

TG-4 (4-12-04)

TECHNICAL BULLETIN Alignment of Bow in Tempered Glass

Though every effort is made during the tempering process to maintain as flat a product as possible, sometimes bow can occur that approaches the allowable limits. This may be more noticeable when a bowed panel is adjacent to, or butts a relatively flat panel. In these situations field measures can be taken to minimize the visual effects. If the joints are to be silicone sealed, temporary alignment clips can be used prior to filling the joints to align the adjoining panels. In most cases, when the clips are removed after curing, the panels will remain aligned. Ornamental mechanical clips are available from a number of suppliers that serve the same purpose when silicone sealed joints are not preferred.

Contrasting Bow — A small amount of bow, even within allowable limits, in two adjoining panels is sometimes magnified if the bow in each panel is facing in opposite directions. In such cases it may be possible to reglaze one of the panels so that the bow in each panel is facing in the same direction, thus minimizing the contrast. This may not be practical if the contrasting bow occurs in non-symmetrical panels. In these situations the procedures mentioned in the above section may alleviate the problem.

Contrasting bow in a pair of doors, however, requires different measures to diminish the effect. In some cases re-alignment of the doors, at the head and sill, within the plane of the opening can be performed in such a manner that the contrasting bow is lessened at the center of the vertical edge, where it would be most noticeable, as illustrated in Figure 1. This can be accomplished either by adjusting the closers and/or closer arms, or by repositioning the door stops at the head. This works best on doors without full-width rails as this solution calls for the top and bottom to be slightly misaligned.

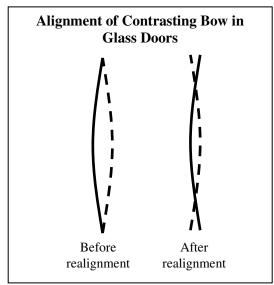


FIGURE 1