



## FICORE® composite

### DESCRIPTION

Specially-developed for the production of high quality luxury baths, Ficore® is a composite of eight different materials, which are chemically fused during the manufacturing process. These are then heat cured at very high temperature. Ficore® is not laminated or bonded. Unlike lesser materials, it cannot come apart or de-layer.

### DEVELOPMENT

Design & Form originally created Ficore® because it strongly believed that most manufacturers' baths were inadequate and represented poor value for money. It sought to develop the best possible material for bath manufacture by analysing the shortcomings of competing materials and then finding ways to overcome them. As a manufacturing material, Ficore® is strong but light, it requires no chassis, it will not flex and it permits especially fine detailing. It can also be produced with a gloss or matt finish. In terms of durability, it is highly resistant to impact and aggressive chemicals, and although its surface is hard and scratch-resistant, it has a warm, pleasant feel.

### PHYSICAL PROPERTIES

Ficore's surface is made from isophthalic neo-pentyl-glycol, which offers substantial advantages over materials such as acrylic, glass fibre and vitreous enamelled metal.

- Ficore® is 50% harder than acrylic (from which 80% of baths are now made). Importantly, this hardness test is conducted when both materials are hot - i.e. replicating real-world conditions when a bath is in use. This surface hardness means that a Ficore® bath more effectively resists scratches and other damage; its surface also retains its gloss.
- American National Standard Institute 'wear' tests with abrasive slurry, carried out by an independent laboratory, show that after 10,000 cycles, Ficore® showed only a 0.5% loss of reflectance, where acrylic typically lost 2%.
- Ficore® is able to withstand continuous exposure to hot water at 80°C (176°F), and to tolerate thermal shock produced by alternating hot and cold water.
- Ficore® is resistant to most chemicals including acid and alkaline solutions (e.g. lime scale remover) which neither acrylic nor vitreous enamel can withstand.
- In the unlikely event of damage, Ficore® is easily and fully repairable - unlike many other bath materials.
- Ficore® is resistant to high temperatures - e.g. cigarette burns.

- Ficore® will not chip; crack, delayer nor have a tendency to fracture under impact - as will vitreous enamel, or some standard cast resins that are filled with crushed stone and other minerals.
- Because of its ability to withstands prolonged immersion in water, Ficore® is:
  - Approved by Lloyd's Register of Shipping for use in the construction of craft under their survey;
  - Approved by Wine Laboratories Limited for long term storage (20 years) of high alcohol content wines and spirits;
  - Approved by The Water Research Council and the Water Bylaws Advisory Service for the long term storage (20 years) of potable water.

### CUSTOMER BENEFITS

- Ficore® can be produced in literally any colour, or in a combination of colours.
- Ficore® permits more sharply defined detail, i.e. tighter radii and curves, than any other bath material. Cleaner, more precise designs are therefore achievable.
- Ficore® is a very effective insulator in terms of both heat and sound; it keeps water hot six times longer than standard acrylic backed by glass fibre, and twelve times longer than vitreous enamelled cast iron. This excellent heat retention permits longer soaks and reduces the water and energy wasted by having to refill or top up a bath to keep it warm.
- Ficore® exhibits excellent structural integrity. It is non-flexing, and will not buckle, bow or change shape under pressure. It requires no other material to reinforce it, nor any chassis/frame to support it.
- While many cast resin, vitreous enamelled or acrylic baths carry only five-year guarantees, all our Ficore® baths are supported by a guarantee of 25 years.
- Ficore® baths can be kept clean of normal grease and dirt using only a soft liquid detergent. Hard water stains are easily removed.
- Despite the hardness of its surface, Ficore® remains always tactile and pleasantly warm to the touch.

### SUMMARY

Ficore® is an advanced composite developed for the manufacture of luxury baths requiring above-standard performance. It has a distinguished track record; developed in 1991, it has been used extensively in the Cabuchon Bathforms range and for numerous bespoke projects. It can be made in literally any colour and its surface finish is naturally high gloss, but it can optionally be supplied in matt.

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