**KLEIBERIT 510.0**

**PUR adhesive for load bearing wood construction certified in accordance to DIN 1052**

tested by
MPA Stuttgart
– Germany –

**Standardisation**

Load bearing wooden building elements, in accordance to DIN EN 1052, must be produced with suitable adhesives (tested and approved in accordance to DIN 68 141). This norm incorporates the in Europe accepted Euro norms EN 301 and EN 302.1-4.

The standardisation and classification however only refers to the traditionally used poly condensation resins. Therefore, DIBt has a special test series just for 1C PUR adhesives. Adhesives which pass these tests receive an individual approval certifying their suitability for use in load bearing building elements in accordance to DIN EN 1052.

**Wooden building elements in accordance to DIN 1052**

Typical construction wooden building elements are:
- Laminated constructional timber
- Duolam and Trilam
- Standardised laminated beams
- Bonded wall and ceiling boards for timber frame houses
- Cross baulk / log cabin boards

**KLEIBERIT 510.0**

- Very high bond strength due to special reinforced fibre
- Very light glue line
- Excellent application properties
- Suitable for high speeds
- Comfortable applications window with an open time of 60 min
- Press time:
  - for non-load bearing applications: from 3 h
  - for load bearing applications: at least 4.5 h

Engineered wooden building materials are increasingly replacing solid timber as well as other building products materials. Bonding of load bearing building components requires the use of approved and high quality adhesives. For the production of innovative products, the light coloured glue joint of KLEIBERIT 1C PUR adhesives provides many convincing advantages in addition to clean processing.

Companies wishing to produce bonded load bearing wooden building elements in accordance to DIN EN 1052-1 require proof of suitability. The required test is conducted by Deutschen Institut für Bautechnik (DIBt) in Berlin.
Additional 1C PUR Adhesives for Solid Wood Processing

<table>
<thead>
<tr>
<th>KLEIBERIT Product</th>
<th>Viscosity [mPas]</th>
<th>Open Time [min]</th>
<th>D4 in accordance to \textit{DIN EN 204}</th>
<th>Application</th>
<th>Approval for load bearing wood construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>510.0</td>
<td>7,000 mPas</td>
<td>60</td>
<td>yes</td>
<td>Load bearing wood construction</td>
<td>yes</td>
</tr>
<tr>
<td>501.0</td>
<td>7,500 mPas</td>
<td>20-25</td>
<td>yes</td>
<td>Solid wood windows/doors</td>
<td>no</td>
</tr>
<tr>
<td>502.8</td>
<td>6,000 mPas</td>
<td>6-8</td>
<td>no</td>
<td>Solid wood short press times</td>
<td>no</td>
</tr>
<tr>
<td>506.0</td>
<td>1,600 mPas</td>
<td>20-30</td>
<td>yes</td>
<td>Wood windows/doors sandwich elements</td>
<td>no</td>
</tr>
</tbody>
</table>

Please see our technical data sheets.

KLEIBERIT Materials

<table>
<thead>
<tr>
<th>KLEIBERIT Product</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>885.0</td>
<td>Release agent for threads, applicator head, slip surface, etc.</td>
</tr>
<tr>
<td>885.7</td>
<td></td>
</tr>
<tr>
<td>822.2</td>
<td>PUR-cleaner for finger jointing comb</td>
</tr>
<tr>
<td>820.0</td>
<td>Cleaner for fresh PUR</td>
</tr>
</tbody>
</table>

Application

Surface bonding

KLEIBERIT 510.0 is applied one sided with appropriate sealed application equipment. This adhesive is easy to pump which allows for high speeds. Bead application is the most commonly used application technique. In addition to this rotation and roller application equipment are also available on the market.

Finger jointing

Finger joints are produced in finger joint machines, which have the necessary comb systems. KLEIBERIT 510.0 is applied direct from its packaging in a sealed system. The adhesive is applied on both sides in accordance to \textit{DIN 1052}.

Competence PUR –

Highest quality standards, decades of experience and innovative solutions

Intensive research, competent development and customer oriented application technology are the foundation for the enormous international success of KLEIBERIT adhesive systems in a variety of applications. Customers worldwide rely on the know-how resulting from decades of experience in the area of PUR adhesives and their applications.