

# PRODUCT SPECIFICATIONS

## TABLE OF CONTENTS

Division 05 - Metals  
A - Post & glass railing system

Division 06 - Wood, Plastics and Composites  
A - Rough Carpentry

Division 07 - Thermal and Moisture Protection  
A - Loose fill insulation  
B - Batt Insulation  
C - Soffit  
D - Sheet Metal Flashing & Trim  
E - Cement board Cladding

Division 08 - Openings  
A - Hardware Schedule (refer to drawing)  
B - Hollow Metal Doors and Frames  
C - Wood Doors and Frames (refer to drawing)  
D - Door Hardware  
E - Glazing

Division 09 - Finishes  
A - Gypsum board Assemblies  
B - Rough Carpentry  
C - Painting  
D - Baseboard, window trim  
E - Vinyl Plank Flooring

## NOTES REGARDING SPECIFICATIONS:

## SHOP DRAWINGS:

- Provide detailed drawings of any atypical non-standard applications of materials which are outside of the scope of the standard details and specifications provided by the manufacture.

## SELECTION SAMPLES:

- For each finish product specified, two complete sets of color chips representing manufacturers full range of available color and patterns.

## VERIFICATION SAMPLES:

- For each finish product specified, two samples, minimum size 4 by 6 inches, representing actual product, color, and patterns.

## NOTES REGARDING FINISHES:

- Flame spread ratings to not exceed as per 2010 MANITOBA BUILDING CODE table 3.1.13.2. note general area maximum flame spread rating is 150.

## DIVISION 05 METALS

### A) RAILINGS

Section Includes: Pre-Engineered Topless post & glass railing system - (railing replacement Lake view residence & new patio railing on Formarts residence)

Design Criteria - 42" high guard post & glass railing.

### Materials

1 Glass - withstand lateral loads as provided in Article 4.1.5.14 of the Manitoba Building Code..

2 Steel Posts - Loads on Guards shall be designed to resist the specified loads prescribed in 9.8.8.2. Manitoba Building Code 2010. Steel posts to be painted anodized black.

### Material: Acceptable Manufacturers.

1 Permaral Railing system or approved alternative

## DIVISION 07 THERMAL & MOISTURE PROTECTION

### A) LOOSE FILL INSULATION

Section Includes: Thermal, Loose fill-type glass fiber insulation in roof assembly.

### Design Criteria Information

1 Mineral fibre insulation: to CAN/ULC-S702, asbestos-free mineral fibre. Type 5 - blowing wool, suitable for application by means of pneumatic equipment.

- Noncorrosive (per ASTM C764, section 12.7)
- Does not absorb moisture (per ASTM C1104)
- Does not support mold growth (per ASTM C1398)

### Performance Criteria

Wood Frame Construction - Roof/Floor/Ceiling, R-Value: Per ASTM C518, R-26- based on 9.25" thickness

### Material: Acceptable Manufacturers.

Owens Corning or approved equal.

## DIVISION 07 THERMAL & MOISTURE PROTECTION

### B) BATT INSULATION

Section Includes: Thermal, batt-type glass fiber insulation in framed wall and roof assembly, for patch and repair as required in drawings .

### Design Criteria

Unfaced Batt Insulation: ASTM C 665, Type I, preformed formaldehyde free glass fiber batt type, unfaced. Includes Unfaced SonoBatts and Sound Attenuation Batts.

1. Noncombustible per ASTM E 136.
2. Flamespread less than 25, smoke developed less than 50 per ASTM E84.
3. ICC Building Code Construction Classification: All types.
4. Water vapor sorption, Maximum by weight: not more than 5 percent.

### Performance Criteria

Wood Frame Construction - Roof/Floor/Ceiling, R-Value: Per ASTM C518, R-19, 6-1/4 inch (159mm) thickness, 15 inch (381mm) or 19-1/4 inch (489mm) or 23 inch (584mm) width, 48 inch (1219mm) or 93 inch (2362mm) length.

### Material: Acceptable Manufacturers.

Owens Corning or approved equal.

### C) SOFFIT

Section Includes: Aluminum metal soffit - all four facilities

Design Criteria Roll formed Full vent aluminum metal soffit, Min 4.01 Square Inches ventilation per linear foot.

Commercial Double 6" Vented Aluminum Soffit  
Profile: V Groove  
Perforation: Full vent  
Blocking: 12" O.C.  
Colour: White (Standard Colour)  
Gauge: Min 29

Material: Acceptable Manufacturers.  
Georgia Pacific or approved equal.

### D) SHEET METAL FLASHING & TRIM

Section Includes: Pre-finished flashing / Metals: All flashing, Drip Caps, Downspouts, Scuppers to match window frame colour (white)

### Design Criteria

### PREFINISHED STEEL SHEET

1 Prefinished steel sheet: zinc-coated steel sheet with factory-applied silicone modified polyester (SMP) coil coating, minimum base metal thickness specified by item.  
Colour 1: custom colour, white to match white specified windows/ doors  
Colour 2: custom colour, black, to match black colour specified in windows/ doors

Fasteners: of same material as sheet metal, to CSA B111, ring thread flat head roofing nails of length and thickness suitable for metal flashing application.  
Touch-up paint: as recommended by metal flashing and trim manufacture.

Fabricate metal flashings and other sheet metal work in accordance with applicable CRCA 'FL' series specifications and as indicated.  
Form pieces in 2400 mm maximum lengths. Make allowance for expansion at joints.  
Hem exposed edges on underside 12 mm. Miter and seal corners with sealant.  
Form sections square, true and accurate to size, free from distortion and other defects detrimental to appearance or performance.  
Form parapet flashings, cap flashings, copings and fascias to profiles indicated of 0.759 mm (22 MSG) prefinished steel sheet.  
Form counter flashings, curb flashings to profiles indicated of 0.607 mm (24 MSG) zinc coated steel sheet.  
Form overflow scuppers and downspouts from 0.759 mm (22 MSG) prefinished steel sheet to sizes and profiles indicated.  
Provide necessary fastenings.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

3.5 CAULKING AND SEALING  
1 At exterior openings, fill head and jamb frame sections with foam sealant. Fill shim space around perimeter of frames with foam sealant.  
2 For both interior and exterior frames seal joint between frames and adjacent construction with sealant (caulking). Apply sealant around full perimeter of frames, on both sides of opening.  
3 For frames at exterior openings provide foam backer rod or bond breaker tape behind sealant.

## DIVISION 08

### B) HOLLOW METAL DOORS AND FRAMES

Section Includes: exterior doors- staff house

### Design Criteria

Hot dipped galvanized steel sheet: to ASTM A653/A653M, coating designation for locations as follows:

- 1 Exterior doors and frames: Z275 (G90).
- 2 Minimum base steel thickness (gauge) in accordance with CDSFMA Table 1, except as follows:
  - 1 Door face sheets: 1.2 mm (18 gauge).
  - 2 Frames: 1.6 mm (16 gauge).
  - 3 Aslragals: 1.9 mm (14 gauge).
  - 4 Floor anchors: 1.6 mm (16 gauge).
  - 5 Jamb anchors:
    - 1 T strap type: 1.6 mm (16 gauge).
    - 2 L type: 1.2 mm (18 gauge).
    - 3 Stirrup-strap type: 15 x 25 x 1.6 mm (16 gauge).
    - 4 Stud type: 1.2 mm (18 gauge).
    - 5 Wire type: 4.0 mm (9 gauge).

6 Reinforcing steel:
 

- 1 Locks, strikes: 1.6 mm (16 gauge).
- 2 Butts, hinges: 3.4 mm (10 gauge).
- 3 Surface mounted hardware: 2.7 mm (12 gauge).
- 4 Stud type: 1.2 mm (18 gauge).
- 5 Wire type: 4.0 mm (9 gauge).

7 Flush bolts: 3.4 mm (10 gauge).

8 Glazing stops: 0.9 mm (20 gauge). ULC approved for fire rated doors and frames.

9 Channel reinforcement for glazed and louvre openings: 0.9 mm (20 gauge).

10 Mortar guard boxes: 0.8 mm (22 gauge).

11 Jamb spreaders: 1.2 mm (18 gauge).

Door construction:  
Stiffened: face sheets laminated or welded, insulated core.  
2 Expanded polystyrene: CAN/ULC-S701, Type 2, density 16 to 32 kg/m<sup>3</sup>.  
3 Polyurethane: to CGSB 51-GP-21M rigid, modified poly/isocyanurate, closed cell board. Density 32 kg/m<sup>3</sup>.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

FRAMES FABRICATION GENERAL  
1 Fabricate frames in accordance with CDSFMA specifications.  
2 Fabricate frames to profiles and maximum face sizes as indicated.  
3 Exterior frames: expandable type construction.  
4 Blank, mortise, reinforce, drill and tap frames and reinforcements to receive hardware and electronic hardware using templates provided by door hardware supplier. Reinforce internally for surface mounted hardware.  
5 Top hinge reinforcement: weld in top hinge reinforcement with 20 mm leg to hinge reinforcement, 25 mm leg to frame.  
6 Reinforce head of frames wider than 1200 mm.  
7 Prepare frame for door silencers, three for single door, and two at head for double doors.  
8 Manufacturer's nameplates on frames and screens are not permitted.  
9 Conceal fastenings except where exposed fastenings are indicated.  
10 Insulate exterior frame components with fibreglass batt insulation.

## DIVISION 08 OPENINGS

### D) DOOR HARDWARE (continued)

### SUBMITTALS

- 1 Submit in accordance with Submittal Procedures.
- 2 Product Data: manufacturer's printed product literature, specifications and data sheets.
- 3 Hardware List: vertical form hardware list indicating manufacturer, model, material, function, finish and other pertinent information for each different type of hardware item proposed for use.

4 Shop Drawings:  
1 Submit shop drawings for electrified hardware. Identify manufacturer, model, function, finish, options and other pertinent information. List each item separately.  
2 Provide description of operation for each different hardware set or function.  
3 Include schematic wiring diagrams, electrical service requirements, interconnection diagrams.

4 Include parts lists and part numbers for each item.  
5 Manufacturer's Instructions: submit manufacturer's installation instructions.

### QUALITY ASSURANCE

1 Regulatory Requirements: hardware for doors in fire separations and exit doors certified by a Canadian Certification 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.

### Material: Acceptable Manufacturers.

Assa Abloy or approved equal.

### E) GLAZING

Section Includes: exterior glazing on all buildings.

### Design Criteria

1 Ensure continuity of building enclosure vapour and air barrier using glass and glazing materials as follows:

- 1 Utilize inner light of multiple light sealed units for continuity of air and vapour seal.
- 2 Limit glass deflection to 1/200 with full recovery of glazing materials.
- 3 Design glass units to withstand thermal stresses created by solar heat gain, shadowing of exterior components or assemblies (soffits, sunshades, buildings, trees, signs) and elevated interstitial space temperatures, and from solar heat gain.

### INSULATING GLASS UNITS

1 Insulating glass units: to CAN/CGSB-12.8 and certified by Insulating Glass Manufacturers Association of Canada (IGMAC).  
2 Thermal spacers for insulating glass units: triple seal design consisting of thermoset foam spacer with integral desiccant, pre-applied adhesive, captive polyisobutylene primary seal, with silicone perimeter seal. Colour WHITE. Ensure perimeter seal is compatible with edge sealants of insulating glass units.

### TYPICAL Insulating Glass Units:

- 1 Double glazed, 25 mm overall thickness.
- 2 Glass:

1 Outboard light: clear, fully tempered safety glass, 6 mm thick.  
2 Inboard light: clear, fully tempered safety glass, 6 mm thick.  
3 Inter-cavity space: 12 mm thick.  
4 Glass coating: surface number 2, low 'E' coating.  
5 Thermal spacers as specified above.  
6 Inter-cavity space argon gas filled.

Screens: to CAN/CGSB-79.1.  
1 Insect screening mesh: count 18 x 14  
2 Fasteners: tamper proof  
3 Screen frames: aluminum, colour to match window frames  
5 Provide full insect screens to cover entire operable window

Screens: to CAN/CGSB-79.1.  
1 Insect screening mesh: count 18 x 14  
2 Fasteners: tamper proof  
3 Screen frames: aluminum, colour to match window frames  
5 Provide full insect screens to cover entire oper