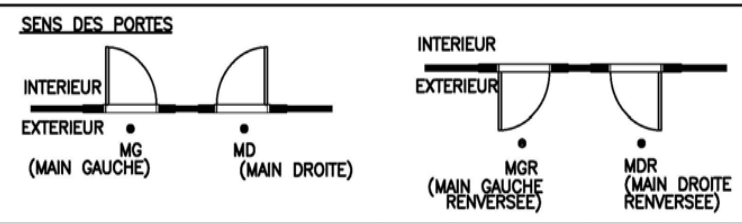


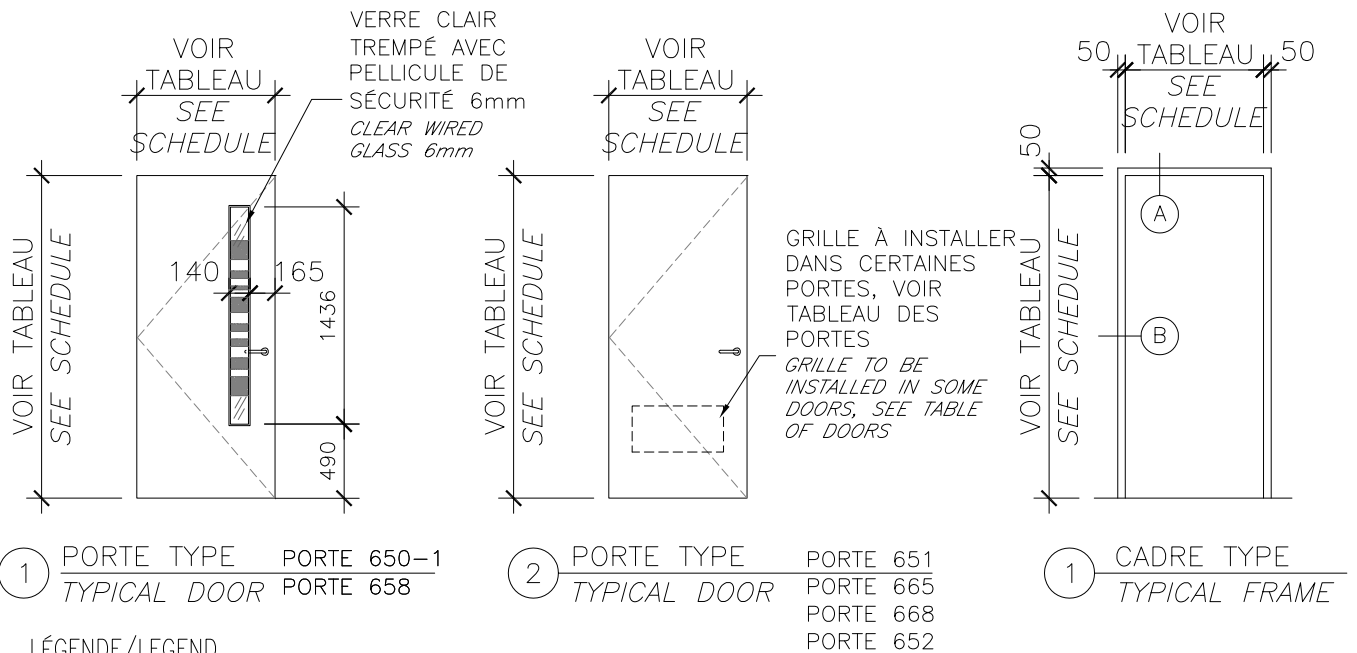
TABLEAU DES PORTES ET CADRES / DOORS AND FRAMES SCHEDULE

NO PORTE DOOR NO	LOCALISATION LOCATION	PORTES / DOORS														CADRES / FRAMES														DIVERS			REMARQUES / NOTES	
		DIMENSIONS				ELEVATION	MATERIAU	CALIBRE	FINI	FINISH	RESISTANCE AU FEU FIRE RATED	VITRAGE GLAZING			OUVERURE OPENING		DIMENSIONS			ELEVATION	MATERIAU	MATERIAL	CALIBRE	GAUGE	FINI	FINISH	RESISTANCE AU FEU	VITRAGE GLAZING			GROUPE QUINCAILLERIE HARDWARE GROUP	PERSIENNE		LOUVER
		LARGEUR	WIDTH	HAUTEUR	HEIGHT							EPAISSEUR	THICKNESS	FILM TRANSLUCIDE	TRANSLUCIDE FILM	MAIN	HAND	MAIN ACTIVE	ACTIVE HAND									LARGEUR TOTALE (LT)	TOTAL WIDTH (TW)	HAUTEUR TOTALE (HT)				
DE @ / FROM TO																																		
650-01	601-3 @ 650	915	2135	45	1	AC	***	P	***	VS1	6	X	MGR	***	1015	2185	1	AC	16	P	***	***	***	***	3	***								
650-02	650	2 x 610	2135	45	2	BAP	***	P	***	***	***	***	COUL	***	***	***	***	***	***	***	***	***	***	5	***									
651-01	650 @ 651	915	2135	45	2	BAI	***	P	***	***	***	***	MD	***	1015	2185	1	ACI	16	P	***	***	***	***	8	***								
651-02	651	711	2135	45	2	BAP	***	P	***	***	***	***	MDR	***	811	2185	1	AC	16	P	***	***	***	***	2	X								
652	650 @ 652	915	2135	45	2	BAP	***	P	***	***	***	***	MD	***	1015	2185	1	AC	16	P	***	***	***	***	4	***								
653	650 @ 653	915	2135	45	2	BAP	***	P	***	***	***	***	MD	***	1015	2185	1	AC	16	P	***	***	***	***	1	***								
654	650 @ 654	915	***	***	10	AL	***	ANOD	***	VS2	6	X	MG	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
655	650 @ 655	915	***	***	10	AL	***	ANOD	***	VS2	6	X	MD	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
656-01	650 @ 656	915	***	***	8	AL	***	ANOD	***	VS2	6	X	MD	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
656-02	650 @ 656	***	***	***	***	***	***	***	***	***	***	***	***	***	2330	2400	7	AL	***	ANOD	***	VS2	2 x 6	X	***	***								3
657	658 @ 657	***	***	***	***	***	***	***	***	***	***	***	***	***	2391	1028	6	AL	***	ANOD	***	VS2	2 x 6	***	***	***								3
658	601-2 @ 658	EX	EX	EX	EXI	AC	***	P	***	VS1	EX	X	MGR	***	EX	EX	EXI	AC	16	P	***	***	***	***	7	***								2
659	667 @ 659	915	***	***	3	AL	***	ANOD	***	VS2	6	X	MD	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
660	667 @ 660	915	***	***	3	AL	***	ANOD	***	VS2	6	X	MD	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
661	667 @ 661	915	***	***	4	AL	***	ANOD	***	VS2	6	X	MD	***	***	***	***	AL	16	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
662	658 @ 662	915	***	***	5	AL	***	ANOD	***	VS2	6	X	MG	***	***	***	***	AL	16	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
663	658 @ 663	915	***	***	5	AL	***	ANOD	***	VS2	6	X	MD	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
664	667 @ 664	915	***	***	4	AL	***	ANOD	***	VS2	6	X	MG	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
665	669 @ 665	915	2135	45	2	BAP	***	P	***	***	***	***	MG	***	1015	2185	1	AC	16	P	***	***	***	***	4	***								
666	650 @ 666	915	***	***	9	AL	***	ANOD	***	VS2	6	X	MD	***	***	***	***	AL	***	ANOD	***	VS2	2 x 6	X	6	***								1 et 3
668	669 @ 668	915	2135	45	2	BAP	***	P	***	***	***	***	MD	***	1015	2185	1	AC	16	P	***	***	***	***	1	***								

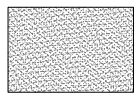
LEGENDE / LEGEND		AC: Acier / Steel		ANOD: Anodisé / Anodized		FAB: Fourni par le fabricant / Supplied by manufact		NR: Non requis / Not required		VS1: Verre trempé clair 6 mm avec pellicule sécuritaire	
ACI: Acier isolé / Insulated steel		BAP: Bois âme pleine / Wood solid core		MD: Main droite / Right hand		PRPT: Prépeint / Prepainted		VS2: Verre trempé clair 6 mm / Clear tempered glass 6 mm		TH1: Unité scellée clair (VS1 + VS1) /	
ACS: Acier insonorisé / soundproofed steel		BAI: Bois âme insonorisé / Wood sound dampening core		MDR: Main droite renversée / Right hand reversed		P: Paint / Painted		TH2: Unité scellée à motif (VS1 + VS2) /		Clear thermos glass (VS1 + VS1)	
AL: Aluminium		BAPV: Bois âme pleine vitré / Glaze wood solid core		MG: Main gauche / Left hand		SM: Seuil en marbre / Marble threshold		Textured thermos glass (VS1 + VS2)			
ALI: Aluminium isolé / Insulated aluminium		COUL: Coulissant / Sliding		MGR: Main gauche renversée / Left hand reversed		TV: Teint + vernis en usine / Stain + varnished					
		EX: Existant / Existing									

REMARQUES / REMARKS	
1	Porte intégrée au système cloison montable/démontable <i>Door integrated into movable partition system</i>
2	Porte, cadre et quincaillerie existante relocalisés <i>Relocated existing door and hardware-new frame</i>
3	Cloison système voir élévations feuille A09 <i>Systeme partition, see elevation on sheet A09</i>





LÉGENDE/LEGEND

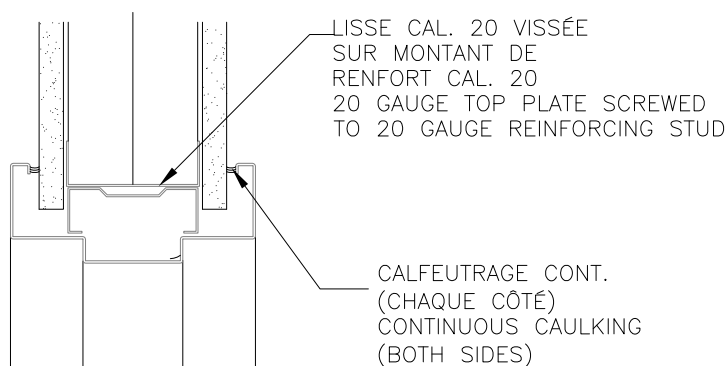


FILM DÉCORATIF  
FINI TRANSLUCIDE  
DECORATIVE FILM  
FINISH: TRANSLUCENT

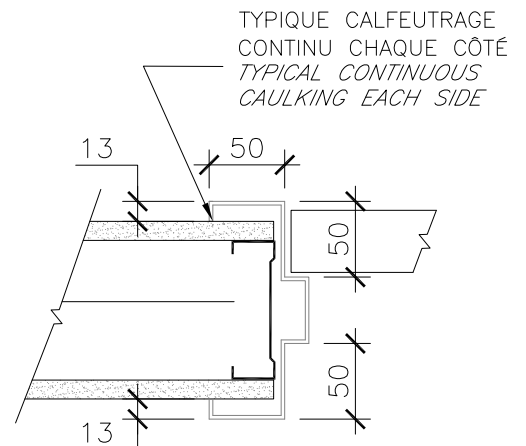


VERRE CLAIR TREMPÉ 6mm  
AVEC PELLICULE DE SÉCURITÉ  
CLEAR TEMPERED  
GLASS 6mm WITH SECURITY FILM

1 ÉLÉVATION – PORTES & CADRES  
 ELEVATION – DOORS & FRAMES

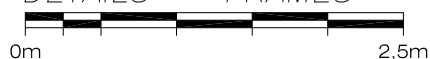


A COUPE-PROFILÉ TÊTE  
 TOP PROFILE(SECTION)



B JAMBAGE TYPIQUE – PLAN  
 PLAN – TYPICAL JAMB

2 DÉTAILS – CADRES  
 DETAILS – FRAMES



**Part 1            General**

**1.1               RELATED REQUIREMENTS**

- .1       Section 06 10 00.01 - Rough Carpentry
- .2       Section 08 14 16 - Flush Wood Doors
- .3       Section 08 71 00 - Door Hardware
- .4       Section 08 80 50 - Glazing
- .5       Section 09 22 16 - Non-structural Metal Framing
- .6       Section 09 21 16 - Gypsum Board Assemblies
- .7       Section 09 91 99 - Painting for Minor Works

**1.2               REFERENCES**

- .1       American Society for Testing and Materials International (ASTM)
  - .1       ASTM A653/A653M-06a, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  - .2       ASTM B29-03, Standard Specification for Refined Lead.
  - .3       ASTM B749-03, Standard Specification for Lead and Lead Alloy Strip, Sheet and Plate Products.
- .2       Canadian General Standards Board (CGSB)
  - .1       CAN/CGSB-1.181-99, Ready-Mixed Organic Zinc-Rich Coating.
  - .2       CGSB 41-GP-19Ma-84, Rigid Vinyl Extrusions for Windows and Doors.
- .3       Canadian Standards Association (CSA International)
  - .1       CSA-G40.20-[04]/G40.21-04, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
  - .2       CSA W59-03, Welded Steel Construction (Metal Arc Welding).
- .4       Canadian Steel Door Manufacturers' Association (CSDMA)
  - .1       CSDMA, Recommended Specifications for Commercial Steel Doors and Frames, 2000.
  - .2       CSDMA, Selection and Usage Guide for Commercial Steel Doors, 1990.
- .5       National Fire Protection Association (NFPA)
  - .1       NFPA 80-99, Standard for Fire Doors and Fire Windows.
  - .2       NFPA 252-03, Standard Methods of Fire Tests of Door Assemblies.
- .6       Underwriters' Laboratories of Canada (ULC)
  - .1       CAN/ULC-S701-01, Standard for Thermal Insulation, Polystyrene, Boards and Pipe Covering.

- .2 CAN/ULC-S702-97, Standard for Thermal Insulation, Mineral Fibre, for Buildings.CAN/ULC-S704-[03], Standard for Thermal Insulation, Polyurethane and Polyisocyanurate Boards, Faced.
- .3 CAN/ULC-S704-03, Standard for Thermal Insulation, Polyurethane and Polyisocyanurate Boards, Faced.
- .4 CAN4-S104-M80, Standard Method for Fire Tests of Door Assemblies.
- .5 CAN4-S105-M85, Standard Specification for Fire Door Frames Meeting the Performance Required by CAN4-S104.

### **1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Provide product data: in accordance with Section 01 33 00 - Submittal Procedures.
- .3 Provide shop drawings: in accordance with Section 01 33 00 - Submittal Procedures.
  - .1 Indicate each type of door, material, steel core thicknesses, mortises, reinforcements, location of exposed fasteners, openings, glazed, louvred, arrangement of hardware and fire rating and finishes.
  - .2 Indicate each type frame material, core thickness, reinforcements, glazing stops, location of anchors and exposed fastenings and finishes.
  - .3 Submit test and engineering data, and installation instructions.

### **1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Waste Management and Disposal:
  - .1 Separate waste materials for recycling] in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Hot dipped galvanized steel sheet: to ASTM A653M, ZF75, minimum base steel thickness in accordance with CSDMA Table 1 - Thickness for Component Parts.
- .2 Reinforcement channel: to CSA G40.20/G40.21, Type 44W, coating designation to ASTM A653M.

### **2.2 DOOR CORE MATERIALS**

- .1 Honeycomb construction:
  - .1 Structural small cell, 24.5 mm maximum kraft paper 'honeycomb', weight: 36.3 kg per ream minimum, density: 16.5 kg/m<sup>3</sup>; minimum sanded to required thickness.

---

**2.3 ADHESIVES**

- .1 Honeycomb cores and steel components: heat resistant, spray grade, resin reinforced neoprene/rubber (polychloroprene) based, low viscosity, contact cement.
- .2 Polystyrene and polyurethane cores: heat resistant, epoxy resin based, low viscosity, contact cement.
- .3 Lock-seam doors: fire resistant, resin reinforced polychloroprene, high viscosity, sealant/adhesive.

**2.4 PRIMER**

- .1 Touch-up prime CAN/CGSB-1.181.

**2.5 PAINT**

- .1 Field paint steel doors and frames in accordance with Section 09 91 99 - Interior Painting. Protect weatherstrips from paint. Provide final finish free of scratches or other blemishes.

**2.6 ACCESSORIES**

- .1 Door silencers: single stud rubber/neoprene type.
- .2 Fabricate glazing stops as formed channel, minimum 16 mm height, accurately fitted, butted at corners and fastened to frame sections with counter-sunk oval head sheet metal screws.
- .3 Metallic paste filler: to manufacturer's standard.
- .4 Glazing : in accordance with section 08 80 50 – Glazing.
- .5 Make provisions for glazing as indicated and provide necessary glazing stops.
  - .1 Provide removable stainless steel glazing beads for [use with glazing tapes and compounds and secured with countersunk stainless steel screws for mounting dry glazing of snap-on type.

**2.7 FRAMES FABRICATION GENERAL**

- .1 Fabricate frames in accordance with CSDMA specifications.
- .2 Fabricate frames to profiles and maximum face sizes as indicated.
- .3 Interior frames: 1.6 mm welded.
- .4 Blank, reinforce, drill and tap frames for mortised, templated hardware, and electronic hardware using templates provided by finish hardware supplier. Reinforce frames for surface mounted hardware.
- .5 Protect mortised cutouts with steel guard boxes.
- .6 Prepare frame for door silencers, 3 for single door, 2 at head for double door.

- .7 Manufacturer's nameplates on frames and screens are not permitted.
- .8 Conceal fastenings except where exposed fastenings are indicated.
- .9 Provide factory-applied touch up primer at areas where zinc coating has been removed during fabrication.
- .10 Isolate frames of acoustic doors with mineral wool fibre insulation, minimum STC 46.

## **2.8 FRAME ANCHORAGE**

- .1 Provide appropriate anchorage to floor and wall construction.
- .2 Locate each wall anchor immediately above or below each hinge reinforcement on hinge jamb and directly opposite on strike jamb.
- .3 Provide 2 anchors for rebate opening heights up to 1520 mm and 1 additional anchor for each additional 760 mm of height or fraction thereof.
- .4 Locate anchors for frames in existing openings not more than 150 mm from top and bottom of each jambs and intermediate at 660 mm on centre maximum.

## **2.9 FRAMES: WELDED TYPE**

- .1 Welding in accordance with CSA W59.
- .2 Accurately mitre or mechanically joint frame product and securely weld on inside of profile.
- .3 Cope accurately and securely weld butt joints of mullions, transom bars, centre rails and sills.
- .4 Grind welded joints and corners to a flat plane, fill with metallic paste and sand to uniform smooth finish.
- .5 Securely attach floor anchors to inside of each jamb profile.
- .6 Weld in 2 temporary jamb spreaders per frame to maintain proper alignment during shipment.

## **2.10 FRAMES: KNOCKED-DOWN TYPE**

- .1 Ship knocked-down type frames unassembled.
- .2 Provide frames with mechanical joints which inter-lock securely and provide functionally satisfactory performance when assembled and installed in accordance with CSDMA Recommended Installation Guide for Steel Doors and Frames.
- .3 Securely attach floor anchors to inside of each jamb profile.

## **2.11 FRAMES: SLIP-ON TYPE**

- .1 Not applicable.

## **2.12 DOOR FABRICATION GENERAL**

- .1 Doors: swing type, flush, with provision for glass and/or louvre openings as indicated.
- .2 Fabricate doors with longitudinal edges welded. Seams: grind welded joints to a flat plane, fill with metallic paste filler and sand to a uniform smooth finish.
- .3 Blank, reinforce, drill doors and tap for mortised, templated hardware.
- .4 Factory prepare holes 12.7 mm diameter and larger except mounting and through-bolt holes, on site, at time of hardware installation.
- .5 Reinforce doors where required, for surface mounted hardware. Provide inverted, recessed, spot welded channels to top and bottom of interior doors.
- .6 Provide factory-applied touch-up primer at areas where zinc coating has been removed during fabrication.
- .7 Manufacturer's nameplates on doors are not permitted.

## **2.13 DOORS: HONEYCOMB CORE CONSTRUCTION**

- .1 Form face sheets for interior doors from [1.2] mm sheet steel with [honeycomb] core laminated under pressure to face sheets.

## **Part 3 Execution**

### **3.1 MANUFACTURER'S INSTRUCTIONS**

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

### **3.2 INSTALLATION GENERAL**

- .1 Install labelled steel fire rated doors and frames to NFPA 80 except where specified otherwise.
- .2 Install doors and frames to CSDMA Installation Guide.

### **3.3 FRAME INSTALLATION**

- .1 Set frames plumb, square, level and at correct elevation.
- .2 Secure anchorages and connections to adjacent construction.
- .3 Brace frames rigidly in position while building-in. Install temporary horizontal wood spreader at third points of door opening to maintain frame width. Provide vertical support at centre of head for openings over 1200 mm wide. Remove temporary spreaders after frames are built-in.
- .4 Make allowances for deflection of structure to ensure structural loads are not transmitted to frames.

---

**3.4 DOOR INSTALLATION**

- .1 Install doors and hardware in accordance with hardware templates and manufacturer's instructions and Section 08 71 00 - Door Hardware.
- .2 Provide even margins between doors and jambs and doors and finished floor[and thresholds] as follows.
  - .1 Hinge side: 1.0 mm.
  - .2 Latchside and head: 1.5 mm.
  - .3 Finished floor, top of carpet, noncombustible sill and thresholds: 13 mm.
- .3 Adjust operable parts for correct function.
- .4 Install louvres.

**3.5 INSULATION OF DOOR FRAMES**

- .1 Install the insulating material inside the indicated door frames.
- .2 Make sure that all the empty spaces are filled by insulating material before beginning the works.

**3.6 FINISH REPAIRS**

- .1 Touch up with primer finishes damaged during installation.
- .2 Fill exposed frame anchors and surfaces with imperfections with metallic paste filler and sand to a uniform smooth finish.

**3.7 GLAZING**

- .1 Install glazing for doors in accordance with Section 08 80 50 - Glazing.

**END OF SECTION**



**Part 1 General**

**1.1 RELATED SECTIONS**

- .1 Section 08 11 00 - Metal Frames.
- .2 Section 08 71 00 - Door Hardware.
- .3 Section 08 80 50 - Glazing.
- .4 Section 099199 - Painting for Minor Works

**1.2 REFERENCES**

- .1 Architectural Woodwork Manufacturers Association of Canada (AWMAC).
  - .1 Quality Standards for Architectural Woodwork 1998.
- .2 Canadian General Standards Board (CGSB).
  - .1 CAN/CGSB-71.19-M88, Adhesive, Contact, Sprayable.
  - .2 CAN/CGSB-71.20-M88, Adhesive, Contact, Brushable.
- .3 Canadian Standards Association (CSA International).
  - .1 CSA A440.2-98, Energy Performance of Windows and Other Fenestration Systems.
  - .2 CSA O115-M1982(R2001), Hardwood and Decorative Plywood.
  - .3 CAN/CSA O132.2 Series-90(R1998), Wood Flush Doors.
  - .4 CAN/CSA-O132.5-M1992(R1998), Stile and Rail Wood Doors.
  - .5 CAN/CSA-Z808-96, A Sustainable Forest Management System: Guidance Document.
  - .6 CSA Certification Program for Windows and Doors 00.
- .4 Environmental Choice Program (ECP).
  - .1 CCD-045-92, Sealants and Caulking Compounds.
  - .2 CCD-046-92, Adhesives.
- .5 National Fire Protection Association (NFPA).
  - .1 NFPA 80-1999, Standard for Fire Doors and Fire Windows.
  - .2 NFPA 252-1999, Standard Method of Fire Tests of Door Assemblies.
- .6 Underwriters' Laboratories of Canada (ULC).
  - .1 CAN-4S104M-80(R1985), Fire Tests of Door Assemblies.
  - .2 CAN4-S105M-85 (R1992), Fire Door Frames Meeting the Performance Required by CAN4-S104.

**1.3 SUBMITTALS**

- .1 Product Data:

- .1 Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures .
- .2 Shop Drawings:
  - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures .
  - .2 Indicate door types and cutouts for lights and louvres, sizes, core construction, transom panel construction and cutouts.

#### **1.4 SAMPLES**

- .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures .
- .2 Submit one 300 x 300 mm corner sample of each type wood door.
- .3 Show door construction, core, glazing detail and faces.
- .4 Manufacturer's Instructions:
  - .1 Submit manufacturer's installation instructions.

#### **1.5 QUALITY ASSURANCE**

- .1 Regulatory Requirements:
  - .1 Wood fire rated doors: labelled and listed by an organization accredited by Standards Council of Canada.
- .2 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
- .3 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .4 Pre-installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.

#### **1.6 DELIVERY, STORAGE, AND HANDLING**

- .1 Storage and Protection:
  - .1 Protect doors from dampness. Arrange for delivery after work causing abnormal humidity has been completed.
  - .2 Store doors in well ventilated room, off floor, in accordance with manufacturer's recommendations.
  - .3 Protect doors from scratches, handling marks and other damage. Wrap doors.
  - .4 Store doors away from direct sunlight.

#### **1.7 WASTE MANAGEMENT AND DISPOSAL**

- .1 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .2 Dispose of packaging material in appropriate on-site bin for recycling in accordance with site waste management program.

- .3 Unused or damaged glazing materials are not recyclable and must not be diverted to municipal recycling programs.
- .4 Divert unused adhesive material from landfill to official hazardous material collections site approved by Departmental Representative.
- .5 Do not dispose of unused paint materials into sewer systems, into lakes, streams, onto ground or in locations where it will pose health or environmental hazard.

## **1.8 WARRANTY**

- .1 For the work of this Section 08 04 16, the 12 month warranty period is extended to:
  - .1 Lifetime for solid core doors;
  - .2 Three (3) years for all soundproof doors.

## **Part 2 Products**

### **2.1 FIRE RATED WOOD DOORS**

- .1 Not used.

### **2.2 WOOD FLUSH DOORS**

- .1 Solid core: to CAN/CSA-O132.2.1.
  - .1 Construction:
    - .1 Wood solid core
      - .1 Solid wood particle core, density of 449 kg per cubic meter, according to standard ANSI A208.1
      - .2 Stiles: 3.2 mm piece of wood hot pressed laminated with structural glue, including hardwood facing to manufacturer's standard to match door veneer, with natural wood facing 22 mm thick by 107 mm wide.
      - .3 Top and bottom rails: glued to core, 85 mm of overall thickness, composed of 3.2 mm pieces of wood hot pressed laminated with type 1 structural glue.
      - .4 7 ply construction.
      - .5 Wood veneer: 5 ply wood laminate or rigid wood fiber board (masonite) to be painted.
- .2 Wood soundproof door with sound dampening core : to ASTM E 90-02, ASTM E 413-87, ASTM E 1332-90 et ASTM E 2235-03
  - .1 Construction:
    - .1 Soundproof door **STC 46**
      - .1 Sound dampening core
      - .2 Stiles: 3.2 mm piece of wood hot pressed laminated with structural glue, including hardwood facing to manufacturer's standard to match door veneer, with natural wood facing 22 mm thick by 107 mm wide.

- .3 Top and bottom rails: glued to core, 85 mm of overall thickness, composed of 3.2 mm pieces of wood hot pressed laminated with type 1 structural glue.
- .4 Wood veneer: 5 ply wood laminate or rigid wood fiber board (masonite) to be painted.
- .5 Soundproofing door seal and recessed automatic door bottom according to the manufacturer's specifications.

## **2.3 FABRICATION**

- .1 Vertical edge strips to match face veneer.
- .2 Prepare doors for glazing. Provide hardwood species to match face veneer with mitred corners.
- .3 Bevel vertical edges of single acting doors 3 mm in 50 mm on lock side and 1.5 mm in 50 mm on hinge side.

## **Part 3 Execution**

### **3.1 MANUFACTURER'S INSTRUCTIONS**

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

### **3.2 INSTALLATION**

- .1 Unwrap and protect doors in accordance with CAN/CSA-O132.2 Series, Appendix A.
- .2 Install labelled fire rated doors to NFPA 80.
- .3 Install doors and hardware in accordance with manufacturer's printed instructions and CAN/CSA-O132.2 Series, Appendix A .
- .4 Adjust hardware for correct function.
- .5 Install glazing in accordance with Section 08 80 50 - Glazing .
- .6 Secure transom and side panels by means of stops.

### **3.3 ADJUSTMENT**

- .1 Re-adjust doors and hardware just prior to completion of building to function freely and properly.

### **3.4 CLEANING**

- .1 Perform cleaning as soon as possible after installation to remove construction and accumulated environmental dirt.
- .2 Remove traces of primer, caulking; clean doors and frames.

- .3 Clean glass and glazing materials with approved non-abrasive cleaner.
- .4 On completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

**END OF SECTION**

---

**Part 1            General**

**1.1               RELATED REQUIREMENTS**

- .1      Section 08 11 00 - Metal Frames.
- .2      Section 08 14 16 - Flush Wood Doors
- .3      Section 08 80 50 – Glazing
- .4      Section 10 22 19.01 – Stud type demountable partitions

**1.2               REFERENCES**

- .1      ANSI/BHMA A156.1-2000, American National Standard for Butts and Hinges.
- .2      ANSI/BHMA A156.2-2003, Bored and Preamsembled Locks and Latches.
- .3      ANSI/BHMA A156.3-2001, Exit Devices.
- .4      ANSI/BHMA A156.4-2000, Door Controls - Closers.
- .5      ANSI/BHMA A156.5-2001, Auxiliary Locks and Associated Products.
- .6      ANSI/BHMA A156.6-2005, Architectural Door Trim.
- .7      ANSI/BHMA A156.8-2005, Door Controls - Overhead Stops and Holders.
- .8      ANSI/BHMA A156.10-1999, Power Operated Pedestrian Doors.
- .9      ANSI/BHMA A156.12-2005, Interconnected Locks and Latches.
- .10     ANSI/BHMA A156.13-2002, Mortise Locks and Latches Series 1000.
- .11     ANSI/BHMA A156.14-2002, Sliding and Folding Door Hardware.
- .12     ANSI/BHMA A156.15-2006, Release Devices - Closer Holder, Electromagnetic and Electromechanical.
- .13     ANSI/BHMA A156.16-2002, Auxiliary Hardware.
- .14     ANSI/BHMA A156.17-2004, Self-closing Hinges and Pivots.
- .15     ANSI/BHMA A156.18-2006, Materials and Finishes.
- .16     ANSI/BHMA A156.19-2002, Power Assist and Low Energy Power - Operated Doors.
- .17     ANSI/BHMA A156.20-2006, Strap and Tee Hinges and Hasps.
- .2      Canadian Steel Door and Frame Manufacturers' Association (CSDMA)
  - .1      CSDMA Recommended Dimensional Standards for Commercial Steel Doors and Frames - 2009.

**1.3               ACTION AND INFORMATIONAL SUBMITTALS**

- .1      Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2      Product Data:
  - .1      Submit manufacturer's instructions, printed product literature and data sheets for door hardware and include product characteristics, performance criteria, physical size, finish and limitations.
- .3      Samples:
  - .1      Submit for review and acceptance of each unit.
  - .2

- .3 Identify each sample by label indicating applicable specification paragraph number, brand name and number, finish and hardware package number.
- .4 After approval samples will be returned for incorporation in Work.
- .4 Hardware List:
  - .1 Submit contract hardware list. The list must indicate specified hardware, including make, model, material, function, size, finish and other pertinent information.
- .5 Manufacturer's Instructions: submit manufacturer's installation instructions.

#### **1.4 CLOSEOUT SUBMITTALS**

- .1 Submit in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Operation and Maintenance Data: submit operation and maintenance data for door hardware for incorporation into manual.

#### **1.5 MAINTENANCE MATERIALS SUBMITTALS**

- .1 Supply maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Tools: Supply 2 sets of wrenches for door closers, locksets and fire exit hardware.

#### **1.6 QUALITY ASSURANCE**

- .1 Regulatory Requirements:
  - .1 Hardware for doors in fire separations and exit doors certified by a Canadian Certification Organization accredited by Standards Council of Canada.
- .2 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

#### **1.7 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Package items of hardware including fastenings, separately or in like groups of hardware, label each package as to item definition and location.
- .3 Storage and Handling Requirements:
  - .1 Store materials indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
- .4 Packaging Waste Management: remove for reuse in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

#### **1.8 ACCEPTABLE MATERIALS OR PRODUCTS**

- .1 Where materials are specified by trade name refer to the "Instructions to Tenderers" for a procedure to be followed in applying for approval of alternatives.

---

**1.9 WARRANTY**

- .1 For the work of this Section 08 71 00, the 12 month warranty period is extended to:
  - .1 Ten (10) years for door closers;
  - .2 Two (2) years for all other hardware components.

**Part 2 Products**

**2.1 HARDWARE ITEMS**

- .1 Use one manufacturer's products only for similar items.

**2.2 DOOR HARDWARE**

- .1 Locks and latches:
  - .1 Mortise locks and latches: to ANSI/BHMA A156.13, series 1000 mortise lock, grade 1, designed for function and keyed as stated in Hardware Schedule.
  - .2 Cylinders: key into keying system as noted as directed.
- .2 Butts and hinges:
  - .1 Butts and hinges: to ANSI/BHMA A156.1, designated by a numeral identifiers, followed by size and finish, listed in Hardware Schedule.
- .3 Door Closers and Accessories:
  - .1 Door controls (closers): to ANSI/BHMA A156.4, in accordance with ANSI/BHMA A156.4, table A1.
  - .2 Closer/holder release devices: to ANSI/BHMA A156.15, listed in hardware schedule.
- .4 Door Operators:
  - .1 Power assist and low energy power operated doors: to ANSI/BHMA A156.19.
- .5 Auxiliary locks and associated products: to ANSI/BHMA A156.5, designated numeral identifiers listed in Hardware Schedule.
  - .1 Dead bolt: Key into keying system as directed.
  - .2 Cylinders: for installation in deadlocks provided with special doors as listed in Hardware Schedule. Key into keying system as directed.
- .6 Architectural door trim: to ANSI/BHMA A156.6, designated by numeral identifiers listed in Hardware Schedule.
  - .1 Door protection plates: kick plate type , 1.27 mm thick.
  - .2 Push plates: 1.27 mm thick stainless steel
  - .3 Push/Pull units: type stainless steel.
- .7 Auxiliary hardware: to ANSI/BHMA A156.16, designated by numeral identifiers listed in Hardware Schedule.
  - .1 Surface bolts
- .8 Barrier Free Pneumatic Door Operator:



- .1 Heavy duty pneumatically assisted door closer, capable of multi-door operation, complete with actuators, control boxes, pneumatic tubing and compressed air source.
- .2 Self contained control box/compressor combination for independent operation of two door leaves.
- .3 Control boxes: complete with electric strike relay.
- .4 Mount operators on either push or pull sides of doors as required to place them inside rooms.
- .5 Actuation of operators by card readers and/or motion detectors.
- .6 Electrical box and actuator: Hardwired low voltage actuator with stainless steel 114 mm round plate, engraved blue filled with handicap symbol. Box 51 mm wide x 102 mm high x 50 mm deep single gang electrical box, flush mounted in wall, locations indicated.
- .7 Supply switched line voltage to control box. Locate switch adjacent to box.
- .8 Supply low voltage wiring to each actuator and 6 mm diameter air tubing to each operator.
- .9 Mount control box in location as directed by Departmental Representative.

## **2.3 MISCELLANEOUS HARDWARE**

- .1 Indexed key control system: to ANSI/BHMA A156.5, designated by numeral identifiers.

## **2.4 FASTENINGS**

- .1 Use only fasteners provided by manufacturer. Failure to comply may void warranties and applicable licensed labels.
- .2 Supply screws, bolts, expansion shields and other fastening devices required for satisfactory installation and operation of hardware.
- .3 Exposed fastening devices to match finish of hardware.
- .4 Where pull is scheduled on one side of door and push plate on other side, supply fastening devices, and install so pull can be secured through door from reverse side. Install push plate to cover fasteners.
- .5 Use fasteners compatible with material through which they pass.

## **2.5 KEYING**

- .1 Doors and cabinet locks to be keyed differently under a existing master keyed and a existing grand master keyed
- .2 Keying system and supply of all definitive mortise cylinders by building authorized company: Serrurier Excel (Valérie Besner 450-638-7073). Contractor is responsible of commissioning authorized company and coordinating the work.
- .3 Provide temporary locks with 5 keys during construction.

---

**Part 3            Execution**

**3.1                INSTALLATION**

- .1      Manufacturer's Instructions: comply with manufacturer's written recommendations, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.
- .2      Supply metal door and frame manufacturers with complete instructions and templates for preparation of their work to receive hardware.
- .3      Supply manufacturers' instructions for proper installation of each hardware component.
- .4      Install hardware to standard hardware location dimensions in accordance with CSDFMA Canadian Metric Guide for Steel Doors and Frames (Modular Construction).
- .5      Where door stop contacts door pulls, mount stop to strike bottom of pull.
- .6      Install key control cabinet.
- .7      Use only manufacturer's supplied fasteners.
  - .1      Use of "quick" type fasteners, unless specifically supplied by manufacturer, is unacceptable.
- .8      Remove construction cores locks when directed by Departmental Representative.
  - .1      Retain services of Serrurier Excel to install permanent cores and ensure locks operate correctly.

**3.2                ADJUSTING**

- .1      Adjust door hardware, operators, closures and controls for optimum, smooth operating condition, safety and for weather tight closure.
- .2      Lubricate hardware, operating equipment and other moving parts.
- .3      Adjust door hardware to ensure tight fit at contact points with frames.

**3.3                CLEANING**

- .1      Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1      Leave Work area clean at end of each day.
  - .2      Clean hardware with damp rag and approved non-abrasive cleaner, and polish hardware in accordance with manufacturer's instructions.
  - .3      Remove protective material from hardware items where present.
  - .4      Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .2      Waste Management: separate waste materials for recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal .
  - .1      Remove recycling containers and bins from site and dispose of materials at appropriate facility.

### 3.4 SCHEDULE

.1	<b>Group 1</b> (doors 668, 653)			
3	Hinges	5BB1 4.5 X 4 FNA	652	IVE
1	Cylindrical lockset (office)	ND50PD x SPA	626	SCH
1	Cylinder on building keying system			ABL
1	Wall bumper	WS402CVX	626	IVE
1	Soundproofing door seal: silicone base, self adhesive, W-22 x 1/915mm (top) + 2/2085mm (jambs), black, K.N.Crowder			
1	Recessed automatic door bottom (neoprene insert), CT-53N x 915mm, 628, K.N.Crowder			
1	Optical spy-hole			
.2	<b>Group 2</b> (door 651-02)			
3	Hinges	5BB1 4.5 X 4 FNA	652	IVE
1	Cylindrical lockset (storeroom)	ND80PD x SPA	626	SCH
1	Louver	406 x 457		
1	Cylinder on building keying system			ABL
1	Wall bumper	WS402CVX	626	IVE
.3	<b>Group 3</b> (door 650-01)			
3	Hinges	5BB1HW 4.5 X 4.5 FNA	652	IVE
1	Electric power transfer	EPT-10	689	VON
1	Electrified hinge	L9080EU-RX X 17B X 24vdc	626	SCH
1	Cylinder on building keying system			ABL
1	Wall bumper	WS402CVX	626	IVE
1	Door operator	9542 STD RF	628	LCN
2	Actuator	8310-856 4 1/2 po. Round with handicap logo	630	LCN
1	Card reader (by Division 28)			
1	Door contact (by division 28). Frame preparation			
1	Power supply (by Division 28)			
.4	<b>Group 4</b> (door 652, 665)			
3	Hinges	5BB1HW 4.5 X 4.5 FNA	652	IVE
1	Electric power transfer	EPT-10	689	VON
1	Electrified lockset	L9080EU-RX X 17B X 24vdc	626	SCH
1	Cylinder on building keying system			ABL
1	Wall bumper	WS402CVX	626	IVE
1	Card reader (by Division 28)			
1	Door contact (by division 28). Frame preparation			
1	Motion detector (by Division 28)			
1	Surface door closer (hinge push side)	4040XP, EDA	689	LCN
.5	<b>Group 5</b> (door 650-02)			
1	Dual tracks and hangers kit	C-650 x longueur	628	KNC
1	Floor guides kit	C-200		
	With recessed guide channel C-201 in door bottom		628	KNC
2	In track stops	C-100		KNC
2	Recessed pulls	950	626	GSH



---

**Part 1            General**

**1.1                RELATED REQUIREMENTS**

- .1        Section 08 11 00 - Metal Frames.
- .2        Section 08 14 16 - Flush Wood Doors

**1.2                REFERENCES**

- .1        ASTM International
  - .1        ASTM C542-05, Standard Specification for Lock-Strip Gaskets.
  - .2        ASTM D790-07e1, Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
  - .3        ASTM D1003-07e1, Standard Test Method for Haze and Luminous Transmittance of Plastics.
  - .4        ASTM D1929-96(R2001)e1, Standard Test Method for Determining Ignition Temperature of Plastics.
  - .5        ASTM D2240-05, Standard Test Method for Rubber Property - Durometer Hardness.
  - .6        ASTM E84-10, Standard Test Method for Surface Burning Characteristics of Building Materials.
  - .7        ASTM F1233-08, Standard Test Method for Security Glazing Materials and Systems.
- .2        Canadian General Standards Board (CGSB)
  - .1        CAN/CGSB-12.1-M90, Tempered or Laminated Safety Glass.
  - .2        CAN/CGSB-12.2-M91, Flat, Clear Sheet Glass.
  - .3        CAN/CGSB-12.3-M91, Flat, Clear Float Glass.

**1.3                ACTION AND INFORMATIONAL SUBMITTALS**

- .1        Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2        Product Data:
  - .1        Submit manufacturer's instructions, printed product literature and data sheets for glass, sealants, and glazing accessories and include product characteristics, performance criteria, physical size, finish and limitations.
- .3        Samples
  - .1        Submit samples according to section 01 33 00 – Submittal procedures.
  - .2        Submit resin panels samples for review and approval.
  - .3        Submit two (2) samples of 300 mm and accessories.

#### **1.4 CLOSEOUT SUBMITTALS**

- .1 Submit in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Operation and Maintenance Data: submit operation and maintenance data for glazing for incorporation into manual.

#### **1.5 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.

#### **1.6 AMBIENT CONDITIONS**

- .1 Ambient Requirements:
  - .1 Install glazing when ambient temperature is 10 degrees C minimum. Maintain ventilated environment for 24 hours after application.
  - .2 Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

#### **1.7 ACCEPTABLE MATERIALS OR PRODUCTS**

- .1 Where materials are specified by trade name refer to the "Instructions to Tenderers" for a procedure to be followed in applying for approval of alternatives.

### **Part 2 Products**

#### **2.1 MATERIALS**

- .1 Flat Glass:
  - .1 Safety glass: to CAN/CGSB-12.1, transparent, 6 mm thick.
    - .1 Type 2-tempered.
    - .2 Class B-float.
    - .3 Category 1
  - .2 Decorative translucent film:
    - .1 Face material : 80 µm matt polymeric translucent stabilized vinyl film cadmium-free.
    - .2 Adhesive : High quality acrylic solvent based adhesive, very cohesive and extremely durable.
    - .3 Liner : Highly stable 135 gsm white kraft paper printed with red backprinting.
    - .4 To install outside the room, except for entrance doors. See drawings.
- .3 Security transparent films:
  - .1 Secure/security films: transparent polyester films, with wear resistant coating and anti-adhesion film.

- .1 Reference product : FrameGuard de Mardico, SCL SR PS15 de LLumarMagnum or replacement product approved by addendum according to Instructions to bidders.
  - .2 Anchor : structural sealant overlapping film and glazing stops. Color : black.
    - .1 Reference product :Dow Corning 995 Silicone structural glazing sealant or replacement product approved by addendum according to Instructions to bidders.
  - .3 Installation : according to manufacturer's instructions, on the inside of room.
  - .4 Resin panels on aluminum frames
    - .1 Translucent resin panel to match « varia ecoresin » product by « 3form » company.
      - .1 Color green to match « Marsh » sample by « 3form » company.
      - .2 Thickness : 12,7 mm
      - .3 Finish : to match « Sandstone » sample by « 3form » company.
      - .4 Panel module : 1220mm X 2410mm
    - .2 Wall to wall frameless partition to match solution 200.25 « Top support » by « 3form » company.
      - .1 Top and bottom aluminum extruded sections.
      - .2 Top and bottom edges of partition : extruded aluminum cap.
      - .3 Accessories: miscellaneous trim, bracing, fasteners, clips, and other accessories for installation as recommended by partition manufacturer.
      - .4 All aluminum components with anodized satin finish.
- Installation : according to manufacturer's instructions.

## 2.2 ACCESSORIES

- .1 Setting blocks: neoprene, 80-90 Shore A durometer hardness to ASTM D2240, to suit glazing method, glass light weight and area.
- .2 Spacer shims: neoprene silicone, 50-60 Shore A durometer hardness to ASTM D2240, 75 mm long x one half height of glazing stop x thickness to suit application. Self adhesive on one face.
- .3 Glazing tape:
  - .1 Preformed butyl compound, 10-15 Shore A durometer hardness to ASTM D2240; coiled on release paper; size to suit application, black colour.

---

**Part 3                      Execution**

**3.1                      EXAMINATION**

- .1      Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for glazing installation in accordance with manufacturer's written instructions.
  - .1          Verify that openings for glazing are correctly sized and within tolerance.
  - .2          Verify that surfaces of glazing channels or recesses are clean, free of obstructions, and ready to receive glazing.

**3.2                      PREPARATION**

- .1      Clean contact surfaces with solvent and wipe dry.
- .2      Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- .3      Prime surfaces scheduled to receive sealant.

**3.3                      INSTALLATION: INTERIOR - DRY METHOD (TAPE AND TAPE)**

- .1      Perform work in accordance with GANA Glazing Manual and GANA Laminated Glazing Reference Manual for glazing installation methods.
- .2      Cut glazing tape to length and set against permanent stops, projecting 1.6 mm above sight line.
- .3      Place setting blocks at 1/4 points, with edge block maximum 150 mm from corners.
- .4      Rest glazing on setting blocks and push against tape for full contact at perimeter of light or unit.
- .5      Place glazing tape on free perimeter of glazing in same manner described.
- .6      Install removable stop without displacement of tape. Exert pressure on tape for full continuous contact.
- .7      Knife trim protruding tape.

**3.4                      INSTALLATION: PLASTIC FILM**

- .1      Install plastic film with adhesive, applied in accordance with film manufacturer's instructions.
- .2      Place without air bubbles, creases or visible distortion.
- .3      Fit tight to glass perimeter with razor cut edge.

**3.5                      ERECTION : PARTITION**

- .1      Install partition after floor finishes, in accordance with manufacturer's instructions.



- .2 Fasten runners to floors, ceiling and abutting vertical surfaces at 600 mm on centre.
  - .1 At ceilings use fasteners that rigidly support partition without damaging or defacing ceiling panels or grid system members.
- .3 Erect partition, plumb, square and level.
  - .1 Accurately fit to abutting surfaces.
  - .2 Shim under partitions at uneven floors to ensure level installation.

### **3.6 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
    - .1 Remove traces of primer, caulking.
    - .2 Remove glazing materials from finish surfaces.
    - .3 Remove labels.
    - .4 Clean glass using approved non-abrasive cleaner in accordance with manufacturer's instructions.
  - .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
  - .3 Waste Management: separate waste materials for recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal

### **3.7 PROTECTION**

- .1 After installation, mark each light with an "X" by using removable plastic tape or paste.

**END OF SECTION**