

## 1 WHY FINISH NUXE

Walnut is a natural wood specie that ranges in colour from light brown to dark chocolate brown, often with a purplish or reddish cast. Over time, as the wood ages when exposed to sunlight, the veneer will change to a more gold-orange tone if left untreated. We therefore recommend finishing the wood with an oil or varnish combined with staining to reduce the UV impact on the colour.



## 2 FINISHING OPTIONS

Veneered panels can be finished in a variety of ways, with oils and varnishes being the most common.

- Oil finishing allows the wood to retain its natural appearance. Furthermore, as the oil will be absorbed and fill up the pores, it will prevent water and other liquids to penetrate the wood. The downside of oil finishing is that it requires more maintenance as the wood must be regularly fed with the right products.
- A varnish will seal the wood properly, resulting in a higher resistance to grease marks, making it a more reliable choice for dining tables and worktops. The downside of varnishing is that the natural appearance is more muted as you add a layer on top of the wood. However, matt varnishes can have a very subtle effect.

Furthermore, several options are possible in order to reduce the sunlight impact on the wood.

- Please ask your supplier for a finishing product including UV blockers. These products provide an additional help in protecting the wood and will lower the overall colour shift upon aging/exposure to sunlight.
- The walnut veneer can also be stained prior to varnishing or oiling in order to achieve a specific color. Especially, using a darker stain will mask the wood colour shift, thanks to the pigmentation in the stain.
- Alternatively, instead of using a separate stain and then applying a finish, you can use a pigmented hardwax oil such as Rubio Monocoat Oil Plus 2C. This product contains pigments within the oil, allowing you to achieve colouring and protection in a single step.
- Adding white pigmentation in the treatment of your wood, will help reflect UV light and give the wood additional protection.

### 3 FINISHING INSTRUCTIONS

1. Inspect the veneer ahead of starting the process.
2. Sand the veneer in the direction of the wood grain to avoid scratches. Remove the wood dust ahead of further steps.  
*Decospan offers boards that are pre-sanded to make sure the surface is clean. However, in order to achieve the optimal result, the boards need to be sanded again with a fine grit to avoid potential glue residue that might become visible when staining/finishing.*
3. Apply the varnish or oil coats according to the manufacturer's instructions
4. Final touches
  - Allow the final coat to cure completely in a dust-free environment. This could take several days to a week, depending on the varnish type.

### 4 FINISHING RECOMMENDATIONS

After extensive testing, we determined that best results can be obtained when using the following finishing products for use on veneer to help protect against the effects of exposure to Ultra Violet light:

- [Sherwin Williams](#) – ICA (solvent-based finish for spray gun)
- [Sherwin Williams](#) – OECO (water-based 2K system for spray gun)
- [Hesse](#) (PUR solvent-based finish for spray gun)
- [Rubio Monocoat](#) (Invisible Protector water-based finish)
- [Rubio Monocoat](#) – Oil Plus 2c (2K hardwax oil)

Always verify the safety data sheets and the most recent application instructions on the supplier website.

## 4.1 SHERWIN WILLIAMS - ICA

### Solvent-based finish for spray gun

#### Products applied:

- IS210UVE > insulating primer
- C200 > Hardener
- D1015 > Transparent thinner
- FAC300UVE > primer
- OAC301G5UVE > Topcoat

#### Procedure

Process	Procedure / Mixture	Lacquer properties	Application and application quantity g/m <sup>2</sup>
1. Wood sanding	P150 crosswise, P150 lengthwise, P220 lengthwise		
2. Insulating	IS210UVE insulating primer + 10w% C200 hardener + 10w% D1015 thinner	Transparent Lightfast	Pistol: 1,8 nozzle 80 - 100 g/m <sup>2</sup>
3. Drying	Overnight drying at room temperature		
4. Sanding	P320		
5. Primer	FAC300UVE primer + 20% C200 Hardener + 10% D1015 Thinner	Transparent Lightfast	Pistol: 1,8 nozzle 80 - 100 g/m <sup>2</sup>
6. Drying	Overnight drying at room temperature		
7. Sanding	P 400		
8. Topcoat	OAC301G5UVE Topcoat + 10% C200 Hardener + 20% D1015 Thinner	Transparent Lightfast Gloss ca. 3-5 (60°)	Pistol: 1,8 nozzle 100 - 200 g/m <sup>2</sup>
9. Drying	Overnight drying at room temperature		

**Notes:** Depending on the wanted UV protection: step 5-7 can be repeated upto a total of 3 layers. Please note that the wood structure will be reduced due to the total varnish application weight.  
Ensure a good mixing of all components immediately before starting productions  
The references on the Decospan website were tested with the basic 3 layer build-up – where only 1 cycle of step 5 & 6 was done.

**4.2 SHERWIN WILLIAMS - OECO**

**OECO (water-based 2K system for spray gun)**

**Products applied:**

- 86V-24 > primer
- IDRO-CEOPAL 41B-0026 > basecoat / Topcoat
- 86A-23 > UV absorber
- 813-54VA > hardener
- Water > thinner

**Procedure**

Prepare basecoat/topcoat mixture :

IDRO-CEOPAL 41B-0026 : 86A-23 : 813-54VA : water

100 : 3 : 10 : 5 to 10

Process	Procedure / Mixture	Lacquer properties	Application and application quantity g/m <sup>2</sup>
<b>1. Wood sanding</b>	P150 crosswise, P150 lengthwise, P220 lengthwise		
<b>2. Primer</b>	86V-24	Transparent	Spray gun Maximum 60 - 80 g/m <sup>2</sup>
<b>3. Drying</b>	Min. 6 hours at room temperature		
<b>4. Sanding</b>	P320		
<b>5. Basecoat</b>	Mixture	Transparent Lightfast	Spray gun Maximum 100 - 120 g/m <sup>2</sup>
<b>6. Drying</b>	Min. 12 hours at room temperature		
<b>7. Sanding</b>	P 320		
<b>8. Topcoat</b>	Mixture	Transparent Lightfast (gloss 3-5)	Spray gun Maximum 100 - 120 g/m <sup>2</sup>
<b>9. Drying</b>	Overnight drying at room temperature		

## 4.3 HESSE- PUR SOLVENT

### Solvent-based finish for spray gun (PUR solvent-based finish)

#### Products applied:

- PUR Sun-Blocker DE 4295x (x is the wanted gloss level) > base coat / topcoat
- (DE 42950 = low gloss, DE 42952 = gloss 10 and DE 42954 = gloss 20 ; under 60°)
- DR4070 > hardener

#### Procedure

Mixture (volumetric) :  
PUR sun:blocker : Hardener  
10 : 1

Process	Procedure / Mixture	Lacquer properties	Application and application quantity g/m <sup>2</sup>
<b>1. Wood sanding</b>	P150 crosswise, P150 lengthwise, P180 lengthwise		
<b>2. Primer</b>	Mixture	Transparent Lightfast	Spray gun 100 - 150 g/m <sup>2</sup>
<b>3. Drying</b>	Min. 3 hours at room temperature		
<b>4. Sanding</b>	P320		
<b>5. Basecoat</b>	Mixture	Transparent Lightfast	Spray gun 100 - 150 g/m <sup>2</sup>
<b>6. Drying</b>	Min. 3 hours at room temperature		
<b>7. Sanding</b>	P 320		
<b>8. Topcoat</b>	Mixture	Transparent Lightfast (gloss depending on selected product variant)	Spray gun 100 - 150 g/m <sup>2</sup>
<b>9. Drying</b>	Overnight drying at room temperature Fully hardened after 7 days at room temperature		

## 4.4 Rubio Monocoat – Invisible Protector (water-based)

### Products applied:

- Invisible Protector: 1 component plant-based resin

### Procedure

Apply a minimum of 3 layers with a roller on untreated wood.

Prior to application, let Invisible Protector stabilise to room temperature (ideally between 18 and 25 °C). Ideal humidity is not over 70%. Shake the Invisible Protector jerrycan thoroughly until any settlement has disappeared.

Process	Procedure / Mixture	Lacquer properties	Application and application quantity g/m <sup>2</sup>
<b>1. Wood sanding</b>	Sand the surface according to the desired smoothness (grit 120) and make sure the surface is free of scratches. Thoroughly remove sanding dust with a vacuum cleaner. Finish immediately after sanding (because of the oxidation of the wood).		
<b>2. First layer</b>	Invisible Protector	Transparent Lightfast	Roller ca. 80 g/m <sup>2</sup>
<b>3. Drying</b>	3 - 4 hours		
<b>4. Second layer</b>	Invisible Protector	Transparent Lightfast	Roller ca. 80 g/m <sup>2</sup>
<b>5. Drying</b>	6 - 8 hours (dry to the touch)		
<b>6. Sanding</b>	P220/240 Remove the sanding dust thoroughly		
<b>7. Third layer</b>	Invisible Protector	Gloss ca. 2,5 - 3 (60°)	Roller ca. 75 g/m <sup>2</sup>
<b>8. Drying</b>	16 - 24 hours (overnight) at room temperature		

### Notes:

When applying a third layer you can add 10% Invisible Protector Component B to the product to make the surface even stronger. Stir well until a homogeneous mixture is obtained. This is mostly recommended for public spaces, countertops in bathrooms and kitchens, food trays and other stain-sensitive surfaces, since the B component increases stain resistance. The B component is also compliant with the certificates obtained.

The product can also be applied with a spray gun (1,8 nozzle).

## 4.5 Rubio Monocoat – Oil Plus 2C (2K hardwax oil)

As an alternative to using a separate stain followed by a finish, you can use a pigmented hardwax oil – Rubio Monocoat Oil Plus 2C. Because the pigments are integrated into the oil, it provides both colouring and protection in a single application step. Note that this oil does not contain UV blockers.

Rubio Monocoat Oil Plus 2C is available in 40 colours and can be used to tone/colour the veneer. The added pigmentation can also help make natural wood colour changes over time less noticeable.

Always test the system on a small piece prior to production. As such, the final colour and gloss aspect can be validated upfront.

### Products applied:

- Oil Plus (A) + Accelerator (B)
- 40 standard colours that can be blended

### Procedure

- Mixture (volumetric) :
- Oil (A) : Accelerator (B)
- 3 : 1

### Technical characteristics

- Drying time: 12-24h
- Curing time: 5 days (80% in 2 days)
- Working temperature: 8-30°C
- Humidity application range: 35% - 60%

Process	Procedure / Mixture
<b>1. Wood sanding</b>	P120 crosswise, P120 lengthwise, P150 lengthwise
<b>2. Clean the surface</b>	Vacuum thoroughly, eliminate remains of dust with Rubio Cleaner and wait until the surface is completely dry.
<b>3. Mix</b>	Stir the A component until a homogenous mixture is obtained. Carefully mix the two components (1 to 2 minutes) with a ratio of appr. 3 units A to 1 unit B.
<b>4. First coat</b>	Spread out a small quantity of Oil Plus 2C using a spatula, a beige/red Rubio Monocoat Scrubby pad or hand sander with a small beige 5.9 inch Rubio Monocoat pad (you can also use the Rubio Monocoat Mouse Pad for smaller objects and corners)
<b>5. Drying</b>	Let absorb a few minutes. Wipe away all excess oil with a cloth or a hand sander with a small white 5.9 inch Rubio Monocoat pad. Finish off with a cloth within max. 30 minutes. The surface should feel non-sticky!

**Note:**

1. Stir the product well before application.
2. When using several containers at one site, it is required to mix them for an even result
3. After application, the surface may appear a bit glossy. This will disappear after cleaning 2-3 times with Universal Soap, Surface Care, All Natural Wood Cleaner or All Natural Wood Cleaner Spray.

**TIPS**

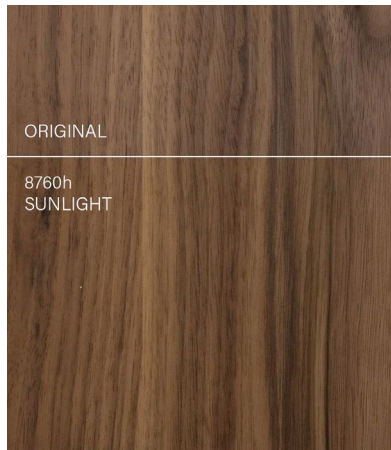
1. **Temperature and Humidity:** Ensure you're working in a well-ventilated area with moderate humidity and temperature, as extreme conditions can affect drying times and finish quality.
2. **Avoid Overworking:** Don't go back over areas that are starting to dry, as this can cause streaks or unevenness.
3. **Varnish Type:** Oil-based varnishes typically provide a richer colour and are more durable, but take longer to dry. Water-based varnishes dry faster and are less odour-intensive but may raise the wood grain slightly.

The information is obtained with utmost care and the results are compiled by reliable sources. The herein contained information and data are considered to be accurate and correct, with reservation of misprints, norm errors or other mistakes. Decospan makes no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information. Decospan will not be liable for claims relating to any party's use of or reliance on information and data contained herein, regardless of whether it is claimed that the info is inaccurate, incomplete or otherwise misleading. It is offered for your consideration, investigation and verification. Due to possible technical changes it is the user's responsibility to obtain the most up to date information.

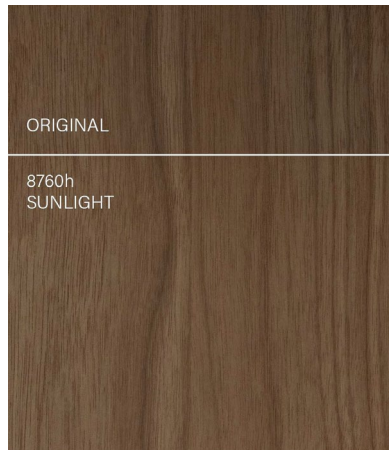
**5. Test results**

**5.1 SHERWIN WILLIAMS - ICA**

**Naturals**



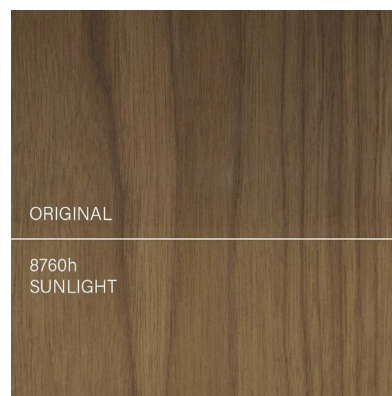
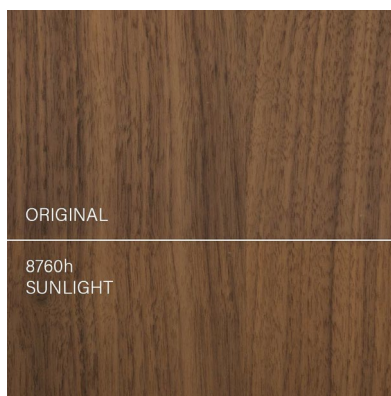
**Noble**



**Spectrum**

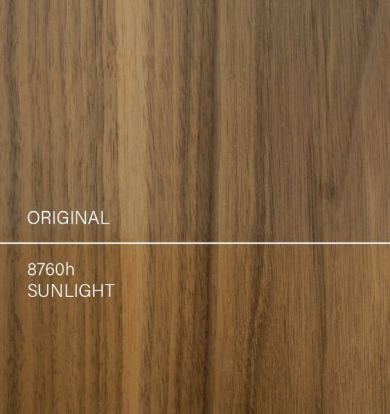


**5.2 SHERWIN WILLIAMS - OECO**



### 5.3 HESSE- PUR SOLVENT

#### Naturals



#### Noble



#### Spectrum

