

TECHNICAL SALES BULLETIN 025

07th July 2020

ArmourScreen Backpainted Glass (Sided Product)

ArmourScreen (Fritted, Lines or Back Painted Glass)

Back painted glass is a sided product and is not recommended in applications where light is allowed to pass through. It is recommended to back the product to ensure the painted side is concealed as small imperfections although allowed are highly noticeable.

a) Mock Ups

In order to make a better, more informed decision concerning any known limitations and colour matching possibilities regarding the use of ArmourScreen, we recommend installing a real-size mock-up at the job site. The mock-up should include those representative materials and/or lighting effects where the finished panels will actually be installed. This is of special importance with innovative, intricate, or complex designs, including graduated and stochastic ones, where the dots may become very small, tight, and randomly scattered. These may be prone to create special visual effects that nobody can anticipate and that will only be visible once the unit is in its final place and under the special lighting conditions related to it.

b) Colour Uniformity

Our ArmourScreen, colour, as well as opacity of the ceramic frit pattern or solid back painted colour may vary slightly due to minor variations in paint thickness and/or viewing angles. Non-uniformity in coloured printed glass can be defined by checking the allowed Delta E tolerances, this is to be confirmed prior to project commencing.

When applying the same colour frit or solid back paint to different glass thicknesses, the colour may exhibit colour differences greater than the allowed Delta E. This differential will also happen between curved and flat glass that use the same colour frit or back paint. The difference tends to happen more easily with reds, blues, yellows, and greens. This will not be considered a defect. The customer needs to be aware of it and use mock ups to evaluate this design driven situation.

Perceived colour or lighting transmission differences when placing the glass in front of lights and using it as a lighting device will not be subject to reject the product. The only accepted method to measure colour uniformity is by using a colorimeter or spectrophotometer as set out in our document PR09 for colour variations.



c) Armourscreen Inspection Guidelines

Industry standards detail that the finished glass should be viewed from a distance of 3m and 4.5m is recommended for spandrel panel applications under natural daylight conditions.

I. PINHOLES

Tiny, reflected pinholes and minute scratches and cracks are inherent in the process and cannot be avoided. These imperfections are not considered defects at this distance (3m). Pinholes larger than 2mm when viewed from the viewing surface (#1) are not allowed if noticeable from a distance of 3m or greater under recommended viewing conditions as set out in PR09.

These Pinholes have no structural effect and will not change overtime as the paint is 'fired' into the glass.



II. PATTERN PARALLELISM

Patterns may be up to 2mm off parallel from edges and 5mm when used in a SIG Unit.

A difference in the size of the printed pattern/frit dots of 1mm is acceptable.

Adjacent panels mismatch for panels sizes up to 1m² are allowed up to +/-4mm, 1m²-2.5m² are allowed up to +/-5mm and panels greater than 2.5m² +/-7mm mismatch in pattern to adjacent panels.

