



Product from  
**spit**

## Description

Extreme performance resin, specifically formulated for extreme rebar and stud applications. With virtually no odour, Viper Xtrem TR is easy to inject at low temperatures and is approved for use in wet and diamond drilled holes.

## Features and Benefits

- Suitable for cracked concrete
- Suitable for use in diamond drill hole
- Easy to inject at low temperatures
- Reliable performance at temperature -40°C to 80°C
- Virtually no odour
- 410ml cartridge
- High performance injection tool - Reduces effort required for application
- Works in damp, wet and submerged hole
- Minimum shrinkage - Improves long term performance in freeze / thaw cycles
- Intended working life 100 years for rebar
- Fast cure time

## Specification

Viper Xterm TR is a heavy duty, fast curing vinylester resin.

Setting characteristics at 27°C

- Working time 8 mins, Full cure time 1 hour

## Approvals



**CSTB** fire tested.26074021  
per ISO 834

## Substrates

- Concrete (cracked and non-cracked)
- Hollow block wall
- Solid stone
- Solid block
- Solid brick
- Hollow block
- Hollow brick

## Setting Time

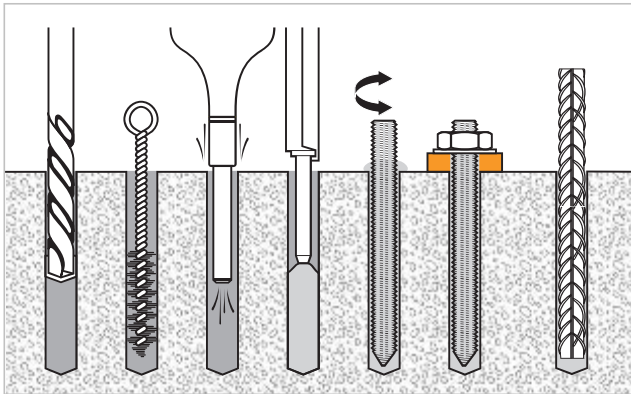
Ambient Temperature (C°)	Max. time for installation	Curing time
35	4 minutes	1 hours
30	8 minutes	1 hours
20	15 minutes	2 hours
10	40 minutes	3 hours
5	60 minutes	4 hours

## Applications

- Pumps and pipework
- Fixing steel framed structures
- Electric insulation (WRAS Approved product)
- Protective barriers, safety rails
- Rebar installation
- Starter bar installation



## Installation



1. Drill correct diameter hole to recommended depth.
2. Clean hole thoroughly with brush and air pump 3~4 times.
3. Assemble nozzle onto cartridge. Dispense and discard enough chemical until uniform mix is achieved. Inject from the bottom of the hole gradually, filling in until 40% full.
4. Insert the rod/stud/rebar by hand to full depth, using slow rotating movement.
5. Allow Viper Xtrem TR to cure for specified period before loading.

## Product Range - VIPER XTREM TR Resin



Part No.	Description	Order Qty
060201	Viper Xtrem TR Cartridge (410ml) + 1 Nozzle + 1 Extension	1
050882	Application Nozzle with Extension (10 nos.)	1
077151	Viper 410ml Manual Injection Tool	1
050919	Pneumatic Injection Tool for Viper	1
054278	Electric Injection Tool for Viper	1

## VIPER XTREM TR Recommended Working Load in 40 N/mm<sup>2</sup> Non-cracked Concrete - Anchor Studs

Thread Ø	Hole Ø (mm)	Fixture Hole Ø (mm)	Embedment Depth (mm)	Hole Depth (mm)	Min Thick of Base Material (mm)	Tightening Torque (Nm)	Shear Load (kN)	Tension Load (kN)
M8	10	9	80	80	110	10	4.9	9.7
M10	12	12	90	90	120	20	7.8	14.9
M12	14	14	110	110	140	30	11.3	20.2
M16	18	18	125	125	160	60	21.0	24.4
M20	25	22	170	170	220	120	32.7	41.7
M24	28	26	210	210	265	200	47.0	57.3
M30	35	33	280	280	350	400	74.7	83.7

\* These are zinc coated studs, for SS studs see full submission

\* Safety factor for all loads = 3

\* This table does not consider edge distance and anchor spacing effects. Please refer to Ramset Design Guide for more information.

\* Recommended shear load is limited by anchor stud grade 8.8 refer to ISO 898-1:2009(E). For loading of other material grade, please contact Ramset Technical Department.

\* Pull out test for single anchor = working load x 1.5

Rebar Fixing with Viper Xtrem TR - for loading and installation, please contact Ramset for full product submission