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Felt Tips

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GLAZING SYSTEMS RECOMMENDATIONS

1.0 GENERAL RECOMMENDATIONS

- 1.1 The glass should, in effect, "float in the opening."
- 1.2 Avoid contact between glass and metal or any hard object.
- 1.3 Use a stop large enough to get a good grip on the glass. Allow sufficient clearance at the edge of the glass to compensate for cutting and fabrication tolerances and for expansion of the glass or framing sections or for some settlement of the building.
- 1.4 Setting blocks should be used on all glass over 6 square feet in area. Use two setting blocks of Neoprene 70 to 90 durometer, installed at quarter points. The blocks should be wide enough so that the glass will not slip off under heavy vibration, wind load, etc. The length of the blocks should be a minimum of 3".
- 1.5 When glazing clips and face putty or compounds are used to install heat absorbing, glass-edge insulating units or laminated glass, a cushion should be inserted between the clip and the face of the glass.
- 1.6 The glazing system should be designed so that building movements, inherent with wind loads or thermal effects, are not transferred to the glass.
- 1.7 Glazing should not be done when the temperature is 40° F or below, unless specifically sanctioned by the sealant manufacturer.

2.0 TINTED AND HEAT ABSORBING GLASS

- 2.1 The temperature of heat absorbing glass, when exposed to sunlight, is greater than that of clear glass. The central area of the light will expand more than the cooler shaded edges causing a build up of tensile stresses.
- 2.2 Do not install glass with flared edges at the bottom.
- 2.3 Do not seam the edges.
- 2.4 Do not nip or scarf corners of the glass.
- 2.5 Do not brush the edges or bump them against metal or other hard objects.
- 2.6 Avoid the use of pocket glazing. It is difficult to keep the edge of the glass from coming in contact with metal during installation. If pocket glazing is prescribed, "bumpers" should be placed in the pockets to prevent glass to metal contact.
- 2.7 Pattern cutting of glass should be reviewed by the manufacturer.
- 2.8 Do not install in concrete reglets or other massive surrounds with high capacity heat storage capabilities.
- 2.9 The stops which hold the glass, in effect constitute a shading device. The grip on the glass should therefore be kept to minimum requirements consistent with good glazing practice.
- 2.10 Sealant must be selected with care. See FGMA Glazing Sealing Systems Manual for recommendations.

3.0 INSULATING GLASS, Organic Sealed Units (Metal Edge)

- 3.1 Rubber or vinyl U channels or other materials relying on heavy pressure to maintain a weather seal should be used with care. The unit should, in effect, float in the opening to minimize the possibilities of the transfer of structural stresses to the glazing unit.

- 3.2 The trade mark etch should be installed at the bottom of the opening.
 - 3.3 Heat absorbing units must be glazed with the absorbing or reflecting glass to the outside.
 - 3.4 Do not remove the protective metal channel from the edge of the glass.
 - 3.5 Do not cover large areas of the unit with paper or other opaque materials.
 - 3.6 Warm air from heating vents should be directed away from the glass whenever possible.
 - 3.7 Make certain that the sealant contacts the glass above the metal channel. Since the channel is not watertight, the sealant must extend above the edge of the metal to accomplish proper sealing.
 - 3.8 The glazing channel must always be weeped to the outside of the building and the unit set on two setting blocks of 70-90 durometer placed at quarter points. If a heel bead is required in the glazing process, it must be permanently pliable.
 - 3.9 Do not use chlorinated solvents such as are commonly used for dry cleaning fluids nor benzene related compounds, such as toluene, as thinners for the glazing compounds. The edge of the insulating glass should never in any way be exposed to these materials.
 - 3.10 The glazing system should not only be designed to prevent accumulation of moisture in the glazing channel at the sill but provision should be made to drain any moisture which might collect so that the organic seal does not remain damp for any extended period of time.
- 4.0 FULLY TEMPERED, HEAT STRENGTHENED AND SPANDREL GLASS
- 4.1 The problems encountered in glazing these types of glass are generally attributable to the warpage of the finished product.
 - 4.2 Fully tempered, heat strengthened and spandrel glass cannot be cut, drilled, ground or otherwise altered after it has been heat treated.
- 5.0 LAMINATED GLASS
- 5.1 If a laminated glass is to be set in a wet sealant, Polysulfide-base Silicone, Butyl rubber and tape are preferred.
 - 5.2 Laminated glass with a reflective coating or tinted for heat absorbing should be installed in much the same manner as regular heat absorbing types of glass, observing the same precautions in selecting setting materials as for clear laminated glass.
 - 5.3 When installing any type of laminated glass, the glazing cavity should be weeped to the outside and must be set on setting blocks.
- 6.0 ACRYLIC PLASTIC
- 6.1 Acrylic plastic sheets or panels should be installed in a channel frame engaging the edges of the material so that the material is free to expand and contract without restraint.
 - 6.2 The channel frame depth should be sufficient to allow for thermal contraction of the acrylic plastic without withdrawal of the edges from the frame.
 - 6.3 Through-bolting or other inflexible fastenings which do not provide for expansion and contraction may cause failure of the installation.
 - 6.4 Before installation in the channel frame, acrylic plastic should be cut sufficiently shorter than the channel frame dimensions to allow for thermal expansion.
 - 6.5 Sealant compounds and tapes should be types which are sufficiently extensible to accommodate thermal expansion and contraction of the acrylic plastic, and which adhere to both acrylic plastic and frame.

Information excerpted from Flat Glass Manufacturers Association Glazing Manual.