

Technical Bulletin SSG 3.2

Recommendations for Residential Window & Door In-Plant Glazing

Introduction:

For more than 70 years, Tremco has been a market leader in the design, development and manufacture of glazing products for use in residential and commercial construction applications. During the industry's growth, windows have become larger, and both glass performance and standards have advanced, all placing higher demands on the materials used to seal, support and protect the glass products within the glazing systems.

General Recommendations for Residential In-Plant Glazing:

1. Compatibility:

- a. Select compatible materials where intimate as well as incidental contact is expected throughout the system's long expected service life in order to reduce the alteration of materials' design properties.
- b. Validate substrate adhesion where chemical bonding is required for functionality.

2. Design:

- a. Design glazing pockets with sufficient size to accommodate edge seal sightline requirements, glazing system face clearances and room for setting blocks and weep systems describes below.
- b. Insure interior air and water barriers to preclude the ingress of interior condensate.
- c. Insure exterior watersheds to limit ingress potential of exterior rain and the acidic waterborne solutions that can be brought into contact with both glass coatings (corrosion risk) and IG edge seal sealant systems.
 - ◆ Use venting weeps over ¼" diameter or slotted over 3/16" x 3/8" to preclude prolonged contact of water with coatings and sealants.
- d. Glaze IG units and all lites on 80 to 90-durometer (Shore A) setting blocks.
 - ◆ These are to be sized to elevate above unplanned water accumulation areas, sized to at least 0.125" x 1.25".
 - ◆ These are to be profiled to prevent glass weight transferring stress through to the edge seal system.
- e. Limit clamping pressures of IG edge seals to be well below industry limits of 10 pli.

3. Workmanship/Detailing:

- a. Be sure that all surfaces are clean.
- b. Seal miters or butted joints involving tapes, gaskets, integral fins, etc.
- c. Guard against sealant skips and squeeze out through automation, wherever this can be justified and accommodated.

Importance:

Because glazing is so critical to the long term performance of fenestration products, it is important that it be done as consistently and accurately as possible. *Defective glazing details* can lead to IGU failure, sill damage, sheathing, drywall damage, and with it increased service costs, customer dissatisfaction or even litigation. *Effective glazing practices* on the other hand will properly secure and support the IGU, allow for necessary movement between glass and its framing, transfer wind loads, reduce pressure points, prevent/manage water infiltration and exfiltration; these will extend the service life of the IGU, reduce field costs, increase customer satisfaction and reduce litigation potential.

Please contact Tremco Technical Service at 866-209-2404 with any questions regarding this bulletin.