

Panel replacement guide for WISA® BONDED FLOOR

How to remove and replace a bonded WISA flooring panel

Here is what you need:

- Replacement WISA plywood flooring panel
- Betaseal™ 1580 adhesive by Dow Automotive
- Betaclean™ 3350 cleaner by Dow Automotive
- Betaprime™ 5504G primer by Dow Automotive
- PU-based sealant – e.g. Betamate™ 7120
- Rubber spacers, thickness 3 mm
- Panel cutting tool – e.g. circular saw, router or jigsaw tool
- Glue bead cutting tool – e.g. oscillating multi-tool or wire cutter
- Knife – e.g. a carpet knife – to cut the sealant
- Applicator gun to spread the glue and the sealant
- Cleaning cloth that does not shed lint or fibres

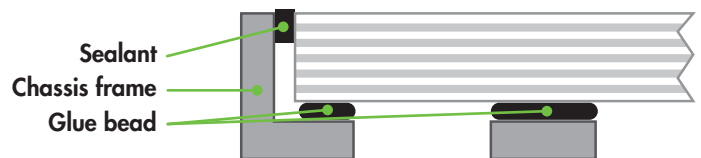
SAFETY FIRST!

Prepare yourself for the work with proper protective gear:

- Safety goggles
- Chemical resistant gloves
- Hearing protector
- Respirator against saw dust when cutting the panel
- Safety shoes – as the panel is heavy if you drop it on your foot!

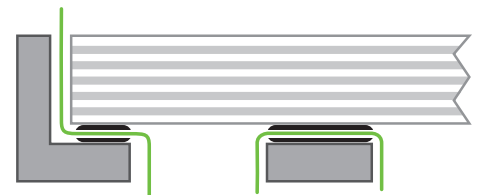
Replacing a WISA Bonded floor is simple; the method is similar to swapping a car windscreen. See the following steps on how it is done:

The starting point



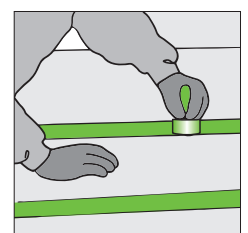
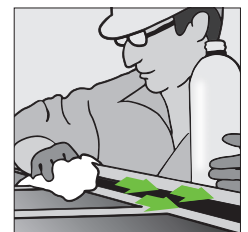
1. Remove the damaged panel

- Cut sealant with a knife.
- Cut the glue bead open from cross members and main beams with an oscillating multi-tool or wire cutter. You need to be underneath the trailer to use these tools.
- If cutting is not possible from underneath due to lack of space, cut the glue bead open with a router, circular saw or jigsaw tool from above.
 - Remember to adjust the blade so that it does not touch the steel frame of the chassis.
- Remove the panel.



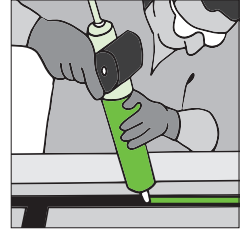
2. Prepare the chassis and panel for bonding

- Remove dirt and any residue of plywood from the frame with a suitable tool, such as an oscillating multi-tool.
- No need to remove the old glue completely.
- Clean the chassis and the replacement WISA plywood panel. Dampen the cloth first with **Betaclean 3350** and swipe the surfaces using parallel movements so that the dirt, once removed, does not return to the cleaned surface.
- Prime areas of the chassis and WISA plywood panel where the adhesive will be applied with **Betaprime 5504G**.
- Leave the primer to dry for 10 minutes.
- If the old glue line is cleaned off completely place the 3 mm thick rubber spacers on the chassis frame prior to installation of the plywood panel. This is to maintain the gap between the frame and the plywood. If an old glue line still remains on the frame, spacers are not needed.



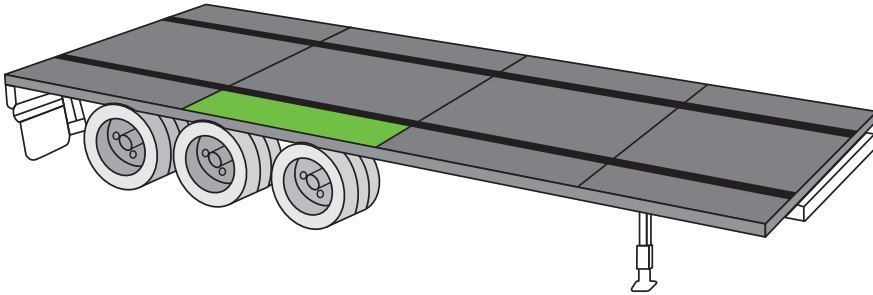
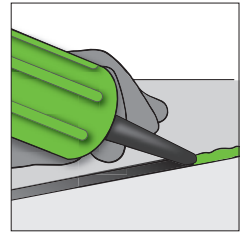
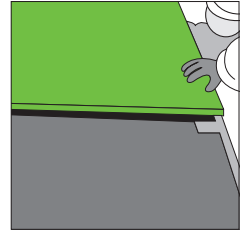
3. Glue the new WISA Bonded Floor panel on the chassis

- Spread the Betaseal 1580 adhesive on the chassis with an applicator gun.
- Place the panel on the chassis immediately after spreading the adhesive.



4. Fine-tune and finish the job

- Fill any gaps between the flooring panels as well as gaps between the panels and the chassis' steel frame with PU-based sealant to protect the panel against moisture.

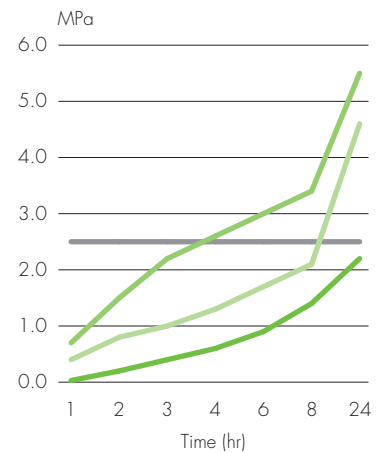


5. Let the newly bonded floor cure before use

The curing time of Betaseal 1580 depends on the temperature and humidity. See the chart for curing times in various conditions.

Lap shear strength over time in different work conditions

- Betaseal 1580 10°C/30% RH
- Betaseal 1580 23°C/50% RH
- Betaseal 1580 32°C/80% RH
- Target min.



Please follow the instructions on material safety and usage given by each material manufacturer.

RH = Relative humidity

WISA® Bonded Floor Solution



UPM Plywood

Niemenkatu 16
P.O. Box 203
FI-15141 Lahti
Finland
Tel. +358 204 15 113
Fax +358 204 15 112

www.wisaplywood.com
www.upm.com

The WISA Bonded Floor Solution replaces screws during installation of the trailer floor. This significantly simplifies the process and improves the whole trailer's strength and rigidity. This will also open up opportunities to redesign the entire trailer lighter than before. This means the trailer can carry more payload or reduce fuel consumption.

Eliminating the use of screws or other mechanical fixing by bonding the floor will ensure that cargo damage due to loose or poorly fitted screws is a thing of the past. The plywood panel is bonded structurally to the trailer chassis without screws.