



LAPITEC – A NEW STONE PRODUCT SET TO REVOLUTIONISE SOLID SURFACE DESIGN

INTRODUCTION

Lapitec sintered stone is a new full bodied hard surface material available for the first time in the United Kingdom. It has been developed and manufactured in Italy using advanced scientific techniques to produce a product that is neither a natural stone; an artificial quartz stone; a ceramic or a porcelain, but which shares the natural advantages of them all.

The process by which Lapitec is produced is known as sintering; the process of creating an object from a powder through compression and heat. In the case of Lapitec, a sintered stone is created from 100% highly refined minerals and fired at over 1,200°C. The minerals used in Lapitec's manufacture are natural with no resin or hydrocarbon based binder components required. The physical and chemical environment of aggregation and crystallization is closely controlled; giving a product with a similar chemistry and mineralogy to granite – but with a tight cryptocrystalline structure similar to porcelain.

The Marble & Granite Centre Ltd, one of the most comprehensive natural stone wholesalers in the UK has recently signed an exclusive deal to market, distribute and provide after-sales service for Lapitec in the UK. The product has already been heralded by UK fabricators as 'inspirational', and 'something that we will definitely be specifying in the future'.

Lapitec has many possible applications including paving, interior and exterior cladding, flooring and kitchen and bathroom surfaces. However, with imagination its uses are almost endless, and European designers have also used it to great effect in sports and leisure facilities. French designer Philippe Starck has also incorporated it in a range of outdoor furniture.

In the UK Lapitec is being marketed to architects and designers who are attracted by its Italian design heritage, and the very many advantages of using the product. Lapitec is strong yet light, it's hard wearing, mould resistant, anti-bacterial, impervious to UV rays and scratch resistant. It is also non-absorbent, easy to maintain and available in slip resistant finishes.

LAPITEC – for Cladding and External Facades

KEY FEATURES

- **New technology; sintered stone is like no other product on the market today**
- **Largest slab size**
- **Light in weight, yet strong**
- **Pollution, frost & UV resistant – won't fade, stain, erode or change colour**
- **Full bodied - can be cut, carved and worked as product is the same throughout**
- **Versatile with numerous design and application opportunities**

Lapitec sintered stone slabs are the largest available on the market today - giving architects and designers greater flexibility in specifying it for exterior cladding and facades. Each slab measures 340x150cm (5.1 square metres) and is available in three thicknesses – 12, 20 and 30mm.

Lapitec is strong but light, each slab is resistant to bending, and with a specific weight of just 2.4kg/dm³, is one of the lightest cladding products of its type available.

Lapitec is impervious to UV light, acid or alkaline so it won't fade or change colour. It will not erode, stain or scratch and is tolerant to very high and low temperatures, even frost and is also unaffected by moisture.

Lapitec is also naturally pollution and mould resistant, anti-bacterial and self-cleaning. This is due to the addition of a product called BioCare during manufacture. BioCare is titanium oxide based - which ensures that micro-organisms breakdown safely on the surface of Lapitec: in effect they are continually 'washed' from the surface of the sintered stone. BioCare is particularly useful when high standards of cleanliness and hygiene are needed, or where external airborne pollution could be a factor.

Lapitec slabs are full bodied - so physical and visual properties are consistent throughout. This is in contrast to ordinary porcelain and traditional ceramic tiles which have a layered structure and where the colour, design and surface finish are applied on the surface only.



Lapitec is very easy to cut and work with, allowing complete freedom for innovative design. It can also be carved with lasting effect.

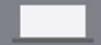
Lapitec is an excellent product for use on ventilated facades, due to its light weight and workability.



Lapitec is an inert product, which does not release any substance into the environment.

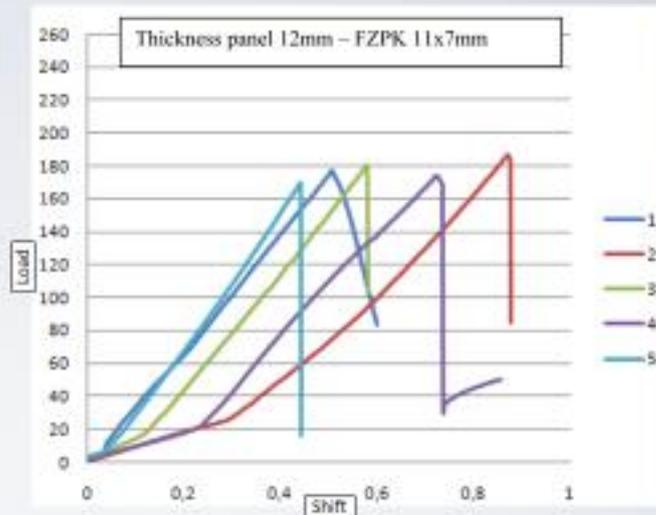
LAPITEC TECHNICAL SPECIFICATIONS

Technical Specification	Test Results	Standard
Size	3400 x 1500mm (133.8" x 59")	EN 14617-16
Thickness	12 – 20 – 30mm	EN 14617-16
Specific Weight	2.4kg/dm ³	EN 14627-1
Flexural Strength	53 N/mm ²	EN 14617-2
Water absorption	0.1%	EN 14617-1
Compression resistance	230-250 N/mm ²	ASTM C773*
Impact resistance	2.9Joule	EN 14617-9
Deep abrasion resistance	139mm ³	EN 14617-4
Frost resistance	Resistant	EN 14617-5
Fire reaction	A1	EN 13501-1
Resistance to acids and bases	C4 – Resistant	EN 14607-10
Colour resistance to light??	No colour change	DIN 51094*
Co-efficient of linear thermal expansion	6.3 x 10 ⁻⁶ C ⁻¹ *	EN 14617-11
Thermal conductivity	1.3 W/m K*	EN ISO 10456

Standards		Standards	
 Size 3.400 x 1.500 mm	EN 14617-16	 Deep abrasion resistance 25,5 mm	EN 14617-4
 Thickness 12 - 20 - 30 mm	EN 14617-16	 Frost resistance Resistant	EN 14617-5
 Specific weight 2,4 kg/dm ³	EN 14617-1	 Fire reaction A1	EN 13501-1
 Flexural Strength 53 N/mm ²	EN 14617-2	 Resistance to acids and bases C4 Resistente	EN 14617-10
 Water Absorption 0,1%	EN 14617-1	 Color resistance to light No change of colours	DIN 51094
 Resistance to compression 230 - 250 N/mm ²	ASTM C773	 Coefficient of linear thermal expansion 6,3 x 10 ⁻⁶ °C ⁻¹	EN 14617-11
 Impact Resistance 3,3 Joule sample: 20 mm thick	EN 14617-9	 Thermal conductivity 1,3 W/m °K	EN ISO 10456

CLADDING APPLICATIONS

		Design and Product Development		
Format: FP Rev.: C Date: 06/02/08		TEST REPORT		Doc. n°. 69 629-11 Rev. 0
OBJECT: Test report-Tensile-load for FZP K fixing on Lapitec panels 4. Test data Panels thickness 12 mm – fixing FZP K 11x7 mm				
Test	Load Max (daN)	Shift (mm)	Test result	
1	177.52	0.51	Breaking panel	
2	186.63	0.87		
3	184.54	0.80		
4	174.48	0.72		
5	169.51	0.44		
Average	176.46	-		



THE LAPITEC RANGE

Lapitec is available in a wide range of colours and finishes. The colour palette currently comprises of contemporary pale and earthy colours commonly found in natural stone as well as styles which mimic veined marbles and stone.

Each colour is available in four different finishes: -

Lux – a highly reflective polished finish (far right)

Satin – a flat eggshell sheen (2nd right)

Vesuvio – a fine textured, tactile but smooth surface - similar to a Satinato (Leather) finish on a fine grained Granite (2nd to left)

Fossil – a coarser textured surface finish, with a 'roughness' similar to the split face surface of natural stone (left)



THE LAPITEC COLOUR PALETTE

Grigio Piombo



Grigio Cemento



Porfido Rosso



Antracite



Tabacco



Bianco Crema



Avorio



Bianco Polare



Sahara



Arabescato
Corallo



Ebano



Arabescato
Perla



LAPITEC – ENVIRONMENTAL CREDENTIALS

Lapitec is committed to respecting the environment and the health of others, and in helping create a more sustainable tomorrow.

The manufacturing process for Lapitec is closely monitored, and the company does not use any raw materials obtained through petroleum processing. Additionally, Lapitec uses renewable energy in its manufacturing – thanks to the 13,000 sq/m of solar panels fitted to the roof of Lapitec’s headquarters in Vedelago, Italy.

Lapitec is an inert product, which does not release any substance into the environment.

At the end of the cycle, Lapitec can be used as recycled aggregate when scrapped, or disposed of as an inert product.

Lapitec in the UK is distributed by The Marble & Granite Centre Ltd, a company with similarly comprehensive green credentials – including a head office with geothermal heating, and an excellent BREEAM rating.

LAPITEC – CONTACT INFORMATION

<http://www.themarbleandgranitecentre.co.uk/>

The Lapitec Press Office is co-ordinated by hp4pr. Contact Anne Consedine on 07818 048438 or email anne@hp4pr.co.uk to receive hi-res images, arrange an interview with the Marble and Granite Centre team, discuss case studies or to be added to the Lapitec Press list.