All floor coverings should be examined prior to installation for any visible defects.

If there are any visible defects, please notify GERFLOR and do not begin installation without its prior approval.

#### **GENERAL**

The floor covering must be laid by a specialist contractor, familiar with the particular features of this product and the laying requirements. The laying requirements primarily relate to the dimensional instability of linoleum caused by the relative humidity if it is inadequately glued down. The product is also very rigid, requiring great skill when cutting the breadths and making adjustments.

**NOTE 1 :** A natural yellow substance forms as the linoleum dries out, and is often mistaken for discolouration. The substance will disappear over time with exposure to the light.

# 1. SUBSTRATES

# Permitted substrates for LINOLEUM, LINOLEUM Acoustic and AcousticPlus:

• Substrates in new-build projects

New substrates must be in accordance with the local standard, including under-floor heating system and calcium sulphate and cement based liquid screeds.

• Substrates in refurbishment projects

Existing substrates are permitted if they are acceptable to install LINOLEUM.

# 2. MATERIALS

With Technical Report: Uni Walton, Linodur, Marmorette, Colorette, Linoart, Linoleum Acoustic and Linoleum AcousticPlus. Differences in width (tolerances) may exist between the breadths.

# 3. CONDITIONS BEFORE LAYING

#### ■ 3.1. STORING THE MATERIALS

Care must be taken not to drop the rolls when they are unloaded. The materials involved in laying glue-down linoleum floor coverings must be acclimatised for 48 hours before laying, in an enclosed, ventilated and secure room, protected from moisture and excessive heat, in ambient conditions identical to those set out below, and on a dry substrate. They must be stored vertically. The rolls are cut a day or two in advance, stored upright and rolled loosened faced out. Unpacked rolls stored before being unrolled must not be exposed to direct sunlight, because a difference in colour (ageing) may appear on the exposed part of the roll\*.

\*A natural yellow substance, formed as the linoleum dries out, is often mistaken for discolouration. The substance will disappear over time with exposure to the light.

#### ■ 3.2. TEMPERATURE AND HUMIDITY:

The minimum substrate temperature required for laying is  $+ 15^{\circ}$ C and a room temperature of  $+ 18^{\circ}$ C.

The humidity must not exceed 75% while the work is being carried out. The humidity and the substrate temperature must be such that there is no condensation on the substrate (dew point). All mentioned conditions has to be fulfilled three days before and seven days after installation of Linoleum.

# 4. UNROLLING THE MATERIAL (at least 24h before gluing)

Each roll of linoleum has a label showing technical data (length, thickness, width) and a roll number.

The rolls should be laid in the numbered order in order to avoid colour differences.

Do not use rolls from different batches in the same room.

The breadths will be laid according to a precise layout following the direction of the light.

The breadths are laid in the same direction.

The breadths are adjusted by using a special linoleum strip cutter (both breadths -1,5-2 cm) to remove the damaged strip. You are recommended to do this when cutting takes place. So it does not need to be done in the gluing phase, the breadths will be welded.

#### WARNING

- The end of the material near the cardboard tube must be laid along walls.
- Leave at least 10 cm at the walls.
- If there is an end-to-end joint, the breadths must be at least 5 m.
- Use an edge cutter or linocut to strip the edge.







#### ■ 4.1. STRAIGHTENING THE SELVEDGES

LINOLEUM floorings on foam are adjusted by cutting.

The edges must be cut by scribing (1,5 to 2 cm) in order to create perfect joints.

Scribing is carried out using an edge cutter or a linocut.

This clean cut means that the edges can be adjusted easily.

# 5. GLUING

#### ■ 5.1. FOR UNI-WALTON, LINODUR, MARMORETTE, COLORETTE

- Unrolled rolls must be glued down at the same day.
- Fold back half the length.
- The flooring is laid using the single bond method with an adhesive that is suitable for linoleum, Spatula B1 (according to TKB standard) is usually used.

Glue technics and solutions may change. As such, be sure to use a glue accurate for the backing of the material and the support. Glue supplier's recommendations have to be respected.

**NOTE:** Regularly check the wear of the blades used, changing them as often as necessary to maintain the recommended adhesive coverage.

- Avoid creating bulges when laying the sheets onto the adhesive.
- Clean spilled adhesive (while it is still wet) and tools using water or another cleaner recommended by the adhesive manufacturer.

#### IMPORTANT:

Carefully follow the instructions provided by the glue supplier. Lay the material onto fresh adhesive.

If the adhesive is allowed to dry out, it will not coat the back of the material successfully (poor adhesion).

### ■ 5.2. FOR LINOLEUM ACOUSTICPLUS

- Unrolled rolls must be glued down at the same day.
- Fold back half the length.
- The flooring is laid using the single bond method with an acrylic adhesive, Spatula A2 (according to TKB standard) is usually used. Glue technics and solutions may change. As such, be sure to use a glue accurate for the backing of the material and the support. Glue supplier's recommendations have to be respected.

**NOTE:** Regularly check the wear of the blades used, changing them as often as necessary to maintain the recommended adhesive coverage.

- Avoid creating bulges when laying the sheets onto the adhesive.
- Clean spilled adhesive (while it is still wet) and tools using water or another cleaner recommended by the adhesive manufacturer.

#### IMPORTANT

Carefully follow the instructions provided by the glue supplier.

- Observe the drying time, which depends on the ambient temperature, the substrate porosity and the coverage of adhesive.
- Drying time too short: blistering, etc.
- Bonding time exceeded: poor transfer of adhesive to the material.
- Do not overlap two adhesive films when you apply more adhesive.

#### ■ 5.3. FOR KORKMENT

**REMINDER:** The KORKMENT underlay that will be laid first must have a thickness less than or equal to the thickness of the LINOLEUM selected.

Korkment underlay can be laid in the same direction than Linoleum rolls or in its transversal direction. When laid, in the same direction than Linoleum rolls, an offset of  $50\ \mathrm{cm}$  between underlay and

linoleum seams needs to be done.

Underlay and Linoleum are laid using the single bond method with a glue that is suitable for Linoleum.

Spatula B1 (according to TKB standard) is usually used.

Glue technics and solutions may change. As such, be sure to use a glue accurate for the backing of the material and the support. Glue supplier's recommendations have to be respected.

Linoleum can be installed on the korkment when the adhesive under the korkment is dry. In most of the cases, it is between 24h to 48h after korkment gluing.

**NOTE:** Regularly check the wear of the blades used, changing them as often as necessary to maintain the recommended adhesive coverage.

- Avoid creating bulges when laying the breadths onto the adhesive.
- Clean spilled adhesive (while it is still wet) and tools using water or another cleaner recommended by the adhesive manufacturer.

#### IMPORTANT:

Carefully follow the instructions provided by the glue supplier. Lay the material onto fresh adhesive.

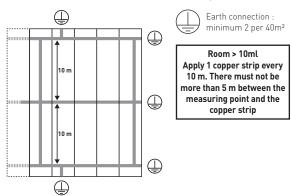
If the adhesive is allowed to dry out, it will not coat the back of the material successfully (poor adhesion).

#### ■ 5.4. FOR DISSIPATIVE LINOLEUM MARMORETTE LCH

Before gluing the linoleum flooring proceed with the installation of the copper strips.

Install the copper strip transversely under all the strips, as well as on the periphery of the room. The furthest point from a strip should not be more than 5m away.

If there is an end-to-end joint, place a  $1.50~\mathrm{m}$  wide copper strip across the two rolls. Install 2 earth connections per  $40~\mathrm{m}^2$ .



Thenglue the flooring in the same way as for compact linoleum, see 5.1, using a conductive linoleum adhesive (refer to the adhesive manufacturers).



# 6. CUTTING

There are two ways to cut LINOLEUM.

- By scribing after most of the rolls has been glued down.
- Freehand using a hot air tool, after gluing and smoothing out.

#### ■ 6.1. SCRIBING ALONG THE WALLS

- Rest the material before gluing down on top of the penultimate sheet, making sure it is correctly aligned.
- Leave the end(s) of the breadth to extend up the wall.
- Using a large scribe device with a spike, mark the profile of the wall onto the flooring.
- Use a knife with a hooked blade to cut the linoleum.



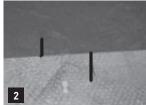
#### ■ 6.2. SCRIBING THE ENDS

After gluing, very long sheets of linoleum shrink lengthwise by a few millimetres.

#### To ensure that this is not visible on the skirting, follow these steps:

- Stop applying adhesive to the substrate at a line drawn 1.50 ml from the edge of the skirting (perpendicular to the material).
- Glue down and smooth the material up to this line.
- Draw a reference mark on the flooring and the substrate (photo 1).
- Slide a cardboard core under the unglued section of linoleum, positioning it so it is parallel to the line you drew earlier, to release the end of the sheets (photo 2).
- Adjust the scribe device between the two marks (photo 3).
- Carry out scribing and cut the end as described above (photo 4).
- Remove the core, apply adhesive, glue down the material, smooth down the end of the sheets using a roller.
- Repeat these steps for each end, taking care not to crack the linoleum while handling it.









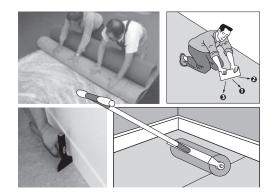
# 7. SMOOTHING

- $\bullet$  Avoid creating bulges when laying the breadths onto the adhesive.
- To prevent cracking, work the ends of the breadths with forward and back movements to soften them when you place them onto the adhesive

## There are two parts to the smoothing process:

- Manual smoothing when the material is laid, using a cork block.
- $\bullet$  Use the smoothing hammer along the walls if the edges need to be levelled.
- Careful smoothing over the entire surface using a smoothing roller (heavy, about 80 kg), to flatten the lines of adhesive and to ensure that the adhesive coasts the back of the flooring successfully

If necessary, place a constant load (for example using small sandbags) onto areas where adhesion is poor.







# 8. EDGE TREATMENT

In the absence of other instructions in the Technical Reports or the data sheets for the floorings, watertight seals around the edge are obtained with one of the following systems:

- Skirting and prefabricated corners supplied by the manufacturer of the flooring, or strips of the flooring cut and adjusted in advance, and welded onto the flooring and in all cases glued to the wall first (acrylic or aqueous phase neoprene adhesive);
- Caulking using an MS Polymer polyurethane or acrylic mastic, after cleaning out the groove formed by stopping the flooring about 3 mm short of the vertical wall
- Continuing the flooring to create skirting, but ONLY for LINOLEUM COMPACT, measuring 38 mm.

Mastic caulking must also be applied around penetrations (pipes, posts) and threshold joints into rooms without a linoleum flooring.

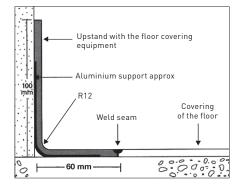
- Continuing the flooring to create skirting with HSLA skirting.



10060 Linoleum

Skirting height: 10 cm Skirting width: 6 cm Length: 250 cm

Packaging: Sizes of 2.5 m





Mark with a line the floor covering height against the wall...



... and on the floor.



Apply glue on the floor and against the



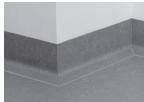
line. Lay HSLA skirtings. Press properly.



Rub while pressing firmly.



Cut out the floor covering that will be laid Work completed on top of the skirting





# 9. HOT WELDING (after 48 hours))

Hot welding (more accurately thermal bonding because the welding cord is different) is carried out as follows:

#### 9.1. GROOVING

Grooving allows the joint to be opened and corrected, to remove any traces of adhesive that may impair the quality of the weld.

#### There are two grooving methods:

- Manual using an appropriate tool (triangle, rule, hand grooves),
- Mechanical using an electric chamfering machine fitted with a 3.3 to 3.5 mm tool.

Grooving the linoleum down to the fabric mesh. (2,5 mm)

#### ■ 9.2. AUTOMATIC WELDING MACHINE

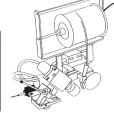
Welding is carried out using a LEISTER UNIVERSAL or UNIFLOOR hot air welding machine with electronically controlled heating, fitted with a narrow multi-outlet nozzle designed for this purpose. Temperature:  $400^{\circ}\text{C}$  up to  $450^{\circ}\text{C}$  - Speed: 2.5 –

3 m per minute

Without PVC hidden







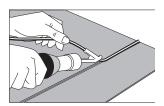
#### Nozzle codes:

ROMUS: 95253 LEISTER: 103.394 JANSER: 225 860 300

#### ■ 9.3. HAND WELDING

Welding rods can be worked using the hand-held welding torch and attached. Ref: ROMUS 95027 or JANSER 224 800 007

Temperature: 400°C up to 450°C Speed: 2.5 – 3 m per minute

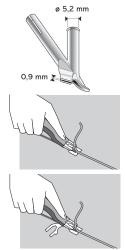


#### 9.4. TRIMMING

Trimming is carried out in two steps, using a Mozart knife.(Ref ROMUS: 95130)

First step: Has to be done with the thickness guide.

Second step: Second trim has to be done with the trimmer only once the rod has cooled down a little.



### 10. FINAL CLEANING

Afterwards, give the area an initial clean with a redispersible detergent (pH < 9).

Please consult the cleaning and maintenance instructions for the linoleum.

#### IMPORTANT: Times before first use:

- For normal traffic, the floor can be walked on 48 hours after the work has finished.
- Wait 72 hours before moving furniture or moving loads on wheel.

### 11. PUTTING INTO SERVICE - CIRCULATION

Wait 48 hours before allowing normal walking on the installation. Do not install fittings or furniture until 72 hours after laying.

# 12. FITTINGS OR FURNITURE

Ensure that end caps on table and chair feet, castors, etc. are suitable for flexible floor covering (PVC, Linoleum)

- We recommend flat end caps without any pattern and with the surface in full contact with the floor covering (no conical end caps).
- Do not allow rubber feet to be used on furniture.
- Ensure that office furniture has type W castors compliant with EN 12529

In the case of underfloor heating, wait 7 days before turning the heating back on.

### 13. EVENTUAL REPAIRS

In the case of isolated repairs on small areas, it will not be possible to obtain the same shade. We recommend carrying out major repairs in order to have a more aesthetic visual effect.

