

technical information



ESSI
STONE

essa™ stone is a remarkably durable and virtually maintenance free quartz surface material created with the latest engineering technology. A meticulously designed colour palette ensures that **essa stone** is naturally at home in the most discerning kitchens, bathrooms and commercial interiors.

essa stone is composed of approximately 95% (by weight) natural quartz based aggregates and 5% high quality resins and pigments to provide a non-porous, homogenous material.

Note: the actual composition of each stone slab will vary marginally between colours due to the quartz particulate designs and dimensions.

PRODUCT APPLICATIONS

essa stone can be used for kitchen and vanity benchtops, splashbacks, furniture components, internal cladding, wet area partitioning, flooring, stairwells and fireplace surrounds.

Note: When used for splashback applications, the installation must conform to the minimum Australian & New Zealand Standards for installation behind gas cook tops, for clearances in relation to appliances generating heat. Please refer to AS 5601-2004 Gas installations and AS NZS 4386.2-1996 Domestic kitchen assemblies - Installation.

essa stone is suitable for most interior applications. Exposure to direct sunlight for extended periods can cause colour fading. Therefore, it is not recommended for use in exterior applications where it is exposed to direct sunlight.

PRODUCT SPECIFICATIONS – **essa stone** slab

Slab Dimensions

Nominal Thickness	20mm
Nominal slab size	3000 x 1400mm (4.20m ²)
Actual size of trimmed slab	3030 x 1415mm (4.29m ²)

Dimensional Tolerance of Trimmed Slab

Thickness	± 0.08mm
Length	± 20mm
Width	± 10mm

Nominal Weight

Slab	220kg per slab
m ²	55kg per m ²

Note: Each slab is produced with a purposely tapered edge to accommodate any mild edge damage that may occur during handling and transportation.

ENVIRONMENTAL

essa stone is manufactured to the specifications of The Laminex Group by Hanwha L&C Corporation Korea in one of the latest and most advanced Breton manufacturing plants in the world. The facility has a strict Environmental Management system and complies with the requirements of the ISO 14001:1996. In 2001, The Minister of Environment of the Republic of Korea recognized Hanwha as an “Environmentally friendly Company” for its contributions toward the Environment, Health and Safety.




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TYPICAL PHYSICAL PROPERTIES

Property	Test Method	Result
Abrasion Resistance (Weight Loss)	ASTM D 4060	1094mg
Izod Impact Strength	ASTM D 256 (Method A)	13.3 J/m
Boiling Water Resistance	NEMA LD3 2000 3.5	No effect
Colourfastness	ANSI 124.6.5.1	Pass
Compression Strength (Dry)	ASTM C 170	209 MPa
(Wet)		203 MPa
Deflection Temperature Under Load (1.82 MPa)	ASTM D 648	243 °C
Flexural Modulus	ASTM D 790	39.7 GPa
Flexural Strength	ASTM D 790	42.4 MPa
Freeze and Thaw Cycling	ASTM C 1026	Unaffected
Fungal Bacterial Resistance	ASTM G 21	No Growth
Surface Gloss	Horiba IG-320	over 45
Barcol Hardness	ASTM D 2583	86
Rockwell Hardness (HRM)	ASTM D 785 (Procedure A)	115
Point Impact	ANSI Z 124.6.4.2.1	Pass
Slip Resistance		
Static Coefficient of Friction (Dry)	ASTM C 1028	0.67
(Wet)		0.49
Specific Gravity (23/23 °C)	ASTM D 792 (Method A)	2.432
Stain Resistance	ANSI Z124.6.5.2	Pass
Tensile Strength	ASTM D 638	17.8 MPa
Toxicity	NSF51 for food zone certified	
Thermal Expansion	ASTM D-696	1.52x10 ⁻⁵ in/in/°C
Water Absorption	ASTM D 570 (24hr. immersion)	<0.011%
Wear and Cleanability	ANSI Z124.6.5.3	Pass

Note: This data shall be considered as an indication only. It may vary depending on the colours and batches of the products.

 **essa stone** is tested and approved for use in food preparation areas.

FIRE TEST RESULTS

Detailed information on the fire hazard properties are available on line at www.essastone.com.au or by calling 132 136.

METHOD OF TEST FOR HEAT RELEASE (Cone Calorimeter test) - Typically achieved when tested to AS/NZS 3837:1998

Indicies	Unit	Result
Average heat release rate at 50 kW/m ²	kW/m ²	91.0
Average specific extinction area	m ² /kg	778
BCA Classification		3

FIRE HAZARD INDICIES - Typically achieved when tested to AS/NZS 1530.3:1999

Indicies	Unit	Result
Ignitability	7	0-20
Spread of Flame	0	0-10
Heat Evolved	2	0-10
Smoke Developed	7	0-10

COLOUR AND PATTERN

essa stone is manufactured from natural quartz. Variations in colour, pattern and shade will exist, and are unique characteristics inherent in natural quartz. Small blotches or off-colour particulate (chips) or irregular particulate distribution will also occur in engineered quartz surfaces and are considered a normal characteristic of the surface.

SURFACE FINISH

essa stone quartz surfaces are factory polished and are available as a gloss surface finish. See actual samples for gloss level.

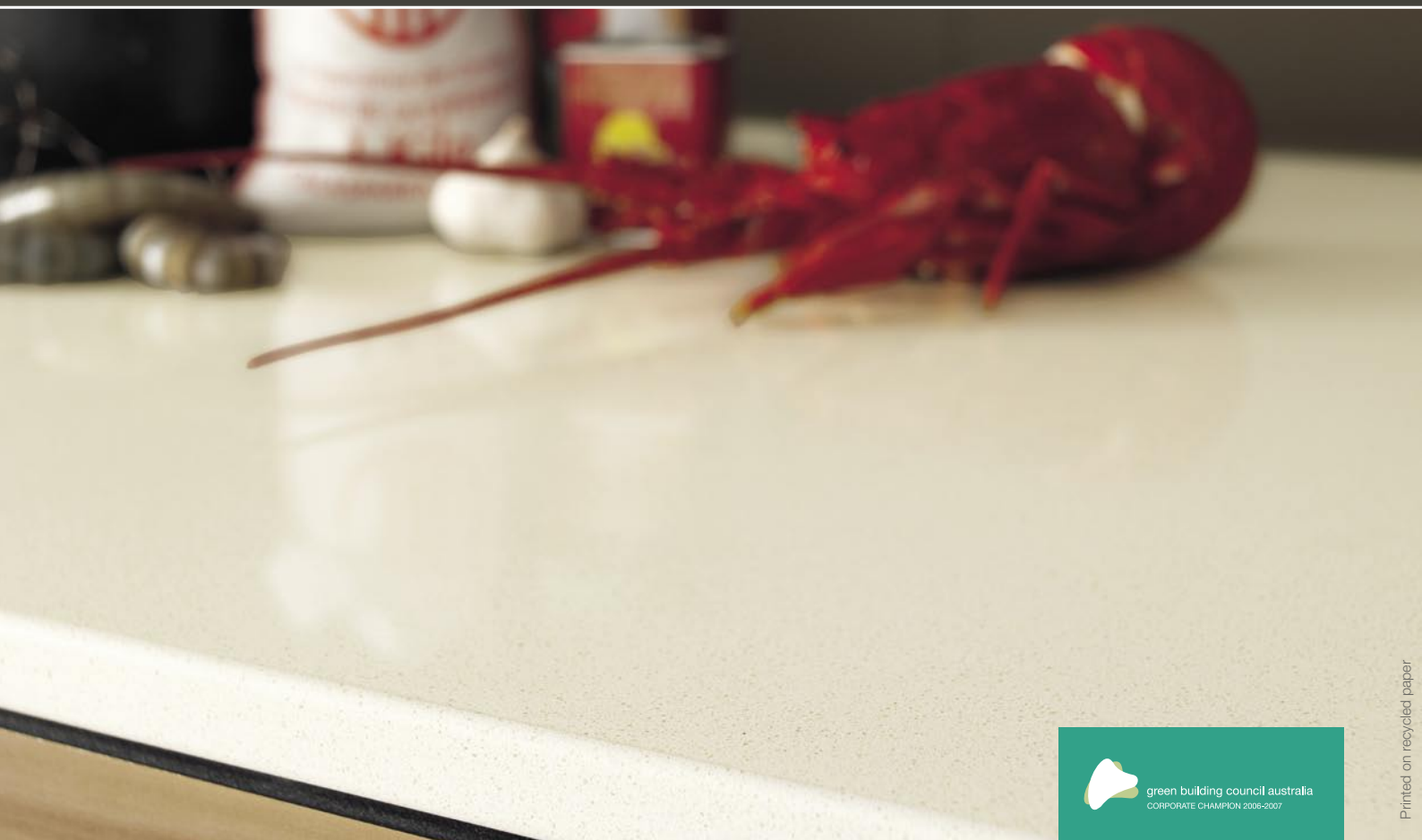
WARRANTY

essa stone is supported by a 10 year limited* warranty.

OTHER INFORMATION

- **essa stone** Product Brochure
- **essa stone** Sample Folder
- **essa stone** Design Guide
- **essa stone** Care & Maintenance
- **essa stone** Limited Warranty

To order **essa stone** samples or brochures contact
1800 002 204 or visit our website www.essastone.com.au



green building council australia
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