SELDER & COMPANY AB WORK MANUAL FOR PRIMER OIL

READ CAREFULLY FOR A GOOD RESULT.

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WOOD CAN BE PROTECTED WITH PRIMER OIL IN SEVERAL WAYS

The most basic treatment gives surface protection. With the more demanding methods, the oil penetrates deeper into the wood.

Using the Selder method in an autoclave - a pressure vessel - even whitewood of thick dimensions can be impregnated all the way to the core with varying pressure and temperature in an autoclave according to the Selder method that we have developed. Ask us about suppliers of such timber.

SURFACE TREATMENT WITH OIL AT ROOM TEMPERATURE

The treatment provides surface protection against dust and dirt indoors and seals the surface before painting with Selder linseed oil paints.

Clean the surface, the treatment makes stains permanent.

If necessary, sand the surface with a sanding net of at least #180. A coarser net makes marks that the oil cannot fill as it acts inside the wood. For a non-slip surface, you can use a net down to #80.

Apply PRIMER OIL liberally with a brush on dry wood. Spread from places that are saturated to places that still absorb oil. Apply and spread until the entire surface is saturated. The oil penetrates a few tenths of a mm into sound wood.

NOTE: Cracked and very porous wood, especially pressure impregnated wood, absorbs PRIMER OIL at room temperature at depth.

Wash brushes, tools and utensils with strong soft soap.

Wipe off: After 1-2 hours, thoroughly wipe off any oil remaining on the surface, otherwise it forms a sticky skin.

Allow time to oxidize: At 20 °C / 68 °F and with good ventilation, the oil dries within a day. It dries by oxidation and the drying time depends on 1. the oxygen supply and 2. the temperature. In wind and solar heat, the surface can become touch-dry in a few hours - in a cool garage with poor ventilation it can take up to a week.

IMPREGNATION WITH 130 °C / 266 °F WARM PRIMER OIL AND A BRUSH

Protects wood against moisture and rot, improves its dimensional stability and bending strength.

Clean the surface, the treatment makes stains permanent.

If necessary, sand the surface with a sanding net of least #180. A coarser net makes marks that the oil cannot fill as it acts inside the wood. For a non-slip surface, you can use a net down to #80.

For 1-1.5 mm penetration

Heat PRIMER OIL to 130 °C / 266 °F, preferably in a deep fryer.

Apply liberally with a natural bristle brush – synthetic bristles melt at these temperatures. **Spread** from places that are saturated to places that still absorb oil. Apply and spread until the entire surface is saturated.

NOTE: Use the thicker LINSEED VARNISH OIL for pressure impregnated and other especially porous wood. Such wood absorbs unnecessarily large quantities of the thinner PRIMER OIL.

For 2-3 mm penetration

Heat the surface with a hot air blower or an IR heater while working.

When treating wood at 130 °C / 266 °F with PRIMER OIL, moisture in the wood evaporates, and the pressure from the steam, which is generated in the cell cavities and exits through the bordered pits, opens them outward - they do not open inward. You can see small steam bubbles on the surface when you apply warm PRIMER OIL.

You can safely work with PRIMER OIL at $130 \,^{\circ}\text{C}$ / $266 \,^{\circ}\text{F}$ - it will neither burn nor fume. Its boiling point is $300 \,^{\circ}\text{C}$ / $572 \,^{\circ}\text{F}$, and it will start to exude a white, sharply smelling steam at $180 \,^{\circ}\text{C}$ / $356 \,^{\circ}\text{F}$. At $130 \,^{\circ}\text{C}$ / $266 \,^{\circ}\text{F}$, it will only emit a smell of linseed oil.

For a half-sheen surface

Sand in the oil that remains on the surface, first with #120, then with #320.

Wash brushes, tools and utensils with strong soft soap.

Wipe off: After 20-30 minutes, thoroughly wipe off any oil remaining on the surface, otherwise it forms a sticky skin.

Allow time to oxidize: At 20 °C / 68 °F and with good ventilation, the oil dries within a day. It dries by oxidation and the drying time depends on 1. the oxygen supply and 2. the

temperature. In wind and solar heat, the surface can become touch-dry in a few hours - in a cool garage with poor ventilation it can take a week.

FOR A GLOSSY SURFACE

Oil-polish the oxidized oil sanded surface with LINSEED VARNISH OIL. Consult its work manual.

DEEP IMPREGNATION OF END WOOD

Heat PRIMER OIL to 130 °C / 266 °F, preferably in a deep fryer. Continue heating the oil. **Place** the workpieces vertically in the warm oil and leave them there until the bubbling of escaping steam has ceased. Then all the moisture in the wood has escaped, and the pressure from the escaping steam has opened the ring pores outward - they do not open inward. (The same happens when vacuum drying timber.)

Turn off the heat and let the temperature drop to 90 °C / 194 °F. The lower temperature causes a negative pressure and oil is sucked into the wood. Half an hour is enough for oil to be absorbed 5-6 cm/ 2-2.5" into the end wood. Too long an absorption time leads to the cells' cavities being filled with oil, where it does no good, but only prevents the supply of oxygen and thus the drying of the oil.

Lift the workpieces up and let them cool.

Wipe off: After 20-30 minutes, thoroughly wipe off any oil remaining on the surface, otherwise it forms a sticky skin.

Wash brushes, tools and utensils with strong soft soap.

Allow time to oxidize: At 20 °C / 68 °F and with good ventilation, the oil dries within a day. It dries by oxidation and the drying time depends on 1. the oxygen supply and 2. the temperature. In wind and solar heat, the surface can become touch-dry in a few hours in a cool garage with poor ventilation it can take a week.

MAINTENANCE

Sunlight will turn the surface grey. You can restore the original colour of the wood by rubbing a small amount of PRIMER OIL into the surface.

Oil treated surfaces can be washed with water and acidic or neutral detergents after the oil has dried.

NOTE: Do **NOT** clean the surface with alkaline detergents, such as STRONG SOFT SOAP. The oil reacts with alkali, causing the outer layer to dissolve. If this occurs, rub a small quantity of PRIMER OIL into the surface to restore it.

GENERAL

CONSUMPTION

About 1-2 dl/m². The main source of variation is the quantity of cracks and their properties.

NOTE: It is difficult to achieve an oil-polished surface on beech and birch. This is because these woods absorb lots of oil. The colour of oil treated beech and birch also varies and

the surface becomes mottled. This applies especially to boards of glued lamellas, the surface of which consists of different grains.



Oil treated board of glued lamellas of birch.

WORKER PROTECTION

Respiratory protection is not required. Provide good ventilation, especially when working with oil at 130 °C. The oil has low thermal conductivity and at this temperature does not cause burns in the event of spillage.

SAFETY

PRIMER OIL consists of oxidizing fatty acids that can ignite spontaneously.

Cloths and other porous materials moistened with PRIMER OIL must be soaked in water without delay. Oil treated surfaces do not ignite on their own. The danger concerns only fibrous materials.

The oil is indigestible. It dries in the digestive tract and causes diarrhea.

Metal objects burn when lifted from warm oil.