

## STEP

Manual



### Manual STEP:

General instructions regarding the use of RIGO Verffabriek STEP products.

Proper preparation is an absolute must for a perfect result. Hence this manual for the use of our lacquers. This manual contains all the information we can offer to help you achieve the best possible result.

### Preparation:

Preparation involves a lot more than picking up a bucket and a roller.



In case of doubt or if anything is unclear, always ask for advice first. Our advisers are happy to help! We can also be reached at 06-47057824, our WhatsApp number.

The pre-treatment is an important part of the preparations:

In case of existing surfaces: always ask our consultants for advice.

After sanding with a belt and/or edge sanding machine, new or sanded parquet and/or plank floors are generally polished using an orbital floor buffer or sanding machine.

While sanding/polishing, avoid hitting any iron objects, especially on oak floors. These include, for instance, the corners of floor ducts, piping, etc. In this case, the sanding dust will contain very small iron particles, which adhere to the surface and are hard to remove. On a dry, non-lacquered floor, these particles are practically invisible. However, as soon as the floor is treated with a water-based lacquer, the metal particles will appear as bluish-black specks almost immediately. To prevent these black specks from appearing, RIGO Verffabriek offers a special additive: SEAL ADD. This additive is exclusively meant for use in the Parquet Primer Warm. It should not be used with other primers, lacquers, or SKYLT.

When sanding as a preparation for a first coat of primer or lacquer, use a single disc with sanding mesh or P120 - P180 sandpaper or a multi disc with sanding mesh or P100 - P150 sandpaper.

Rising fibres:

The problem of rising fibres (on oak floors, for example) may be reduced by slightly wetting the bare wood before you polish it with an orbital sander. The wood fibres will rise due to the moisture. After 20 - 30 minutes, the surface will dry again, and will be ready for polishing. This will lead to a far smoother lacquer result, reducing or even eliminating the need for intermediate sanding.

Document:

Note down all relevant information:



- Batch number of each package (6-digit number on the package)
- Make sure to check all packaging (different packaging sizes often have different numbers)
- Temperature and humidity during application
- Floor temperature (at least 10°C)
- Temperature and humidity while drying
- Measures that benefit ventilation
- Any particularities

Temperature of floor and surroundings:

Ensure a normal temperature during application. The temperature should absolutely not be below 10°C or exceed 30°C.

In case of temperatures that are too low, the water-based lacquer will not dry properly. Heat is required for the evaporation of water. If necessary, turn up the heating by a few degrees. The hotter the air, the more moisture it can hold.

Excessive temperatures are not suitable either. In case of excessive temperatures, the lacquer may dry too quickly. To prevent this, it is important to filter incoming sunlight (in time!). In case of high temperatures, the RIGO STEP EXTENDER additive can be added to the lacquer.

Relative humidity:

The relative humidity should not exceed 80%.

Ensure sufficient ventilation. The air containing the evaporated water should be able to flow away. If this does not happen, the moisture will hover above the coat of lacquer like a 'blanket', which will keep the rest

of the water from evaporating. Air saturated with water should be able to flow away. If necessary, open a door and a window, switch on the extractor hood and create air circulation in 'dead' corners with a small fan. Note: you should create some circulation. It shouldn't feel like the wind is blowing inside.



- Make sure your surroundings are clean.
- Ensure adequate ventilation for yourself.
- Make sure to cover any objects you really don't want to get lacquer on!
- Decide on a method to apply before starting.
- Only use plastic or stainless-steel tools.
- Wear suitable gloves (see VIB/MSDS for more information).
- Wear RIGO Steppertjes (overshoes) or shoes/flip flops that you only wear for lacquering.
- Consider purchasing two separate cables: one for your oil/wax floors and one for lacquer floors. This way, you can prevent oil/wax residue from your power cord from ending up on your lacquer floor.

Yield:

Generally,

- the 1st coat is applied in a 1:8 ratio (1 litre for 8 m<sup>2</sup>) ≈ 125 grams wet product/m<sup>2</sup>
- the 2nd coat is applied in a 1:10 ratio (1 litre for 10 m<sup>2</sup>) ≈ 100 grams wet product/m<sup>2</sup>
- the 3rd coat is applied in a 1:12 ratio (1 litre for 12 m<sup>2</sup>) ≈ 85 grams wet product/m<sup>2</sup>

System composition:

New or sanded floor should be lacquered with STEP Primer and 2 x STEP Parquet Lacquer

On pH-sensitive wood types, first apply Parquet Primer Natural or Parquet Primer Warm (with Seal ADD if necessary).

Always prime kambala, afzelia and basralocus with Kambala Primer.

Recoating an existing, non-sanded floor: Request advice

Preparing the lacquer:

Always store the lacquer at a temperature ranging from 10 to 30 °C. This way, you can prevent the lacquer from deteriorating due to significant temperature fluctuations. Allow the lacquer sufficient time to acclimatise to the space in which you intend to apply it.

Thoroughly shake the lacquer. Strain the lacquer into the RIGO Roller Tray using the orange RIGO sieve. Check the opening of the can to see if the entire can was emptied into the lacquer tray. All components of the lacquer serve a purpose, and a “caked-on” patch at the bottom of the can, clumps in the sieve or a strong odour are indicators that something could be wrong. In this case, ALWAYS immediately contact one of our technical consultants. Do not simply start applying the lacquer in the hope it will be fine.



In case of 2-component lacquer, add the hardener to the lacquer in the bottle/can, shake thoroughly and let the lacquer “rest” for about 10 minutes. Stir the lacquer before application. The pot life (the time the lacquer can be used after mixing in the hardener) is about 2 to 3 hours. Even if the lacquer still seems fluid after this, it cannot be used anymore. Do not use any remains in subsequent coats.

During application, regularly add freshly prepared product to the working batch if necessary. Due to the release of CO<sub>2</sub>, the 2-component lacquer should not be sealed airtight once mixed with the hardener.

Do not dilute the lacquer. We bring all our lacquers to the right viscosity. In case of (overly) favourable drying conditions or difficult spaces, add EXTENDER to the lacquer.

### Applying lacquer in general:

No matter how you decide to apply the lacquer or what method you're used to, you should always keep the following in mind:

- Always use a lacquer bucket / RIGO Roller Tray. This makes it easier to evenly apply the lacquer.
- Always paint wet-on-wet. Avoid pooling and differences in coat thickness. When using the “Goudhaantje” lacquer roller 25 cm (for a first coat, dipping 1x is sufficient for 0.7 to 0.8 m<sup>2</sup>)
- NEVER apply the paint thinly at the edges of your stroke or surface, but always leave a THICK edge. It is no problem if this is a white edge measuring several centimetres.
- Of course, the surface should be clean, dry and free of wax, grease and dust.
- Do not smoke/eat/drink when lacquering floors. Tobacco crumbs especially may leave unpleasant brown stains.
- Wear a cap or hair net to avoid hairs in the lacquer.

### Applying the lacquer:

Apply, spread and roll the lacquer out in strokes or squares.

A full coat offers better wetting and flow and does not dry as quickly, which means you have more time to roll it out and make wet-on-wet connections to avoid visible transitions and differences in colour. Make sure

to thickly apply the edges of strokes or squares. Thin edges will dry quickly, resulting in reduced wetting and colouration. This may lead to lighter streaks. Sealing in air may likewise result in a whitish haze under the lacquer.

In the meantime, keep an eye on the strokes/squares you already lacquered:

- Is the lacquer flowing properly and forming an even coat without foam?
- Does everything look normal or is anything out-of-the-ordinary happening?

In case of accidents or abnormalities, see if it is possible to remove the wet lacquer. If so, remove the lacquer with a wet mop or sponge, carefully clean the spot with clean water and ask for advice. Of course, on a bare surface, a first coat cannot be removed with a wet mop or sponge.

Never continue applying lacquer in the hope that the issue will resolve itself if you apply a next coat!

Drying:

The drying times stated on the packaging apply to a situation with an ambient temperature of 20 °C, a relative humidity of 65%, normal coat thickness and sufficient ventilation. Please be aware that less optimal drying conditions and/or thicker coats may result in significantly longer drying times.

Proper drying conditions, even coats of a normal thickness and sufficient drying time are crucial to a good result.

An easy way to check if your lacquer has dried sufficiently, is to feel it with the back of your hand. If the surface is relatively cold, the drying process is still going on. The most accurate way to check, of course, is to use a humidity gauge that measures the humidity at the surface.

Only apply a subsequent coat once the previous coat is sufficiently dry. Sealing a coat that hasn't dried properly may lead to defects.

The drying time before applying a subsequent 1-component lacquer coat is 1 to 2 hours on average at a temperature of 20 °C, a relative humidity of 65% and normal coat thickness. For 2-component lacquer coats, this is 3 to 4 hours on average.

Intermediate sanding/polishing:

It is not technically necessary to sand coats before applying subsequent coats when using any of the RigoStep lacquer systems.

Only sand before the final coat if it is necessary to remove dust particles, dirt and any raised wood fibres.



The first coat should never be sanded. This could lead to 'worn through' areas. Worn-through, bare areas will form darker or lighter spots after applying the second coat.

Lightly sanding (matte sanding) benefits adhesion: this leads to very fine scratches, increasing the surface for adhesion. The next coat will then be able to stick to the former even better. The previous coat will have to be fully dry for this to work. A somewhat tacky coat of lacquer may be "sealed" through polishing.

Intensive sanding (polishing) has a negative effect on adhesion: the surface may become too smooth or polished

On top of that, intensive sanding removes too much lacquer.

Water-based lacquers contain little to no solvents, which means subsequent coats can only mechanically adhere to previous ones.

After polishing, the sanding dust has to be thoroughly removed from the floor with a vacuum. This includes the tops of baseboards, other ridges and power outlets.

#### Waste:

Fully dried brushes and rollers may be considered general waste. The same goes for fully dried, hardened lacquer remains in buckets or roller trays.

Fluid lacquer remains and jerry cans with lacquer remains are chemical waste and should be disposed of in accordance with local municipal or provincial regulations.

It is best to clean tools with lukewarm water. Do this in a bucket before the tools dry. Dried lacquer can be dissolved in acetone. Due to the risk of damaging the environment, the rinsing water should not end up in the sewer.

#### Tips:

Floors treated with STEP parquet/cork lacquer can be provided with polish 16 hours after the last coat of lacquer has dried. The user can apply the polish before the furniture is returned.

Furniture can also be returned 16 hours after the last coat of lacquer has dried. The user should be made aware that they should be careful when lifting and placing the furniture.

Sliding furniture - especially on fresh coats of lacquer - may cause streaks.

Inform the user of the floor that the lacquer coat still needs to harden in the first one or two weeks after it is applied and should not be covered or cleaned with water or fluid detergents.

This could affect the durability of the coat and could even affect the coat itself.

Maintenance:



Provide the user of the floor with advice

Provide the user of the floor with the STEP Maintenance Instructions.