

Glass Technical Document

Spandrel Glass Applications:

Spandrel is the panel of a wall, located between vision areas of windows, that conceals structural columns, floors, and shear walls. The proper application for ceramic frit and/or ICD Opaci-Coat 300 spandrel glass is to install it in an opening that has a uniformly colored insulation or back-pan that eliminates the possibility of read-through or viewing of the glass in transmission. When done properly, the glass may only be viewed from the exterior of the building with daylight reflecting from the glass surface.

Note: Spandrel glass is NOT for vision wall areas. Tristar spandrel glass products are to be glazed against a uniform, opaque background. We do NOT recommend that they be used in any application where they 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.

Please be advised that the preferred placement of ceramic frit and/or ICD Opaci-Coat 300 in a spandrel area IGU is on the number four (4) surface versus that of the number two (2) or number three (3) surfaces. Found below is an explanation as to why that is the case.

Due to the high temperatures experienced in spandrel areas we want to assure that we have the best primary IGU seal possible to assure the longevity of the unit. We know, from experience, that the best possible seal is achieved with sealant to glass contact. With ceramic frit located on surface number two (2) or three (3) you end up with sealant to ceramic frit contact in lieu of sealant to glass contact. When applying ICD Opaci-Coat 300 on surface two (2) or three (3) it becomes necessary to hold back the coating from the edge via taping during production in order to achieve sealant to glass contact. Keep in mind that ICD Opaci-Coat 300 should NEVER be used on the number three (3) surface in conjunction with a Low-E coating located on surface number two (2). Off-gassing may occur and the net result will be a haze or appearance of staining from the project exterior. By relocating the ceramic frit and/or Opacicoat to the number four (4) surface the desired and preferred sealant to glass contact is achieved, assuring the best possible performance of the unit over its lifetime.



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In addition, ceramic frit or ICD Opaci-Coat 300 located on the number four (4) surface serves to minimize the differences in appearance between vision and spandrel glass areas. In a vision area, light is transmitted and reflected through both the outboard and inboard lite of glass creating an appearance of depth from the project exterior. When ceramic frit or ICD Opaci-Coat 300 is located on the number two (2) or three (3) surface the appearance of depth is lost. This is due to the fact that with a second surface application light is only reflecting and not transmitting; with a third surface application light is transmitting and reflecting through one lite of glass only. The net result is that the spandrel area glass tends to look more noticeable in comparison to that of the vision area glass when ceramic frit or ICD Opaci-Coat 300 is used on surfaces two (2) and three(3). To minimize this visual effect between vision and spandrel areas a fourth surface ceramic frit or ICD Opaci-Coat 300 paint is suggested.

Lastly, the technology used to apply a ceramic frit or ICD Opaci-Coat 300 product is a roller-coater. This production process, while "state of the art", produces a spandrel quality product. There will be striations and inconsistencies present in the finished product. When this material is placed in a spandrel area cavity on the number four (4) surface and the back lighting in the cavity is eliminated the inconsistencies inherit to this product tend to wash out. When the ceramic frit or ICD Opaci-Coat 300 is located on surfaces two (2) or three (3) any and all of these inconsistencies may become more apparent from the project exterior. This is especially true relative to a second surface application.

In summary, Tristar Glass can provide spandrel area units with the ceramic frit located on the number two (2), three (3) or fourth (4) surface, the choice is yours. However, the purpose of this writing is to make you aware relative to why, without question, the fourth surface is the preferred location. Keep in mind that spandrel glass products are NOT designed to be used in vision wall areas. It is the hope that this writing will help to familiarize you more with the features and benefits of spandrel glass and will assist you in discussion with the various members of the building team.

Sincerely, TriStar Glass Products

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