

PART I – GENERAL**WORK SPECIFIED HEREIN**

- All labor, materials, equipment and services necessary to provide the glass and glazing and related items as indicated or specified.

SUBMITTALS

- Unless otherwise noted, the contractor shall prepare all shop drawings, product literature, etc. only as required to properly coordinate and construct the project.
- Review of submittals by the Professional of Record is limited to specific shop drawings as called for in the Project Manual.

QUALITY ASSURANCE

- All work under this section shall conform to National Building Code; and to local code requirements. In case of conflict the more stringent requirements shall apply.
- Specification is based on products as manufactured by PPG Industries, Pittsburgh, PA. Glass products by other manufacturers may be submitted for approval by the Professional of Record subject to their meeting specification performance requirements.

PERFORMANCE REQUIREMENTS

- Insure that all materials comply with the requirements and is intended for the applications shown.
- Water tight and airtight installation of each piece of glass is required. Each installation must withstand normal temperature changes, wind loading, impact loading (for operating doors) without failure of any kind including loss or breakage of glass, failure of sealants or gaskets to remain watertight and airtight, deterioration of glazing materials and other defects in the work.
- Protect glass from edge damage at all times during handling, installation and operation of the building. Glass breakage during the guarantee period will be considered a form of faulty material or workmanship (resulting from edge damage) unless known to result from vandalism or other causes not related to materials and workmanship.
- Glazing channel dimensions as shown are intended to provide for necessary minimum bite on the glass, minimum edge clearance and adequate sealant thicknesses, with reasonable tolerance. The glazer is responsible for correct glass size for each opening, within the tolerances and necessary dimensions established.
- Examine the framing or glazing channel surfaces, backing, removable stop design, and the conditions under which the glazing is to be performed, and notify the Contractor in writing of any conditions detrimental to the proper and timely completion of the work. Do not proceed with glazing until unsatisfactory conditions have been corrected in a manner acceptable.

PART II – PRODUCTS**MATERIALS**

- *Glass Types:* All glass types are as scheduled on drawings. Exterior storefront performance glass shall be tempered glass units complying with CAN/CGSB-12.8. Performance glass units shall be manufactured with low-E performance coating, complying with CAN/CGSB-12.10, applied to Surface #2. Refer to Material and Products Schedule on Drawings for additional information.
- *Interior Glass:* 6 mm and 13 mm thick fully tempered glass complying with CAN/CGSB-12.1, Type 2, Class B, Category II, and ASTM C-1048. Permanently etch each light with manufacturer's name and his compliance with ANSI Z-97.1. Clear or as indicated. Provide one-way view, glass conforming with CAN/CGSB-12.6-M91, as indicated on plans.
- *Interior Glazing Compound:* complying with CAN/CGSB-19.2, Polymerized Butyl Rubber and inert Fillers (pigments), solvent based with minimum 75% solids, non-sag consistency, tack-free time of 24 hours or less, paintable non-staining.
- *Setting Blocks:* Neoprene, EPDM, or other resilient blocks of 85 shore A durometer hardness, minimum length 100 mm (4").
- *Exterior Glazing Compound:* Conforming to ASTM C290, Type S, Grade NS, Use G.
- *Butt Glazing Sealant:* GE SCS1200 Silicone Sealant, complying with CAN/CGSB-13-M, and ASTM C90.

PART III – EXECUTION**INSTALLATION**

- Comply with combined recommendations of glass manufacturer and manufacturer of sealants and other materials used in glazing, except where more stringent requirements are shown or specified, and except where manufacturer's technical representatives direct otherwise.
- Clean the glazing, channel, or other framing members to receive glass, immediately before glazing. Remove coatings, which are not firmly bonded to the substrate.
- Do not attempt to cut, seam, nip or abrade glass, which is tempered or heat strengthened.
- Comply with "Glazing Manual" by FGMA, except as shown, and specified otherwise by the manufacturers of the glass and glazing material.
- Inspect each piece of glass immediately before installation, and eliminate pieces having observable edge damage or face imperfections.
- Install setting blocks of proper size at quarter points of sill rabbet. Set blocks in this course of the heel-head compound, if any.
- Provide spacers inside and out, and of proper size and spacing, for all glaze sizes larger than 127 mm (50 united inches). Provide 3 mm

(1/8") minimum bite of spacers on glass, and use thickness equal to sealant width.

- At butt glazing; ground edges, provide 3 mm (1/8"), $\pm$ 1.5 mm (1/16") space and fill with clear silicone sealant.
- Unify appearance of each series of lights by setting each piece to match others as nearly as possible. Inspect each piece and set with pattern, draw and bow oriented in the same direction as other piece.
- Miter cut and bond ends together at corners where gaskets are used for channel glazing, so that gaskets will not pull away from corners and result in voids or leaks in the glazing system.
- Protect exterior glass from breakage immediately upon installation, by attachment of crossed streamers to framing held away from glass. Do not apply markers of any type to surfaces of glass.
- Remove and replace glass which is broken, chipped, cracked, abraded or damaged in any other way during the construction period, including natural causes, accidents and vandalism.
- Final installation must be completely weather tight and clean both inside and out.

END OF SECTION