

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