PMO
[428$_{V1}$]

LAYING TILES WITH ELECTRICAL PROPERTIES, GTI ESD CLEANTECH WELDED WITHOUT COVING



Substrate and ambient temperature Minimum: 10° C

Before laying the floor covering, it should be inspected, so as to detect any visual defects. In the event of any visual defects, please notify GERFLOR and do not start laying the product before receiving GERFLOR's approval.

MATERIALS	FORMAT	CODE	NOTES
GTI ESD CLEANTECH	650 x 650 / Th 6 mm	4552 followed by colour code	
Copper strip	W (width) 10 mm / Th 0.08 mm	0586 0001	self tape copper strip is not permitted
Conductive welding rod	100 ml	2722 followed by colour code	

ANTISTATIC ASTATIC FLOORINGS (ASF) < 2 kW

Standard installation. These floorings do not require any specific installation method (no copper strip required)

DISSIPATIVE (DIF) AND CONDUCTIVE (ECF) FLOORINGS

Installation using copper strip: code 0586 0001 (length: 200 ml)
Store the tiles for 24 hours in the room where they will be installed.

SPECIFICATION FOR CONDUCTIVE FLOORINGS:
It is the responsibility of the client and/or contractor to specify the required standard in the specifications.
For the electrical performances of the flooring, please refer to its technical datasheet.

1. CHOICE OF JOINT TREATMENT

This material is laid edge to edge, **with or without** coving. For the installation of GTI ESD cleantech with coving, see Installation Guidelines [428].

WATER EXPOSURE	JOINT AND EDGE TREATMENT
Room exposed to water (bathrooms, kitchens)	Joints hot-welded with conductive welding rod + caulked at the edges (leave a 3mm gap to apply mastic)*
Room with a prolonged exposition to water	Joints hot-welded with conductive welding rod + coving

** Skirting must be installed after the flooring is laid.*

2. LAYING

Preparation

The tiles must be stored in the room in which they are going to be laid for 24 to 48 hours before installation. After installation, the temperature variation must not exceed 20 °C.

SUBSTRATE: Moisture content 4% at 4 cm with a carbide bomb test. To guaranty good conductivity between tiles, ensure that the surface evenness is < 7 mm under a 2m straight edge and < 2 mm under a 20 cm straight edge, with no unevenness.

MECHANICAL PREPARATION: The surfaces should be prepared with care so as to remove any soiling, laitance, treatment products or any other foreign bodies.

BUMP AND DEPRESSION TREATMENT: Sanding of bumps. Point levelling of depressions with a suitable floor sealer.
CRACK TREATMENT: On any surface, cracks should be detected beforehand. They are not treated if there is no unevenness and if they are < 3 mm wide.

JOINT TREATMENT: Contraction joint: if gap < 4 mm, they are not treated. Structural Expansion Joint: following thorough cleaning, expansion joints are preserved: end profiles with or without an overlay are arranged on either side of the joint. Construction joint: similar to cracks, not treated if gap < 3 mm.

LOCALISED LEVELLING: Surface levelling may be required, particularly where the surface is not even enough or in poor condition.

2.1 - MARKING OUT AND LAYING THE STRIPS

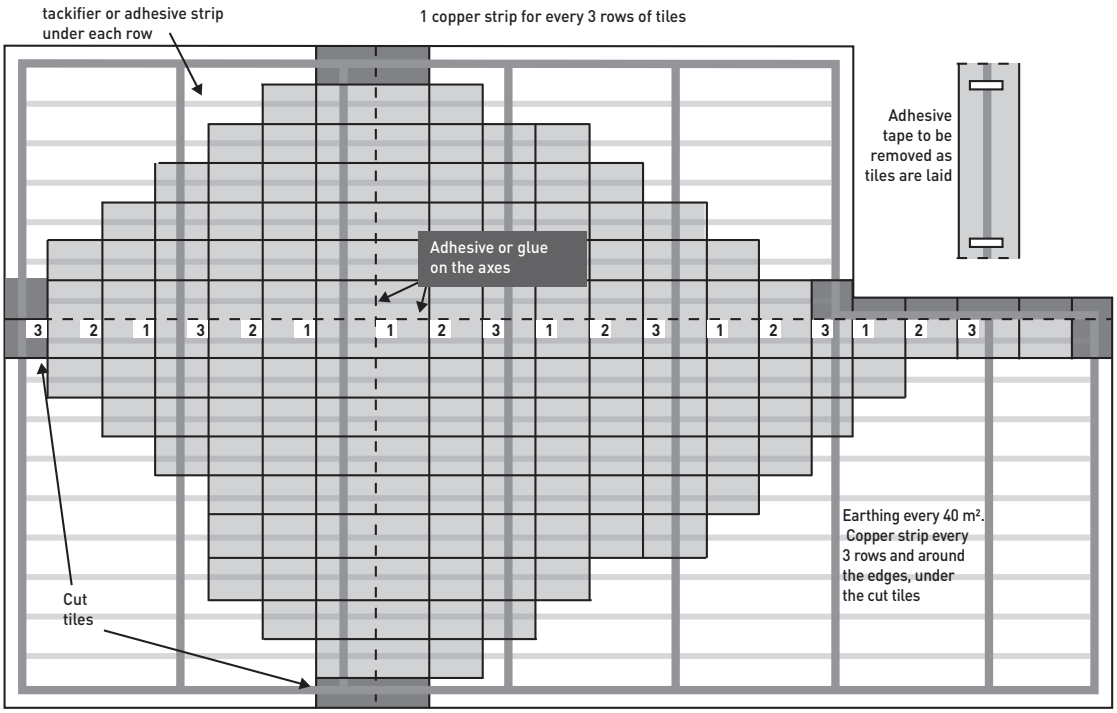
- Mark out the two perpendicular axes, making sure the cuts are the same on each side
- Apply the tackifier or acrylic glue evenly over the two axes with a coverage of about 100 to 150 g/m².
- **Apply a tackifier strip or double-sided adhesive (Fix and Free 100) under each row of tiles, in one direction only, to ensure that the tiles are held in place during chamfering and welding.**
- Respect the waiting time according to the manufacturer's instructions.
- Install one copper strip **every 3 rows, in one direction,** holding it down with adhesive tape **(see diagram)**
- **Encircle the room with a copper strip under the cut tile at least 5 cm from the walls**
- An earthing line must be provided for every 40 m².
  Leave 50 cm of the strip spare to allow the electrician to make the connection
- The copper strip might be visible later due to telegraphing.

Self tape copper strip is not permitted.

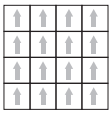
IMPORTANT :*The information in this document is valid from 04/09/2026 and is subject to change without prior notice. As we carry out continuous technical improvements, our customers should check with us that this document is still in force before starting any work.*

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2.2 - LAYING THE TILES



• Precautions

1- The tiles are supplied on pallets. Different batches must not be mixed together

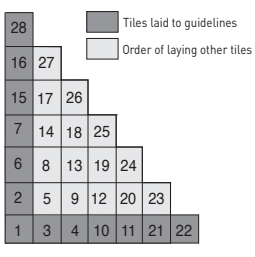
2- Laying direction: Tiles are **ALL** installed in the same direction. Observe the direction indicated by the arrow on the back of the tile.

3- Pressed materials, such as GTI tiles, may have dimensional tolerances from one series to another or from one color to another which may vary by 1 mm. In this case, the tiles may slightly offset. It is therefore necessary to cross-cut the entire row of tiles before continuing the laying. These two rows will be hot-welded

4- To allow a proper welding process, the tiles are maintained with double sided adhesive (Fix and Free 100) or tackifier.

5- Loose laying is limited to 500 m2. Above 500 m2 it is necessary to divide the surface into 500 m2 sections by applying either an extra large double-sided adhesive tape (Fix and Free 750) or by gluing over a width of two tiles before laying the copper strip and the tiles. For details, see installation guideline [413] GTI Max Connect, section 2.3.1

• Installation



Lay the first tile and continue in a staircase pattern, following the axes you marked out.The tiles should be installed with a space between them of 0.8 to 1.2 mm. Remove the adhesive tape maintaining the copper strip as you work. The copper strip must always be in direct contact with the back of the tiles.

2.3 - EDGING

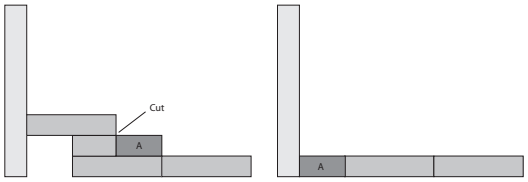
Cuts are made:

• Either using a cutter (make one or two marking cut on the surface before snapping the tile)

• Or using the overlapping method:

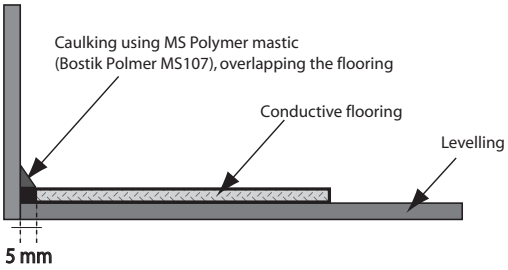
- place the tile to cut on the last uncut tile of the row
- take an uncut tile to act as a template
- place it on the tile you want to cut, pushing it against the partition (wall)
- leave a gap of 5 mm along the walls
- mark the tile you want to cut along the edge of the template, using a knife with a straight blade
- cut the tile cleanly then put it in place

To help, you are recommended to heat the material with a hot-air paint stripper. This method means that no jigsaw is necessary. A guillotine (Romus ref 93660) can also be used



More difficult cuts (door frames, etc.) may be made using a jigsaw or high leverage nippers.
If there are a lot of cuttings, we recommend keeping a circular saw on site.

When planning the edge cuts, make sure that they are the same on each side and that the tiles are not cut to less than half the width of a tile plus caulking gap (see drawing).



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2.4 - HOT WELDED JOINTS

The tile joints are welded with a two-layer conductive welding rod.
The conductive welding rod leaves a black thread after trimming. This thread ensures conductivity between each tile.

IMPORTANT:

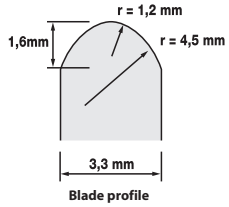
- The trimmed conductive welding rod may leave marks on the flooring. You are recommended to collect the trimmed pieces as you work.
- To prevent poor welds where the tiles intersect, it is necessary to chamfer, weld and level in one direction before repeating in the other direction.

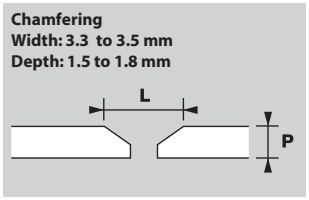
To avoid calamine deposits during the welding process, we recommend:

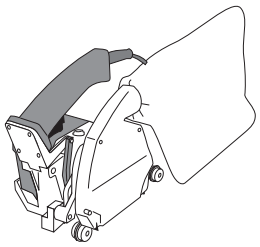
- To respect a welding temperature range of 400 – 500°
- To respect the recommended welding speed: Position 3
- To clean the nozzles regularly

2.4.1 Chamfering

- **Chamfer the joints** using an electric chamfering machine, blade width 3.3 mm, depth 1.5 to 1.8 mm
- Use a triangular grooving tool to chamfer along the skirting





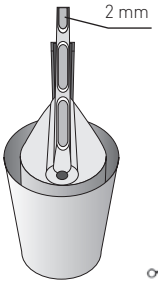


Chamfering machine

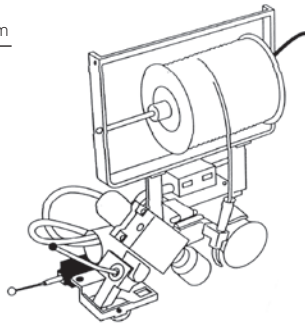
2.4.2 Welding

- **Hot weld the joints** using a welding machine.

Use a LEISTER UNIVERSAL or UNIFLOOR hot air welding machine with electronically controlled heating, fitted with a narrow multi-outlet nozzle designed for this purpose.



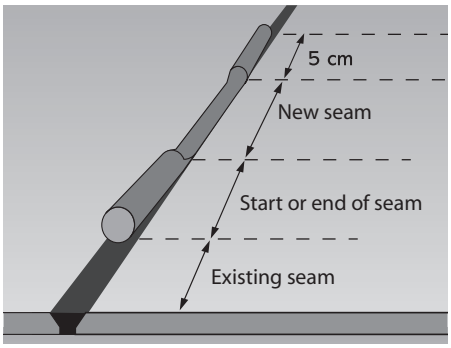
Narrow nozzle



TOOLS	ROMUS CODE	JANSER CODE	LEISTER CODE
Narrow nozzle	95254	225 860 040	105 407

- **A Leister Triac S handheld hot air tool must be used at the start and end of the weld**
- **Joining or repairing welds**

To prevent carbon black build-up during repairs:
- Make an initial trimming of the seam.
- Clean the joint with a vacuum cleaner to remove the particles and run a triangular scraper over it.
- Make a notch at both ends of the seam.
- Use a hot air tool with the Rapid nozzle as explained above, starting and ending at the existing welds (about 5 cm).



2.4.3 Trimming

- Using a MOZART knife:

First pass: make an initial cut by placing the levelling guide under the MOZART knife blade (fig. 1)
Second pass: **allow the rod to cool down completely**
Rotate the levelling guide to 90° on the side and make a second pass to completely remove the excess seam material (fig. 2)

TOOLS	GERFLOR CODE
MOZART knife	0561 0001
Spare blades	0542 0001

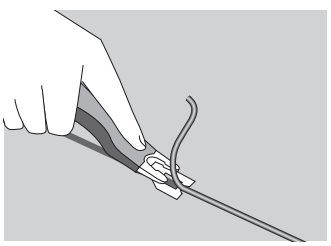


Fig. 1 - Levelling guide under the blade

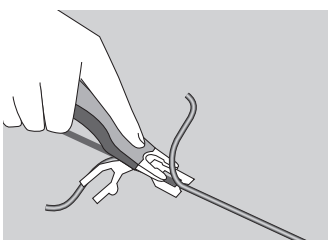


Fig. 2 - Levelling guide at 90°

This method prevents hollow welds.

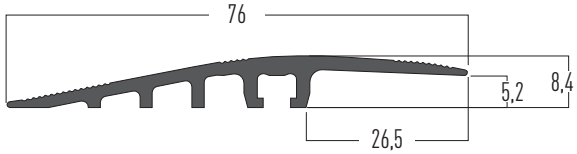
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3. ENDS AND DOORWAYS

Use the following profiles depending on conditions of use (traffic, humidity...):

3.1. HEAVY TRAFFIC, PALLET TRUCKS...

Finishing profile H0505



3 m long profile with 10 drilled holes of 4.6mm diameter
The centre distance between the holes is 313mm
The first hole is 90mm from the end
Deburr the holes after drilling

TFZ 4x50 mm screw and 6x30 mm plug

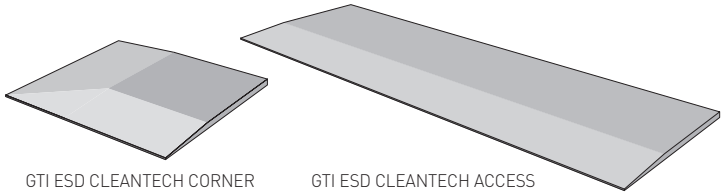
TFZ screw, diameter 4mm and length 50mm



Dowel, diameter 6mm and length 30mm



3.2. MODERATE TRAFFIC



GTI ESD CLEANTECH CORNER GTI ESD CLEANTECH ACCESS

GTI ESD CLEANTECH ACCESS AND CORNER		
GTI ESD CLEANTECH ACCESS	650 x 320 mm	Code : 2715 followed by colour code
GTI ESD CLEANTECH CORNER	320 x 320 mm	Code : 2716 followed by colour code

These accessories must be glued down, either using a 2 components PU adhesive and weighted until the adhesive sets (6 to 12 hours),or using an acrylic double bonding adhesive.

4. FIRST USE

For normal traffic, the floor can be walked on immediately after welding.
To move furniture, lay panels to distribute the load.
Do not allow rubber feet to be used on furniture.

5. UNDERFLOOR HEATING

Underfloor heating should be turned up gradually over the seven days after the flooring is laid.

6. MAINTENANCE

FINAL CLEANING

The floor covering can be used as soon as it is laid, but take these precautions:
- Deposits or scurfing remains from the seam : dampen a clean cloth with alkaline detergent and gently rub to clean the marks, then wipe with a sponge dampened with clean water.

DO NOT ATTEMPT TO CLEAN BY HAND OR USING A DRY CLOTH

After the marks are removed, flooring must be cleaned as follows:
- Remove dust and particles using a broom or an industrial vacuum cleaner,
- Clean the floor with a scrubber drier using an alkaline detergent,
- Rinse with clean water to remove all traces of the detergent,
- Let it dry.

DAILY CARE

Refer to the maintenance guidelines for this flooring.