## Technical Data Sheet

# K125 Trowel Grade Epoxy Paste System



## **DESCRIPTION:**

K125 epoxy is an economical and versatile heavy duty epoxy paste suitable for a wide variety of purposes.

K125 is a paste (as distinct to a heavy mortar like K102). It is easier to mix and will apply by spatula or trowel. It provides a creamy, easy to apply and smooth consistency; yet is sag resistant up to normal film builds. It can be applied overhead and in vertical applications. It will bond more readily to surfaces due to its more pasty consistency.

## **TYPICAL FEATURES | BENEFITS:**

- Simple 1:1 mix ratio
- Interior | Exterior application
- User friendly.
- Very hard when cured
- Highly durable, high compressive strength
- Very high adhesive and cohesive strength.

- Two colours differentiate resin and hardener.
- Easy mix recognition.
- General purpose.
- Many uses, handy, paintable.
- Chemical resistant Acid and salt resistant

#### **PERFORMANCE DATA:**

Properties		Values		
Minimum application temperature: Air		*12°C		
Flash point:	~ Resin	>93°C >150°C		
	~ Hardener			
Tensile strength:		35 - 47MPa		
Tensile bond strength:		10 - 14 MPa		
Compressive strength:		80 MPa		
Flexural strength:			17 - 18 MPa	
Maximum operating temperature:		+65 <sup>0</sup> C		
Adhesion Properties to correctly prepared surface:	~ Concrete ~ Metal ~ Timbers ~ PVC ~ Polyethylene ~ Polypropylene	Excellent Excellent Excellent Excellent Poor Refer: Note #1. –Below Poor Refer: Note #1. –Below		
Appearance:	~ Resin ~ Hardener	White paste Black paste		
SG kg/litre:	~ Resin ~ Hardener	1.4 1.4		
Density Kg/Litre -cured:		1.4		
Coverage:		Use as required: $(0.001\text{m}^3 = 1 \text{ Litre})$ e.g. 1 litre covers $1\text{m}^2$ @ 1mm thick		
Pot Life: (Usable Life) Pot life is based on 100gram samples. Large quantities of mixed epoxy will generate heat and the pot life may be significantly reduced.		+12°C- 50%RH +15°C- 50%RH +20°C- 50%RH	50 - 60 minutes 30 - 35 minutes 20 minutes	
Cure Time:		+18°C -50%RH	24 hours	
Clean up:		Wash hands with warm soapy water after any skin contact Solvent HA for tools		
NZ Dangerous Goods Class:	~ K125	Refer: SDS		
Packaging:	~ K125 Kit	8 Litre		
Shelf Life:		24 months from date of manufacture. (After this period consult with allnex).		

#### **RECOMMENDED USES:**

- Bonding pipes, concrete and PVC. Bends in concrete pipes.
- Re-forming edges; stair nosing's, usable overhead.
- Filling holes, forming plinths.
- Steel plate fixing to concrete.
- Smoothing concrete prior to application of Fibreglass, Carbon fibre or Kevlar for column reinforcement.
- Fixing floors, tanks, concrete blocks, kerbs.

Setting bolts and rebar into concrete. - Horizontal.

Fixing pipes | concrete.

- Patching floor holes.
- Smoothing and repairing concrete surfaces; e.g. eroded sewer tanks and pipes, eroded marine concrete; Acid and salt resistant.

#### NOT RECOMMENDED:

- Application below +12°C air temperature.
- Application to incorrectly prepared surfaces.
- Application to unsound substrates.
- Bonding Polypropylene and polyethylene.

#### **HEALTH & SAFETY:** Refer safety data sheets (SDS).

- Wear gloves wherever possible.
- Wash hands with warm, soapy water after any skin contact.
- Re-seal all containers tightly.

#### **SURFACE PREPARATION:**

The surface to be filled/repaired must be clean and sound.

Remove all dust, dirt, oil, scale, laitance, paint or any other contaminates. Concrete: Acid etch | Shot blast | Diamond grind | Needle gun.

Metals: Degrease with Acetone > Abrade with medium grit abrasive paper > Degrease with Acetone again.

Timber: Prepare by way of mechanical sanding using 80 grit paper. Bolt Grouting: Blow hole clear with clean, dry oil free compressed air.

Spalled Concrete Control Joints: Diamond cut the spalled edges so that the face is vertical. Vacuum clean. > Fill > Recut

#### Note

K80 is best for Spalled Concrete Control Joints

#### **MIXING RATIO**

#### K125 Mixing Ratio - By weight

#### K125 Mixing Ratio - By volume

Element	Value	Element	Value
Resin	1 part	Resin	1 part
Hardener	1 part	Hardener	1 part

#### Refer: Cautions Section

The mix ratio must not be altered.

The mix ratio is the only acceptable formula.

Adding more hardener will make the mix softer and it will be uncured.

Increased hardener levels will result in a weaker product.

#### MIXING METHOD:

Carefully mix the product according to the stated mix ratio. Mix until uniform and no streakiness is evident. (Uniform grey colour) Hand mixed.

Mixing is often easiest with gauging trowel or broad knife.

## **APPLICATION METHOD:**

Trowel | Knife | Cartridge | Barrel gun

If using to imbed horizontal bolts and bars, put mixed K125 into empty cartridge tubes and insert bung. Pump into back of cleaned hole and insert bolt with hammer (or use barrel gun).

May be wetted with water or methylated spirits to get a smooth glass like surface. - Excessive use of water will weaken the product.

## Note

The installation of this product is speciality work and consideration should be given to the use of a competent installer.

## **CAUTION:**

K125 is a two part epoxy that is mixed in the specified ratio. Only this ratio will produce a hard, non-softening product. Adding more hardener (with the aim of making the product cure faster) will not work and will only result in making the product softer. The more hardener that is added, then the softer it will become. No matter how long it is left, it will never harden.

Only the stated mix ratio will work and exhibit the stated performance data.

#### Note well

The consequences of having soft K125 due to poor mixing may be far reaching and costly to repair.

This is a job that must be done once, and done right. Many people do not understand the consequences.

One to one ratio mixing means just exactly that.

#### Note

K125 is very tough and hard but it is not flexible. It will fill non-moving joints but will not bridge actively moving joints.

#### **OTHER EPOXIES AVAILABLE:**

- K36 Clear Laminating Resin.
- K78 Crack Repair.
- K80 Pourable Grout.
- K83 Machinable Epoxy Grout
- K102 High Viscosity Mortar.
- K106 Structural 24 hour Adhesive.
- K125 Concrete Repair Paste.
- K130 Control Joint Filler.

- K138- High Strength, Structural Heat Resistant Adhesive.
- K214 General Purpose Adhesive
- K219- Structural 5 Minute Adhesive.
- K273- Underwater Cure Mortar.
- K2005 High Peel Strength Structural Adhesive.
- Fairing Cream Sandable Smoothing Paste.
- Truestik EA Flexible Adhesive Multipurpose.

#### **EPOXY SELECTION:**

Refer: Epoxy Selection Chart.

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