

The Parquet Guide

Wood Coatings
Passion for wood

AkzoNobel 





Publication details

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Parquet Guide 2018

Achieving the perfect wood or cork floor with high-quality oils and varnishes

Parquet has grown more popular over the years, not just as a cost-effective flooring with health benefits but often because people simply prefer the way it looks.

This Guide has been prepared by our team at AkzoNobel's Wood Coatings to inspire your parquet or cork laying and finishing projects. And we also want to give you some tips about renovating old floors and restoring them to their former glory.

AkzoNobel is a leading company in the colours and paints industry, and a major manufacturer of special-purpose chemicals. AkzoNobel draws on its many years of experience to supply industry customers and consumers worldwide with innovative products and sustainable technologies that have been developed to meet the growing requirements of our rapidly changing world. The product portfolio includes brands such as Sikkens Wood Coatings, the premium brand for industrial wood surface coatings for wooden doors/windows and exterior applications, and AkzoNobel Wood Coatings, both of which are leaders in their respective markets.

Our high-quality AkzoNobel Wood Coatings finishing products for wood and cork floors ensure that the final protective coat is visually appealing. Achieving a perfect floor also requires proper preparation of the subfloor, which is why this Guide devotes plenty of space to discussing this important topic.

The right cleaning and care ensures that flooring will stay looking good for many years. Here we can offer you the right cleaning and care products from our AkzoNobel Wood Coatings range, perfectly coordinated to the surface system in question.

Technical support

If you have any questions about how to use our products, please contact your expert adviser from the sales department. They will be happy to advise you on any questions about surface design. You can find the telephone number on our website www.akzonobel-woodcoatings.com

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Finishing

Basic parquet know-how

In recent years, there have been fundamental changes to consumer standards in our living spaces: in an era of mass production and climate change, we now focus increasingly on values such as individuality, healthy living and sustainability when choosing our furnishings and fittings. Parquet flooring is a good match for these needs and is the perfect choice for creating healthy, individual and aesthetically pleasing interiors. Parquet offers an impressive set of advantages, being durable, long-lasting and especially easy to care for. As a natural product, parquet is also eco-friendly and highly recommended for health reasons. You'll be amazed at just how versatile parquet flooring can really be!

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Sustainable products

Climate protection is truly a topic for our times: ozone, particulate and CO₂ pollution threaten both human health and the environment. AkzoNobel Wood Coatings realised the importance of this topic at an early stage, pushing ahead with environmentally friendly products entirely free of hazardous substances.

Water-based products

Water-based varnishes, in which organic solvents have been largely or entirely replaced by water, are the coatings of the future. Since only water is released when working with these varnishes, this protects both human health and the environment. In technical terms, the new high-tech water-based varnishes from AkzoNobel Wood Coatings are equal to solvent-based coatings. They are outstandingly durable, offer exceptional scratch resistance and are far superior to earlier coatings in terms of hardness.

Products from natural raw materials

Natural products are the most environmentally friendly surface materials. They are manufactured from renewable resources and contain no harmful substances.

AkzoNobel Wood Coatings natural products can draw on almost a century of experience: they are technically advanced products that contain only natural and renewable materials. The products contain no poisonous ingredients or allergenic terpenes such as citrus terpenes and balsam turpentine, and they are entirely lead- and cadmium-free. As such, they are ideal products for use on children's furniture and toys.



Parquet and health

Parquet prevents the build-up of household dust mites while simultaneously insulating the room from cold and moisture when used with the right subfloor materials. The result is a homely and healthy living space.

Parquet creates a healthy indoor climate

If your parquet is oiled, then the wood remains permeable to vapour, meaning that it can absorb any excess moisture in the room air and release it again if necessary. This keeps your indoor climate optimal at all times – safeguarding your good health.

Parquet protects the environment – twice

Both solid and engineered wood flooring consists mostly of wood, a renewable natural resource. Trees bind CO₂ from the air by means of a chemical process that results in the creation of oxygen. These trees are later made into parquet flooring. After a very long useful life, it may be the case that the parquet floor is taken out rather than being restored. The floorboards then become scrap wood that can be used for heating. Parquet – simply perfect!



Parquet product advantages

Individual

Parquet can be used to achieve a truly individual interior design – offering a varied range of wood types, fitting methods (floorboards, vertical finger or mosaic parquet) and finishing techniques (varnished or oiled). The decision is entirely yours.

Hard-wearing

Once a wood or cork floor has been professionally coated then it can easily survive even the wildest party. The floor needs to be given at least three coats and not subjected to normal traffic for at least a month.

Long-lived

Parquet often outlives several generations of owners. Such a floor can not only easily last a century if properly treated and cared-for but can also be sanded down and re-sealed several times (assuming the top layer of the parquet is thick enough to do so).

Restorable

Wood parquet flooring can be sanded down and re-sealed several times – which means that wooden flooring offers much greater value for money than carpets!

If you want unbeatable value for money, you want parquet!

Service for parquet fitters

Once you have read through the guidance on pages 12 and 13, and followed the detailed instructions for working with our products on the pages that follow, you will be impressed with the results – and naturally the products themselves!

Our website also offers you more information, instructions and tips for working with our products, plus safety data sheets. To make it easier for you to find our great products, we have also included a stockist directory on our website. These dealers can also advise you on the right choice of product and answer any questions you might have about usage.

www.akzonobel-woodcoatings.com

Avoiding and repairing damage For varnished floors:

<p>Marks left by furniture</p> <p>Cause: The varnish has not yet set properly. Furniture was brought into the room too early. Plasticiser migration from plastic castor cups.</p> <p>How to avoid: Let the parquet coating dry out (cure) properly before usage (see technical data sheet). Use felt pads for furniture.</p> <p>How to remedy: Sand down the entire floor and apply a new coat of varnish.</p>	<p>Poor adhesion/white patches</p> <p>Cause: Base coat and topcoat are incompatible. Different topcoats have been used. Lacquer sanding inadequate.</p> <p>How to avoid: Only use coordinated lacquer systems from a single manufacturer. Ensure that the entire surface is properly sanded to finish.</p> <p>How to remedy: Sand the entire floor down to the wood and seal again.</p>
<p>Dull areas</p> <p>Cause: The varnish has been applied too thickly. This leads to more aggressive sanding of raised areas.</p> <p>How to avoid: Matt sealing coatings must not be applied too thickly. The final sand must be performed evenly, without excessive pressure.</p> <p>How to remedy: Sand down the entire floor to a matt finish and then apply a new coat of varnish.</p>	<p>Joint shrinkage</p> <p>Cause: The parquet joint filler Aqualit A-PJF100 was prepared with too much wood flour. This meant the ready-mixed filler had poor adhesion and was mostly stripped from the gaps by the final sand.</p> <p>How to avoid: Don't add too much sanding dust to the Parquet joint filler Aqualit A-PJF100 – the mixture must not be too dry! Don't forget that putty also picks up sawdust from surfaces during application.</p> <p>How to remedy: Sand the entire floor down to the wood, fill the gaps and seal again.</p>
<p>Discoloration</p> <p>Cause: Brownish-yellow wood discoloration due to alkalinity of water-based varnish.</p> <p>How to avoid: Avoid pooling, to ensure that the water-base varnish doesn't react with the wooden surface. Use a specialised parquet primer.</p> <p>How to remedy: Sand the entire floor down to the wood and seal again.</p>	<p>Wrinkling</p> <p>Cause: The last-but-one varnish layer is liquefying again, pulling upwards.</p> <p>How to avoid: Always allow enough drying time between each coat of varnish! Remember that drying times will be longer at low temperatures and/or higher relative humidity.</p> <p>How to remedy: Sand the entire floor down thoroughly to remove wrinkles and then apply a new coat of varnish.</p>
<p>Poor drying/curing</p> <p>Cause: Poor drying is a result of low temperatures and/or high relative humidity and/or coats of varnish applied too quickly. With two-component (2C) coatings, the mixing ratio may also be inaccurate.</p> <p>How to avoid: Observe a minimum room temperature of +15°C (optimal +18–25°C) and relative humidity of under 70% (optimal 40–70%). Ensure room is well-ventilated – but without draughts! Do not apply varnish too thickly. For 2C coatings, use the correct ratio of coating to curing agent (weigh out).</p> <p>How to remedy: Increase room temperature slowly and ensure good ventilation (without draughts).</p>	<p>Brush marks</p> <p>Cause: Varnish has been applied unevenly. Poor workmanship can result in another coat of varnish being applied to already dry areas. Temperatures too high (> +25°C).</p> <p>How to avoid: Apply varnish evenly, avoid brush marks by always applying "wet to wet". For large areas, always work as part of a team. Do not coat floors at temperatures above +25°C (tip: work early in the morning). Switch off underfloor heating well in advance of coating work.</p> <p>How to remedy: Sand the entire floor down to the wood and seal again.</p>

<p>Varnish surface starts to soften</p> <p>Cause: The plasticiser from a carpet backing (e.g.) has migrated into the varnish coat, softening it.</p> <p>How to avoid: If carpets with PVC backing are going to be laid on the parquet floor, play it safe and use a 2C parquet varnish.</p> <p>How to remedy: Sand down the entire floor and seal again.</p>
<p>Blistering</p> <p>Cause: Direct sunlight, draughts or high temperatures (especially in summer).</p> <p>How to avoid: Lower blinds to avoid the coating being exposed to direct sunlight. Do not coat floors at temperatures above +25°C (tip: only work early in the morning). Underfloor heating must be switched off well in advance of coating work.</p> <p>How to remedy: Sand the surface down using 150-grit paper to remove blisters and then apply a new coat of varnish.</p>
<p>Banding in wood</p> <p>Cause: Sanding errors in wood, which result in dark discolorations.</p> <p>How to avoid: The final sanding of the wood floor must be performed very carefully. For water-based varnishes, a graded wood finish with a 120-grit final sand is necessary (see also our sanding guidance from p. 14 onwards).</p> <p>How to remedy: Sand the entire floor down to the wood and seal again.</p>
<p>Cumulative shrinkage (rafting)</p> <p>Cause: High relative humidity while laying parquet; the wood's moisture content was too high during coating (should be max. 5–15%). Low relative humidity and/or high temperature: the wood releases its moisture and shrinks. Varnish in the gaps has edge-bonded boards together.</p> <p>How to avoid: Only lay wood with a moisture content of 5–15%. Prevent sudden changes to the indoor climate. Use of a humidifier is recommended! Use a specialised wood primer to reduce the incidence of edge bonding.</p> <p>How to remedy: Sand the entire floor down to the wood, fill the gaps and seal again.</p>

For oiled floors:

<p>Shiny/sticky areas</p> <p>Cause: The oil has not been absorbed fully and has therefore dried onto the surface.</p> <p>How to avoid: Remove the oil after the indicated amount of time and rub down with a cloth as an extra precaution.</p> <p>How to remedy: Sand down the entire floor and oil again.</p>
<p>Spotting</p> <p>Cause: Uneven wood sanding causes variations in the quality of oil absorption.</p> <p>How to avoid: The final sanding of the wood floor must be performed both carefully and evenly. For oiling, a graded wood finish with a 180-grit final sand is necessary (see also our sanding guidance from p. 14 onwards).</p> <p>How to remedy: Sand the entire floor back down to the bare wood and oil again.</p>
<p>Poor water resistance</p> <p>Cause: Not enough oil has been applied to the wood.</p> <p>How to avoid: The wood floor must be oiled until no more oil is absorbed and oil starts to "sit" on the surface. If the oil film starts to sag during the waiting time, more oil must be applied to this area. After the waiting time, ensure all excess oil has been properly removed.</p> <p>How to remedy: Sand the floor to key up the surface and oil again until saturated.</p>
<p>Foot traffic wear</p> <p>Cause: Oil application was inadequate, unprofessional care and cleaning.</p> <p>How to avoid: Wood can handle heavy foot traffic over a prolonged period only if it has been properly saturated. The oiled floor must be cleaned regularly using Nature Parquet Cleaner for oiled surfaces (approx. every 2–3 weeks) and, depending on the amount of traffic, freshened up every 2–3 months with Nature Parquet Care for oiled surfaces. Depending on the amount of wear, the floor should also be re-oiled every 1–2 years.</p> <p>How to remedy: Sand the entire floor back down to the bare wood and oil again.</p>

Preparation

The final finish given to the surface of a parquet floor is what really makes it stand out: it shows off the true beauty of the wood while making it easy to care for and hygienically clean.

However, a certain amount of preparation is required before you start to varnish or oil your wood or cork floor. The first step is to clear the entire room, before sanding the floor down and applying any coats of primer that might be necessary.

Sanding	16–19
Filling	20–21
Priming	22–23



Sanding

Filling

Priming

Sanding

All floors must be sanded down before a sealing coat is applied. With new flooring, this sanding will even out height differences between the strips of wood. For old floors, this process removes soiling and care product residues while sanding off any wear from foot traffic. Even for restoration work, we therefore recommend sanding right down to the bare wood. To ensure an optimum result is achieved, multiple sanding steps are required, each with a different grade (grit) of sandpaper. The exact number will depend on the degree of unevenness or soiling.

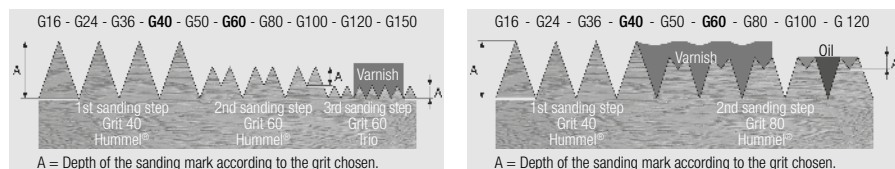
For further information about sanding parquet flooring, please consult the detailed sanding manual provided online by Laegler (www.laegler.com).

Going through the grits

Achieving an optimum sanding result is crucially dependent on the right sequence of abrasive grit sizes, known as the "grit sequence". This grit sequence and the number of sanding steps will depend on the size and number of protrusions between the individual wood elements, the degree of soiling and the unevenness of the wood flooring.

Pre-sanding

When pre-sanding with the HUMMEL®, one grit number can usually be skipped, but no more – since otherwise the removal of sanding marks from the previous grit number is impossible, or possible only with a major investment of time and material consumption. To keep sanding marks to a minimum, the first sanding step should be performed with as high a grit number as possible. This approach makes it easier to skip a sanding step, which not only improves workmanship but also reduces working time and material consumption.



Varnished surface if grit sequence chosen correctly

Defective varnished/oiled surface if wrong grit sequence chosen

Final sanding

When using the TRIO for the finish, it makes sense not to skip any grit numbers. Since high grit numbers only take off a little material, the sanding marks from the previous sanding steps won't be particularly coarse. If you do need to remove rougher sanding marks, the previous sanding step will need to be repeated.

Sanding

Filling

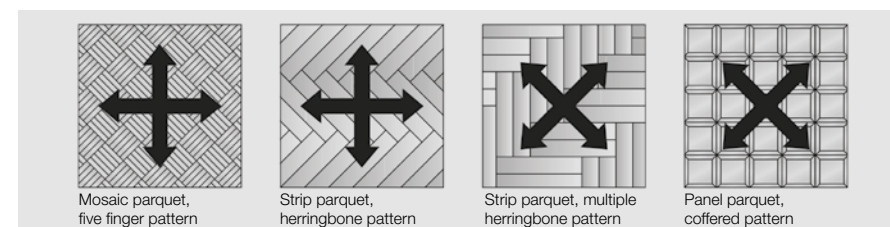
Priming

Special notes

For hardwoods, less material is removed by sanding than from softwoods: accordingly, deeper sanding marks will require greater effort to remove. For very hard woods, such as some tropical species, it may therefore be advisable to choose a higher grit number than for softer woods from the outset. Sanding will be more effective if one or more steps are performed in a cross-wide direction.

Parquet types and fitting patterns with the same sanding direction

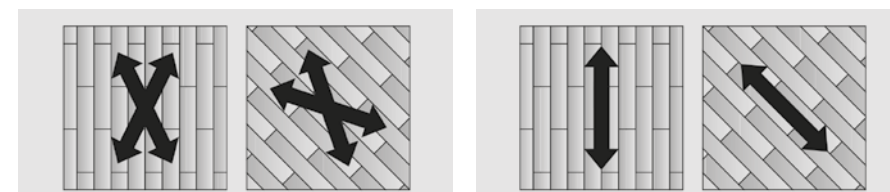
For the parquet types and fitting patterns shown in the figure, all sanding steps in pre-sanding and final sanding must be performed at an angle of 45° to the direction of the wood grain. This avoids gouging the surface.



Sanding at 15–45° to direction of wood grain for all sanding steps.

Sanding directions for strip parquet and floor boards without cupping

For strip parquet laid longitudinally or floor boards, all sanding steps, except the final sand, must be performed at an angle of 15–45° to the direction of the wood grain. The more uneven the floor, the larger the angle should be to the direction of the wood grain. Exception: floor boards with excessive cupping. The last sanding step is then performed with the wood grain



Sanding at 15–45° to direction of wood grain for first to last-but-one sanding step.

Sanding direction parallel to wood grain for the last sanding step.



Note:

- For oiled surfaces, choosing the right grit sequence is even more important than for varnished surfaces, since even the finest sanding marks can negatively affect the final appearance. Also remember to always thoroughly vacuum off the surface and expansion gaps directly after completing each sanding step!
- These are excerpts from the sanding manual from Laegler. For more information and the complete manual, please visit www.laegler.com/downloads.

Sanding

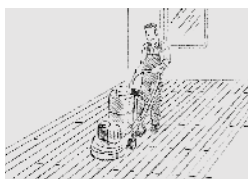
Filling

Priming



1. After completing preparatory work, coarse sand the floor in several steps (for grit size, see table on page 16). Always start on the left of the room. Switch the machine on and move it slowly forwards (for drum sanding machines, make sure you lower the sanding drum carefully onto the floor). Keep to the sanding direction shown in the diagrams on page 17!

When sanding backwards, always take the same path as sanding forwards. For drum sanders, always lift the drum when switching between forwards and backwards motion! Sand the next strip so that it overlaps with the previous strip sanded. Also stagger the starting position from sanding step to sanding step. The first complete sanding should remove all protrusions and soiling from the floor. If this is not the case, then the floor must be sanded again with the same grit, but rotated by 90°. Continue with step 2.



2. After step 1, about a metre of parquet is left unsanded in the area near the wall behind you. This area now needs to be sanded in the opposite direction. Sand so as to create a seamless border between the two areas that is invisible after oiling or varnishing.

Ideally, this area should be opposite the window facade (incident light). If this is not possible, please continue with step 3, otherwise proceed to step 4.



3. If there are any visible sanding marks between areas (turning points, etc.) from step 2, these must be corrected by hand. Perform all hand sanding in the direction of the original sanding. Continue with step 4.

4. Now use the edge sanding machine to sand down the edge areas. Start with the grit size from step 1 and work using a circular motion without excessive pressure. Then move to the next higher grit size (as described in the table on page 16). Vacuum the floor thoroughly between sanding steps.



5. Intermediate sanding should now be completed, again rotated at 90° to the previous sanding step. Please proceed as described in steps 1 to 4.

Caution: Keep the sanding dust to mix with the Parquet joint filler Aqualit A-PJF100! Before starting final sanding, vacuum the floor thoroughly to remove all dust.

Sanding

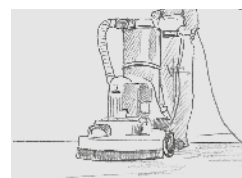
Filling

Priming



6. Before starting the final sand, you must ensure all cracks and gaps are filled (see pp. 20–21). Note: ensure the joint filler is completely dry before sanding!

Caution: If any joint filler on the surface cannot be removed with the finest grit size, the area must be sanded down again with the grit size used for intermediate sanding. You can now perform the final sand (for grit size, see table on page 16). Work in the direction of the grain towards the light source, as described in step 1.



7. Now use the edge sanding machine to sand down the edge areas.



8. To exclude any possibility of visible borders between sanding steps, we recommend finishing the floor surface with a disc sander. After vacuuming, the floor is then perfectly prepared for varnishing or oiling.

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Tips:

- Don't stay in one place too long with the sander and don't switch directions if it is still running. Failure to do so can cause deep sanding marks or even singe the wood – and these marks are very hard to sand off again. Before stopping at the end of a sanding step, slowly raise the sanding drum or sanding disc from the floor.
- The best results are achieved by planning your sanding “paths” along the floor. Keep to the grit sequence where possible! Substandard sanding results cannot be corrected by the surface finish.
- Empty the sander's dust bag regularly before it starts to reach maximum capacity: this will keep suction power as high as possible. Don't throw away the sanding dust, however: keep it for adding to the Parquet joint filler Aqualit A-PJF100 later.
- A delta sander (triangle sander) is an excellent choice for difficult-to-reach places such as corners or the area around radiators, etc.

Sanding

Filling

Priming

Parquet joint filler Aqualit A-PJF100

- Seals gaps and holes
- Reduces the risk of edge bonding
- For mixing with wood flour
- Simple to apply
- Fast-drying
- Easy to sand down



Cracks and gaps are created by fluctuations in temperature and relative humidity in the room. Often, these are only visible after sanding. Sealing cracks and gaps is the best way to stop sagging in the final topcoat. At the same time, this also minimises the risk of edge bonding (see diagrams on page 22).

For this step, it is essential that the mixture of joint filler solution and wood flour is prepared correctly. If the filler mix is too thin, it will drip and is more likely to edge bond the boards; if it is too thick, it can be stripped out of the gaps during sanding.



Available in 5 litre and 1 litre containers.

Sanding

Filling

Priming

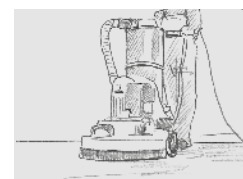


1. After intermediate sanding (step 5 on page 19), any cracks and gaps present in the floor must be closed using the Parquet joint filler Aqualit A-PJF100. Start by selecting a clean, empty container. Now mix the Parquet joint filler Aqualit A-PJF100 with the wood flour (dust) from intermediate sanding in a ratio of 2:1 to 5:1 (depending on wood type). Ensure that the joint filler is neither too thick nor too thin.

Caution: While the filler is being worked, evaporation can change its consistency. If the filler starts to thicken, add joint filler liquid as necessary.



2. To ensure that all gaps and cracks are properly sealed, use a broad, flat (stainless!) steel palette knife to spread the filler evenly over the entire floor.
3. After the drying time of approx. 45 minutes (can also be longer, depending on temperature and relative humidity in the room), any larger cracks or gaps that show sagging must now be refilled as appropriate.



4. Before starting the final sand, you must ensure all cracks and gaps are filled. Note: ensure the joint filler is completely dry before sanding! **Caution:** If any joint filler on the surface cannot be removed with the finest grit size, the area must be sanded down again with the grit size used for intermediate sanding. You can now perform the final sand (for grit size, see table on page 16). Work in the direction of the grain towards the light source, as described in step 1.



5. Now use the edge sanding machine to sand down the edge areas (for grit size, see table on page 16 for final sanding). To exclude any possibility of visible borders between sanding steps, we recommend finishing the floor surface with a disc sander. After vacuuming, the floor is then perfectly prepared for varnishing or oiling.



Tips:

- Ensure that lumps of filler do not dry onto the floor's surface! These kind of lumps will be very hard to sand off again. Any areas not sanded off will also lead to discoloration in the topcoat. Always scrape the surface clean with the palette knife and sand down well after drying.
- Do not use joint filler on old wood floors with oversized gaps – such as simple floor boards. This also applies to wood floors laid over an elastic subfloor – such as floors used for sports. Filler used here will eventually crack and fall out.

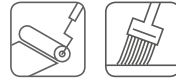
Sanding

Filling

Priming

Parquet sealer Aqualit A-PS130

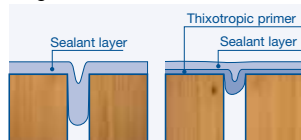
- For Aqualit parquet varnishes
- Reduces the risk of edge bonding
- Minimises wood discoloration
- Simple to apply
- Fast-drying
- Easy to sand down



Before applying a water-based sealant, the floor should be painted with a special parquet primer. This reduces the risk of wood discoloration. Note: do not use this primer on surfaces that have been stained! For these surfaces, coat directly with Aqualit parquet varnish. As Parquet sealer Aqualit A-PS130 does not penetrate deeply into gaps in the parquet, it is less likely to stick boards together. This reduces the risk of edge bonding (see diagram 1). If temperatures and relative humidity fluctuate, edge bonding will lead to irregular gaps ("rafting") between boards (see diagram 2).

Another good approach to avoiding edge bonding is simply to close the gaps with AkzoNobel Wood Coatings Parquet joint filler Aqualit A-PJF100.

Diagram 1



Sealant layer with and without primer

Diagram 2



Irregular gaps formed due to edge bonding



For details of relevant standards, see page 34.

Available in 5 litre and 1 litre containers.

Sanding

Filling

Priming

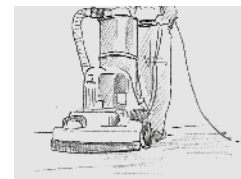


1. Before you apply the sealing coat, you need to remove the dust produced by sanding. Dust off picture frames, window sills, door frames, etc. and then vacuum the floor thoroughly. Then wipe down the floor with a clean, damp cloth (moist only, not dripping).

Caution: Take care to ensure that your shoes are clean, with no splinters, etc. sticking in the soles.



2. Now apply the parquet primer, using as thin a coat as possible. Apply with a special roller (pile height 2–5 mm) or a whitewash brush for water-based varnishes. Don't simply tip the primer onto the wood but use a paint tray or something similar. Leaving the primer on the wood for too long can cause discoloration! Work away from the light, to ensure that you can spot errors in the sealant immediately and correct them before the primer dries out. Work in a "path" about 1.5 m wide, using only moderate pressure – first at 90° and then parallel to the grain. Ensure the next path overlaps with the last within 5 minutes, to avoid creating visible brush marks. Use a paintbrush to work on hard-to-reach areas. Clean working utensils thoroughly with water and stow away in an air-tight container (e.g. plastic bag) for further use.



3. After a drying time of about 60–90 minutes, the sealed floor can then be sanded down. To do so, use a disc sander, starting with 150-grit abrasive discs and finishing with brown (fine) abrasive pads. Sand to an even finish using only moderate pressure (don't wear away the primer). The entire floor should now have a matt finish. Vacuum off the floor and wipe it down with a tack cloth. You can now apply a coat of 1K Parquet top coat Aqualit A-PT230-20 or 2K Parquet top coat Aqualit A-PT260-20 (for details, see pp. 28–29). Continue with step 2/3 on page 28.

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Tips:

- If the room is fairly large, consider working in a team of two or more to ensure that brush marks are not created by varnish drying out between overlaps.
- Good air exchange will accelerate the drying of the varnish. Take care to avoid draughts, however, as otherwise the surface will harden too quickly, creating unsightly ripples. (Use draught stoppers on doors!)
- Varnishing is not recommended at extreme summer temperatures of over +25°C, since rapid drying can lead to rippling, brush marks or air bubbles being trapped under the varnish coat. Work early in the morning – and keep window blinds rolled down!

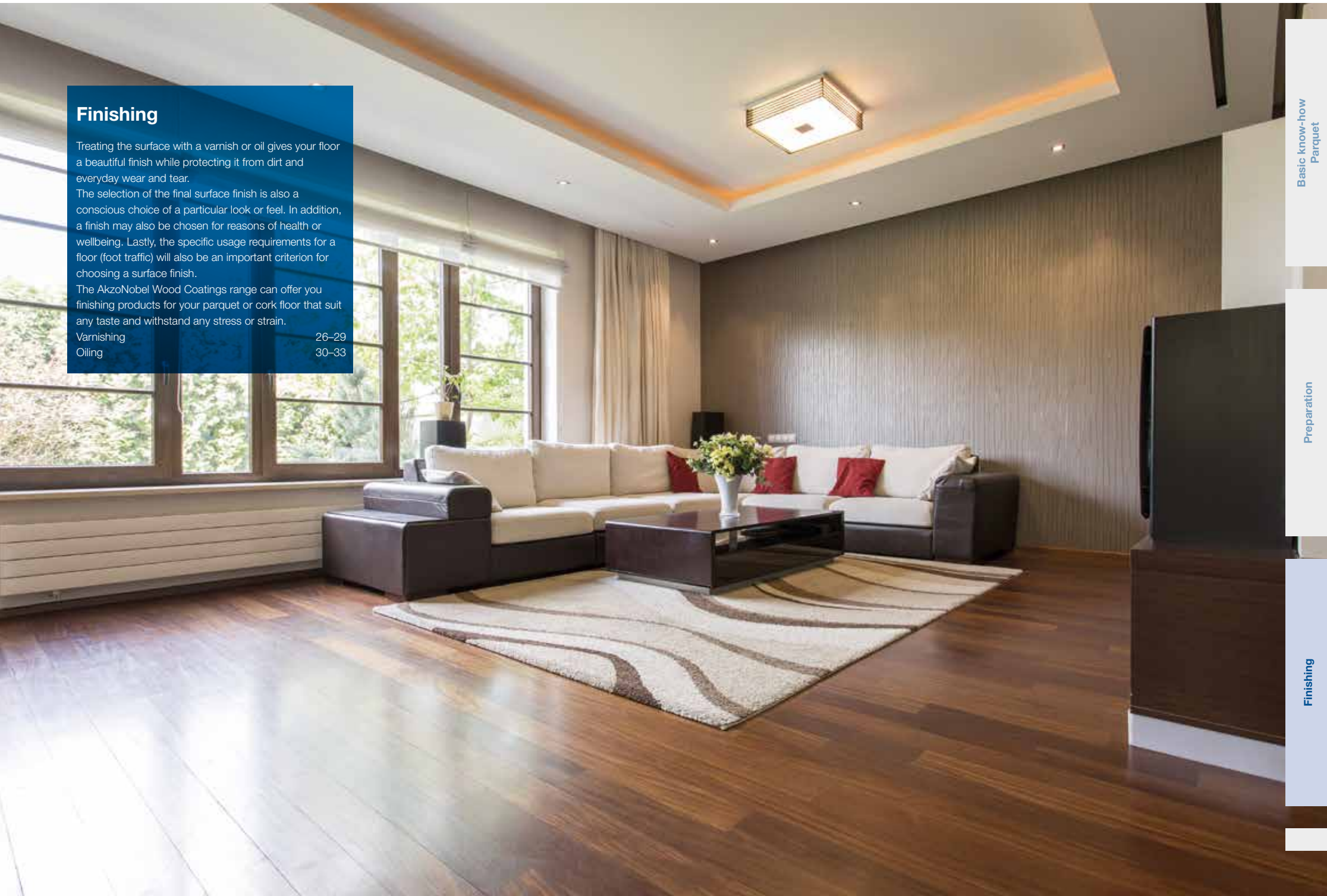
Finishing

Treating the surface with a varnish or oil gives your floor a beautiful finish while protecting it from dirt and everyday wear and tear.

The selection of the final surface finish is also a conscious choice of a particular look or feel. In addition, a finish may also be chosen for reasons of health or wellbeing. Lastly, the specific usage requirements for a floor (foot traffic) will also be an important criterion for choosing a surface finish.

The AkzoNobel Wood Coatings range can offer you finishing products for your parquet or cork floor that suit any taste and withstand any stress or strain.

Varnishing	26–29
Oiling	30–33

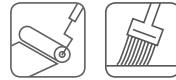


Varnishing

Oiling

1K Parquet top coat Aqualit A-PT230-20

- For cork, parquet, wood staircases and furniture
- Suitable for residential use
- Good hardness and scratch resistance
- High abrasion resistance
- Easy to work
- Fast-drying



AkzoNobel Wood Coatings parquet varnishes put the finishing touches to your parquet or cork floor after priming with Aqualit Parquet Primer. The varnish layer provides the floor with a tough topcoat that protects it from wear and tear while also increasing its visual appeal. Whether you choose matt or satin, 1K Parquet top coat Aqualit A-PT230-20 can be used to finish not just residential floors but also wood staircases, since it can be assumed that these surfaces will be walked on in slippers or stocking feet. Note: wood that has been thermally or chemically treated cannot be finished with Aqualit parquet varnishes!



For details of relevant standards, see page 34.

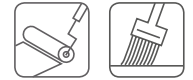
Available in 5 litre and 1 litre containers.

Varnishing

Oiling

2K Parquet top coat Aqualit A-PT260-20

- For cork, parquet, wood staircases and furniture
- Suitable for commercial use
- Very good hardness and scratch resistance
- Extremely high abrasion resistance
- Fast-drying
- Must be used with a curing agent
- Mix 20:1 with PWH 3200 PUR water-based varnish curing agent



AkzoNobel Wood Coatings parquet varnishes put the finishing touches to your parquet or cork floor after priming with Aqualit Parquet Primer. The varnish layer provides the floor with a tough topcoat that protects it from wear and tear while also increasing its visual appeal. 2K Parquet top coat Aqualit A-PT260-20 can be used to finish both floors and wood staircases in residential and commercial properties that are exposed to greater wear and tear. Note: wood that has been thermally or chemically treated cannot be finished with 2K Parquet top coat Aqualit A-PT260-20es!



Note:

- 2K Parquet top coat Aqualit A-PT260-20 is available to trade customers only.



For details of relevant standards, see page 34.

Available in 5 litre and 1 litre containers.

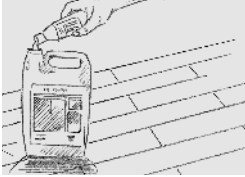
Varnishing

Oiling



- 1.** Before you apply the sealing coat, you need to remove the dust produced by sanding. Dust off picture frames, window sills, door frames, etc. and then vacuum the floor thoroughly. Then wipe down the floor with a clean, damp cloth (moist only, not dripping).

Caution: Take care to ensure that your shoes are clean, with no splinters, etc. sticking in the soles.



- 2.** If you have decided to provide your floor with a hard-wearing 2K Parquet top coat Aqualit A-PT260-20 topcoat, you must first mix the varnish with curing agent before starting work. To do so, create a 20:1 mix by adding the complete contents of the curing agent bottle to the container, then close and shake it for at least 15 seconds. Then let the container stand for 5 minutes to let any trapped air escape. Note: the container must not be re-sealed after the curing agent has been added! Always mix the right amount of varnish that you need for the coating job in question: use a separate container if necessary. Leave residues to harden in the container. Note: you have only 2 hours to complete work with 2K Parquet top coat Aqualit A-PT260-20 after mixing!



- 3.** You can now use 1K Parquet top coat Aqualit A-PT230-20 or 2K Parquet top coat Aqualit A-PT260-20 to apply the first topcoat. With 2K Parquet top coat Aqualit A-PT260-20, you must first mix the varnish with curing agent before starting work. Apply with a special roller (pile height 2–5 mm) or a whitewash brush for water-based varnishes. Don't simply tip the varnish onto the primed wood surface but use a paint tray or something similar. Work calmly, so as to keep the amount of air trapped in the varnish to the absolute minimum. Work away from the light, to ensure that you can spot errors in the sealant immediately and correct them before the primer dries out. Work in a "path" about 1.5 m wide, using only moderate pressure – first at 90° and then parallel to the grain. Ensure the next path overlaps with the last within 5 minutes, to avoid creating visible brush marks. Use a paintbrush to work on hard-to-reach areas. Clean working utensils thoroughly with water and stow away for further use in an air-tight container (e.g. plastic bag).

Varnishing

Oiling



- 4.** After a drying time of about 4–6 hours, the sealed floor can then be sanded down. To do so, use a disc sander fitted with 150-grit abrasive discs. Always use new sandpaper! Vacuum off the floor and wipe it down with a tack cloth. The floor should have an even, matt finish. If this is not the case for any areas, these must be re-sanded, so as to "key" the surface for the next coat of varnish.



- 5.** You can now apply a second coat of 1K Parquet top coat Aqualit A-PT230-20 or 2K Parquet top coat Aqualit A-PT260-20 (as described in steps 3 and 4). Do not apply more than two coats (including primer) per day, however, since the excessive coating thickness will slow down drying times. If the floor has not been primed before coating with Parquet sealer Aqualit A-PS130, then the floor must be given a third coat of varnish – and a fourth coat for non-residential floors (as in steps 3 and 4).

i

Tips:

- If the room is fairly large, consider working in a team of two or more to ensure that brush marks are not created by varnish drying out between overlaps.
- Good air exchange will accelerate the drying of the varnish. Take care to avoid draughts, however, as otherwise the surface will harden too quickly, creating unsightly ripples. (Use draught stoppers on doors!)
- Varnishing is not recommended at extreme summer temperatures of over +25°C, since rapid drying can lead to rippling, brush marks or air bubbles being trapped under the varnish coat. Work early in the morning – and keep window blinds rolled down!
- Do not cover the floor with any porous material or apply any adhesive masking tape!
- After applying the last coat, avoid all traffic on the surface for at least eight hours. Wait at least 24 hours before placing furniture on the floor and wait one week before laying rugs. Use felt pads underneath furniture – do not use PVC castor cups! Wait at least one month before cleaning with water and Aqualit Parquet Cleaner.

Varnishing

Oiling

Industrial oil Nature N-IO750

- For cork, parquet, wood staircases and furniture
- Suitable for residential and commercial use
- Wax ingredients provide a satin shine
- Contains no allergenic terpenes
- Easy to work
- Fast-drying



Oiling gives your parquet/cork flooring or staircases a luxurious finish. The oil penetrates deep into the wood, to protect it from within (impregnation). The major advantage of oiling is that the wood stays porous (permeable to vapour). This means that the wood can absorb excess moisture from humid air and release it back into the room as needed – so as to ensure an optimum indoor climate. Industrial oil Nature N-IO750 can be used to finish both floors and staircases in residential and commercial properties that are exposed to greater wear and tear. However, note that regular cleaning, maintenance and timely re-oiling will also be required!

Material required:

5 l are enough for 40–75 m² per oiling step (2–3 recommended) and 0.75 l is enough for approx. 6–11 m² per oiling step (2–3 recommended), depending on wood absorbency.

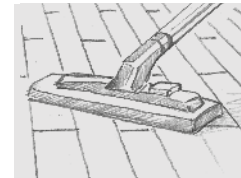


For details of relevant standards, see page 34.

Available in a 5 litre and 750 ml container.

Varnishing

Oiling



1. Before you start oiling, you need to remove the dust produced by sanding. Dust off picture frames, window sills, door frames, etc. and then vacuum the floor thoroughly. Then wipe down the floor with a clean, damp cloth (moist only, not dripping).

Caution: You can (and probably will need to) walk on the oil-soaked floor. You should therefore tie clean cotton cloths, for example, over your shoes.



2. Apply the Industrial oil Nature N-IO750 with an oil-resistant roller or a paintbrush to create an even coat of wet oil. Oil absorption rates will depend on the type of wood. Re-apply oil immediately to any places where the wood appears dry. Continue to do so until the oil stays on the surface as an even film. Start by working away from the light, so you can immediately see where the wood is absorbing oil more quickly and needs re-oiling. Work in a “path” about 1.5 m wide, from left to right and using only moderate pressure.



3. After a waiting time of about 30 minutes, any oil remaining on the surface must be completely removed. The best tool for this job is a rubber or foam rubber squeegee. Mop up the collected pools of oil with a cotton cloth.



4. The remaining oil is now worked in by hand with a cloth or with a single-disc machine (using a white or green pad) until the surface appears completely dry.

Caution: Absolutely no oil film must be visible on the surface! Leave to dry overnight and then repeat steps 2 to 4. Depending on the absorbency of the wood and future foot traffic it may require a third oiling step (see steps 2 to 4).

i

Tips:

- If the room is fairly large, consider working in a team of two or more to ensure that any dry areas can be immediately re-oiled as necessary.
- Good air exchange will accelerate drying. Take care to avoid draughts, however, as otherwise the oil will dry too fast, leading to poor absorption. (Use draught stoppers on doors!)
- If you want to use the roller or paintbrush for the next application of oil, you must carefully rinse these off using white spirit or turpentine substitute.
- Do not cover the floor with any porous material or apply any adhesive masking tape!
- After applying the last coat, avoid all traffic on the surface for at least eight hours. Wait at least 24 hours before placing furniture on the floor and wait one week before laying rugs. Use felt pads underneath furniture – do not use PVC castor cups! Wait at least 8–10 days before cleaning with water and Nature Parquet Cleaner.

Varnishing

Oiling

Waxoil Nature N-WO780

- For all interior wood surfaces
- Also for cork, parquet and wood staircases
- Wax ingredients provide a satin shine
- Easy to work
- Fast-drying
- Highly moisture-repellent
- Suitable for use in rooms with high humidity
- Contains no allergenic terpenes



Waxoil Nature N-WO780 is a surface protection product with a natural wood appearance (does not accentuate grain/texture) based on high-quality oils and waxes. It has good filling properties, excellent absorbency and gives the surface a premium appearance combined with an especially pleasant, natural haptic appeal. It is easy to work with, moisture-repellent, hard-wearing and can be applied to any interior wood surface. Waxoil Nature N-WO780 contains no toxic substances or allergenic terpenes (e.g. citrus terpenes, balsam turpentine, etc.). It consists of non-aromatic hydrocarbons, sunflower oil, rapeseed oil, safflower oil, soy oil, shellac wax, candelilla wax, carnauba wax, microcrystalline wax and lead-free dry matter (see section "Health and safety").

Working instructions:

0.75 l is enough for approx. 7.5–15 m² per oiling step (2–3 recommended). Accordingly, 5 l are enough for an area of approx. 50–100 m² per oiling step (2–3 recommended), depending on the absorbency of the wood. Shake and/or mix thoroughly before use! Working temperature: max. 45°C.

Shelf life:

24 months in sealed original packing. Keep between +10°C and +30°C for storage and transportation.

Frost-sensitive!

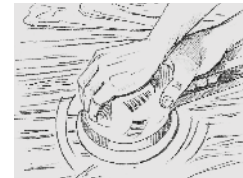


For details of relevant standards, see page 34.

Available in a 5 litre and 0.75 litre container.

Varnishing

Oiling



1. Before you start oiling, you need to sand down the surface as described in chapter 2 (preparation). Then vacuum off the surface to remove wood dust.



2. Shake or stir the oil thoroughly before use. Apply the oil with an oil-resistant paintbrush or roller evenly to create a wet, saturated film on the wood. Oil absorption rates will depend on the type of wood. Re-apply oil immediately to any places where the wood appears dry. This step must be repeated until the oil remains on the surface as an even film. Start by working away from the light, so you can immediately see where the wood is absorbing oil more quickly and needs re-oiling.



3. After a waiting time of about 10–15 minutes, any excess oil must be completely removed. To do so, scrape the surface off with a clean, colourfast squeegee or window wiper. (Absolutely no oil film must be visible on the surface!)



4. Leave to dry overnight and then perform an intermediate sanding step (320/400-grit or a fine sanding sponge). Now apply a second, thin coat of the oil, and then polish the surface using a random orbit sander with a white pad.

Caution: For surfaces subject to heavy wear and tear (e.g. in bathrooms), more than 2 coats will be needed.

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Tips:

- For the second coat of oil, one option is to spread the oil in a thin and even coat with a paintbrush and then leave it in a film on the floor surface. This creates a more hard-wearing protective coat. When spreading the oil with the brush, dab the brush off on a cloth now and again to ensure any excess oil can be taken up properly. This is especially recommended for vertical surfaces.
- If you want to use the roller or paintbrush for the next application of oil, you must carefully rinse these off using white spirit or turpentine substitute. (If you want to use the exact same product again later, then you can also stow the brush or roller away in an airtight plastic bag.)

Application



Spraying High/low pressure



Sponge /bale of cloth



Brush



Spatula



Roller

Certifications



Flame resistance according to DIN 4102 B1 or EN 13501-1



Chemical resistance DIN 68861-1B or 1C



Preventive Fire protection in Railway Vehicles DIN 5510 Part 2



Abrasion resistance DIN 68861 Part 2



Children toys EN 71-3



Controlled indoor air pollution, low Emission

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