# Technical Datasheet



# Brickbond L.O.

### **Brick Adhesive**

### Description

A two component, solvent free, low odour epoxy bonding paste specifically designed for use with cut bricks of all types where they are required to be bonded. The material is characterised by its excellent bond strength and very low tendency to carbonate, even under adverse conditions. Brickbond L.O. is naturally grey in colour, however it can be mixed with a small amount pigment or brick dust to produce an excellent colour match adhesive. Economical and simple to use the exact amount required can be mixed as and when needed. Brickbond L.O. has been designed to comply with requirements of EN1504 Part 4.

### **Advantages**

- Simple 1:1 by volume mixing ratio.
- Colour coded mixing.
- No special tools or equipment required.
- High bond strength.
- Excellent resistant to a wide range of chemicals.
- Easily pigmented to colour match bricks.
- Non-shrink.
- Excellent adhesion to brick, concrete, stone, asphalt and metal.

### **Technical Information**

Mixing Ratio (by volume)	1:1	
Workable Life	45 Minutes @ 20°C	
Initial Cure	3 Hours @ 20°C	
Full Cure	3 Days @ 20°C	
S.G.	1.4	
Compressive Strength	>30 MPa	
Tensile Strength	10 MPa	
Flexural Strength	25 MPa	
Bond Strength to Brick	Always Exceeds Brick Strength	
Bond strength to Concrete	>2.0 MPa	

In all tests conducted the strength of the Brickbond L.O. joint exceeded that of the integral brick strength, resulting in the failure of the brick every time.



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EN 1504-4 Structural bonding		
Compressive strength	≥30 MPa	
Modulus of elasticity, in compression	≥2000 MPa	
Dangerous substances	Complies with 5.4	

### **Surface preparation**

All surfaces should be clean, free from dust, oil, and preferably dry.

### Mixing

This may be carried out by hand using a trowel/spatula or slow speed drill and paddle. If mixing by hand the material should be mixed in equal parts, by volume, on a clean non-absorbent surface until smooth and uniform in colour and consistency. When mixing by drill and paddle, the paddle used should always ensure complete and thorough mixing, leaving no unmixed material in the corners of the mixing vessel. Only mix sufficient material as can be used within the working time.









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### Technical properties of Brickbond L.O.

Properties	Standard	Performance Requirement	Declared Value
Appearance			Grey Resinous Paste
Aggregate size			<0.1mm
Layer thickness - minimum			0.1mm
Consistence			Non-Slump
Working time (@ 23°C)			45 Minutes
Density			1400 kg/m³
Temperature for application			5°C to 35°C
Compressive Strength	EN12190	≥ 30 MPa	>30 MPa
Modulus of Elasticity, in Compression	EN13412	≥ 2000 MPa	>3500 MPa
Flexural Strength	BS6319-3		25 MPa
Modulus of Elasticity in Flexure	EN ISO 178	≥ 2000 MPa	> 2000 MPa
Tensile Strength	BS2782-3		10 MPa
Shear Strength	EN12615	≥ 6 MPa	> 6 MPa
Glass Transition Temperature	EN12614	≥ 40°C	> 40°C
Adhesion - concrete	EN1542		> 2.0 MPa
Adhesion after freeze/thaw (50 cycles with salt)	EN13687-1		> 2.0 MPa
Adhesion after thunder showers (30 cycles)	EN13687-2		> 2.0 MPa
Adhesion after dry cycling (30 cycles)	EN13687-4		> 2.0 MPa
Total Shrinkage	EN12617-1	≤ 0.1%	< 0.1%
Carbonation resistance	EN13295	d <sub>k</sub> ≤ ref. concrete	d <sub>k</sub> < ref. concrete
Capillary absorption	EN13057	$\leq 0.5 \text{ Kg/m}^2/\text{h}^{-0.5}$	< 0.5 Kg/m <sup>2</sup> /h <sup>-0.5</sup>

Technical data shown are statistical results and do not correspond to guaranteed minima.

Tolerances are those described in appropriate performance standards.

 $1 \text{ N/mm}^2 = 1 \text{MPa}$ 

 $1 \text{ kN/mm}^2 = 1 \text{ GPa}$ 

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### **Application Instructions**

The mixed Brickbond L.O. should be firmly applied with a trowel/spatula onto both faces of the substrates. These can then be brought together and the excess material cleaned away. Once bonded the unit should be left undisturbed until the Brickbond L.O. has set. Clean all tools and equipment after use with Nuwash.

### **Packaging**

Brickbond L.O. is available in 10 litre and 20 litre units.

### Storage

Brickbond L.O. should be stored in cool dry conditions.

If stored at temperatures of  $10^{\circ}$ C or below the containers should be warmed prior to use as this will greatly aid the mixing procedure. Brickbond L.O. should be stored away from foodstuffs and out of the reach of children.

### **Health & Safety**

Product Safety Data Sheets (SDS) are available from Nufins. SDS sheets are provided to help customers satisfy their safe handling, use and disposal needs as well as assist with any conformance requirements made locally by health and safety regulations.

SDS are continually updated to provide the very latest information to our customers. We therefore recommend contacting our head office to obtain the most recent and accurate SDS before handling and using any product.

#### Limitations

Do not apply below 5°C.

#### Disclaimer

The information contained herein is to the best of our knowledge true and accurate and is given in good faith but without warranty. The user will be deemed to have satisfied themselves independently as to the suitability of our products for their own particular purpose. In no event shall Nufins be liable for consequential or incidental damages.

Users must always refer to the most recent issue of the Technical Datasheets, copies of which will be supplied on request.

### **Technical Support**

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors. Technical contacts are available to provide further information and arrange demonstrations.