

## MORA RESIN TDS

STONE BONDING RESIN IS THE BINDER USED FOR AGGREGATES,PVA FLAKES AND NATURAL MINERALS.

### DESCRIPTION:

- ✚ Stone Bonding Resin is a formulated epoxy resin binder which can be used on a wide range of applications.
- ✚ The outstanding properties of this binder towards strength and flexibility are excellent making the system highly recommendable in civil engineering applications.
- ✚ To be used as a binder for pigmented quartz, PVA flakes and other minerals.



### ADVANTAGES:

- ✚ Medium Viscosity
- ✚ Good Chemical Resistance
- ✚ Good Early Strength
- ✚ Good Flexibility (Unfilled)
- ✚ Excellent Curing Rate
- ✚ Versatile

### TECHNICAL DATA :(AT 25 °C):

<b>Color</b>	<b>transparent</b>
<b>Solid content</b>	100 %
<b>Density</b>	1.15 ± 0.02Kg/l
<b>Mixing ratio A : B by weight</b>	1.8: 1
<b>Pot life</b>	45 min
<b>Initial setting time</b>	10-12 hours
<b>Final setting time</b>	24 hours
<b>Full hardness Recoating time</b>	7 days 24hour

### MIXING RATIO:

Component one (Resin): Component two (Hardener)

### MIXING:

Mora Resin TDS - has been accurately pre-measured to provide an exact chemical reaction. Do not attempt to change the mixing proportions, as a weak product will be produced. Thorough mixing of the

hardener component with the resin component will ensure a product with optimum properties. Failure to achieve a homogeneous mix can result in soft, uncured spots.

### PREPARATION:

Mora Resin TDS @ should only be applied to solid substrates (concrete, tarmac, compacted hardcore etc.) Clean the area thoroughly of any oils or loose debris and ensure the area is dry.

### APPLICATION:

- ✚ BONDED - Once the resin and hardener components have been thoroughly mixed, they should be decanted into a shallow tray/scuttle, then applied to the surface at a rate of 400-500g per m<sup>2</sup>. Once an area has been coated, totally cover with the stone/aggregate. Use a soft broom to push-in and sweep the gravel to the bare patches of resin, this also helps to embed and secure the gravel. You can then proceed to the next area. Once fully cured the area should be thoroughly swept to remove loose, unbonded surface gravel.
- ✚ BOND - Once the resin and hardener components have been thoroughly mixed to a homogenous state the mixed material needs to be combined with the aggregate at a rate of approx. 8(stone):1(resin). Spread onto the surface at a thickness of 10-12mm for pedestrian use or 18mm+ for vehicle use.

### STORAGE:

- ✚ Mora Resin TDS @ system have a shelf life in excess of 12 months if stored in a dry warm environment. The products should be stored at ambient temperatures to ensure the products remain in prime useable condition.
- ✚ Storage of products outside this range or repeated fluctuations in storage temperature can reduce the storage life of resin-based products.

### USEFUL TIPS:

To ensure that you get the optimum of properties and surface finish, remember the following:

- ✚ Ideal application temperature is 15-20°C.
- ✚ Store materials overnight in a warm place.
- ✚ Use heaters if the temperature is low.
- ✚ Keep cool if temperatures exceed 30°C.
- ✚ Avoid high atmospheric humidity, particularly areas where plaster has just been applied.
- ✚ Never alter mixing ratios.
- ✚ Mix thoroughly by mechanical means whenever possible.

### CLEANING:

All brushes, rollers, tools etc. should be cleaned with thinners immediately after use. For hands – soap and water.

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## HEALTH & SAFETY:

- ✚ It is recommended that barrier creams, gloves and protective clothing are used when using stone Bonding Resin.
- ✚ If eyes are affected wash with copious amounts of water and seek medical advice. For full details refer to Safety Data Sheet.

## EFFECT OF TEMPERATURE CHANGES:

- ✚ this system has been designed to produce the optimum application and physical properties at an ambient application temperature between 15°C and 25°C. When conditions are outside 15-25°C and it is not practicable to provide a suitable temperature, an awareness of the changes in application properties is needed.
- ✚ **TEMPERATURES BELOW 15°C:** As the ambient temperature drops below 15°C, the viscosity of the liquid components increases. The lower the temperature the thicker the resin becomes. Resins become more difficult to apply and may not flow out satisfactorily. Equally it may be difficult to achieve coverage rates and excess products may be used. Air may not be fully released leaving pinholes or craters. It would be advisable to pre- warm the resin in the circumstances to achieve coverage.
- ✚ Trowel applied systems become stiffer and difficult to trowel flat without applying heavy pressure, which can cause trowel burns, and the possibility of bubbles due to trapped air is more likely. If closing the surface of the screed is difficult, the chances of open porous areas are more likely.
- ✚ Cure times are extended and at temperatures below 5°C the curing reaction may cease completely until a suitable temperature is reached. Although the resin will eventually cure at low temperatures, the polymer reaction is not as thorough as the original design and physical and chemical properties are reduced.
- ✚ The use of solvents to reduce viscosity at low temperatures is widely accepted by many individuals as a normal practice. This is not so when the product has been designed as a solvent free system. Solvents, especially, with a low evaporation rate will create many problems, in many instances total failure and at the least a system which will not meet the relevant specification. To ensure optimum properties the use of any form of dilution must be eliminated on any system that is not designed to be thinned down.
- ✚ **TEMPERATURES ABOVE 25°C:** Just as low temperatures increase the viscosity of resins; high temperatures reduce the viscosity and the resin becomes thinner.
- ✚ Trowel applied systems become easier to trowel but the resin could drain to the bottom of the screed if not compacted properly.
- ✚ Cure times are reduced but the workable time of the mixed resins is also reduced. This can result in resin going hard before it is applied and difficult in joining together separate mixes.

## EFFECT OF HIGH HUMIDITY:

Mora Stone Bonding Resin TDS @ is solvent free epoxy resin system have been formulated to resist water staining which is caused by the formation of a salt when water comes in contact with the resin surface before the cure is complete. The resultant salt may not show immediately and the effect is that of a slightly matting surface. When the surface is eventually washed with water a white-water stain occurs.

## COVERAGE:

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Resin Bonded - Each 5kg unit will cover ~7-8 m<sup>2</sup> @ 0.7mm thick. Resin Bound with 1-3mm – 5kg will cover ~5m<sup>2</sup>.

**PACKAGING:**



One Component: (Resin) 9.67 kg, Two Component:(Hardener) 5.320 KG

