MonoProof AEW is a two component acrylic modified elastomeric waterproofing which consists of specialty hard-wearing aggregates and liquid acrylic emulsion. It is a seamless, waterproof coating providing a tough and durable water tight coating which cannot be easily damaged or worn away. The coating is designed to re-face and even out variations in concrete and masonry surfaces. This is an easily brush able coating which can simply be applied by a stiff brush, or trowel to obtain the desired thickness. This is a three-layer system with coats in different colors ensuring proper build-up of the thickness, making it a reliable waterproofing system. The polymer provides with exceptional adhesion, toughness and durability. MonoProof AEW effectively seals concrete masonry walls and bridges the shrinkage cracks which are static. The coating additionally protects against concrete decay providing a long lasting barrier to waterborne corrosive salts, freeze-thaw scaling, chloride, carbonation and atmospheric gases. A 1mm coating provides anti carbonation cover equivalent to over 80cm of concrete or air layer thickness for carbon dioxide diffusion (R) of 92 metres. MonoProof AEW is shown to resist positive hydrostatic pressure up to 7 meter head MonoProof AEW is suitable for all types of structures including those in coastal environments.

### Typical Applications

<table>
<thead>
<tr>
<th>Basement water tanks</th>
<th>Concrete foundations</th>
<th>Submerged tunnels</th>
<th>Drainage culverts</th>
</tr>
</thead>
<tbody>
<tr>
<td>reservoirs</td>
<td>Parking decks</td>
<td>Sumps</td>
<td>As a backing to marble, granite and natural stones to prevent water ingress and thus alleviate surface staining. For use on pedestrian walkways in marine nares</td>
</tr>
<tr>
<td>swimming pools</td>
<td>Bathrooms, Toilets, Sunken Portions</td>
<td>Structural surface of cellars</td>
<td>Canals and dam walls</td>
</tr>
<tr>
<td>Flat roofs</td>
<td>Podiums</td>
<td>Sea Water Channels</td>
<td>Steam rooms</td>
</tr>
<tr>
<td>terraces and balconies</td>
<td>Roof Gardens</td>
<td>Sewerage Treatment Plants</td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td>Retaining walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lift Pits</td>
<td>Pile heads</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MonoProof AEW- 11102

High Performance acrylic polymer modified elastomeric waterproofing membrane coating for concrete and masonry surfaces
## Typical Properties

<table>
<thead>
<tr>
<th>Properties</th>
<th>Units</th>
<th>Standard</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLOR</td>
<td>~</td>
<td>ASTM D 1544</td>
<td>White</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>~</td>
<td>ASTM D 1475-98</td>
<td>1.65</td>
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<tr>
<td>VISCOSITY</td>
<td>secs</td>
<td>ASTM D 1200-10</td>
<td>12</td>
</tr>
<tr>
<td>MIX RATIO</td>
<td>Parts by weight</td>
<td>Manual</td>
<td>1(R):2(A)</td>
</tr>
<tr>
<td>pH VALUE</td>
<td>~</td>
<td>ASTM D 1293</td>
<td>7</td>
</tr>
<tr>
<td>POT LIFE</td>
<td>mins</td>
<td>IS 101</td>
<td>45</td>
</tr>
<tr>
<td>FUNCTIONAL CURE</td>
<td>hrs</td>
<td>ASTM D 1640</td>
<td>24</td>
</tr>
<tr>
<td>COVERAGE @ WFT/DFT/THICKNESS/NO.OF.COATS</td>
<td>~</td>
<td>~</td>
<td>12.5 sq.m/20kg/1mm/2 coats</td>
</tr>
<tr>
<td>WATER ABSORPTION</td>
<td>%</td>
<td>ASTM D 570</td>
<td>5</td>
</tr>
<tr>
<td>CURED HARDNESS</td>
<td>shore D</td>
<td>ASTM D 2240</td>
<td>65</td>
</tr>
<tr>
<td>TENSILE STRENGTH</td>
<td>N/mm²</td>
<td>ASTM D 412</td>
<td>4</td>
</tr>
<tr>
<td>FLEXURAL STRENGTH</td>
<td>N/mm²</td>
<td>ASTM D 790</td>
<td>14</td>
</tr>
<tr>
<td>COMRESSIVE STRENGTH</td>
<td>N/mm²</td>
<td>ASTM D 695</td>
<td>46</td>
</tr>
<tr>
<td>CHEMICAL RESISTANCE</td>
<td>%</td>
<td>ASTM C 267</td>
<td>Excellent</td>
</tr>
<tr>
<td>HYDROSTATIC PRESSURE</td>
<td>bar</td>
<td>ASTM C 1306</td>
<td>7</td>
</tr>
<tr>
<td>ABRASION RESISTANCE</td>
<td>mg</td>
<td>ASTM D 4213-08</td>
<td>8</td>
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</tbody>
</table>

## Product Features

- **Minimum surface preparation needed** - Low labor costs.
- **Applied directly to** the damp concrete and masonry
- **Excellent adhesion** - Bonds to porous and nonporous surfaces.
- **Retains flexible when submerged**

- Non-toxic-ideal for potable water tanks
- Breathable-allows transmission of water vapor from interior of building
- Flexible, with thermal expansion similar to concrete.
- For special applications such as areas where more thick plaster application is needed

- Excellent for concrete roof, leaking brick and masonry walls
- Good resistance to Carbon dioxide and Chloride ion diffusion
- Flexible enough to bridge hairline crack bridge up to 0.5mm width
- The product shall exhibit at least 40% elongation at ambient & 30% elongation in under water condition

- Water vapor permeable
- Abrasion resistant—No additional protective coating is required for roof subjected to foot traffic.
- Ease of application – can be applied by brush & roller easily.
- Light weight – does not add extra weight over the

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### Surface Preparations

**Note:**

- All new cement-sand renderings /concrete surfaces should be allowed to age 6 to 8 weeks before surface coating.
- Surfaces should be clean and sound and free of all bond-inhibiting contaminants.
- Concrete substrates should be fully cured.
- The substrate must be prepared by suitable mechanical preparation techniques such as light sweep blasting, high pressure water jetting, needle guns, blast cleaning etc. and properly pre-wetted to a saturated surface dry (SSD) condition. High-suction substrates require more dampening then dense substrates. However, make sure there is no free-standing water. Blast clean to remove all contaminants within the pores / blowholes.
- All the surfaces which are to receive MonoProof AEW, must be free from oil, grease, wax, dirt or any other form of foreign matter which might affect adhesion. Spalled and deeply disintegrated concrete should be removed to sound concrete and repaired with MonoBuild System. Roofing tiles should be firmly bedded and grouted before application.

### Mixing Instructions

**Note:**

- Do not add any additional quantity of water to make the coating slurry form the liquid is poured into a plastic or metal drum. It is always recommended to start mixing with approximately 80% of the liquid. To this, an equal volume of clean fresh water is added, for brush application consistency. Then mixing is started with propeller agitator a slow speed drill (350-450 rpm). The powder component is added gradually to the liquid avoiding lump formation and mixed for 2-4 minutes. Allow the mixed slurry to stand for 5-10 minutes for releasing trapped air during mixing and use. More material should not be mixed than can be used within pot life. Retempering with water should not be done. Keep on stirring during application.
**Product Limitation**

Avoid application in direct sun and/or strong wind. Do not add water in any circumstances. Apply only to sound, prepared substrates. Do not exceed maximum layer thickness. Minor shade variation may occur with natural cement color material. Static and moving cracks can be detailed in accordance with accepted industry practices of using embedding mesh or other methods to reduce the reflecting of cracks.

Efflorescence in the existing substrate can result in the failure of the bond or discoloration of the surface if there are areas of concrete that are not protected from water ingress.

As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure.

Do not flood or over expose the treated surface to water until it is completely cured.

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**Application Instructions**

**Note:** This depends on the required consistency. The approximate 12.5 Sq.m coverage per pack at even consistency 1mm thickness

**Note:**

The degree of resistance of MonoProof AEW to water under pressure depends on the coating thickness. Areas subjected to moderate and heavy loads/hydrostatic pressure, minimum 2mm thickness coating is recommended with screed above. For best results moisten the surface before coating with MonoProof AEW.

**Note:**

Test a small area of the surface (minimum 1.5 by 1.5 m before general application to ensure desired performance results, aesthetics and coverage rates and to verify application technique. Allow 5–7 days for the product to fully react before evaluating. All corners, gaps, joints, protrusions & outlets shall be coated with two extra coats.

This depends on the required consistency. The approximate 12.5 Sq.m coverage per pack at even consistency 1mm thickness.

For best results moisten the surface before coating with MonoProof AEW. Apply the mixed material using a short, stiff bristle brush preferably 100 to 150mm width or roller like a paint. When the material begins to drag or “ball”, do not add more liquid/water but dampen the surface again. Trowel applications can be undertaken as necessary using the correct mixing ratio to obtain satisfactory consistency. MonoProof AEW shall be applied in two coats to achieve 1mm thickness. The second coat of MonoProof AEW shall applied as soon as the first coat has reached touch dry state in the opposite direction to the first coat. On hot substrates, i.e., over 40° C surface temperature, a primer coat of mixed MonoProof AEW and water with a slurry like consistency should be applied. Prime only areas that can be coated with MonoProof AEW before the primer dries. Material should not be applied at temperatures below 10° C. It is recommended that for general re-surfacing the total thickness of the applied material be 1 to 2 mm. Areas subjected to moderate and heavy loads/hydrostatic pressure, minimum

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**Curing**

It is essential to cure MonoProof AEW immediately after application for a minimum of 3 to 5 days to ensure full cement hydration and to minimize cracking.

Use polythene sheeting, damp hessian or similar approved methods.

Subsequent Finishes

MonoProof AEW provides an aesthetically pleasing surface finish texture depending on the method of application, and does not normally require any further surface finishes. MonoProof AEW is however compatible with most forms of subsequent coatings.

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**Cleaning**

MonoProof AEW should be removed from tools and equipment immediately after use with clean water. Hardened material can be removed mechanically.
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**LIMITED WARRANTY NOTICE**

**Storage**

MonoProof AEW has a shelf life of 12 months in unopened packs, if kept in a dry store. In high humidity locations, the shelf life may be reduced to less than 6 months. Prevent MonoProof AEW liquid from freezing. In tropical climates the product must be stored in an air-conditioned environment.

**Product Order Information**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Code</th>
<th>Product Pack Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>MonoProof AEW</td>
<td>11102</td>
<td>20 kg</td>
</tr>
</tbody>
</table>