# moducrete LamPlas



# **LAMPLAS TRENCH COVERS**

### LOW MAINTENANCE COMPOSITE SYSTEMS

# **LamPlas** Polymer Composite Panel

Falling under the **moducrete** category of **resocrete** products, the **LamPlas** Polymer Composite Panel has a wide range of applications, from building cladding, to trench covers, from stand-alone VIP pit latrine structures, to low-cost housing wall panels.

With an extremely high abrasion resistance rating and with high resistance to acids and alkali environments, the panels can be manufactured to withstand extremely high loading of up to 1200kg over a cover 600mm x 500mm with a very high impact resistance.

Classed as a GFR Polymer Concrete, the **LamPlas** Polymer Composite Panel has incredible tensile and flexural strength, and through its unique composite design, also has superior sound attenuation properties.

For oversized areas like junctions etc, where dimensions of the covers exceed the standard design criteria, components are reinforced by bonding a 60mm x 60mm x 6mm **Structabond** angle section to the underside of the cover, allowing us to easily achieve the load requirements, thereby enabling us to manufacture covers that could not be achieved an any other medium because of their standard sheet size restrictions.

### General Features

- · Large standard sheet sizes can accommodate any trench cover requirement.
- Up to 10 times the flexural strength of Vibrated Cement Concrete
- · High resistance to acids, alkalis and other corrosive substances
- · Resistance to biological attack
- · Far lighter than aluminium, steel and fibre cement alternatives
- High acoustic and flexibility absorption properties Superior thermal properties and stability
- · Outstanding weathering and UV resistance
- · Rated Highly Abrasion Resistant
- Fire retardency Complies with ASTM E-84 Flame Spread rating of 25 or less



OVERSIZED Lamplas TRENCH COVERS INSTALLED AT A TRENCH JUNCTION



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## **General Material Properties**

Load Bearing (unreinforced) 1200 kg per 600mm x 500mm

Specific Gravity 750 kg/m³
 Water Absorption 0.05% by weight

Operating temperature to 80°C

C&Cl abrasion resistance rating Class 1a
 Surface penetration during

C&Cl abrasion test Nil micron

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### Composition

Made from primarily waste products, recycled materials, by-product materials and natural stone, and with a zero moisture absorbency, moducrete attains 98% green-build properties whilst retaining superior compressive strength, flexural strength, sound attenuation properties, and outstanding thermal blanketing.

LamPlas trench covers and Access floor panels are available in either a 20mm or 25mm thickness, with the option of fitment of a 6mm edge trim where it is required to replace steel checkered plate.



Moulding the Future

# **Innovation**

An exciting new addition to the range of accessories for the moderete LamPlas Polymer Composite Panel is the new StructaBond compound.

Where formed into brackets and profiles, this compound withstands shear forces of up to 3000kg per linear meter and compressive forces of 1,020 kilograms-force (kgf) per 70mm<sup>2</sup>.

# Advantages

The moderate LamPlas Polymer Composite Panel has a number of unique advantages and characteristics when comparing to other conventional access flooring systems:

- Unlike other products, it is available in large sheet sizes and can therefore bridge any space required.
- · As a non-metallic product, it has no scrap value and being non-conductive, it is the safest alternative in electrical installation applications.
- · Light weight modular panels with the benefit in panel size, aesthetics, price, ease of installation, maintenance and repair.
- moducrete is impervious to water with no oxidizing, rusting, rotting or corrosion and is not susceptible to biological attack,
- · As shown by the tests below, the **moducrete LamPlas** Polymer Composite Panel attains high strength and flexibility, and is UV stable

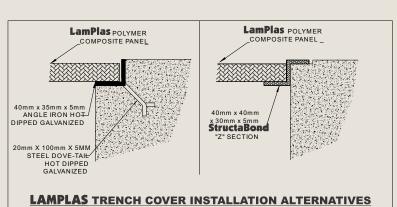


### **StructaBond** Compound Test

· Test **Compressive Load Test Structabond** Compound **Product** 

10.19mm x 6.94mm x 50mm Sample Size Load Applied 1021 kilograms-force (kgf)

Results Sample failed at above load





# moducrete LamPlas Polymer Composite Panel Test

· Test Sandbag Load Test

· Product **LamPlas Trench Cover** 

Sample Size 600mm x 500mm

LamPlas trench cover fitted with 6mm edge Description

trims, resting on two sides

**Load Applied** 1280 kg

 Results Test stopped at 1280 kg as load became unstable - no failure recorded

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