



# DRI-GARD RA 490

## High grade methyl methacrylate coating for roof tiles & various applications

Single component, methyl methacrylate-based protective coating that is suitable to be applied on roof tiles. It has excellent weather- and UV-resistance, water resistance, flexibility, hardness, and adhesion strength.

### FEATURES/BENEFITS

- Excellent weather- & UV-resistance
- Fast drying and protects against aggressive atmospheric attacks
- Excellent dirt pick-up resistance
- Water vapour permeability not adversely affected
- Protects and enhances cementitious materials effectively
- Available in standard and custom colours

### APPLICATION AREAS

- Roof tiles
- Cementitious surfaces
- Concrete
- Steel structure
- Metal substrates

### PRODUCT DATA

Appearances / Colours	Clear / Coloured
Packaging	20 L pail
Storage	12 Months from date of production
Storage Condition	Store properly in original, unopened and undamaged sealed packaging in cool and dry conditions. Protect from direct sunlight and frost.

### TECHNICAL DATA

Origin	Acrylate resin in solvent	
Specific Gravity	1.12 – 1.13	
Solid Content	~ 43% (dependent on colour)	
Flash point	Above 35 °C	
Carbon Dioxide Diffusion Resistance	> 250 m equivalent thickness of air	(BS EN 1026-6:2002, Method B)
Water Vapour Transmission	> 13 h/m <sup>2</sup> /day	(BS EN ISO 7783-1:2000)
Reduction in Chloride Ion Penetration	> 90% at 28 days	(BS EN ISO 7783-1:2000)
Freeze/Thaw Salt Scaling	Unaffected by 50 exposure cycles (no scaling effect)	(ASTM C672-12)
Reduction in Water Absorption	> 80% at 28 days	(ASTM C642-06)

## APPLICATION CONDITIONS

<b>Consumption</b>	Clear coat: approx. 0.15 kg/m <sup>2</sup> per coat Top Coat: approx. 0.20 kg/m <sup>2</sup> per coat								
<b>Substrate Temperature</b>	5 – 35 °C At rising temperatures, do not apply to concrete substrates without a pore sealer.								
<b>Relative Humidity</b>	< 85%								
<b>Dew Point</b>	Temperature must be at least 3 °C above the dew point								
<b>Waiting Time / Overcoating</b>	Waiting time between coats:								
	<table border="1"> <thead> <tr> <th>Substrate Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>10°C</td> <td>8 hours</td> </tr> <tr> <td>20°C</td> <td>5 hours</td> </tr> <tr> <td>30°C</td> <td>3 hours</td> </tr> </tbody> </table>	Substrate Temperature	Time	10°C	8 hours	20°C	5 hours	30°C	3 hours
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Note: Refresher coats of Dri-Gard RA 490 can be applied without priming if the existing coating has been thoroughly cleaned.									
<b>Curing Treatment</b>	No special curing required. However, the coating must be protected from rain for at least 1 hour at 20°C (dust dry in 30 minutes at 20°C)								
<b>Applied Product Ready for Use</b>	Full cure at approx. 5 days at 20 °C								

## SUBSTRATE PREPARATION

Remove all loose, defective paint or powdery residues, loose chalk, dust, fungus, algae and foreign matter. Treat any areas affected by fungus growth with suitable fungicidal solution. Repair cracks, uneven surfaces, and other defects with suitable exterior-grade fillers. Any repaired areas should leave a smooth finishing. This can be achieved using sandpaper or other recommended methods by the repair material's manufacturer.

Surfaces to be painted must be thoroughly cleaned and dry, and free from any dirt, grease or other contaminants. Allow all surfaces to dry completely prior to painting. Avoid painting when the moisture content or alkalinity of the substrate is high.

For better durability and performance, it is recommended to apply a primer prior to the application of Dri-Gard RA 490.

## TOOLS

Clean all tools and application equipment with thinner immediately after use. Hardened and/or cured material can only be mechanically removed.

## APPLICATION

### **Concrete Roof Tiles:**

In normal situations:

- 1 coat x Dri-Gard RA 490 (thinned) / Primer
- 2 coats x Dri-Gard RA 490

When using bright coloured shades:

- 1 coat x Dri-Gard RA 490 (thinned) / Primer
- 3 coats x RA 490

### **Cementitious substrates:**

- 1 coat x Dri-Gard RA 490 (thinned) / Primer
- 2 – 3 coats x Dri-Gard RA 490

Dri-Gard RA 490 may be applied by brush, short-piled lambskin roller or airless spray.

[Note: Thinning may be done up to 7% for applications using airless spray. Spray pressure 150 bars, nozzle bore 0.38 – 0.66 mm, spray angle 50 – 80°]

## MIXING

Dri-Gard RA 490 is supplied ready to use. Stir thoroughly prior to application. In difficult painting conditions, such as very low or very high temperatures, up to 5% of thinner can be added.

## LIMITATIONS

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- Do not apply when there is expected rain, relative humidity >85% and/or temperature below 5 °C and/or below dew point.
- On fair-faced and precast concrete without a levelling pore sealer, bubbles may occur if the application is carried out during rising temperatures.
- The system is fully resistant for all normal atmospheric exposures and rainfall, etc.
- Splashed water containing de-icing salts or sea water may cause a loss of gloss and colour shade variation. However, the protective performances are not adversely affected.
- Existing water-based coating, even well adhering, must be removed completely prior to applying Dri-Gard RA 490.

## HEALTH & SAFETY

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For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

## LEGAL NOTE

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The information, and, in particular, the recommendations relating to the application and end-use of these products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance to the manufacturer recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. The manufacturer reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

