



## Technical Services Bulletin ATB – 107 SPANDREL CAUTIONS

*Trulite Glass & Aluminum Solutions supplies glass spandrels and wall cladding products for general construction applications. The process creates opaque glazing material of glass coated with fired ceramic frits; cold cured silicone elastomer or applied scrim films. The intended application utilizes the opacity to hide construction components from view. Such areas usually include column's, floor lines in curtain walls, knee walls, ceiling lines etc. Other applications may be purely decorative such as wall claddings, or non vision panels with contrasting or complimentary colors. The designer should consider the various production methods, potential variances in production processes and potential tradeoffs in desired applications. Trulite Glass & Aluminum Solutions recommends the use of full scale mock up's in addition to architectural color samples. Designs which incorporate viewing from both exterior and interior or have other unusual aspects should consult with the producing Trulite Branch prior to specification or order.*

**Spandrel Coatings.** Spandrel coatings are intended to render glass opaque in reflected light from the exterior as installed. The product is NOT intended for use in vision or light transmitting areas. Viewing installed spandrel panels from the interior, in transmitted light may reveal spray or roll pattern and pin holing. This is normal and is usually noted during the construction phase prior to the placement of insulation or other finishing surfaces. At this phase of construction wide variations in coating consistencies or density is apparent from the interior. The coating application methods will produce different patterns and may show heavy to light areas as the production run reduces thickness to achieve opacity with minimum required material usage. The glazing contractor or designer should advise this as a normal condition with ceramic frit or silicone coatings and refer to the proper method of inspection if questioned.

Most projects utilizing solar control reflective or low e coated glass products may have one of the spandrel coatings applied directly to the coated surface. IE solar control low e number two (2) silicone spandrel number two (2). Application of silicone or ceramic coatings to opposing surfaces is not recommended. IE low e coating number two (2) silicone spandrel number three (3). The high temperature generated in spandrel areas may cause components to out gas and condense on the cooler outer lite. The resulting oily, iridescent appearance cannot be rectified without replacement. Volatile material from ceramic frit spandrel application will normally be burned off during the firing process. However design professionals and Specifiers should be aware the coated surface of spandrel products is not considered a finished surface. Specifying to the number one surface or the number three surface in IGU is not recommended.

### **Surfaces.**

Normally the coating is specified to the number two (2) or number four (4) surface. Specifying the spandrel coating to the third surface may reveal an orange peel texture, process blemishes, smudges, fingerprints, brush lines or other inherent characteristics and is NOT recommended.

### **Cleaning**

Once installed spandrel products may be cleaned as any other glass product. Refer to GANA Glass Informational Bulletin 01-300 for recommended cleaning instructions. Initial cleaning after glazing may require the removal of smudges of sealants or light overspray from silicone coatings. Normal practice will usually only smear these areas. The use of specialized cleaning products can remove these contaminants quite easily. Trulite will usually recommend the use of Sparkle® or other non chlorinated / fluorinated cleanser for these applications. No cleaning is recommended for the coated surfaces.

### **Storage**

Spandrel should be ordered in a manner that will reduce prolonged storage on site. In any event spandrel products should be stored indoors, avoiding indoor high humidity areas. As with any glass product packaging material is intended for transport and short term storage. Crated material should be opened and installed as soon as possible to avoid damage. Protect stored and installed material from adjacent trades.

### **Compatibility**

Ceramic frit spandrels are fused, pigmented glass fines which become a part of the glass substrate during the heat treating process. Users should follow the normal precautions of any glazing for compatibility paying particular attention to the placement of insulation as described.

Opaci-Coat 300 Spandrels require the use of silicone setting blocks and gasket. Only use approved neutral cure silicones and insulation.

### **Insulation**

Do not place any insulation or construction material in direct contact with the spandrel surface. Maintain a minimum of one inch clearance between glass and insulation. Properly secure insulation to avoid sagging and possible contact with the spandrel surface. Failure to do so may result in read through, staining or thermal breakage.

Opaci-Coat 300 coatings should only be used in conjunction with approved sealants, gasket and insulation products. Chemical compatibility should be verified prior to installation. Failure to do so may result in coating failure.

