Aquatic Mortar Accelerated Data Sheet

Specification notes

Product: Aquatic Mortar Accelerated

Supplier:
Arcon Construction Supplies
19-20 Prestwood Court
Leacroft Road
Warrington
WA3 6SB

Tel: 01925 852225
Email: mail@arconsupplies.co.uk
Web: www.arconsupplies.co.uk

Call 01925 852225 or visit Arcon Construction Supplies
... for more information on our flooring and construction products
AQUATIC MORTAR ACCELERATED

Product code
AA002, packaging listed overleaf

Description
Aquatic Mortar Accelerated is a blend of special Portland cements high quality graded sands, and unique combinations of polymers and admixtures including microsilica. The product contains no iron, high alumina cement, chloride or deleterious substances. The mortar powder, when mixed with water, produces a very cohesive material and is anti-washout. Aquatic Mortar Accelerated is used when ambient temperatures are low, or when an early strength gain is required. The product is easily mixed with gauging water to produce a putty-like consistency for ease of application. The mixed material will not disperse, wash out or break up in water or underwater situations. The placed mortar develops rapid early strength even at low temperatures. Strong bonding is achieved onto brick, masonry and concrete. Levels can be built up to meet existing profiles in one operation obtaining a smooth and attractive finish when required. The anti-washout properties enable effective plugging and sealing of leaks in running water situations. Contamination of canals, rivers, reservoirs or lakes is reduced to a minimum.

Uses include:
- Repair of tunnels, culverts, sewers and pipes.
- Repair of brick, masonry and concrete in wet conditions.
- Protection of marine structures, Sea defences, harbours, jetties, docks and locks.
- Stop and seal the flow of water or grout in brickwork or concrete.

Specification Outline
Concrete repairs and replacement shall be carried out using Aquatic Mortar Accelerated as manufactured by Parex Ltd. The product must be stored, handled and used strictly in accordance with the manufacturer's instructions.

Quality Assurance
Parex Ltd is a firm of Assessed Capability. The Company's quality system conforms to BS EN ISO 9001:2008 and is assessed by UK CARES LTD.

Standards
Aquatic Mortar Accelerated has been tested in accordance with the appropriate parts of EN 12390, ASTM C827

Typical Mortar Properties @ 20°C

<table>
<thead>
<tr>
<th>Consistency</th>
<th>Water Content %</th>
<th>Ltr/25kg Bag</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>3.75</td>
<td>Firm Mortar</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>4.5</td>
<td>Good Mortar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consistency Life</th>
<th>Water Content %</th>
<th>Ltr/25kg Bag</th>
<th>For Working Mortar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>3.75</td>
<td>5 Minutes</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>4.5</td>
<td>10 Minutes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Set times (BS 4550)</th>
<th>Water content %</th>
<th>Ltr/25kg bag</th>
<th>Initial Set</th>
<th>Final Set</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>3.75</td>
<td>10 Minutes</td>
<td>15 Minutes</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>4.5</td>
<td>14 Minutes</td>
<td>20 Minutes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compressive Strength</th>
<th>Water Content %</th>
<th>Ltr/25kg Bag</th>
<th>N/mm² @ 1 Hour</th>
<th>N/mm² @ 1.5 Hours</th>
<th>N/mm² @ 2 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>3.75</td>
<td>3.0</td>
<td>12.0</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>4.50</td>
<td>1.0</td>
<td>7.0</td>
<td>13.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compressive Strength</th>
<th>Water Content %</th>
<th>Ltr/25kg Bag</th>
<th>N/mm² @ 1 Day</th>
<th>N/mm² @ 7 Days</th>
<th>N/mm² @ 28 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>3.75</td>
<td>27.0</td>
<td>44.0</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>4.5</td>
<td>21.0</td>
<td>40.0</td>
<td>55.0</td>
</tr>
</tbody>
</table>

Density @ Water Content 18% 2100kg/m³
Shrinkage Aquatic Mortar Accelerated is non-shrink
AQUATIC MORTAR ACCELERATED

Instructions For Use

Preparation
Ensure all contact surfaces are clean, free of contamination and marine growth. In underwater locations, for cleaning, use a water jet. For surfaces situated in the tidal zone, or above the waterline, use Hot Compressed Propane Burning to remove contaminants, abrade the substrate and clean the surface.

Mixing and Priming
Place the required quantity of water in a suitable mixing vessel. Slowly add the powder to the water whilst continuously mixing. Suitable mixers include a slow speed high torque (1kW) drill with a Mortar Stirrer. After all the powder has been added mix for a further 1-2 minutes. Mixing by hand is not recommended.

Use a gloved hand to form a contact coat. Work and compact the mortar onto and well into any cracks or cavities and completely cover the substrate. The contact coat will reduce voids at the bondline and promote intimate contact between the repair material and the concrete. It will also prevent peeling and slumping on vertical and soffit substrates.

Placing
On top of the contact coat use a trowel or steel float to apply the mixed mortar and build up to the profile of the surrounding concrete. For ease of working and application of the mortar above the waterline keep gloves and all implements wet. Use a hand held water spray to wet mortar surfaces and to produce a smooth finish.

Curing
As soon as the material is in place and the application is complete, cure immediately with Polycure. Spray at the rate of 10m²/litre, and at least 50mm beyond the perimeter of the repair. Ensure that the mortar is evenly and completely covered.

Precautions

Health and Safety
Aquatic Mortar Accelerated is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs wash thoroughly with clean water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice.

Full health and safety data are given in Product Safety Data Sheet.

Fire
Aquatic Mortar Accelerated is non-flammable.

Yield
Aquatic Mortar Accelerated is packed in 25kg bags. The yield obtained is approximately 13.5 litres of mixed material.

Storage And Shelf Life
Aquatic Mortar Accelerated will have a shelf life of 6 months when kept in dry conditions at a temperature of 5°C to 45°C. Storage at higher temperatures and high humidity may reduce the shelf life.

Packaging And Ordering
Aquatic Mortar Accelerated is supplied in:

25kg bag: Product Code AA002

For further information and sales please contact your local Parex office as listed below.

Parex Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Parex Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Parex Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.