Part 1 GENERAL

1.1 GENERAL REQUIREMENTS

1. Conform to Sections of Division 1 as applicable.

1.2 RELATED WORK

1. Window Re-Glazing: Section 08 03 50 10, Reglazing of Heritage Windows.

2. Storm Windows: Section 08 52 69, Wood Storm Windows

1.3 REFERENCES

ASTM C509-91 - Specification for Elastomeric Cellular Preformed Gasket and Sealing Material
ASTM C542-90 - Specification for Lock-Strip Gaskets
ASTM D1044-90 - Test Method for Resistance of Transparent Plastics to Surface Abrasion
ASTM D1925-70 - Test Method for Yellowness Index of Plastics
ASTM E90-90 - Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions
CAN/CGSB-12.1-M90 - Tempered or Laminated Safety Glass
CAN2-12.3-M76 - Glass, Polished Plate or Float, Flat, Clear
CAN2-12.4-M76 - Glass, Heat Absorbing
CAN/CGSB-12.5-M86 - Mirrors, Silvered
CAN2-12.6-M76 - Mirrors Transparent (One-Way)
CAN/CGSB-12.8-M90 - Insulating Glass Units
CAN2-12.9-M76 - Glass, Spandrel
CAN2-12.10-M76 - Glass, Light and Heat Reflecting
CAN/CGSB-12.11-M90 - Wired Safety Glass
CAN/CGSB-12.12-M90 - Plastic Safety Glazing
CAN2-12.13-M79 - Glass, Patterned
CAN/CGSB-19.2-M87 - Glazing Compound Non-hardening Modified Oil Type
CAN/CGSB-19.13-M87 - Sealing Compound, One-Component, Elastomeric, Chemical Curing
CAN/CGSB-19.18-M87 - Sealing Compound, One-Component, Silicone Base, Solvent Curing
CAN/CGSB-19.21-M87 - Sealing and Bedding Compound Acoustical
CAN/CGSB-19.24-M90 - Multicomponent, Chemical-Curing Sealing Compound
Glazing Manual 90 - Flat Glass Marketing Association

1.4 SUBMITTALS

1. Samples: Submit samples of materials if required by the Consultant before commencing work. Ensure samples are clearly labelled with manufacturer's name and type.

1.5 GUARANTEE

1. The work under this Section shall be guaranteed for a period of 10 years on insulated units and 5 years on all other work from the date of the Consultant's Certificate of Substantial Completion.

Part 2 PRODUCTS

2.1 GLASS MATERIALS

1. Float Glass: CAN2-12.3-M, thicknesses shall be as indicated on Drawings or shall conform to The Ontario Building Code. In case of discrepancies most stringent requirements shall govern.

2. Sheet Glass: to CAN/CGSB-12.2, 6mm thick.

3. Tempered Glass: CAN/CGSB-12.1-M90, clear, ¼" (6mm) thick minimum typical unless otherwise indicated. Provide in flat configurations shown.

4. Sealant Compound: 1 component type, elastomeric chemical curing, CAN/CGSB-19.13-M, Class G-2-25-A-N. Colour to match adjacent surfaces unless indicated otherwise.

5. Sealing and Bedding Compound, Acoustical: CAN/CGSB-19.21-M for use at doors with sound seal.

6. Glazing Tape: 440 polyisobutylene-butyl tape manufactured by Tremco Manufacturing Co. (Canada) Ltd., or 3M ribbon sealer butyl tape manufactured by Minnesota Mining and Manufacturing Co. Ltd.

7. Gaskets: ASTM C509 cellular, elastomeric, preformed, black.

8. Glazing Splines: (Neoprene) manufacturer's standard dry glazing splines to suit aluminum extrusions. Colour to match adjacent surfaces unless indicated otherwise.

9. Spacer Shims and Setting Blocks: Neoprene, Shore "A" Durometer hardness 70-90, 100 mm (4") long, wide enough to extend from fixed stop to opposite face of glass and of height suitable to provide adequate glazing "bite" for setting blocks. Neoprene, Shore "A" 40 to 50 Durometer hardness, of adequate thickness to provide correct glass to face clearance of at least 3 mm (1/8") for spacer shims.

10. Primer Sealers and Cleaners: To glass manufacturer's standards.

11. Sealed Insulating Glass (IG) for heritage style wood storm windows,

    1. Insulating glass units: to CAN/CGSB-12.8, double unit, 19mm overall thickness (refer to drawings).

    2. Acceptable Manufacturer: Vitro Architectural Glass or approved equal.

    3. Glass: to CAN/CGSB-12.3.

    4. Glass Thickness: 3.175 mm each light

    5. Inter-cavity space thickness: 6 mm or 13 mm (Refer to drawings)

    6. Argon filled cavity space

7. Indoor Lite: clear

8. Outdoor Lite: clear, Solarban 60 on second surface (2).

9. Low-E Coating: Solarban 60

   Location: Second Surface (2)
   Visible Light Transmission: 70%
   U-Value Winter: 0.24
   Solar heat Gain Coefficient: 0.39
   Outdoor Visible Light Reflectance: 11%

12. Sealed Insulating Glass (IG) for SSG Curtain Wall, and Aluminum Windows

    1. Insulating glass units: to CAN/CGSB-12.8, double unit, 25 mm overall thickness (refer to drawings).

    2. Acceptable Manufacturer: Vitro Architectural Glass or approved equal.

    3. Glass: to CAN/CGSB-12.3.

    4. Glass Thickness: 6 mm each light

    5. Inter-cavity space thickness: 13 mm (Refer to drawings)

    6. Argon filled cavity space

    7. Indoor Lite: Vitro "Acuity"

    8. Outdoor Lite: Vitro "Acuity", Solarban 60 on second surface (2).

    9. Low-E Coating: Solarban 60

       Location: Second Surface (2)
       Visible Light Transmission: 73%
       U-Value Winter: 0.24
       Solar heat Gain Coefficient: 0.41
       Outdoor Visible Light Reflectance: 11%

13. Fire Rated Glazing - interior
    1. TGP Firelite Plus 5/16" (8 mm) thick laminated fire-rated and impact safety-rated glazing for use at interior fire rated doors, sidelites, transoms and borrowed lites.

14. Fire Rated Glazing – exterior

    1. Sealed Insulating Glass Unit (IGU) to CAN/CGSB-12.8, double unit, 25 mm overall thickness (refer to drawings).

    2. Indoor Lite: TGP Firelite Plus 5/16" (8 mm) thick laminated fire-rated and impact safety-rated glazing

3. Inter-cavity space thickness: 13 mm (Refer to drawings)

4. Outdoor Lite: 8mm tempered glass

15. Laminated Glass for use at glass guards and windows that act as glass guards
    1. One layer of 8mm tempered glass, and one layer of 8mm tempered glass with a 1.56mm thick clear plastic interlayer.
    2. Plastic Film Interlayer: Dupont SentryGlas® interlayer optically clear polyester film, abrasion resistant coating and release liner.
       1. Type 1 Safety Film: Testing in accordance with ANSI Z97.1 and CPSC 16 CFR 1201 CAT II.
       2. Thickness: 1.56mm (0.060")

2.2 FABRICATION

1. Label each light of glass with registered name of product and weight and quality of glass.

2. Check dimensions on Job Site before cutting materials.

Part 3 EXECUTION

3.1 Installation

1. Refer to Section 08 03 50 10.

End of Section 08 81 00