: generally 16 ga. base thickness steel.

2.2.3 Floor anchors, channel spreaders and wall anchors: minimum 16 ga. base thickness steel.

2.2.4 Guard boxes: minimum 22 ga. base thickness steel.

2.2.5 Glazing stops: minimum 20 ga. base thickness steel, tamper proof.

2.2.6 Reinforcing channel: to CSA G40.20-13/G40.21-13 (R2018), type 300W.

2.2.7 Door bumpers: black neoprene single stud.

2.2.8 Primer to CAN/CGSB 1.181-99.

Section 08 11 16 Aluminum Doors and Frames

1 Design Criteria

- 1.1 Where Aluminum Doors and Frames are incorporated into design use heavy duty materials, complete with hardware, exterior stops and tamper proof hinges.
- 1.2 All main entrance doors and frames shall consist of aluminum sections and tempered glass. These doors will be equipped with an automatic closer and holding mechanisms. At least one main entrance door and frame system shall consist of a double with removable mullion to allow a minimum opening of 1.5 m.

2 Materials

2.1 Aluminum extrusions

2.1.1 Aluminum Association alloy AA6063-T5, anodizing quality.

2.2 Sheet aluminum

2.2.1 Aluminum Association alloy AA5005-H32.

2.3 Steel reinforcement

2.3.1 To CSA G40.20-13/G40.21-13 (R2018), grade 44W hot dip galvanized to CSA G164-18.

2.4 Fasteners

2.4.1 aluminum, or stainless steel, finished to match adjacent material.

2.5 Weatherstrip

2.5.1 Replaceable mohair.

2.6 Isolation coating

2.6.1 Alkali resistant, bituminous paint or epoxy solution.

2.7 Glass

2.7.1 Tempered glass to CAN/CGSB 12.1-2017, Type 2, Class B.

2.8 Finishes

2.8.1 Finish exposed surfaces of aluminum components in accordance with Aluminum Association Designation System for Aluminum Finishes - 1980.

3 Fabrication

3.1 Design frames and screens in exterior walls to:

3.1.1 Accommodate expansion and contraction within service temperature range of -35 deg.C to 75 deg. C.

3.1.2 Make allowances for deflection of structure. Ensure that structural loads are not transmitted to aluminum work.

3.2 Provide replaceable weatherstripping at exterior and vestibule door openings. Weatherstrip bottom of doors with pile sweep strip applied to door rail.

3.3 Aluminum Frames and Screens

3.3.1 Frames for doors and screens to be aluminum extrusions 1-3/4" x 4-1/2" with minimum wall thickness 0.120".

3.4 Aluminum Doors

3.4.1 Construct doors of porthole extrusions with minimum wall thickness of 0.120".

3.4.2 Construction: heavy duty, minimum style size 1 3/4" x 4".

3.4.3 Reinforce mechanically-joined corners of doors by welding, spigotting, welding and spigotting or by one piece of cast aluminum angle to produce sturdy door unit.

3.4.4 Glazing stops: interlocking snap-in type for dry glazing. Exterior stops: tamper proof type.

4 Installation

- 4.1 Arrange components to prevent abrupt variation in colour.
- 4.2 Door frames shall be set plumb and square, properly and well secured to the surrounding structure.
- 4.3 Cavities between frames and the rough opening should be filled with foamed-in insulation.
- 4.4 The exterior joints between the frames and the adjacent building material shall be carefully caulked.
- 4.5 Install doors and hardware in accordance with hardware templates and manufacturer's instructions.
- 4.6 Adjust hardware for smooth operation.

Section 08 14 00 Wood Doors

1 Design Criteria

- 1.1 Refer to general comments - Section 08 00 00.
- 1.2 All wood flush doors shall be seven-ply solid core with hardboard face.
- 1.3 Use Nova Scotia manufactured hardboard faces whenever possible.

2 Materials

- 2.1 Solid core door materials: to CSA 0132.2.

3 Fabrication

- 3.1 Vertical edge strips shall match the face veneer.
- 3.2 Prepare doors as required for items such as glazing and louvres. Glazing stops to match face veneer.

4 Installation

- 4.1 Install doors and hardware in accordance with manufacturer's instructions.

Section 08 30 00 Specialty Doors

1 Sectional Overhead Doors

1.1 Design Criteria

1.1.1 Design exterior door assembly to withstand windload with pressures of 120 km/hr with a maximum horizontal deflection of 1/240 of opening width.

1.1.2 Exterior doors to be insulated.

1.2 Products

1.2.1 Material

1.2.1.1 Galvanized steel sheet: Commercial quality with zinc coating.

1.2.1.2 Exterior sheet steel: 20ga. Prepainted hot dipped galvanized.

1.2.1.3 Interior sheet steel: 20 ga. Galvanized cover sheets.

1.2.2 End caps: 16 ga. Galvanized end caps.

1.2.2.1 Finish coat: factory applied, baked on acrylic enamel finish from Manufacturer's standard colour range.

1.2.3 Doors

1.2.3.1 Door sections: Insulated, thermally broken, steel polyurethane steel sandwich formed by a continuous process and complete with ship lapped joints. Reinforcements to be minimum 14 gauge steel or wood blocking.

1.2.3.2 Continuous neoprene bulb weatherstrip full width of door bottom.

1.2.3.3 Provide electro mechanical reversing safety bar full width of door section with tie into door operator.

1.2.3.4 Hardware: all door face hardware, tracks and track mounting and torsion assembly to be hot dip galvanized, minimum 14 gauge.

1.2.3.5 With Division 16 provide all accessories necessary for proper function of door including rollers, roller brackets, counter balances and other accessories as warranted by project.

2 Special Function Doors

2.1 Design Criteria

2.1.1 Sound Control Doors

2.1.1.1 Consider use of Sound Control Doors for incorporation into design to maintain room STC ratings.

2.1.1.2 Ensure such doors have appropriate gaskets and seals about door perimeter and bottom.

Section 08 42 29 Automatic Entrances

1 Automatic entrance equipment must be capable of interface with access control systems.

Section 08 50 00 Windows

1 Windows

1.1 All exterior windows shall meet the performance requirements as calculated and required by the most recent issue of CSA A440-17, Windows.

1.2 Refer to the specific section in this document for more details. The designer is required to select the material most suitable to the specific job requirements. Windows manufactured from the following materials are acceptable:

1.2.1 Aluminum

1.2.2 Vinyl

1.3 The designer is required to select the operator most suitable to the specific job requirements. The following types of operable windows are generally acceptable, except as noted otherwise in Part 2, Section 2, Division 08.

1.3.1 Projected

1.3.2 Horizontal slider

1.3.3 Vertical slider

1.3.4 Casement

1.3.5 Awning

1.3.6 Tilt and turn

- 1.4 Windows shall be coloured by an appropriate manufactured process or by painting with suitable products on site.
- 1.5 Glazing in all exterior windows shall be, as a minimum, double glazed insulated units, argon filled with low-e coating and non-metallic spacers, except as noted otherwise in Part 2, Section 2, Division 08.

2 Design Criteria

2.1 Window Area:

- 2.1.1 Carefully consider orientation, size and characteristics of glazing to take into account the impact of solar gain, glare and day lighting requirements which may result in different sizes, R values, and the like. For type, number, and percentage of window area, as well as operable or fixed, refer to the project specific requirements and coordinate with DTIR Project Design Leader.
- 2.2 Locate windows in the main element of the wall, on the warm side of the plane of the insulation. Do not place window frames in the veneer.
- 2.3 Use triple glazing only when approved.
- 2.4 Provide insect screens, removable from the interior, on operable windows.
- 2.5 Weather stripping shall be constructed of a material that is resistant to deterioration by weathering or aging and shall be compatible with associated materials. Weatherstripping shall be mechanically secured in position and shall be replaceable.
- 2.6 Provide brick mould, sill extender, drywall receiver and other accessories required for suitable detailing and technical performance of exterior veneers and interior finishes.

3 Fabrication

- 3.1 Fabricate units to project dimensions and as confirmed on site.
- 3.2 Fabricate window units square and true with maximum tolerance of plus or minus 1/16" for units with diagonal measurement of 6'-0" or less, and plus or minus 1/8" for units with diagonal measurement over 6'-0".
- 3.3 Make allowance for deflection of structure. Ensure that structural loads are not transmitted to windows.

- 3.4 Manufacturer's nameplates on windows are not acceptable.
 - 3.5 Install air seal gasket at factory as detailed.
 - 3.6 Install removable insect screens in all opening sashes (on interior side of window only).
- 4 Glazing
- 4.1 Glaze and install windows in accordance with CSA A440-17 and as required for the selected window material and operation.
 - 4.2 Thermal glazing unit: double glazed sealed unit.
- 5 Hardware
- 5.1 Finish: stainless steel or white bronze.
 - 5.2 Types: use the most appropriate hardware, approved by the manufacturer, for the window material and operation either singly or in combination, including:
 - 5.2.1 cam handles
 - 5.2.2 roto-operators
 - 5.2.3 tilt-turn
 - 5.2.3.1 Stainless appearance for colour compatibility with all profile colours.
 - 5.2.3.2 Single handle operation tilt before turn for easiest operation into venting position.
 - 5.2.3.3 Intermittent Stop Arm type hardware to hold the window in any position when open.
 - 5.2.3.4 Custodial Lock type entry resistant tilt-turn hardware for prevention of unlawful entry, including lockable handles to allow only authorized use of swing-in sash position for cleaning purposes, blocking unauthorized exterior access in institutional buildings and for increased safety in high rise applications.
 - 5.2.4 Spring catch - for pole operation of vents.

6 Installation

- 6.1 Windows are to be installed in accordance with CSA A440.4:19 and according to the manufacturer's instructions. Verify window openings to ensure all framing members are securely in place and all barriers (air and vapour) are installed.
- 6.2 Mock-up of window installation required for approval.
- 6.3 Arrange components to prevent abrupt variation in colour.
- 6.4 Window frames should be set plumb and square, properly and well secured to the surrounding structure, according to the manufacturer's instructions.
- 6.5 Cavities between window frames and the rough opening should be filled with foamed-in insulation.
- 6.6 The exterior joints between window frames and the building opening should be carefully caulked.
- 6.7 Adjust hardware for smooth operation.

Section 08 51 00 Metal Windows

1 Aluminum Windows

1.1 References and Quality Work:

1.1.1 To recent issue of CSA A440-17 as follows:

Vertical Slider Unit	Air leakage	A-3
	Water leakage	B-7
	Wind load	C-4
Fixed or Projected	Wind load	C-5
	Screen strength	S-1
	Forced entry	F-10

1.1.2 All windows by the same manufacturer.

- 1.1.3 Sash: aluminum
- 1.1.4 Main frame: aluminum, thermally broken.
- 1.2 Certificates:
 - 1.2.1 Submit manufacturer's certificate, certifying compliance with specification requirements, for:
 - 1.2.1.1 Windows
 - 1.2.1.2 Infiltration/exfiltration rates
 - 1.2.1.3 Thermal transfer resistance of frames
 - 1.2.1.4 Anodized aluminum finish
 - 1.2.1.5 Architectural coatings
- 1.3 Isolation
 - 1.3.1 Isolate aluminum from adjacent components, as required, by means of isolation coating.
- 1.4 Finish: Clear Anodized.

Section 08 53 00 Plastic Windows

1 Vinyl Windows

1.1 References and Quality Work:

- 1.1.1 Conforms to latest NBC, Clause 9.7.2.1 and most recent issue of CSA A440-17 as follows:

Air Leakage	A-3
Water Leakage	B-4
Wind Load	C-4
Screen Strength	S-1
Forced Entry	F-10

1.2 Extended Warranties:

1.2.1 In addition to the standard extended warranty required for Windows as specified in Section 08 00 00, provide for the following manufacturer's warranties on materials:

1.2.1.1 PVC frame - lifetime

1.2.1.2 Hardware - lifetime

1.2.1.3 Glazed sealed units - 10 years

1.3 Components

1.3.1 Frame

1.3.1.1 Thickness: multi-chambered 3-1/4"

1.3.1.2 Assembly: fusion welded corners

1.3.1.3 Cam lock and keeper system as per manufacturer's recommendations

1.3.2 Screens

1.3.2.1 Full screen which is removable from the inside with white aluminum frame and fiberglass cloth (grey/black).

Section 08 60 00 Roof Windows and Skylights

- 1 Where roof windows or skylights are incorporated into the design, use translucent glazing systems to minimize heat gain and improve the quality of the light delivered to occupied spaces. Transparent glazing may be used with DTIR approval.
- 2 Standard of Acceptance for translucent glazing systems:
 - 2.1. Solera Advanced Glazing or approved equal.

Section 08 71 00 Door Hardware

- 1 Hardware to be installed to standard hardware location dimensions in accordance with the Canadian Metric Guide for Steel Doors and Frames (Modular Construction) prepared by the Canadian Steel Door and Frame Manufacturers' Association.
- 2 Keying of hardware shall be coordinated with the client and DTIR. Refer to the specific section in this document for details on keying.
- 3 Design Criteria
 - 3.1 Prior to design and specification development ensure that the client group has been contacted to coordinate individual needs and program related concerns including master or grand master keying requirements.
 - 3.2 Refer to DC350, Part 2, Section 2, Division 08, 08 71 00 for Education related design criteria.
- 4 Materials
 - 4.1 Door Trim
 - 4.1.1 Specify finish to be generally satin.
 - 4.2 Description of Hardware
 - 4.2.1 Use the following Hardware series numbers when specifying the various items of door hardware. Series numbers may be changed to two digits for small projects.
 - 4.2.2 Series 100 - Door Butts and Hinges.
 - 4.2.2.1 Use series designation 100 for hardware items to specify door hinges, pivots or floor closers, threshold (when part of the floor closer) track and Hangers.
 - 4.2.2.2 Specify by Number of pairs, Type of Bearings, metal, tips, fastenings, size and gauge, options, application (example, full mortise or half-mortise)
 - 4.2.2.3 Size hardware to manufacturer's hinge specification guide to meet requirements including those required by ULC, NFPA (Fire) 80, latest NBC, and required trim clearance, door lining, electric controls.
 - 4.2.2.4 Use heavy weight hardware for doors or doors of high frequency and

unusual stress.

4.2.2.5 Use Non-removable pin on exterior doors opening out and reverse bevel on interior doors with locks.

4.2.2.6 Exercise care to ensure that floor and sill conditions will accommodate checking floor hinges when specified. Generally, an intermediate pivot is required.

4.2.2.7 Butts and Hinges:

4.2.2.7.1 Specify size to suit intended use.

4.2.2.7.2 On exterior doors and doors in wet areas use non-ferrous hinges of bronze or stainless steel.

4.2.2.7.3 On exterior and out swinging doors provide non-removable pins (NRP)

4.2.3 Series 200 - Lockset & Latchsets

4.2.3.1 Use series 200 designation for hardware items to specify locksets, latchsets, exit devices, flush bolts, cremone bolts.

4.2.3.2 Specify hardware by manufacturer's line, function, design and finish adding prefix and suffix numbers to qualify selection of options.

4.2.3.3 Conform to manufacturer's reference guides and meeting requirements of ULC, NFPA, and latest NBC.

4.2.3.4 For locks and latches, specify mortised type with lever handles; light, medium or heavy duty as applicable to function and use.

4.2.4 Series 300 - Operating Trim

4.2.4.1 Use series 300 for hardware items to specify operating trim such as door pulls, push plates, push and pull bars.

4.2.4.2 Specify model, size, gauge, material, finish options.

4.2.4.3 Ensure Pulls are through bolted, except when the opposite side does not permit.

4.2.5 Series 400 - Exit Device Accessories

4.2.5.1 Use series 400 for hardware items to specify exit device accessories, including mullions, co-ordinators, and astragals.

4.2.5.2 Specify hardware for pairs of doors only by description and manufacturer's number designation.

4.2.5.3 For Exit Devices

4.2.5.3.1 All exit devices required for the project shall be of matching design.

4.2.5.3.2 Provide labeled fire exit devices on fire doors.

4.2.5.3.3 Ensure trim for exist devices are through bolted to the lock style case.

4.2.5.3.4 Where required, exit devices hall have touch bar locked down by inside cylinder feature.

4.2.6 Series 500 - Overhead Closing Devices

4.2.6.1 Use series 500 for hardware items to specify surface or concealed overhead closing devices and mounting brackets.

4.2.6.2 Specify finish, manufacturer's series number, and size (where applicable), arm assembly, option suffix complete with accessory numbers.

4.2.6.3 Door Closers and Accessories:

4.2.6.3.1 Specify parallel arm in exposed locations.

4.2.6.3.2 Specify Top Jamb Mounted (TJM) on exterior doors opening out.

4.2.6.3.3 Specify power assist operators with remote pad switch where required by Provincial Building Code N.S. Reg. 44/2019.

4.2.7 Series 600 - Door Controls

4.2.7.1 Use series 600 for hardware items to specify door controls including overhead door holders, electro-magnetic holders and smoke/heat detectors.

4.2.7.2 Door control hardware may be required for doors normally held in open

position and where a smoke barrier or labeled door is required.

4.2.7.3 Automatic Door Operators

4.2.7.3.1 Ensure closing force and door speed are adjustable to provide appropriate closing control.

4.2.7.3.2 Specify units having a three position switch (On, Off, Hold Open)

4.2.7.3.3 Ensure the full open position is fully adjustable between 0 to 30 seconds.

4.2.7.3.4 Ensure the door shall close under full spring power when the operator motor is shut off at the unit, using the Off switch.

4.2.7.3.5 Ensure provision of push button switches to assist entrance and exit from the building.

4.2.7.3.6 Ensure signs are provided indicating an automatic barrier free entrance.

4.2.8 Series 700 - Protective Plates and Trim

4.2.8.1 Use series 700 for hardware items to specify protective plates and trim including kick, mop, stretcher and door edges.

4.2.8.2 Specify type, size, material, and finish.

4.2.8.3 Specify plates 50 mm less than door width on push side of single doors and 25 mm less on pairs of doors.

4.2.8.4 Specify plates 12 mm less than door width on pull side.

4.2.8.5 Stretcher plates may be used as a combination push plate and stretcher plate.

4.2.8.6 Specify kick plates on push pull function, push side.

4.2.9 Series 800 - Door Stops, Holders, and Bumpers

4.2.9.1 Use series 800 for hardware items to specify floor or base stops and holders, wall bumpers.

4.2.9.2 Specify wherever an open doors or any item of hardware thereon strikes a wall, column, or other part of the building.

4.2.10 Series 900 - Special Door Accessories

4.2.10.1 Use series 900 for hardware items to specify special door accessories including weatherstripping, thresholds (when not specified elsewhere), key control cabinets, letter slots, number and name plate.

4.2.10.2 Specify door gaskets and bottom seal with retract mechanism on acoustic control doors.

4.2.10.3 Specify weatherstripping, applied continuously around perimeter of head, jambs and mullions of exterior doors. Provide weatherstripping of extruded aluminum with neoprene gasket, unless specified otherwise.

5 Keying

- 5.1 Door keying shall be co-ordinated with DTIR.
- 5.2 Specify grand master key(s) as directed.
- 5.3 Specify three (3) master keys for each MK group.
- 5.4 Specify duplicate keys for each lock.
- 5.5 Keying code numbers to be stamped on keys and cylinders.

6 Installation

- 6.1 Hardware to be installed to standard hardware location dimensions in accordance with the Canadian Metric Guide for Steel Doors and Frames (Modular Construction) prepared by the Canadian Steel Door and Frame Manufacturers' Association.
- 6.2 During installation, an Architectural Hardware Consultants shall inspect and certify, in writing, that all items and their installation are in accordance with specified requirements, are functioning properly and are in compliance with the Contract Documents.

Section 08 74 00 Electro-Mechanical Hardware

1 Design Criteria

- 1.1. Magnetic locking systems are not to be used.

Section 08 80 00 Glazing

1 Design Criteria

- 1.1. Use tempered safety glass in traffic doors, vestibules, and borrowed lite units in public areas.
- 1.2. Specify mirrors as part of washroom accessories.
- 1.3. Specify wired glass in fire rated assemblies.

2 Materials

- 2.1. Clear Sheet Glass: to CAN/CGSB 12.2-M91 (R2017) B quality.
- 2.2. Polished Plate or Float Glass to CAN/CGSB 12.3-M91 (R2017), glazing quality.
- 2.3. Clear wired glass: to CAN/CGSB 12.11-M90, Type 1, wire mesh style 4, 6 mm (typical) thick.
- 2.4. Insulating Glass Units: Factory sealed double glazed units, argon filled and complete with non-metallic spacers - outer lite tinted (except where noted otherwise for educational facilities in Part 2 Section 2, Division 08, 08 50 00) , 1/4" thick, inner lite 1/4" clear plate or float glass, with a hermetically sealed space of 1/2" width.
- 2.5. Clear tempered glass: to CAN/CGSB 12.1-2017, Type 2, Class B 1/4" thick.
- 2.6. One way mirrored glass: to CAN/CGSB 12.6-M91, Type 1 - metallic coating applied to clear glass.
- 2.7. Silvered mirror glass: to CAN/CGSB 12.5-M86, Type 1A - float glass for normal use.
- 2.8. Glazing and Sealing Compound Materials.
 - 2.8.1. Glazing Compound: oil base, to CGSB 19-GP-6M, Type 1.
 - 2.8.2. Sealant Compound: one component acrylic base, to CGSB 19-GP-5M, gun grade.

- 2.8.3. Glazing Tape: preformed butyl tape, 10-15 durometer hardness, paper release.
- 2.8.4. Setting Blocks: neoprene, Shore "A" durometer hardness 70-90.
- 2.8.5. Spacer shims: neoprene, Shore "A" durometer hardness 40-50.
- 2.8.6. Primer-sealers and cleaners: to glass manufacturer's standard.
- 2.9. Non-Vision / Translucent Glazing Units (TGU)
 - 2.9.1. Acceptable translucent glazing unit manufacturers:
 - 2.9.1.1. Solera by Advanced Glazings Limited, Sydney, N.S. or approved equal.
 - 2.9.2. Fabrication and installation to manufacturer's printed specifications.

END