

Spandrel Glass in Vision Areas

Spandrel glass is the opaque glass located between vision glasses on each floor of a building. Although spandrel glass can be either complementary or contrasting in color when compared to the appearance of the vision glass, the purpose is to conceal structural building components, such as, columns, floors, HVAC systems, vents, electrical wiring and plumbing, from being visible from the exterior of the building.

Spandrel glass is made by applying ceramic spandrel paint to the glass using a rubber application roller. The ceramic frit is then fused to the glass with heat treatment to form a permanent bond. This process causes the ceramic painted pane to take on all of the properties of heat treated glass, preventing it from blistering or peeling during fabrication, transport and installation. Additionally, the fused coating is chemical resistant, meaning, it will not fade, stain or discolor upon contact with glazing compounds, sealants or gasketing materials.

The proper application for ceramic enamel spandrel glass is to install it in an opening that has a uniform, opaque background to eliminate the possibility of read-through or the viewing of the glass in transmission. Because of the technology used, although state of the art, a spandrel quality product is still created, meaning we do NOT recommend the use of spandrel glass in any application where it can be viewed with daylight or artificial light on the opposite side such as interior partitions, mechanical rooms, screen walls or glazing in a parking garage. If the glass is viewed from the building interior, looking outward toward daylight, pinholes and variations in the coating density will be perceptible. This condition is not considered a defect in the spandrel glass. For these reasons, we do not recommend spandrel glass be used in vision areas and that all spandrel glass be inspected from the exterior of the building in accordance with ASTM C1376.

Spandrel glass must be HEAT TREATED to complete the fusion process and to withstand high thermal stress. Tristar Glass Products supports the industry standard concerning the use of fully tempered openings where safety glass is required by law, code or where human impact is a concern. In all other cases, heat-strengthening should be the heat-treatment of choice. The applicable industry standard is that of ASTM C 1048 Standard Specification for Heat-Strengthened and Fully Tempered Glass.

A minimum air gap of 1" to 2" must be maintained between the innermost surface of the glass and insulation or other building components. Attachment of insulation directly to the glass or use of impaling pins on the spandrel glass is NOT recommended.

As always, a full size mock up is ALWAYS recommended for any size project.

