



WINDOW - RESIDENTIAL

GLASS & MUNTINS

GENERAL - The glass which is shown on our proposals shall be HERITAGE DG (Double Glazed) manufactured by Tashco Industries, Inc. of Gilbert, Arizona.

MATERIAL - Glass shall be of the following types, classes, styles, forms, qualities and finishes. It will originate from a float process.

1- Quality. It is q5-GlazingB. This quality level is intended for general glazing applications that have lesser aesthetic demands than mirror and glazing select qualities.

2- Blemishes - Blemish tolerances will be different on Central and Outer areas. Central area is considered to form an oval or circle centered on the lite whose axes or diameters do not exceed 50% of the overall dimension. The remaining area is considered the Outer area. Table 1 summarizes allowable blemishes:

TABLE 1 Maximum Allowable Blemishes for Thicknesses 6.0 mm (1/4" in.) or Less.

Blemishes	Central	Outer
Scratches and Rubs- Intensity of Light in Viewing (When looking through the glass and perpendicular to it using daylight without direct sunlight or with background light suitable for observing each type of blemish)	Medium	Medium
Scratches and Rubs- Distance from glass (Blemishes shall not be detectable at distances greater than)	132"	132"
Crush - Maximum Length	1/2"	1/2"
Knots, Dirt and Stones	1/16"	1/8"

Note: 1) the above specs are from ASTM C-1036-90 and have been approved by Department of Defense. For further details like shadowgraph readings refer to above.

2) Glass greater than 6.0 mm (1/4") in thickness may contain proportionally more and larger blemishes.

HARDWARE AND CONSTRUCTION - The glass is cut by a robotic X-YZ cutting system. Spacers are steel whose conductivity is close to glass. On square and some of the out of square products, all corners will be bent by robotic machine and connectors will be hardened steel, which is special stamped. The desiccant will be filled by automatic filling machine which keeps the desiccant all sealed in its filling process. The filling hole will be automatically sealed after the filling process. The primary seal is PIB (Poly-Iso-Butylene) and is extruded on both shoulders of the spacer. The spacers are manually installed to the glass on a vertical system. A flat press presses the glass against PIB and spacer. The secondary seal is silicon and is applied manually.

FINISH and DIMENSIONAL TOLERANCES - The finish on the spacer can be galvanized, dyed, painted or plated depending on the availability of materials at the time of fabrication. Due to the technological nature of the double seal process, PIB will be visible on the spacer up to 1/8". The spacer setback will have a variance of up to 3/8" in straightness due to steel's resistance to bent corners or shapes. As a result of this, the spacer shoulder may show up to 3/16" in the sightline when the unit is assembled into the frame.

TEMPERED and OVERSIZED GLASS - Tempered glass is supplied according to ASTM C-1048-90 specs and will have bows and warp tolerances. **HERITAGE supplies Double or Single Glazed, Annealed glass 60 square foot or over or Tempered glass, which is over 48 square foot without any warranty on the seal life, glass surface, vision quality and spacer straightness.**

