

ADHESIVE

DURAL 618R

RESIN GROUTING COMPOUND



EUCLID CHEMICAL

PACKAGING

DURAL 618R is packaged in 1 Litre and 5 Litre kits

APPROXIMATE YIELD

2m²/litre at 0.5mm thick

CLEAN-UP

Clean equipment immediately after use with Pro-Struct 105 Cleaner and rinse with clean water.

SHELF LIFE

24 Months if stored between 15°C to 30°C.

DESCRIPTION

DURAL 618R is a 2-component, solvent-free epoxy liquid designed to have excellent surface wetting properties, with a long working time. The cured mechanical properties achieved make it the ideal construction site general purpose liquid resin system.

PRODUCT CHARACTERISTICS

FEATURES / BENEFITS

- Low viscosity for easy pouring
- Quick strength development
- General purpose liquid adhesive

PRIMARY APPLICATIONS

- Grouting reinforcing bars and holding down bolts
- Bonding concrete bricks, tiles and other construction products where a thin glue line is required
- Sealing surface concrete cracks
- Laminating with chopped strand matt onto concrete or timber
- Versatile grouting compound when mixed with graded dry aggregates

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

TYPICAL PROPERTIES	AT 25 °C
Colour	Amber
Consistency	Liquid
Volume Solids	100%
Number of Components	2
Mix Ratio By Volume (Base:Activator)	2:1
Pot Life	60 to 90 Minutes
Apply Over	Prepared metal and concrete surfaces
Apply By	Pouring or trowel
Initial Set	8 Hour at 25 °C
Service	24 Hours
Full Cure	7 Days
Application Temperature Range	15 °C to 35 °C
Maximum Service Temperature	60 °C
Compressive Strength	>50 MPa at 7 days
Steel to Steel Bond	>8 MPa
Concrete Bond Strength	Breaks concrete
12mm Rebar Pull-out Depth 126mm	Bar failure 50.8KN
20mm Rebar Pull-out Depth 200mm	Bar failure 143.4KN
VOC	<3 g/l

Dural 618R (2) July 2026 replaces July 2023

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DIRECTIONS FOR USE

Surface Preparation:

Surfaces must be clean, sound and dry. Exposed concrete surfaces must be sandblasted or chipped to show the well-bonded main aggregate. Steel should be grit blasted, clean, free of rust, paint or foreign matter likely to affect the bond or performance of the repair.

Mixing: Pre-condition material to between 15°C to 25°C before using. Premix each component of the kit. Add the Activator component to the Base component and mix thoroughly for 3 minutes with a slow speed drill. Do not aerate or mix more material than can be placed in 30 minutes. To prepare an epoxy mortar, slowly add pre-packaged Stonhard 622 dry graded aggregate to a kit of mixed resin and mix to a uniform consistency.

Application: Refer to various methods specified for appropriate use. For crack injection, refer to the Dural 618LV data sheet.

NOTE: The generic chemistry of this product renders the resin prone to solidification when exposed to colder temperatures. This solidification can be reconstituted by gently warming the container (using a warm water bath) and stirring with a spatula until all solidified material has “melted” to a uniform consistency. This will have no detrimental effect on the performance of the product. If unsure, please consult Euclid Technical Services for further advice / guidance.

PRECAUTIONS / LIMITATIONS

- Application temperature of substrate to be 4°C and rising. Low temperatures adversely affect application spread rates and time to achieve bond.
- Hot temperatures decrease working time.
- Do not apply over wet surfaces.
- Do not thin with solvent.
- Use materials in strict accordance with the manufacturer’s Safety Data Sheet.
- Protective clothing and equipment will significantly reduce risk of injury.
- Body coverage apparel, safety goggles and impermeable gloves are recommended.
- In case of contact, flush with copious amounts of water and seek medical attention.
- Dispose of waste materials and containers in strict accordance with Government regulations.

FORMULA FOR CALCULATING MATERIAL USAGE

METHOD FOR CALCULATING RESIN USAGE IN LITRES FOR GROUTING REINFORCING BARS, HOLDING DOWN BOLTS, ETC.

$$\text{No. OF LITRES} = \frac{0,8 (D - d) (D + d) ht}{1\ 000\ 000} \times \text{No. OF HOLES}$$

WHERE
D = Diameter of hole
d = Diameter of bar or rod
ht = Depth of hole

NB: Take ALL dimensions in mm

Note: Diameter of hole should be 1,25 - 1,5 times diameter of bar or rod.

Depth of hole should be 10 times diameter of bar or rod for reinforced concrete and 15 times for mass concrete.

ALLOWABLE SPACING AND EDGE DISTANCE (D = ANCHOR DIAMETER)

	Distance for full anchor capacity (Critical Distance) ¹	Distance for reduced anchor capacity
Edge Distance - Tensile Load	12D	4D
Spacing Between Anchors	24D	8D
Edge Distance - Shear Load	12D	4D

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