AITHON PV33 system

DESCRIPTION

AITHON PV33 is a superior clear water borne intumescent varnish for providing fire resistance to internal timber. It is easy to use and quick drying.

It must be protected using AITHON F3 Finish coating.

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 throughout the application time.
• Check timber humidity.
• Ensure 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 preparation, in order to choose the best procedure.
• Stir thoroughly before use.
• Ensure appropriate PPE is available (gloves, googles and face mask) in accordance with the health and safety data sheet.

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.

If you have any doubt regarding the compatibility of AITHON PV33 with your timber substrate, please advise our Technical Service.

AITHON F3 may be applied by brush, roller or spray.
SITE REQUIREMENTS

AITHON PV33 should not be applied where ambient humidity exceeds 70%. It is important not to exceed the ambient humidity as this will affect the drying of the product and it will remain sticky. If AITHON F3 Finish coating is applied onto a non-cured product then this can cause long term durability problems and may result in local delamination. Apply AITHON PV33 when ambient temperature is between 5°C and 30°C; it is important that the temperature remains above 5°C throughout the drying process.

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 heating 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. Stir thoroughly before use.

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 for fire classification is the following:

<table>
<thead>
<tr>
<th>Product</th>
<th>Class</th>
<th>g/m²</th>
<th>d.f.t. (microns)</th>
<th>w.f.t. (microns)</th>
<th>no. of coats (indicative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AITHON PV33</td>
<td>B s1 d0</td>
<td>300</td>
<td>65</td>
<td>250</td>
<td>1 - 2</td>
</tr>
<tr>
<td>AITHON F3</td>
<td></td>
<td>50</td>
<td>14</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>AITHON PV33</td>
<td>R15, R30,</td>
<td>300 - 1150</td>
<td>65 - 250</td>
<td>250 / coat</td>
<td>1 - 6</td>
</tr>
<tr>
<td>R45, R60</td>
<td></td>
<td>60 - 70</td>
<td>17 - 20</td>
<td>45 - 53</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: 300 gr/m² can be applied in one or two coats. One or two coats per day can be applied, in controlled environment (relative humidity below 65% and temperature above 20°C). In non-controlled environment no more than one coat per day is recommended.

AITHON F3 can be applied as soon as timber coated with AITHON PV33 has reduced moisture content below 12%.
**STORAGE**

Storage and transport at min. 5°C and max 30°C. Unopened packaging has 18-month shelf life. Opened packaging must be sealed carefully.

**MAINTENANCE**

Once the treatment has been applied, including AITHON F3, it will last for the useful life of the substrate in indoors. Cleaning with water and mild detergent is allowed.

**HEALTH and SAFETY**

During application avoid contact with open wounds, eyes and mouth. Eyes and skin should be rinsed immediately with clean water. Safety goggles and gloves should be worn when handling and applying the material. Adequate ventilation and appropriate mask required when spraying. More detailed information can be found in the Material Safety Data Sheet.

**UNITED KINGDOM & IRELAND DISTRIBUTOR**

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