

# TECHNICAL DATA SHEET

## ULTRAFIX PLUS<sup>™</sup> POLYESTER ANCHORING ADHESIVE

Date of Issue: May 12, 2005

### DESCRIPTION

**ULTRAFIX PLUS is a fast curing adhesive for anchoring threaded rod and deformed bar into concrete and masonry.**

ULTRAFIX PLUS is styrene free, **low odour** and is **not flammable\*** making it user friendly for domestic applications.

### RECOMMENDED USES

- ◆ Anchoring threaded rod and studs for:
  - Timber bottom plate hold down
  - Cyclone Rods
  - Gate hinges
  - End plates on timber and steel beams
- ◆ Anchoring deformed bar for:
  - Starter bars for masonry walls
  - Starter bars for pouring adjacent concrete slabs
- ◆ Exterior and interior applications

### SUITABLE FOR USE IN

- ◆ Solid Concrete
- ◆ Masonry including:
  - Stone
  - Solid Brick
  - Concrete Block (with accessories)
  - Hollow Brick (with accessories)

### FEATURES AND BENEFITS

- ◆ **Fast Cure**
- ◆ Use in standard caulking gun
- ◆ Safe for use in domestic applications
  - Low odour
  - Styrene Free
  - Not flammable\*
- ◆ **Re-usable** – just change nozzles
- ◆ **Easy to use**
  - Resistant to dripping and running from holes in vertical walls
  - Easy to dispense in cold weather
- ◆ **Low waste**

### INSTRUCTIONS FOR USE

#### Drilling Holes

- ◆ Mark out location of holes using fixture as a template.
- ◆ Select correct size masonry drill bit from Chart 1 below for the appropriate stud, bar or perforated sleeve
- ◆ Drill hole with hammer drill or other rotary percussive drilling machine, to correct depth (see Chart 1)
- ◆ **IMPORTANT:** Clean dust from walls of hole with stiff wire or nylon brush
- ◆ Blow out debris with hand pump or other source of high velocity air
- ◆ **Dust interferes with adhesive bond and if present will result in load capacity reduction**
- ◆ Do not clean holes with water
- ◆ If hole is wet, allow to dry before injecting adhesive
- ◆ **Water interferes with adhesive bond and if present will result in load capacity reduction**

#### Opening and Using Cartridge

- ◆ Unscrew cap.
- ◆ Pull out red plug to expose plastic film.
- ◆ Cut film and discard red plug.
- ◆ Screw on mixing nozzle.

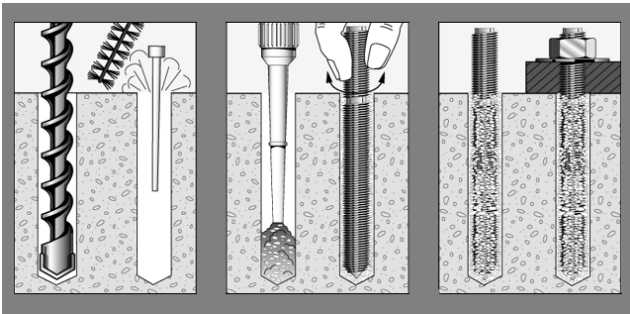
**IMPORTANT: Ensure nozzle contains spiral-mixing elements. Do not use nozzles from silicone cartridges as adhesive will not mix and cure.**

- ◆ Load cartridge into standard caulking gun.
- ◆ Dispense adhesive to waste until colour changes to grey.

\*Not classified as FLAMMABLE for transport and storage according to criteria of Australian Dangerous Goods Code 6<sup>th</sup> addition.

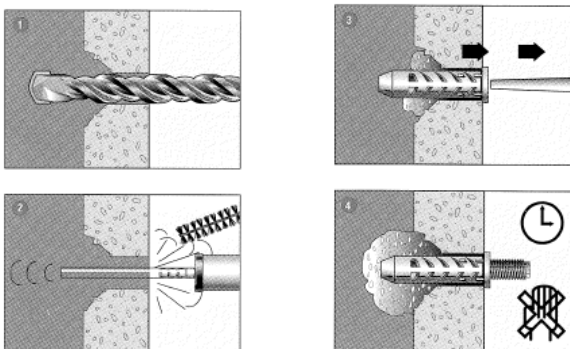
**Installing in Solid Substrates**

- ◆ Insert nozzle to bottom of hole.
- ◆ While squeezing trigger to inject adhesive, gradually withdraw nozzle until hole is ¾ full.
- ◆ Insert threaded rod or deformed bar to bottom of hole while rotating to avoid trapping air.
- ◆ Wipe away any excess adhesive
- ◆ When adhesive has cured (see Chart 2) tighten nuts or apply load as required.



**Installing into Hollow Substrates**

- ◆ Select perforated sleeve or sieve from Chart 1 below
- ◆ Insert into hole
- ◆ Insert nozzle to bottom of sleeve or sieve
- ◆ While squeezing trigger to inject adhesive, gradually withdraw nozzle until hole is full.
- ◆ Insert threaded rod or stud while rotating to avoid trapping air
- ◆ Wipe away any excess adhesive
- ◆ When adhesive has cured (see Chart 2) attach fixture and tighten nuts



**CLEAN UP**

Clean up uncured material and equipment immediately after use using **Acetone**.

Remove cured Ultrafix Plus by scraping or other mechanical means.

**RE-USE**

After use do not remove nozzle. ULTRAFIX PLUS will cure in the nozzle creating an impervious plug. The cured material will preserve the remaining contents for up to 6 months. To re-use replace old nozzle.

**PACK SIZES AND ORDER NUMBERS**

Pack Size	Order Number
300 mL	UFP300

**STORAGE**

Store between 5°C and 20°C out of direct sunlight. Shelf life is 12 months in original unopened container.

**HEALTH AND SAFETY**

- ◆ Not classified as flammable for storage and transport according to Australian Dangerous Goods Code 6<sup>th</sup> Edition.
- ◆ Not classified as hazardous according to criteria of NOHSC
- ◆ Not a scheduled poison according to criteria of the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP)
- ◆ Normal safe working practices and hygiene is recommended when using this product
- ◆ Avoid contact with the skin, eyes and avoid breathing vapour.

For more detailed information refer to the Material Safety Data Sheet. Call 1300 780 063 or visit the website [www.ramset.com.au](http://www.ramset.com.au)

**Chart 1. Masonry Drill Bit Size Selector**



Rod Size (mm)	Nominal Drill Bit Diameter (mm)			Min. Drill Bit Working Length (mm)
	Threaded Rod	Deformed Bar	Hollow Masonry Plastic Sleeve	
8	10		12	80
10	12	12 - 14	16	90
12	14	15 - 16	22	110
16	18	20 - 22		125
20	24	24 - 26		150
24	26	30 - 32		160

**Chart 2. Working and Loading (Cure) Times**

Substrate Temp. (°C)	Working Time (Minutes)	Loading (Cure) Time (Minutes)
30	4	35
25	5	40
20	6	50
10	10	85
5	18	145



**Chart 3. Installation Temperature Limits**

	Minimum	Maximum
Substrate	0°C	35°C
Adhesive	5°C	30°C



**Chart 4. Estimating Guide**

Drill Bit Diameter (mm)	Hole Depth (mm)	Number of Fixings per Cartridge
10	80	70
12	90	48
14	110	30
18	125	20
24	150	8
26	160	8

**Chart 6. Load Capacities in Brick and Concrete Block**

Threaded Rod Size	Drilled Hole Diameter (mm)		Fixture Hole Diameter (mm)	Threaded Rod Embedded Length (mm)	Working Load Limit (kN)					
	Nylon Sleeve	S/S Sleeve			3 Hole Brick		10 Hole Brick		Concrete Block	
					Shear*	Tension	Shear*	Tension	Shear*	Tension
M8	12	12	10	64	3.8	2.5	3.0	1.0	1.8	1.8
M10	14	16	12	64	4.6	2.5	4.6	1.0	2.0	1.8
M12	16	16	15	64	5.0	2.5	5.0	1.0	2.0	1.8
M16	-	22	19	64	5.0	2.5	5.0	1.0	2.0	1.8

\*Assumes steel threaded rod is grade 4.6 or greater

**Chart 7. Load Capacities in Solid Clay Brick**

Threaded Rod Size	Drilled Hole Diameter (mm)	Fixture Hole Diameter (mm)	Threaded Rod Embedded Length (mm)	Working Load Limit (kN)	
				Shear	Tension
M8	10	10	80	4.4	1.4
M10	12	12	85	4.8	1.5
M12	14	15	85	5.2	1.6
M16	18	19	85	5.2	1.7

Ramset™ Fasteners (Aust) Pty Limited does not give any representation, guarantee or warranty, express or implied that the information is or will be complete or accurate or that it has been or will be independently verified. To the extent permitted by statute, Ramset™ Fasteners (Aust) Pty Limited, its servants and its agents will not be liable (whether in negligence or other tort, by contract or under statute) in respect of any loss or damage (including consequential loss or damage) arising by any reason of or in connection with the provision of the information or by purported reliance on it.