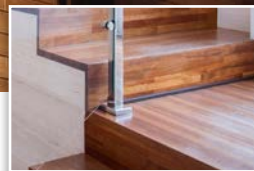


Water Resistant Bonding

with KLEIBERIT Adhesives



Surface and joint bonding | Profile wrapping | Edge banding



Competence **PUR**

Water Resistant Bonding with KLEIBERIT Adhesives



Surface and joint bonding of tricoya®

KLEIBERIT 303.0

gluing qualities:

D3 according to DIN EN 204

D4 according to DIN EN 204 with hardener KLEIBERIT 303.5

WATT 91 (DIN EN 14257) > 7 N/mm²

bonding methods:

cold, warm and high-frequency gluing

Base: PVAC dispersion
Density: approx. 1.10 g/cm³
Colour: white

Viscosity at 20 °C

(Brookfiled Sp. 6/20 Upm): 12,000 ± 2,000 mPa·s

Pot life: with 5% KLEIBERIT 303.5
approx. 24 hours

Open time at 20 °C: 6-10 minutes

KLEIBERIT 501.0

gluing qualities:

D4 according to DIN EN 204

WATT 91 (DIN EN 14257) > 7 N/mm²

bonding methods:

cold and warm gluing

Base: polyurethane
Density: approx. 1.13 g/cm³
Colour: brown

Viscosity at 20 °C

(Brookfiled Sp. 6/20 Upm): 7,000 ± 1,500 mPa·s

Open time at 20 °C: 20-25 minutes

KLEIBERIT 304.4

gluing qualities:

D4 according to DIN EN 204 with hardener KLEIBERIT 808.0

WATT 91 (DIN EN 14257) > 7 N/mm²

bonding methods:

cold, warm and high-frequency gluing

Base: polymer dispersion
Density: approx. 1.30 g/cm³
Colour: cream

Viscosity at 20 °C

(Brookfiled Sp. 6/20 Upm): approx. 10,000 mPa·s

Pot life: with 15 p.p.w. KLEIBERIT 808.0
approx. 60 minutes

Open time at 20 °C: 8-12 minutes

KLEIBERIT 510.3.40

gluing qualities:

D4 according to DIN EN 204

WATT 91 (DIN EN 14257) > 7 N/mm²

bonding methods:

cold and warm gluing

Base: polyurethane
Density: approx. 1.13 g/cm³
Colour: vanilla

Viscosity at 20 °C

(Brookfiled Sp. 4/20 Upm): approx. 18,500 mPa·s

Open time at 20 °C: 20-25 minutes



Profile wrapping of accoya®

KLEIBERIT 704.6

gluing qualities:
weather-resistant, if plastic films suitable for outdoor use are used.

bonding methods:
hot gluing by means of wide slot nozzle application

Base: polyurethane
Density: approx. 1.10 g/cm³
Colour: transparent
Application temperature: 120°C-140°C
Viscosity (Brookfield HBTD 10 Upm): approx. 60,000 mPas at 120°C
approx. 35,000 mPas at 140°C

Edge banding on tricoya®

KLEIBERIT 707.9.40

gluing qualities:
highly heat and moisture resistant when using suitable plastic edges
(e.g. ABS, PP, PVC, etc.)

gluing methods:
hot gluing by means of roller or slot nozzle application

Base: polyurethane
Density: approx. 1.10 g/cm³
Colour: ivory
Application temperature: 120°C-140°C
Viscosity (Brookfield HBTD 10 Upm): approx. 60,000 mPas at 120°C
approx. 35,000 mPas at 140°C

accoya® and tricoya® are registered trademarks of Accsys Technologies PLC. Both are highly resistant, chemically modified materials for durable, dimensionally stable end products, suitable for outdoor use. accoya® stands for refined solid wood, mostly used as profile materials. tricoya® stands for refined wood fiber materials, mostly used in form of board materials.

Longevity is achieved by modifying the naturally grown wood, usually a wood species with little resistance, through acetylation so that the molecular structure of the previously hygroscopic material is changed in such a way that moisture absorption and moisture binding is greatly reduced. As a rule, the acetylation of wood is achieved by impregnation with an acetic anhydride solution. This causes the hygroscopic hydroxyl groups of the wood cell walls to be esterified. The original hygroscopicity or moisture absorption and moisture binding is thus considerably reduced. Infestation by microorganisms can also be excluded.

The KLEIBERIT adhesives listed in this product brochure have been extensively tested for their suitability for both materials. They have in-house test certificates as well as performance certificates from independent, renowned testing institutes.

Besides chemically reactive polyurethane adhesives, a selected PVAC dispersion and an EPI system are available. The processing of both adhesives, which are liquid in the processing state, is similar to the known solid wood gluing processes. Due to the modified water absorption capacity of accoya® and tricoya®, slightly longer pressing times may be necessary. If, on the other hand, a moisture-reactive PUR adhesive is chosen, whether in the form of a liquid prepolymer or as a hotmelt, the addition of moisture may be required for the usual quick setting reaction due to the low to non-existent moisture on the surface of the acetylated material.

The optimal processing conditions when using accoya® and tricoya® have to be determined in the form of test runs, as with all other materials that undergo a bonding process. The advantages offered by these wood-based materials quickly outweigh the test effort.

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