Aithon PV 33

DESCRIPTION

AITHON PV33 is a clear, water borne intumescent varnish; it must be protected AITHON F3 Finish coat. AITHON PV 33 is recommended for interior fire protection of timber, it is easy to use and quick drying.

AITHON F3, based on white spirit, offers a transparent, warm wax-like satin finish.

BEFORE STARTING APPLICATION

- Check the ambient temperature and humidity to ensure that they are within the recommended limits all along the application time.
- Check timber humidity.
- Control that the timber surface is free from dust, wax, oil, or other water-repellent products which may affect AITHON PV33 adhesion. In case of doubt we recommend the preparation of test specimens, with and without a certain degree of surface sand blasting, in order to chose the best procedure.

SUBSTRATE PREPARATION

AITHON PV33 is water borne, and its adhesion is related to the natural porosity of timber. If the timber has already been treated with a varnish, with oil or wax products and the timber porosity has been reduced, the adhesion of AITHON PV33 can be significantly affected. It is often very difficult to eliminate completely the existing products from the timber surface, and a proper sandblasting is often not possible due to ambient restrictions; but at least the entire surface needs to be carefully cleaned using a 150 or 180 grade sand paper, if timber is already treated. Otherwise the adhesion in the long term may be affected, even if it seems good at the time of application.

Should timber need a shade of colour, a water-born dye must be applied before AITHON PV33. AITHON F3 is transparent, but on request it is available in the whole RAL range of colours. The supply of RAL colour Finish Coat is subjected to a minimum supply quantity; please contact our Technical Service for supply details.

If you have any doubt regarding the compatibility of AITHON PV33 with your timber substrate, our Technical Service will be please to provide you with samples for an application test.
SITE REQUIREMENTS

Apply AITHON PV33 when ambient temperature is between 5°C and 30°C; it is important that the temperature remains above 5°C all along the drying process. Ambient humidity should not exceed 70%. Above that value drying may be affected, and AITHON PV33 retains some water in the film showing a sticky surface. If AITHON F3 is applied in such condition, the trapped water may be released during summer or when the building is heated generating air pockets which leads to local delamination of the entire coating system.

The timber humidity at the time of application should be below 12%. A higher timber humidity does not affect AITHON PV33 adhesion, but the varnish drying process will slow down, and the film may remain sticky until timber excess of humidity has been released to the ambient air. In this case we recommend to heat the site, and provide once in a while ventilation to help both timber and the varnish to dry.

APPLICATION

AITHON PV33 can be applied by brush, roller or a spray gun. For spray application the best results are achieved using double-orifice nozzles, like the T93R manufactured by Tritech Industries Inc.

For application at low temperature (5°C – 10°C) it may be convenient to heat AITHON PV33 up to 40 – 50°C. For airless spray application at low temperature an electric heating unit can be inserted between the pump and the gun. Please contact your airless pump supplier for more information on these heating units.

The required quantity of AITHON PV33 is the following:

<table>
<thead>
<tr>
<th>Product</th>
<th>Class</th>
<th>gr/sqmt</th>
<th>no. of coats (indicative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AITHON PV33</td>
<td>B s1 d0</td>
<td>300</td>
<td>1 - 2</td>
</tr>
<tr>
<td>AITHON F3</td>
<td></td>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>AITHON PV33</td>
<td>R15, R30, R45, R60</td>
<td>300 - 1150</td>
<td>1 - 4</td>
</tr>
<tr>
<td>AITHON F3</td>
<td></td>
<td>60 - 70</td>
<td>1</td>
</tr>
</tbody>
</table>

THINNER

AITHON PV33 is supplied as a gel product. It can be spray applied as it is or thinned with 5% water. Brush or roller application requires a 10% to 20% thinning with water.

AITHON F3 may be used as it is, or thinned with white spirit. Usually 10% thinning is sufficient.

DRYING

AITHON PV33 (base coat): 300 gr/m2 can be applied in one or two coats. Applying one coat per day is correct, but with relative humidity below 65% and temperature above 20°C it is possible to apply two coats per day.

AITHON F3 (finish coat) can be applied the day after the last coat of AITHON PV33.