

## **ROCKET RESIN POLYESTER STYRENE FREE**







A two component chemical anchoring injection system. A formulation derived from polyester resin with high bond strength, developed principally to anchor threaded rods into concrete, and for masonry and hollow wall installations. Used widely for medium loads in both horizontal and vertical applications.

### • CHARACTERISTICS

- · Suitable for medium loads for non-critical applications.
- · Fast working times for early loading in time sensitive applications.
- · No styrene allows for use indoors and in enclosed spaces.
- · Use in damp & wet environments and fixing holes.
- · Extremely versatile in masonry, hollow, aerated concrete.
- · 10:1 resin available in a variety of cartridge types.

#### APPROVALS / CERTIFICATIONS / TESTING

- · 15/0008 ETA Option 7 Non-Cracked Concrete. Includes flooded holes.
- · 19/0496 ETA ETAG 029 Hollow Wall / Masonry Installations.
- · CE Certified 1404-CPR-2586 ZAG, Solvenia.
- · LEED tested 2009 EQ c4.1 SCAQMD rule 1168 (2005.)
- · VOC A+ Rating (Volatile Organic Content)
- · WRAS Approved for use with Potable drinking water approval no. 2205534







## • PHYSICAL PROPERTIES

- ·Mixed Colour Grey
- ·Density 1.71 kg/m²
- ·Compressive Strength 43.5 N/mm² (EN ISO 604)



### • TYPICAL TENSILE PERFORMANCE - STANDARD EMBEDMENT DEPTH

| Concrete, C20/25, 5.8 Grade Studding |                             |                           |                              |              |               |               |  |  |  |  |
|--------------------------------------|-----------------------------|---------------------------|------------------------------|--------------|---------------|---------------|--|--|--|--|
| Size                                 | Recommended L               | oad (kN)                  | Spacing (S <sub>cr,N</sub> ) | Drill Hole Ø | Fixing Hole Ø | Setting Depth |  |  |  |  |
|                                      | Tension (N <sub>rec</sub> ) | Shear (V <sub>rec</sub> ) | (mm)                         | (mm)         | (mm)          | (mm)          |  |  |  |  |
| M8                                   | 8.36                        | 5.14                      | 160                          | 10           | 9             | 80            |  |  |  |  |
| M10                                  | 11.79                       | 8.57                      | 200                          | 12           | 12            | 90            |  |  |  |  |
| M12                                  | 17.29                       | 12.00                     | 240                          | 14           | 14            | 110           |  |  |  |  |
| M16                                  | 24.93                       | 22.29                     | 320                          | 18           | 18            | 125           |  |  |  |  |
| M20                                  | 38.14                       | 34.86                     | 400                          | 22           | 22            | 170           |  |  |  |  |
| M24                                  | 50.29                       | 50.29                     | 450                          | 28           | 26            | 210           |  |  |  |  |
| M30                                  | 68.07                       | 81.43                     | 520                          | 35           | 32            | 280           |  |  |  |  |

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## • TYPICAL PERFORMANCE IN AERATED CONCRETE

| Characteristic values of resistance under tension & shear loads for Autoclaved Aerated Concrete. Compresive strength of material fb > 6MPa Temp range -40 to +40 C degree. PESF. |             |              |              |                |  |  |  |  |
|--|-------------|--------------|--------------|----------------|--|--|--|--|
| Size   | Condition : | d/d          | w/w & w/d    | d/d, w/w & w/d |  |  |  |  |
|  | Hef (mm)    | Tension (kN) | Tension (kN) | Shear (kN)     |  |  |  |  |
| M8   | 80          | 2            | 1.5          | 5              |  |  |  |  |
| M10  | 90          | 3            | 2.5          | 8              |  |  |  |  |
| M12  | 100         | 4            | 3.5          | 8              |  |  |  |  |
| M16  | 100         | 5.5          | 4.5          | 8              |  |  |  |  |

<sup>\*</sup>Note: The values are valid for steel 5.6 or greater. For steel 4.6 and 4.8 multiply VRk,b by 0,8

## • TYPICAL PERFORMANCE FOR SOLID & HOLLOW MASONRY

| Category c: Solid Masonry, fb class ≥18 MPa – density pm ≥ 1600kg/m³ - Temperature range -40°C/+40°C |  |   |  |                                       |  |   |                        |                      |                      |                    |  |
|--|--|---|--|---------------------------------------|--|---|------------------------|----------------------|----------------------|--------------------|--|
| Size   | Installation Para                            |   | Characteristic<br>Resistance               |                                       | Service Loads                              |   |                        |                      |                      |                    |  |
|  | d Anchor<br>Rod Ø<br>d₀ Drill Hole Ø<br>(mm) | Min<br>Edge<br>C <sub>min</sub><br>(mm) | Min<br>Spacing<br>S <sub>min</sub><br>(mm) | Drill<br>Depth h <sub>1</sub><br>(mm) | Embedment<br>Depth h <sub>ef</sub><br>(mm) | Installation<br>Torque<br>Moment<br>T <sub>inst</sub> | Tension<br>Nrk<br>(kN) | Shear<br>Vrk<br>(kN) | Tension<br>F<br>(kN) | Shear<br>F<br>(kN) |  |
| M6   | 6/8  | 120                                     | 240  | 85                                    | 80   | 2   | 4                      | 6                    | 1.14                 | 1.71               |  |
| M8   | 8/10   | 120                                     | 240  | 85                                    | 80   | 2   | 4                      | 6                    | 1.14                 | 1.71               |  |
| M10  | 10 / 12                                      | 127.5                                   | 255  | 90                                    | 85   | 2   | 4                      | 7                    | 1.14                 | 2                  |  |
| M12  | 12 / 14                                      | 127.5                                   | 255  | 90                                    | 85   | 2   | 4                      | 7                    | 1.14                 | 2                  |  |

| Category c: Hollow Masonry, fb class ≥6 MPa – density pm ≥ 900kg/m³ - Temperature range -40°C/+40°C |  |                |   |  |                                       |  |   |                        |                              |                      |                    |  |
|---|--|----------------|---|--|---------------------------------------|--|---|------------------------|------------------------------|----------------------|--------------------|--|
| Size  | Installation Parameters                                  |                |   |  |                                       |  |   |                        | Characteristic<br>Resistance |                      | Service Loads      |  |
|   | d Anchor<br>Rod Ø<br>d <sub>o</sub> Drill Hole Ø<br>(mm) | Sleeve<br>Type | Min<br>Edge<br>C <sub>min</sub><br>(mm) | Min<br>Spacing<br>S <sub>min</sub><br>(mm) | Drill<br>Depth h <sub>1</sub><br>(mm) | Embedment<br>Depth h <sub>ef</sub><br>(mm) | Installation<br>Torque<br>Moment<br>T <sub>inst</sub> | Tension<br>Nrk<br>(kN) | Shear<br>Vrk<br>(kN)         | Tension<br>F<br>(kN) | Shear<br>F<br>(kN) |  |
| M6  | 6/12   | 12 x 80        | 100                                     | 120  | 85                                    | 80   | 2   | 2                      | 2                            | 0.57                 | 0.57               |  |
| M8  | 8 / 12   | 12 x 80        | 100                                     | 120  | 85                                    | 80   | 2   | 2                      | 2                            | 0.57                 | 0.57               |  |
| M10   | 10 / 16  | 16 x 85        | 100                                     | 120  | 90                                    | 85   | 2   | 2                      | 2                            | 0.57                 | 0.57               |  |
| M12   | 12 / 16  | 16 x 85        | 100                                     | 120  | 90                                    | 85   | 2   | 2                      | 2                            | 0.57                 | 1.86               |  |

## • WORKING AND HARDENING TIMES

| Base Material Temperature | -10°C** | -5°C**  | 5°C    | 15°C   | 25°C   | 35°C   |
|---------------------------|---------|---------|--------|--------|--------|--------|
| Gel Working Time          | 50 min  | 40 min  | 20 min | 9 min  | 5 min  | 3 min  |
| Curing Time Dry Concrete  | 240 min | 180 min | 90 min | 60 min | 30 min | 20 min |
| Curing Time Wet Concrete  | x 2     | x 2     | x 2    | x 2    | x 2    | x 2    |

<sup>\*\*</sup>Resin Temperature must be at least 20°C



## **ROCKET RESIN POLYESTER STYRENE FREE**

#### APPROVALS









### INSTALLATION

#### Solid substrates





















Hollow wall









For further information please refer to the Technical Data Sheet in the website customer area, or by request.

## • STORAGE / SHELF

This product should be stored between +5°C & +25°C.

Avoid Direct Sunlight

The Shelf life of the product is 18 months from the manufacture date.

The information and data given is based on our own experience, research and testing and is believed to be reliable and accurate. However, as Chemfix Products cannot know the varied uses to which its products may be applied, or the methods of application used, no warranty as to the fitness or suitability of its products is given or implied. It is the users responsibility to determine suitability of use. For further information please contact our Technical department.