

# CRISTALPROOF L1

Surface applied treatment that penetrates into concrete for an in-depth waterproofing solution.

<ul style="list-style-type: none"> <li>▪ <b>Description</b></li> </ul>	<p><b>Cristalproof L1</b> is a unique chemical treatment designed to waterproof and protect concrete from water penetration of pores and capillaries. <b>Cristalproof L1</b> is the most chemically active of the Cristalproof Waterproofing Products. It is designed to be a surface applied treatment that penetrates into concrete for an in-depth waterproofing solution. <b>Cristalproof L1</b> actually works within the concrete's substrate to force a reaction between un-hydrated cement particles and water to cause further hydration within the concrete's mass. This results in further hydration within the already established pores and capillaries effectively reducing the permeability of the concrete until water penetration is stopped. In doing so it will make the concrete permanently waterproof. Due to the catalytic nature of this technology, any water penetration that occurs at a later date is again utilized to produce more CSH crystals within the pores and capillaries. This process of increasing concrete's own natural abilities by using <b>Cristalproof L1</b> means the self healing process of the concrete is in excess of the concrete's normal and natural abilities. It allows concrete to increase the natural autogenously healing process allowing for self-healing capabilities of cracks up to 0.2mm in diameter when moisture is present.</p>
<ul style="list-style-type: none"> <li>▪ <b>Recommended use</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ Swimming pools</li> <li>▪ Tunnels and subway systems</li> <li>▪ Parking garages</li> <li>▪ All below grade concrete foundations</li> <li>▪ Rooftops</li> <li>▪ Dry vaults</li> <li>▪ Sewage and water treatment plants</li> <li>▪ Water towers and water reservoirs</li> <li>▪ Marine structures</li> <li>▪ Pipes</li> <li>▪ Bridge decks</li> <li>▪ Concrete walls and floors</li> </ul>

▪ **Features, benefits and advantages**

Features:

- Virtually eliminates water penetration through concrete
- Will work to prevent high hydrostatic pressure
- User Friendly – simply mix with the appropriate amount of water and brush on
- Will self-heal new hairline cracks to effectively stop water penetration into the concrete

Benefits:

- Low application cost
- Lowers overall costs through increased life span
- Completely eliminates the need for alternative waterproofing systems
- Lower maintenance costs and increased effective life

Advantages:

- Less volume to accomplish even greater productivity
- Stops corrosion of reinforcing steel, stops penetration of waterborne contaminants resulting in increased durability and reduction of opportunity costs
- Less chance of error, and no impediment to productivity
- Can be used to stop water penetration through concrete under dramatic conditions
- Eliminates expensive repairs while providing increased durability

▪ **Operational data**

**Cristalproof L1** is a dry powder that when mixed with water to a creamy consistency can be applied as a brush on slurry to concrete as a penetrating surface treatment under the following mix proportions:

- **Single Coat Brush Applied Slurry Applications:** Use 1 kg per m<sup>2</sup>, mixed 5 parts powder to 2 parts water
- **As A First Coat In Brush Applied Slurry Application:** Use 0.8 kg per m<sup>2</sup>, mixed 5 parts powder to 2 parts water (Use **Cristalproof L2** as an alternative for a cost effective second coat)

**Cristalproof L1** may also be Spray applied. When utilizing the spray application method follow the mix proportions as outlined and follow up immediately with a brush to insure that **Cristalproof L1** penetrates effectively into the pores and capillaries.

- **As Single Coat spray applications:** Use 1 kg per m<sup>2</sup>, mixed 5 parts powder to 3 parts water

	<ul style="list-style-type: none"> <li>▪ <b>As a First Coat spray applications:</b> Use 0.8 kg per m<sup>2</sup>, mixed 5 parts powder to 3 parts water (Use <b>Cristalproof L2</b> as an alternative for a cost effective second coat)</li> </ul> <p><b>Cristalproof L1</b> may also be dry shake applied. To do so simply apply the powder spreading it evenly throughout the surface at a rate of 1 kg per m<sup>2</sup> before power trowelling the application. This system may only be done successfully when a power trowel is used for finishing.</p> <p>Do not add water to the mix should signs of setting occur.</p> <p><b>NOTE:</b></p> <ol style="list-style-type: none"> <li>1. Follow <b>Cristalproof L1 Surface Preparation Instructions</b> for appropriate surface preparation procedures.</li> <li>2. Follow <b>Cristalproof L1 General Application Instructions</b> for appropriate application procedures.</li> <li>3. Follow <b>Cristalproof L1 Curing Instructions</b> for appropriate curing procedures.</li> </ol>
<ul style="list-style-type: none"> <li>▪ <b>Technical data</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ Color gray</li> <li>▪ Appearance powder</li> <li>▪ Solids 100%</li> <li>▪ Bulk density 1.45</li> <li>▪ PH 13</li> <li>▪ Rate of Penetration 2.1 mm per week</li> <li>▪ Particle size 50 - 150 microns</li> <li>▪ Water Pressure 170 m (when used as 2 coats)</li> <li>▪ Shelf Life 2 years (when kept dry)</li> </ul>
<ul style="list-style-type: none"> <li>▪ <b>Curing</b></li> </ul>	<p>Cristalproof L1 requires wet curing. Follow instructions as contained within the appropriate Cristalproof L1 Application Instructions.</p>
<ul style="list-style-type: none"> <li>▪ <b>Coverage</b></li> </ul>	<p>All single coat applications: 1 kg powder per 1 m<sup>2</sup>  As a first coat: 0.8 kg powder per 1 m<sup>2</sup>  As a second coat: 0.8 kg powder per 1 m<sup>2</sup></p>
<ul style="list-style-type: none"> <li>▪ <b>Packaging</b></li> </ul>	<p>20/ 25kg bags or pails.  Alternate packing may be made available upon request</p>
<ul style="list-style-type: none"> <li>▪ <b>Conservation</b></li> </ul>	<p>Store in dry location, opened bags or pails will deteriorate if subjected to moisture.</p>

▪ **Health precautions**

**Cristalproof L1** is a cementitious based system and as such is alkaline. It may cause skin and eye irritation. Use appropriate and suitable protective clothing and eye protection when mixing and or using **Cristalproof L1**.

Please refer to Manufacturer's Safety Data Sheets for health and safety information.

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