

Matacrete®

Ready Rep N

Rapid Set, Multi-Purpose Structural Repair Mortar

Product Description

Matacrete® Ready Rep N is a two-component structural repair and reprofiling mortar based on a methyl methacrylate liquid resin which acts as a binder with a mix of specially-graded quartz aggregate and powder additives.

Basic Uses

Matacrete Ready Rep N is used as a fast-setting, durable mortar to repair damage, holes and imperfections in concrete substrates. It can be applied at very low ambient and substrate temperatures 32 to 86 °F (0 to 30 °C). Repair and reprofile applications include:

- Patch repairs on vehicular and asphalt wearing courses.
- Filler for joints and trenches that require rapid setting and durable mortar.
- Specialized fillings such as machine bases, joint arrises, drill and bolt holes, etc.

Features and Benefits

- Installs at above freezing temperatures and sets rapidly, typically within 60 minutes.
- Can withstand heavy duty vehicular traffic with any adverse material effects.
- Impermeable.
- Tenacious bond.
- High performance in versatile applications and extreme weather conditions.

Physical Properties*

Property (Components)	Test Method	Value
Powder Density	DIN EN 1097	1250 – 1350 kg/m ³
Liquid Viscosity @ 68 °F (20 °C)	DIN 53019	< 1 mPa*s
Liquid Density @ 68 °F (20 °C)	ISO 2811	0.94 g/ml
Liquid Flash Point	ISO 1516	52.7 °F (11.5 °C)
Property (System)		
Pot Life @ -4 °F (-20 °C)		approx. 15 minutes
Curing Time @ -4 °F (-20 °C)		approx. 30 minutes
Compressive Strength (1 hour)	ASTM C579	>11,750 psi
Compressive Strength (7 days)	ASTM C579	>14,000 psi
Flexural Strength	ASTM D790	>3,850 psi
Tensile Adhesion	ACI 503R	>340 psi

* The values shown are based on system testing under laboratory conditions. Different field application conditions or lab equipment configurations may result in system value variances.

Packaging

- Powder component: 17.8 kg bag
- Liquid component: 2.2 kg pail
- Yield: 0.345 ft³ (0.01 m³) per kit

Installation

Surface Preparation

- Prior to applying Matacrete Ready Rep N, a suitable Primer, including sanding when appropriate, must be applied.
- To prime, substrates must be dry, firm, solid and free of dust, grease, oil, and loose particles, usually by shot or sand blasting to attain correct surface profile. Newly poured concrete must have reached adequate strength to receive Matacrete Ready Rep N.
- When used with asphalt, the damaged asphalt should be square cut to the depth of solid concrete. For best results, the square cuts should be inclined so that the square opening is smaller than the square bottom.

MATACRETE™ READY REP N

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Installation - *continued*

Mixing

- The Matacrete Ready Rep N powder component is mixed with the liquid component to create a homogenous mixture. When required by the application, up to 15 % SNL powder can be mixed with Matacrete Ready Rep N.
- Liquid to powder ratio by weight is 1:8
- Liquid to powder ratio by volume is 1:5.8
- The weight and volume ratios must be adhered to at all times. Partial container mixes are not recommended.

Application

Matacrete Ready Rep N is manually applied with a trowel or wooden float at a minimum thickness of 6 mm. When applying in layer thicknesses 25 mm and greater, the following mix ratios should be used:

Content	Amount in kg	Minimum Layer Thickness	Content Yield (ft³)
Powder component	17.8	6 mm	.345
Liquid component	2.2		
Powder component	17.8	25 mm	.468
Liquid component	2.2		
Quartz sand 2.0 to 8.0 mm	8.0		
Powder component	17.8	50 mm	.537
Liquid component	2.2		
Quartz sand 2.0 to 8.0 mm	3.0		
Quartz aggregate 8.0 to 16.0 mm	12.0		
Powder component	17.8	120 mm	.640
Liquid component	2.2		
Quartz sand 2.0 to 8.0 mm	4.8		
Quartz aggregate 8.0 to 16.0 mm	6.4		
Quartz aggregate 16.0 to 32.0 mm	8.0		

Addition of sand and aggregate in quantities other than those listed is not recommended and should be tested prior to use. For vehicular applications on roads and bridges, a functional, non-slip surface is attained by broadcasting hard-wearing bauxite or aluminum oxide aggregate onto wet Matacrete Ready Rep N. Consumption of Matacrete Ready Rep N without additional filler is 2.1 kg/l.

- Do not apply when surface temperature is above 104 °F (40 °C) and/or rapidly rising. Special care must be observed if area is exposed to direct sunlight.
- Substrate temperature must be at least 5° over actual dew point and rising.

The techniques involved may require modification to adjust to job-site specific conditions. Consult your FPT Infrastructure Sales Representative or FPT Infrastructure Technical Services for site conditions and requirements. For further installation details, see our General Preparation and Application Guidelines for "Matacrete Systems".

Limitations/ Shelf Life

Two (2) years when stored in a dry place in original, closed packaging. Optimal storage temperature: 60 to 70 °F (15 to 20 °C).

Warranty

FPT Infrastructure warrants its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, FPT Infrastructure makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to FPT Infrastructure Products. FPT Infrastructure's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of FPT Infrastructure Products proven to be defective, and FPT Infrastructure shall not be liable for any loss or damage.

Please refer to our website at fptinfrastructure.com for the most up-to-date Product Data Sheets.

NOTE: All FPT Infrastructure Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

