



Coating: Coating of teak

Description / features

Teak: botanical name *Tectona grandis*, origin South and Southeast Asia

Tall, branch-free trunks, along with its special properties in solid form and as a sliced veneer, make teak a very valuable wood. It is easy to work and dries without splitting and warping. Natural oils mean that its surface remains attractive and weather-resistant even without on-going maintenance. Teak furniture frequently receives a teak oil treatment rather than lacquering the wood.

Its rubber content does however complicate gluing and other constituents complicate coating and/or artificial colouring, so special adhesives and lacquers have to be used.

We have conducted an extensive series of internal tests and used the state of the art to determine the most suitable coating systems and the most effective working methods for application on teak.

Coatings on solid teak and/or teak veneer

Potential products:

- PU Thinner DV 4900
- PU Thinner DV 4994
- PU Thinner DV 4955
- PU Thinner DV 4935
- PU Thinner DV 4981

- Wood soap BZ 850

- PU Basecoat DG 4717-0005
mixing ratio (by volume) 5: 1 with PU Hardener DR 4070
- PU Basecoat DG 4768-0004
mixing ratio (by volume) 2 : 1 with PU Hardener DR 4035-0001
- PU OPTI-BASE DG 4750
mixing ratio (by volume) 1 : 5 with PU Hardener DR 4034
- PU Basecoat DG 4760
mixing ratio (by volume) 1 : 3 with PU Hardener DR 4038



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- FANTASTIC-CLEAR DE 4877x(gloss level)
mixing ratio (by volume) 10 : 1 with PU Hardener DR 4071
- MEGA-PUR DE 4503x(gloss level)
mixing ratio (by volume) 10 : 1 with PU Hardener DR 4070
- FANTASTIC-BRILLANT DU 48799
mixing ratio (by volume) 4 : 1 with PU Hardener DR 4071
- PU Brilliant lacquer DU 44099
mixing ratio (by volume) 2 : 1 with PU Hardener DR 4080

Application examples

Surface preparation:

- Graduated bare wood sanding at 150 - 180 grit
- Washing out wood contents

Variant a:

Use a cup gun to apply PU Thinner DV 4900 onto the teak. Then use a scrubbing brush to carefully and evenly remove the constituents from the wood pores, brushing in the grain direction. A heavily impregnated gauze ball can also be used for this process. Next use a dampened and a dry gauze ball to remove the extracted constituents and thinner. As far as possible avoid subsequently sanding the dried teak. Should this be absolutely necessary for equalization, only smooth lightly using 150 - 180 grit. The basecoat / lacquer must be applied on the same day.

or

Variant b:

Dissolve 25 g of wood soap BZ 850 in one litre of boiling water. Apply the hot soap solution onto the teak and use a scrubbing brush to carefully and intensively brush it out, working in the grain direction. Allow circa 2 minutes for absorption, reapply the soap solution and brush the constituents out again. Next use lukewarm water to thoroughly rinse away the soap solution. Remove the excess using a gauze ball and water and allow it to dry for a few hours. Then sand lightly using 150 – 180 grit and still on the same day apply the basecoat / lacquer.

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Open-pore lacquer structures, from dull matt to glossy

- 1 x 100 - 150 g/m² PU Basecoat DG 4717-0005
mixing ratio (by volume) 5 : 1 with PU Hardener DR 4070
Add 50 % DV 4955 to the lacquer/hardener mixture
Drying: 15 - 20 min / 20 °C
- 1 x 100 - 150 g/m² PU Basecoat DG 4717-0005
mixing ratio (by volume) 5 : 1 with PU Hardener DR 4070
Add 50 % DV 4955 to the lacquer/hardener mixture
Drying: > 16 h / 20 °C
Lacquer sanding: 280 - 320 grit
- 1 x 100 - 150 g/m² FANTASTIC-CLEAR DE 4877x(gloss level)
mixing ratio (by volume) 10 : 1 with PU Hardener DR 4071
Add 20 - 25 % DV 4900 to the lacquer/hardener mixture

or after applying DG 4717-0005 as a basecoat

- 1 x 100 - 150 g/m² MEGA-PUR DE 4503x(gloss level)
mixing ratio (by volume) 10 : 1 with PU Hardener DR 4070
Add 10 - 20 % DV 4900 to the lacquer/hardener mixture

Closed-pore lacquer structures, from dull matt to glossy

- 1 x 100 - 150 g/m² PU Basecoat DG 4717-0005
mixing ratio (by volume) 5 : 1 with PU Hardener DR 4070
Add 50 % DV 4955 to the lacquer/hardener mixture
Drying: 15 - 20 min / 20 °C
- 1 x 100 - 150 g/m² PU Basecoat DG 4717-0005
mixing ratio (by volume) 5 : 1 with PU Hardener DR 4070
Add 50 % DV 4955 to the lacquer/hardener mixture
Drying: > 16 h / 20 °C
Lacquer sanding: 280 - 320 grit
- 1 x 150 - 200 g/m² PU OPTI-BASE DG 4750
mixing ratio (by volume) 1 : 5 with PU Hardener DR 4034
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: 15 - 20 min / 20 °C
- 1 x 150 - 200 g/m² PU OPTI-BASE DG 4750
mixing ratio (by volume) 1 : 5 with PU Hardener DR 4034
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: > 16 h / 20 °C

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The more porous the wood, the more basecoats should be applied. Although at most 400 g/m² may be applied in wet film on one working day, since a drying time of > 16 h / 20 °C is then required! Sufficient basecoat layers must be applied until the pores of the surface to be lacquered are closed prior to lacquer sanding! The drying time for the final basecoat layer of OPTI-BASE DG 4750 must be > 48 h / 20 °C! It is possible to use PU Thinner DV 4981 at higher temperatures or for very large surfaces.

or after applying DG 4717-0005 as a basecoat

- 1 x 150 - 200 g/m² PU Basecoat DG 4768-0004
mixing ratio (by volume) 2 : 1 with PU Hardener DR 4035-0001
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: 20 - 30 min / 20 °C
- 1 x 150 - 200 g/m² PU Basecoat DG 4768-0004
mixing ratio (by volume) 2 : 1 with PU Hardener DR 4035-0001
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: 20 - 30 min / 20 °C
- 1 x 150 - 200 g/m² PU Basecoat DG 4768-0004
mixing ratio (by volume) 2 : 1 with PU Hardener DR 4035-0001
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: > 16 h / 20 °C

The more porous the wood, the more basecoats should be applied. Sufficient basecoat layers must be applied until the pores of the surface to be lacquered are closed prior to lacquer sanding! The drying time for the final basecoat layer of PU Basecoat DG 4768-0004 must be > 48 h / 20 °C! It is possible to use PU Thinner DV 4981 at higher temperatures or for very large surfaces.

Top coat on PU OPTI-BASE DG 4750 / PU Basecoat DG 4768-0004

- Lacquer sanding: 280 - 320 grit
1 x 100 - 150 g/m² FANTASTIC-CLEAR DE 4877x(gloss level)
mixing ratio (by volume) 10 : 1 with PU Hardener DR 4071
Add 20 - 25 % DV 4900 to the lacquer/hardener mixture

or

- Lacquer sanding: 280 - 320 grit
1 x 100 - 150 g/m² MEGA-PUR DE 4503x(gloss level)
mixing ratio (by volume) 10 : 1 with PU Hardener DR 4070
Add 10 - 20 % DV 4900 to the lacquer/hardener mixture

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Closed-pore lacquer structures, high gloss

- 1 x 100 - 150 g/m² PU Basecoat DG 4717-0005
mixing ratio (by volume) 5 : 1 with PU Hardener DR 4070
Add 50 % DV 4955 to the lacquer/hardener mixture
Drying: 15 - 20 min / 20 °C
- 1 x 100 - 150 g/m² PU Basecoat DG 4717-0005
mixing ratio (by volume) 5 : 1 with PU Hardener DR 4070
Add 50 % DV 4955 to the lacquer/hardener mixture
Drying: > 16 h / 20 °C
- Lacquer sanding: 280 - 320 grit
1 x 150 - 200 g/m² PU OPTI-BASE DG 4750
mixing ratio (by volume) 1 : 5 with PU Hardener DR 4034
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: 15 - 20 min / 20 °C
- 1 x 150 - 200 g/m² PU OPTI-BASE DG 4750
mixing ratio (by volume) 1 : 5 with PU Hardener DR 4034
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: > 16 h / 20 °C

The more porous the wood, the more basecoats should be applied. Although at most 400 g/m² may be applied in wet film on one working day, since a drying time of > 16 h / 20 °C is then required! Sufficient basecoat layers must be applied until the pores of the surface to be lacquered are closed prior to lacquer sanding! The drying time for the final basecoat layer of OPTI-BASE DG 4750 must be > 48 h / 20 °C! It is possible to use PU Thinner DV 4981 at higher temperatures or for very large surfaces.

or after applying DG 4717-0005 as a basecoat

- 1 x 150 - 200 g/m² PU Basecoat DG 4760
mixing ratio (by volume) 1 : 3 with PU Hardener DR 4038
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: 20 - 30 min / 20 °C
- 1 x 150 - 200 g/m² PU Basecoat DG 4760
mixing ratio (by volume) 1 : 3 with PU Hardener DR 4038
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: 20 - 30 min / 20 °C
- 1 x 150 - 200 g/m² PU Basecoat DG 4760
mixing ratio (by volume) 1 : 3 with PU Hardener DR 4038
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: > 16 h / 20 °C



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The more porous the wood, the more basecoats should be applied. Sufficient basecoat layers must be applied until the pores of the surface to be lacquered are closed prior to lacquer sanding! The drying time for the final basecoat layer of PU Basecoat DG 4760 must be > 48 h / 20 °C! It is possible to use PU Thinner DV 4981 at higher temperatures or for very large surfaces.

Top coat on PU OPTI-BASE DG 4750 / PU Basecoat DG 4760

- Lacquer sanding: graduated from 400 – 600 grit
1 x 90 - 120 g /m² FANTASTIC-BRILLANT DU 48799
mixing ratio (by volume) 4 : 1 with PU Hardener DR 4071
Add 40 % DV 4935 to the lacquer/hardener mixture
Drying: 30 - 60 min / 20 °C
- 1 x 90 - 120 g /m² FANTASTIC-BRILLANT DU 48799
mixing ratio (by volume) 4 : 1 with PU Hardener DR 4071
Add 40 % DV 4935 to the lacquer/hardener mixture
Ready for polishing and packaging: > 7 d / 20 °C

or

- Lacquer sanding: graduated from 400 – 600 grit
1 x 100 - 120 g/m² PU Brilliant lacquer DU 44099
mixing ratio (by volume) 2 : 1 with PU Hardener DR 4080, add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Drying: 15 - 20 min / 20 °C
- 1 x 100 – 120 g/m² PU Brilliant lacquer DU 44099
mixing ratio (by volume) 2 : 1 with PU Hardener DR 4080
Add 20 - 25 % DV 4994 to the lacquer/hardener mixture
Ready for polishing and packaging: > 2 d / 20 °C

Handling and safety information:

Please observe the latest technical information and material safety data sheets for the individual products listed.



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Special instructions:

- The result is dependent on substrate material, time factor, application devices and sanding equipment used.
- Conduct a trial coating under practical conditions.
- **Users themselves should verify the result! Should you wish, our Innovation Centre can conduct a climatic change test on a sample panel you provide to consider adhesion and surface sinkage. You can then subsequently approve the planned coating after this climatic change test.**
- Please contact your local sales representative, call our technical hotline on +49 (0)2381 963 846 or go to service@hesse-lignal.de.

Note:

This information is purely advisory and is based on the best knowledge available after careful research in line with current state of the art technology. The information is not legally binding. We also refer you to our Terms and Conditions.

A material safety data sheet is available as per Regulation (EC) No. 1907/2006.