**Concrete/masonry Hand or trowel**

- *Renderoc HB*
- *Renderoc LA/LA55/LA60*
- *Trowel applied*
- *Renderoc Plug 1/20*
- *Renderoc HB30/HBM*
- *Renderoc RP252*
- *Renderoc HBS/HB45*
- *Steel/wood/Renderoc GP*
- *Renderoc ST05*
- *Renderoc DS/SC*

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**Structural and non-structural repair (BS EN 1504-3)**

Fosroc’s world-renowned range of Renderoc mortars has been developed to provide appropriate solutions to the wide variety of problems resulting in defective concrete. These pre-bagged single component products are available in the 4 different classes specified in BS EN 1504 for structural and non-structural concrete repair products.

### Product selector

#### Non-structural repairs

<table>
<thead>
<tr>
<th>Class</th>
<th>≥10MPa</th>
<th>≥25MPa</th>
<th>≥45MPa</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class R1</strong></td>
<td>Renderoc Plug 1 / Plug 20&lt;br&gt;<strong>Rapid setting cement based, wetting mortars</strong>&lt;br&gt;Emergency wetting mortars&lt;br&gt;Single component - pre-bagged to overcome variations in site batching&lt;br&gt;Excellent bond to substrate&lt;br&gt;Low-seal, minimum thermal cracking&lt;br&gt;Chloride free&lt;br&gt;Renderoc Plug 20 DNW-compliant&lt;br&gt;Renderoc Plug 1: Approx. 3 litres/6kg bag&lt;br&gt;Renderoc Plug 20: Approx. 12.5 litres/25kg bag</td>
<td>Renderoc S&lt;br&gt;<strong>Two component fibre and polymer modified cementitious mortar for re-profiling and protection</strong>&lt;br&gt;Wide range of application thickness&lt;br&gt;Excellent bond to the concrete substrate&lt;br&gt;Shrinkage compensated&lt;br&gt;Used for vertical and overhead high build applications&lt;br&gt;Approx. 15 litres/22kg bag (1.5m² at 10mm thickness)</td>
<td>Renderoc ST05&lt;br&gt;<strong>Medium weight concrete reinstatement mortar</strong>&lt;br&gt;Excellent bond to the concrete substrate&lt;br&gt;Can be used with a plastic float&lt;br&gt;Used for vertical and overhead high build applications&lt;br&gt;Approx. 15 litres/22kg bag (1.5m² at 10mm thickness)</td>
</tr>
</tbody>
</table>

| **Class R2** | Renderoc FC<br>**Polymer modified fairing coat**<br>Designed for application in thin layers to produce a finish appearance to concrete or masonry surfaces in readiness to receive a protective coating<br>BBA approved<br>Approx. 15 litres/22kg bag (3m² at 3mm thickness) | Renderoc RP252<br>**Two component fibre and polymer modified cementitious mortar for re-profiling and protection**<br>Wide range of application thickness<br>Excellent bond to the concrete substrate<br>Shrinkage compensated<br>Used for vertical and overhead high build applications<br>BBA approved<br>Approx. 15 litres/22kg bag (1.5m² at 10mm thickness) | Renderoc LA / LA55/30<br>**Medium weight concrete reinstatement mortar**<br>Used for high build applications such as columns, beams and soffits<br>BBA approved<br>Approx. 12 litres/18kg pack (2.4m² at 5mm thickness) |

<table>
<thead>
<tr>
<th><strong>Non-structural repair</strong></th>
<th><strong>Structural repair</strong></th>
<th><strong>Non - structural repair</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R1 ≥10MPa</strong></td>
<td><strong>R3 ≥25MPa</strong></td>
<td><strong>R2 ≥15MPa</strong></td>
</tr>
<tr>
<td><strong>R2 ≥15MPa</strong></td>
<td><strong>R4 ≥45MPa</strong></td>
<td><strong>R4 ≥45MPa</strong></td>
</tr>
</tbody>
</table>

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**Non-structural repairs**

1. **Class R1**
2. **Class R2**
3. **Class R3**
4. **Class R4**

**Structural repair**

- **R1 ≥10MPa**
  - **Renderoc HB30**
  - **High performance fibre reinforced, lightweight concrete reinstatement mortar**
  - **Low permeability**
  - **Shrinkage compensated**
  - **Used for vertical and overhead repairs**
  - **Approx. 15 litres/22kg bag (1.5m² at 10mm thickness)**

- **R3 ≥25MPa**
  - **Renderoc HBS**
  - **Lightweight concrete reinstatement mortar**
  - **Used for vertical and overhead repairs**
  - **Approx. 15 litres/22kg bag (1.5m² at 10mm thickness)**

- **R2 ≥15MPa**
  - **Renderoc RP252**
  - **Two component fibre and polymer modified cementitious mortar for re-profiling and protection**
  - **Wide range of application thickness**
  - **Excellent bond to the concrete substrate**
  - **Shrinkage compensated**
  - **Used for vertical and overhead high build applications**
  - **Approx. 15 litres/22kg bag (1.5m² at 10mm thickness)**

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**Structural repairs**

- **R4 ≥45MPa**
  - **Renderoc HB45**
  - **High performance fibre reinforced, lightweight concrete reinstatement mortar**
  - **Used for high build applications such as columns, beams and soffits**
  - **Approx. 14.0 litres/25kg bag (1.4m² at 10mm thickness)**

- **R3 ≥25MPa**
  - **Renderoc HBS**
  - **Medium weight concrete reinstatement mortar**
  - **Used for repair of columns, beams and soffits**
  - **Approx. 14.0 litres/25kg bag (1.4m² at 10mm thickness)**

- **R2 ≥15MPa**
  - **Renderoc GP**
  - **General purpose concrete reinstatement mortar**
  - **Used for patch repairs**
  - **Can be used as a render**
  - **BBA approved**
  - **Approx. 16 litres/22kg bag (1.6m² at 10mm thickness)**

- **R1 ≥10MPa**
  - **Renderoc Plug 1 / Plug 20**
  - **Rapid setting cement based, wetting mortars**
  - **Emergency wetting mortars**
  - **Single component - pre-bagged to overcome variations in site batching**
  - **Excellent bond to substrate**
  - **Low-seal, minimum thermal cracking**
  - **Chloride free**
  - **Renderoc Plug 20 DNW-compliant**
  - **Renderoc Plug 1: Approx. 3 litres/6kg bag**
  - **Renderoc Plug 20: Approx. 12.5 litres/25kg bag**

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**Non-structural repairs**

1. **Class R1**
   - **≥10MPa**
2. **Class R2**
   - **≥15MPa**
3. **Class R3**
   - **≥25MPa**
4. **Class R4**
   - **≥45MPa**

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**Structural repairs**

1. **R1 ≥10MPa**
   - **Renderoc Plug 1 / Plug 20**
   - **Rapid setting cement based, wetting mortars**
   - **Emergency wetting mortars**
   - **Single component - pre-bagged to overcome variations in site batching**
   - **Excellent bond to substrate**
   - **Low-seal, minimum thermal cracking**
   - **Chloride free**
   - **Renderoc Plug 20 DNW-compliant**
   - **Renderoc Plug 1: Approx. 3 litres/6kg bag**
   - **Renderoc Plug 20: Approx. 12.5 litres/25kg bag**

2. **R2 ≥15MPa**
   - **Renderoc FC**
   - **Polymer modified fairing coat**
   - **Designed for application in thin layers to produce a finish appearance to concrete or masonry surfaces in readiness to receive a protective coating**
   - **BBA approved**
   - **Approx. 15 litres/22kg bag (3m² at 3mm thickness)**

3. **R3 ≥25MPa**
   - **Renderoc HBS**
   - **Lightweight concrete reinstatement mortar**
   - **Used for vertical and overhead repairs**
   - **Approx. 15 litres/22kg bag (1.5m² at 10mm thickness)**

4. **R4 ≥45MPa**
   - **Renderoc HB45**
   - **High performance fibre reinforced, lightweight concrete reinstatement mortar**
   - **Used for high build applications such as columns, beams and soffits**
   - **Approx. 14.0 litres/25kg bag (1.4m² at 10mm thickness)**

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**Patchroc GP**

- **Fast setting emergency patching mortar**
- **Used for emergency reinstatement of localized patches in concrete pavements, airport aprons, access ramps, roadways and warehouse floors**
- **Rapid strength gain. Will accept traffic in just 2 hours**
- **High strength, abrasion and weather resistance**
- **Approx. 12.0 litres/25kg bag (1m² at 12mm thickness)**

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**Paveroc**

- **Reinforcement mortar for concrete pavements and floors**
- **Rapid strength gain. Will accept pedestrian traffic after just 13 hours**
- **High strength, abrasion and weather resistance**
- **Approx. 11.5 litres/25kg bag (0.9m² at 12mm thickness)**

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**Renderoc LA range**

- **Range of free-flowing low alkali micro-concretes**
- **Ideal for the reinstatement of large structural sections of concrete**
- **Excellent chloride and carbon dioxide resistance**
- **Can be used for repairs to concrete affected by alkali silica reaction**
- **Can be pumped or poured**
- **Self compacting - no vibration required**
- **Conforms to Department of Transport requirements**
- **Renderoc LA55 is BBA approved**
- **Approx. 12.0 litres/25kg bag**

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**Renderoc ST 05**

- **Protective cementitious coating and levelling mortar**
- **Carbonation and chloride barrier**
- **Suitable for vertical and horizontal applications**
- **Scrape-coat, brush or towel applied**
- **Approx. 12.0 litres/pack depending on mix ratio**
- **Chloride protection: 2mm = 264mm of concrete**
- **Carbonation protection: 2mm = 21mm of concrete**
Fosroc is working with customers to meet the requirements set out in BS EN 1504 - supplying products to meet the standards, the construction industry demands. Fosroc offers a comprehensive range of concrete repair and remediation products tested to European Standard methods and CE Marked; including our internationally proven specialist Renderoc repair mortars and Deeguard and carbonation coatings.

Whatever the structure - from bridges to carparks and commercial buildings to jetties, Fosroc’s technical expertise in concrete repair technology can help guide you through the application of BS EN 1504, enabling you to develop a cost effective and highly beneficial solution for your concrete repair project.