

SGG Emalit® Evolution visual appearance

SGG Emalit® Evolution is an opaque enamelled glass designed principally for use as an external wall cladding / spandrel panel solution. It is extremely durable, completely UV stable and a toughened safety glass manufactured in accordance with the current BS EN 12150 Glass in building: Thermally toughened soda lime silicate safety glass.

To ensure a permanent fusion between the coloured ceramic enamel and the glass, SGG Emalit® Evolution is subjected to a toughening cycle with higher temperature than a normal non-fritted product. This makes the product more susceptible to visual imperfections such as pitting and roller pluck (which may exhibit as dark or light spots under directional lighting e.g. sunlight), therefore these are an inherent characteristic of the product and are not considered a fault in manufacture as they do not detract from the function, thermal or physical safety characteristics of the product as required by the relevant product standards. Note: these visual imperfections are considerably more evident when Emalit is used as a single glazed cladding product as opposed to a look-a-like spandrel.

As a result of these potential visual imperfections SGG Emalit® Evolution should not be used as an internal wall cladding where finished decorative appearance is the primary concern. SGG Vitrio® is a high quality back-painted product designed specifically for internal wall cladding situations and should be used where the appearance of the product is a priority. Vitrio is not a fired ceramic product and therefore not suitable for external use.

SGG Emalit® Evolution provides exceptional resistance to humidity and can be used to clad internal wall areas, such as laboratories, where hygiene and durability are more important than aesthetics.

The enamel coating forms on the back of SGG Emalit® Evolution in a manner which may leave small “pinholes” through the coating therefore the product is designed for use with a back-up wall and is not intended for viewing the enamelled surface from an internal aspect.

The occurrence of colour differences is unavoidable for technical reasons, any ‘coloured’ products be they paints, wallpaper or fabrics will have a top and bottom tolerance, and ‘matching’ will only typically be guaranteed within a given batch.

Both the glass and the Emalit ceramic frit are industrially manufactured products subject to defined tolerances. The colour of the base glass will be manufactured to the tolerances within the relevant parts of BS EN 572 Glass in building: Basic soda lime silicate glass products.

The ceramic frit used to colour-coat SGG Emalit® Evolution will also vary in colour from batch to batch within manufacturer’s defined tolerances. Wherever possible Emalit should be ordered in a single batch to ensure the closest possible colour match across panes, however it is not always practicable to use a single batch of ceramic frit on a project, this might be due to the size of the contract and/or the fact the contract is supplied over a period of time/phases as the ceramic frit has a limited shelf-life.

On site conditions can greatly influence the perceived appearance of SGG Emalit® Evolution, elements such as variations in light sources due to orientation and/or shading/illumination, external reflections and the distance and angle the installed product is viewed from will all have an impact on the appearance of the product in-situ.

Even colour tolerances nominally acceptable on paper or small visual samples can give rise to a distinctly appreciable colour deviation on the installed product, where human visual perception of colour differs.

The thickness of the glass will affect the final colour of the product therefore a single thickness should be used throughout a project.

Installed SGG Emalit® Evolution should be viewed at a fixed angle from the position relevant to the completed project and not from artificial viewing platforms such as scaffold or cherry pickers.

For specific observation criteria please refer to GGF standard visual quality guidelines