

General

1.1 REFERENCES

- .1 American National Standards Institute (ANSI).
 - .1 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB-12.1-M90, Tempered or Laminated Safety Glass.
 - .2 ASTM F1233-98 (2004)
 - .3 H.P. White Testing Standards
- .2 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 E330-[02] , Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
 - .8 ASTM F1233-[08] , Standard Test Method for Security Glazing Materials and Systems.
- .3 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.
 - .4 CAN/CGSB-12.4-[M91] , Heat Absorbing Glass.
 - .5 CAN/CGSB-12.6-[M91] , Transparent (One-Way) Mirrors.
 - .6 CAN/CGSB-12.8-[97] , Insulating Glass Units.
 - .7 CAN/CGSB-12.8-[97] (Amendment), Insulating Glass Units.
 - .8 CAN/CGSB-12.9-[M91] , Spandrel Glass.
 - .9 CAN/CGSB-12.10-[M76] , Glass, Light and Heat Reflecting.

- .10 CAN/CGSB-12.11-[M90] , Wired Safety Glass.
- .11 CAN/CGSB-12.12-[M90] , Plastic Safety Glazing Sheets.
- .12 CAN/CGSB-12.13-[M91] , Patterned Glass.

1.2 ADMINISTRATIVE REQUIREMENTS

- .1 Pre-Installation Meetings
 - .1 Convene pre-installation meeting 1 week prior to beginning work of this Section, with Departmental Representative in accordance with Section 01 31 19- Project Meetings to:
 - .2 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
 - .1 Verify project requirements.
 - .2 Review installation and substrate conditions
 - .3 Co-ordination with other building subtrades
 - .4 Review manufacturer's written installation instructions and warranty requirements

1.2 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 Submit two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 33 00 - Submittal Procedures. Indicate VOC's:
 - .1 For glazing materials during application and curing.
- .2 Shop Drawings:
 - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Samples:
 - .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit duplicate 300 mm size square samples of each type of glass.
- .3 Manufacturer's Instructions:
 - .1 Submit manufacturer's installation instructions
- .4 Closeout Submittals:
 - .1 Provide maintenance data including cleaning instructions for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

1.3 QUALITY ASSURANCE

- .1 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
 - .1 Provide testing and analysis of glass under provisions of Section 01 45 00 -

Quality Control.

- .2 Provide shop inspection and testing for glass.
- .2 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .3 Pre-installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.

1.4 SITE CONDITIONS

- .1 Environmental 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.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with section 01 74 21 – Construction / Demolition Waste Management and Disposal.
- .2 Divert metal cut-offs from landfill by disposal into on-site metal recycling bin.
- .3 Divert uninstalled materials for reuse at nearest used building materials facility or similar type facility.
- .4 Divert unused caulking and sealant materials from landfill through disposal at special wastes depot.
- .5 Unused or damaged glazing materials are not recyclable and must not be diverted to municipal recycling programs.
- .6 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .7 Dispose of corrugated cardboard, polystyrene, plastic and packaging material in appropriate on-site bin for recycling in accordance with site waste management program.

Part 2 Products

2.1 LAMINATED SAFETY GLASS

- .1 Laminated Safety glass: to CAN/CGSB-12.1, transparent, 2 layers of 5 mm thick tempered glass with .090 polyvinyl interlayer.

2.2 ACCESSORIES

- .1 Glazing Tape: 100% solids, ribbon form extruded polyisobutylene - butyl type, 10-15 durometer hardness, paper release, colour to match adjacent surfaces, size to suit opening.
- .2 Setting Blocks: Neoprene: 70-90 durometer Shore "A" hardness, 100 mm long x 9.5 mm thick x 6 mm high.
- .3 Spacer Shims: Neoprene: 50 durometer hardness, 75 mm x 2.4 mm thick x 6 mm high.

- .4 Glazing Points, and wire spring clips: corrosion resistant, manufacturer's standard.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

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

3.2 EXAMINATION

- .1 Verify that openings for glazing are correctly sized and within tolerances.

3.3 PREPARATION

- .1 Clean all existing surfaces and prepare for new glazing installation.
.2 Seal porous glazing channels or recesses with substrate primer or sealer.
.3 Prime surfaces to receive sealant.

3.4 INSTALLATION: INTERIOR – DRY METHOD (TAPE TO TAPE) TO HOLLOW METAL WINDOWS

- .1 Cut glazing tape to length and set against permanent stops, projecting 1.6mm above sight line.
.2 Place setting blocks at ¼ points, with edge block maximum 150mm from corners.
.3 Rest glazing on setting blocks and push against tape for full contact at perimeter of light or unit.
.4 Place glazing tape on free perimeter of glazing in same manner described.
.5 Install removable stop without displacement of tape. Exert pressure on tape for full continuous contact.
.6 Knife trim protruding tape.
.7 Install Security Sealant to entire perimeter providing a bond breaker against the surface of the glass to ensure the Security Sealant does not adhere to the glass.

3.5 CLEANING

- .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
.2 Remove traces of primer, caulking.
.3 Remove glazing materials from finish surfaces.
.4 Remove labels after work is complete.
.5 Clean glass using approved non-abrasive cleaner in accordance with manufacture's instructions.
.6 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

3.6 PROTECTION OF FINISHED WORK

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

END OF SECTION