

Recommendations for the installation of noraplan[®] nTx floor coverings in vehicles

An impeccable, dust-free and permanently dry subfloor is required for installation. The floor temperature must be at least 15 °C and the room temperature at least 18 °C, humidity below 75 %.

Even at temperatures above 30 °C, noraplan[®] nTx can be installed without any problems. It is important that the material has been acclimatised sufficiently.

If the subfloor exhibits one or more than one of the defects listed below, it is absolutely essential that these are eliminated prior to installation:

- Major unevenness
- Cracks in the surface of the subfloor
- Insufficiently dry subfloor
- Insufficiently firm subfloor
- Surface of the subfloor too porous or too rough
- Surface of the subfloor soiled, e. g. by oil, wax, paint residues
- Incorrect height of subfloor in relation to adjacent parts of the vehicle (level out joints, bores and connections)

The following conditions must be fulfilled:

- A permanent connection of the subfloor elements has to be ensured to avoid flooring separation or vibration cracks.
- When using nora[®] floor coverings to cover elements with external radii, e. g. wheel housings, heating elements etc., minimum radii of 3.5 cm must be ensured.
- In general, internal and external radii have to be glued additionally with nora[®] profix or stepfix.

Please make sure the material is properly stored on site:

noraplan[®] rolls have to be stored upright!



Important: Any defects must be reported immediately! Material defects which are visible prior to installation cannot be acknowledged when claimed after the installation.

When installing several rolls/tiles in the same vehicle/room, the floor covering must have identical batch numbers to avoid variations in colour between different production batches.

These installation recommendations do not replace our detailed installation recommendations. When processing adhesives and other installation products please observe the relevant guidelines issued by the respective manufacturer as well as the regulations laid down in the Ordinance on Hazardous Substances.

As we have no influence on proper processing routines, we cannot assume any liability for the processing result.

Please also see our “**General remarks** for the installation of nora[®] floor coverings, stairtreads and accessories”.

Depending on the subfloor and the conditions on site, it may be necessary to grind the subfloor or apply nora[®] nTx 020 prior to the installation of noraplan[®] nTx. Please consult nora Technical Services beforehand.

Vacuum clean the subfloor.



Cover the whole area with noraplan[®] nTx sheets paying attention to the arrows on the back of the floor covering. Carry out the installation including the cutting of the seams as explained in the „Recommendations for the installation of noraplan[®] and norament[®] floor coverings in vehicles“.



Fold back half of the sheets.



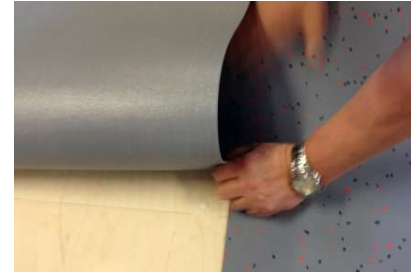
Remove the protective foil from the back of the **noraplan**[®] nTx sheets und cut it off leaving approx. 10 cm. Fold back these 10 cm of foil and push them under the other half of the sheet.



Make sure no particles of dirt get onto the adhesive layer on the back of the floor covering when removing the protective foil.



Vacuum clean the subfloor, then insert the sheet. Rub the floor covering into place, for instance with a cork board.



Remove the second half of the protective foil from the sheet and rub the floor covering into place.

Tip: Do not crumple up the removed protective foil, but rather lay the pieces flat on top of each other. When the job is finished, roll all pieces up, thus minimising the amount of waste.



Finally, press down the floor covering of the whole installed area both longitudinally and transversely with a heavy iron roller (approx. 50 kg).



Follow this procedure to finish installing the complete vehicle, then rub the floor covering into place and press it down with a heavy iron roller.

Due to the given movements/vibrations in vehicles the flooring seams have to be sealed (see below or processing recommendation "Joint sealing").

To carry out a siteform-coving we recommend nora[®] profix 50 or 90 (see separate installation recommendation).

Joint-sealing of nora[®] floor coverings with nora[®] 1 component joint sealing compound

Due to the given movements/vibrations in vehicles the flooring seams must always be sealed. Because of its higher bonding strength to the grooved seam edges, we recommend the use of nora[®] 1 component joint sealing compound for joint-sealing in vehicles.

Execution: 24 hours after installation at the earliest

A 300 ml cartridge with approx. 450 g nora[®] 1 component joint sealing compound will produce approx. 20-25 linear metres/cartridge, depending on the joint width. Please be aware that the **drying time for the joint sealing compound is at least 12 hours**.

The joint sealing compound must be allowed to settle and fully cure prior to being walked upon. Any spilt joint sealing compound must be removed immediately as cleaning at a later stage is not possible.

We recommend nora[®] 1 component joint sealing compound for the sealing of joints between nora[®] floor coverings and rising elements like wheel housings etc.

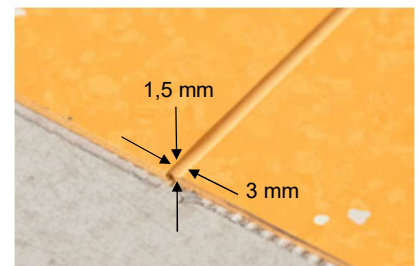
If joints have to be sealed longitudinally as well as transversely, 12 hours have to pass between the two work steps.

The sealing of the joints with nora[®] 1 component joint sealing compound can be carried out in different ways, please also see our comprehensive "Installation Recommendations – Joint sealing of nora[®] floorings".

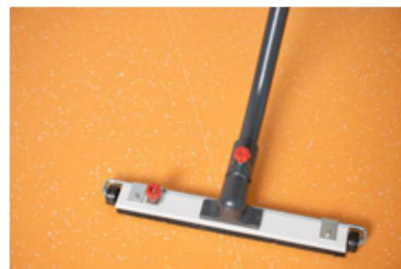
1. Use of a thin painter tape

Cut open or mill out joints centrally with the joint cutter or an electric milling machine.

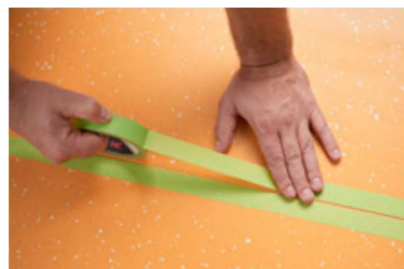
Joint width approx. 3.0 mm
joint depth max. 1.5 mm



Remove milling chips (vacuum cleaner).



To prevent the nora[®] 1 component joint sealing compound from adhering to the surface of the floor covering, apply a thin painter tape on the right and left side of the joint.



First seal the joints running lengthwise. After the joint sealing compound has cured, seal any seams across the car.

To do so, the joint sealing compound is spread into the joints without leaving any gaps until a small bulge develops above the seam.



Immediately after application, the joint sealing compound is pressed into the joint and smoothed with the big round shape of the nora[®] smoothing spatula. Thereby, the surplus of the joint sealing compound is pressed to the left and right of the joint. You have to make sure that the joint sealing compound pressed to the sides is entirely separated from the compound in the joints. Hold the spatula in a position as flat as possible to avoid the development of hollow joints.



The adhesive tape can be removed immediately.



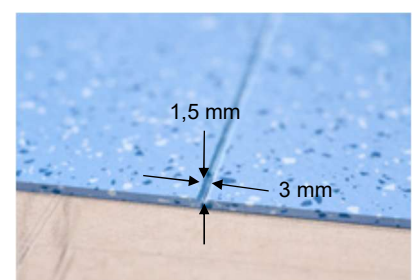
2. Use of nora[®] liquid wax

Apply nora[®] liquid wax to seam areas. Leave liquid wax to dry completely!



Cut open or mill out joints centrally with the joint cutter or electric milling machine.

Joint width approx. 3.0 mm
joint depth max. 1.5 mm



For shockfree milling on high pastilles, a steel straight edge is placed under the running wheels of the milling machine.



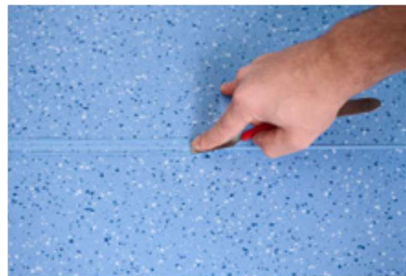
Remove milling chips (vacuum cleaner).



First seal the joints running lengthwise. After the joint sealing compound has cured, seal any seams across the car. To do so, the joint sealing compound is spread into the joints without leaving any gaps until a small bulge develops above the seam.



Immediately after application the joint sealing compound is pressed into the joint and smoothed with the flat side of the nora[®] smoothing spatula. Thereby, the surplus of the joint sealing compound is pressed to the left and right of the joint. You have to make sure that the joint sealing compound pressed to the sides is entirely separated from the compound in the joints. Hold the spatula in a position as flat as possible to avoid the development of hollow joints.



The surplus of the joint sealing compound pressed to the sides can be removed after approx. 12 hours.



Even if no initial cleaning is required after installation, wax residues must be removed approx. 12 hours after joint sealing and at least 48 hours after installation with a suitable basic cleaner or oil and grease remover and a suitable method.

When sealing joints with any joint sealing compound it is state of the art that the compound will dip slightly during the curing process.

Special tools required in addition to the standard installation equipment:

Smoothing Spatula



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