

# (800) 734-8799

# **GLOBAL STONE® solid surfacing material**

#### **Product Specifications:**

GLOBAL STONE® solid surfacing material is non-porous and homogeneous throughout with a standard material thickness of 12mm. GLOBAL STONE® solid surface is a blend of Unsaturated Acrylic/Polyester blend Resin, Methyl Methacrylate, ATH (Aluminium Hydroxide), other natural mineral fillers and pigments.

Our Solid Surfacing Material comprises of the following features:

- 1) Solid, non-porous and homogenous throughout.
- 2) Unique strength and high thermal shock and impact resistance.
- 3) Joints are seamless and impermeable using GLOBAL STONE® adhesive.
- 4) Not affected by water and corrosion.
- 5) Stains can be easily removed by water and soap.
- 6) Completely safe, hygienic and environmentally friendly does not
  - Encourage growth or deposit of bacteria or radioactive compounds.

7) Scratches, knife cuts, cigarette burns or other accidental damages that may occur to GLOBAL STONE® surfaces can be easily removed by abrasive cleaners, Scouring pads or sand paper.

8) GLOBAL STONE® is resistant to hot pots/pans up to 200°C (20 minutes) with no change in colour or lustre.

9) Excellent fire retardant and does not emit toxic fumes under burning condition.

10) High Resistance against UV rays.

11) Surface can be repaired without trace using GLOBAL STONE® repair kit.

### Applications include -

Kitchen Worktops, Vanity Worktops, Wall Cladding, Skirting & Trimmings, Laboratory Worktops, Decorative Counters, Bathtub Surround, Shower Floors, Tables & Chairs, Signage, Integrated Sinks & Bowls, Breakfast Counters, Reception & Bar Counters

GLOBAL STONE® sheets are also available in thickness of: 6mm for Wall Panel Application.



## (800) 734-8799

### **GLOBAL STONE® solid surfacing material**

Technical Data:

Taken under Singapore Productivity and Standard Board (IAPMO PS 18-66)

| Characteristics   | Performance Values   | Test (IAMPO PS18-66)            |
|---|--|---------------------------------|
| Density - mean  | 1.68 g/cm <sup>2</sup>   | ASTM D792:91                    |
| Barcol Hardness - mean  | 61   | ASTM D2583:93                   |
| Tensile Strength - mean   | 47.14N/mm <sup>2</sup>   | ASTM D638:96                    |
| Tensile Modulus - mean  | 9586N/mm <sup>2</sup>  | ASTM D638:96                    |
| Elongation at break - mean  | 0.67%  | ASTM D638:96                    |
| Modulus Of Elasticity   | 1090kg/mm2   | JIS K7203                       |
| Compression Strength  | 139.10 N/mm <sup>2</sup>   | ASTM D1621-94                   |
| Impact resistance   | Passed/No fracture   | IAMPO PS18-66                   |
| Water Absorption<br>Shall not absorb water in<br>excess of 0.58% in 24hrs | 0.03%  | ASTM D570:88                    |
| Coefficient Of Thermal<br>Expansion (-50°C to 40°C)                       | 44.1 microm/m°C  | TMA (Thermomechanical Analysis) |
| Coefficient Of Thermal<br>Expansion (100°C to 175°C)                      | 131 microm/m°C   | TMA (Thermomechanical Analysis) |
| Fire Propagation  | Class 0  | BS476 Part6 : 1989              |
| Surface spread of Flame   | Class 1  | BS476 Part7 : 1997              |
| Resistance to dry heat  | Resistance to hot pot up to 200°C for 20 minutes without change to colour and lustre | JISK9602                        |
| Heat Resistance   | No swelling or cracking<br>or decrease in lustre or<br>colour                        | JISK9602                        |



# (800) 734-8799

## **GLOBAL STONE® solid surfacing material**

Technical Data:

#### Taken under Singapore productivity and Standard Board (IAPMO PS 18-66)

| Characteristics<br>Stain Resistance (Common)<br>Coffee/Tea/Detergent/Acet<br>one/ Olive oil/Lipstick/Fly<br>spray /Ink, washable/<br>Urea (6%) / Alcohol/Iodine<br>(1%)/Shoe<br>polish/Vinegar/House<br>ammonia<br>Solution(10%)/Citric acid<br>solution(10%) /Acryl<br>acetate/ Carbon<br>tetrachloride/<br>Tri sodium phosphate | Performance Values<br>Passed | Test (IAMPO PS18-66)<br>IAMPO PS18-66                                   |
|---|------------------------------|---|
| Cigarette Test  | Passed                       | IAMPO PS18-66   |
| Wash ability Test<br>Shall withstand 40,000 cycles in<br>scrub test (only slight brush<br>marks are allowable)  | Passed                       | IAMPO PS18-66   |
| Oven test for cracking or<br>crazing, Oven test at 74 ±2°C<br>for 10 days evidence of<br>cracking or crazing  | Passed                       | IAMPO PS18-66   |
| Load on drain fitting connection  | Passed                       | IAMPO PS18-66   |
| Fungi Growth Test   | Passed / No Growth           | IAMPO PS18-66 / ASTM G21-96   |
| Bacteria Growth Test<br>(ATCC 9027)   | Passed / No Growth           | IAMPO PS18-66   |
| Fire Effluents Test, Toxicity   | Passed                       | Air emission Standards - Singapore<br>Clean Air (Standards) Regulations |



(800) 734-8799

#### COMPARISON WITH MARBLE AND GRANITE

| Property                       | SOLID SURFACE MATERIAL  | MARBLE/GRANITE   |
|--------------------------------|---|--|
| Durability                     | A homogeneous non-coated<br>material.<br>Durability is more than 12 years<br>with the original new look.<br>New look often lasts until user<br>decides to change the surface. | Once a thin layer of surface<br>coating wears off, it becomes<br>susceptible to water and<br>weather conditions.<br>New look can fade within a short<br>period, 1 ~ 2 years. |
| Maintenance                    | Little or no maintenance  | Needs professionals to maintain reasonably new look.   |
| Chemical resistance            | Very high   | Poor   |
| Abrasion Resistance            | High  | High   |
| Flammability & fire resistance | Retards spread of fire  | No spread of fire  |
| Stain Resistance               | Homogeneous and non porous<br>hence stains can be removed<br>using household detergents,<br>water and scotchbrite pads  | Stubborn stains remain and are difficult to remove   |
| Moisture resistance            | Non-porous, non-retentive   | Porous, retains water hence<br>promotes growth of bacteria,<br>can be unhygienic   |
| Impact resistance              | Very High   | High   |
| Scratch resistance             | High  | High   |
| Restoration and<br>aesthetics  | Original finish can be restored easily  | Extremely difficult to restore<br>original finish  |
| Workability                    | Very easy to work on/can be worked on   | Difficult to work on   |
| Seams and joints               | Joints are seam free and<br>homogeneous. Hence do not<br>accumulation of dust, bacteria<br>after usage  | Joints are not seam free and are<br>susceptible to accumulation of<br>dust, bacteria. Hence joints<br>become dirty and unhygienic<br>after some usage                        |
| Moulded items                  | Sink bowls and other moulded items are possible   | Can not be moulded   |
| Integration of moulded items   | Sink bowls and other moulded<br>items can be integrated into<br>worktops to give aesthetic<br>appearance, homogeneous and<br>hygienic properties.                             | Seam free integration Sink<br>bowls and other moulded items<br>cannot be integrated into<br>worktops.  |