

SECTION 10

GLAZING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. Extent of Work: The extent of the glazing work is shown on drawings and in schedules and includes glazing and all associated accessories.

1.02 QUALITY ASSURANCE

- A. Codes and Standards: Comply with the applicable requirements of the following codes and standards:

BS British Standards

476 Fire Tests on Building Materials and Structures.

Part 7:1987, Method for Classification of the Surface Spread of Flame of Products.

Part 22:1987, Methods for Determination of the Fire Resistance of Non-Load Bearing Elements of Construction.

952 Glass for Glazing.

Part 1:1978, Classification.

Part 2:1980, Terminology for Work on Glass.

2571 Specification for General Purpose Flexible PVC Compounds for Moulding and Extrusion.

4255 Rubber Used in Preformed Gaskets for Weather Exclusion from Buildings.

Part 1:1986, Specification for Non-Cellular Gaskets.

6206 Specification for Impact Performance Requirements for Flat Safety Glass and Safety Plastics for Use in Buildings.

6262 Code of Practice for Glazing for Buildings.

8000 Workmanship on Building Sites.

Part 7:1980, Code of Practice for Glazing.

PD Published Documents.

6512 Use of Elements of Structural Fire Protection with Particular Reference to the Recommendations given in BS 5588. Fire Precautions in the Design and Construction of Buildings.

Part 3:1987, Guide to the Fire Performance of Glass.

1.03 SUBMITTALS

- A. Samples: Submit samples size 300 x 300 mm of each type of glass proposed, glazing compounds, sealants and glazing accessories.
- B. Manufacturer's Literature: Submit manufacturer's literature containing technical and installation information.
- C. Certificates: Submit certification from the manufacturer stating quality, thickness, type and grade.
- D. Shop Drawings: Submit shop drawings and details of glass installation at framing members such as head, mullions, transoms, jambs and sills.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Glass: Crate glass securely and safely for delivery, handling and storage. Provide cushions at edges of glass to prevent damage. Protect glass faces from scratches and abrasions and in a dry, well ventilated location, carefully protected at all times from soiling, atmospheric condensation and other moisture. Replace damaged or defective glass with new glass at no additional cost. Deliver each piece of glass with factory labels intact, indicating glass type, quality and thickness and do not remove labels until installation has been accepted.
- B. Glazing Materials: Deliver sealing materials in manufacturer's unopened containers, fully identified with trade name, colour, size, hardness, type, class and grade. Store each glazing and sealing material where they will be free from damage and in strict accordance with the manufacturer's recommendations.

PART 2 - PRODUCTS

2.01 GLASS

- A. General: Furnish glass materials from an approved manufacturer.

B. Glass Materials:

1. Clear/Float Plate Glass: Polished plate or float glass wired, 6.0 mm thick unless otherwise indicated.
2. Clear/Float Plate Glass: Fully tempered 6.0 mm thick unless otherwise indicated.
3. Double Glazing: Outer layer glass 6 mm thick reflective tinted 6 mm gap in between and 6 mm thick inner sand blasted glass, unless otherwise indicated.
4. Opaque Glass: 6.0 mm thick unless otherwise indicated.
5. Mirrored Glass: 6.0 mm thick unless otherwise indicated.
6. Glass panels shall be double glazing with 12mm air space in between, an external 6mm thick tinted heat absorbing glass and 6mm thick internal sand blasted glass. A transparent reflective coating shall be applied to the external glass on surface 2. Glass panels shall have thermal characteristics not exceeding the following values:
 - a. Convection heat transfer coefficient: $2.50 \text{ W/m}^2 \text{ K}$
 - b. Shading coefficient: 0.30

2.02 GLAZING SEALANTS/COMPOUNDS

- A. General: Provide hardness of materials as recommended by the manufacturer for the required application and condition of installation in each case. Provide only compounds which are known (proven) to be fully compatible with surfaces contacted. Provide the following materials as required for the installation and as approved by the Engineer.
- B. Polyvinyl Chloride Glazing Gaskets: Extruded, flexible PVC gaskets of the profile and hardness as required for watertight construction. Comply with BS 2571, or in another material and to standards approved by the Engineer. If rubber is used, then BS 4255 Part 1 shall apply.
- C. Setting Blocks: Neoprene or other resilient blocks of 70-90 durometer hardness, tested for compatibility with sealants used.
- D. Spacers: Neoprene or other resilient material of 40-50 durometer hardness, tested for compatibility with sealants used.
- E. Cleaners, Primers and Sealants: Type recommended by sealant or gasket manufacturer.

- F. Mirror Mastic: Type recommended by mirror manufacturer for spot application system, with less than 25% coverage and 3 mm-12 mm thickness of setting bed, with mirror supported only at lower edge.
- G. Mirror Clips: Stainless Steel.

PART 3 - EXECUTION

3.01 INSPECTION

- A. The Contractor shall examine the substrates and the conditions under which glazing work shall be carried out and correct any unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Engineer.
- B. Weather Conditions: Do not proceed with installation of sealants under adverse weather conditions, or when temperatures are below or above manufacturer's recommended limitations for installation.

**** END OF SECTION ****