INSTALLATION INSTRUCTIONS
GTI MAX CLEANTECH

industrybygerflor.com

Gerflor®
theflooringgroup

IN THIS GUIDE YOU WILL FIND INSTALLATION ISTRUCTIONS FOR : **GTI MAX CLEANTECH**

This guide will allow you to benefit from all the advantages of this product specially adapted to the renovation of clean and sterile rooms:

- Waterproof system
- Quick installation
- High resistance to traffic
- Easy to clean and resistance to decontamination processes

INSTALLATION OF GTI MAX CLEANTECH TILES

Tiles are all laid in the same direction.

Min ambient temperature: 10°C

Laying of extra-wide double-sided adhesive tape every 500 m²

Min substrate temperature: 10°C

Before laying the flooring, it is a good idea to inspect it and to identify any problems with the appearance. If there are visible defects, please notify GERFLOR and wait to hear from them before laying the flooring.

TABLE OF REFERENCES

PRODUCT	DIMENSIONS	CODE
GTI MAX CLEANTECH	600x600 mm	2699
DIMINISHING STRIP (GTI UNDERLAYER)	650x100 mm	2603
COVE FORMER 38	20x30x38 mm	0480
MIPOLAM BIOCONTROL	2x20 m	8570
WELDING CORD CR40	100 ml	0585
WELDING CORD CR50	100 ml	H209
ACCESS WITHOUT DOVETAIL	600x300	2688/2553/2533
CORNER WITHOUT WELDING CORD	300x300	2689/2554/2653
THRESHOLD BAR	3M bars	0505

1. AREAS OF APPLICATION

	P RATING FOR NEW AND REFURBISHED PREMISES	LAYING METHOD WITH TEMPERATURE CONDITIONS	PERIPHERAL EXPANSION
	Only in premises with positive temperature		
GTI MAX CLEANTECH	Premises that routinely withstand heavy traffic within the limits of 75 kg/cm². Floor care is limited to the use of a self-propelled automatic scrubber.	As these premises are air-conditioned, the floor covering is not subjected to temperature variations greater than 20°C. GTI tiles have dimensional stability that allows loose-laying within the limit of 500 m².	Due to the year-round heat regulation in the buildings, Gerflor recommends allowing for a 0.5 cm edge clearance.

INSTALLATION OF GTI MAX CLEANTECH TILES

	DYNAMIC LOAD RESISTANCE	STATIC LOAD RESISTANCE
	MAXIMUM LOAD PRESSURE	MAXIMUM LOAD PRESSURE
GTI MAX CLEANTECH	< 75 kg / cm²	< 100 kg / cm²

GERFLOR GTI TILES ARE SUITABLE FOR THE TRAFFIC OF ELECTRIC PALLET TRUCKS ON THE CONDITION OF RESPECTING THE FOLLOWING CONDITIONS.

TYPE OF USE	Electric pallet truck with controller
TYPE OF WHEELS	Polyurethane wheels (for example, Vulcolan)
MAXIMUM SPEED	4.8 km/h (80% of recommended standard speed of 6 km/h)
LOAD WEIGHT: UP TO 1,500 KG INCLUDED	OK
LOAD WEIGHT: UP TO 2,000 KG	Marking effect
LOAD WEIGHT: >2,000 KG	Burn effect

Risk of surface burn from wheel spin due to sudden acceleration of a loaded pallet truck from a static start. Ask the manufacturer's technicians to adjust acceleration speed and deceleration speed.

Recommended pallet truck models:

- BT TOYOTA : - Electric: BT Levio W range, LWE140, 160 180, 200 models
  - Manual: BT Lifter range
- STILL : - Electric: EXU range, EXU 16, 18, 20, 22 models
  - Manual: HPT or HPS range
- FENWICK : - Electric: T16, T18, T2t0 models

INSTALLATION OF GTI MAX CLEANTECH TILES

2. SUBSTRATES

2.1 - PREPARATORY WORK FOR NEW FLOORING

DRYNESS RATIO:
Moisture content 7% at 4 cm with a carbide bomb test.

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.
Cleaning: using industrial vacuum cleaner.
Point levelling of depressions with P4S or P4SR floor sealer.

CRACK TREATMENT:
On any surface, cracks should be detected beforehand. They are not treated, if they are flush, and if they are < 3 mm wide.

JOINT TREATMENT:
Contraction joint: if they have an opening < 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, if they have an opening < 3 mm, they are not treated.

LOCALISED LEVELLING:
Surface levelling may be required, particularly where the surface is not sufficiently even or in poor condition.
Required characteristics on dry surface (moisture content 7% at 4 cm with a carbide bomb test):
The sealer performances should meet P4S or P4SR rating specifications.

2.2 - PREPARATORY WORK FOR NEW FLOORING

	RESIN		ADHESIVE-BONDED TILING, SEALED TILING		CARPET
	Surface evenness < 7 mm / 2 m	Surface evenness > 7 mm / 2 m	Surface evenness < 7 mm / 2 m	Surface evenness > 7 mm / 2 m	
Retention of existing floor covering % damaged surface < 10 %	direct laying	sanded epoxy resin grout to restore surface evenness	direct laying with joint treatment¬ in the case of pronounced joints	treatment of tiling with primer and dressing sealer	removal
Removal of existing floor covering % damaged surface area > 10%	direct laying on stripped surface	removal see new concrete + concrete treatment for surface evenness	direct laying on stripped surface	removal see new concrete + concrete treatment for surface evenness	

Laying on bituminous coatings can be undertaken if the surface evenness is < 10 mm under the 2 m rule.
Beyond this, bumps need to be planed using suitable means.
We do not recommend the use of shrink-free resin.

3. INSTALLATION

3.1 - STORAGE & WORK CONDITIONS

Before laying the flooring, it is a good idea to inspect it and to identify any problems with the appearance. If there are visible defects, please notify GERFLOR and wait to hear from them before laying the flooring.
Since the stores are air-conditioned, these tiles are not subject to temperature deviations greater than 20°C.
The tiles should be stored on-site for 24 to 48 hours beforehand at ambient temperature.

⚠ DO NOT MIX BATCHES

3.2 -LAYING METHOD

GTI MAX CLEANTECH tiles can be bonded as per DTU 53.2, but they are essentially designed for loose (non-adhesive) laying, in single pieces limited to 500 m². For larger surface areas, the surface is split into 500 m² sections and the joints between areas are sealed with adhesive tape, glued or secured by fixing.

3.3 -DETAILED INSTALLATION

3.3.1 Splitting surfaces every 500 m²

As loose-laying is limited to 500 m², the surface must be split into 500 m² sections by applying either an extra-wide double-sided adhesive tape beforehand or by gluing them over a width of two tiles or using any other fixing/securing means (mechanical) when it is not possible to apply glue.

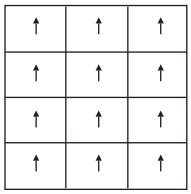
Regardless of the configuration, double-sided adhesive tapes or glue should be applied never exceeding more than 20 rows of tiles to prevent the displacement of the tiles due to creep.

If it is not possible to apply glue: Determine another type of fixing (screwed metal plate, etc.).

• Example of a configuration < 500 m²

INSTALLATION OF GTI MAX CLEANTECH TILES

3.3.2 Laying the GTI tiles



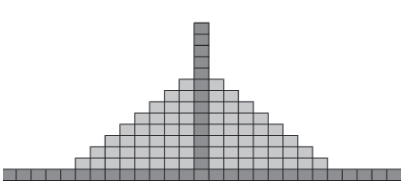
• Precautions

1- **The tiles are supplied on pallets. Different batches must not be mixed together**
2- Laying direction: Tiles are ALL laid in the same direction. Observe the direction indicated by the area on the back of the tile.
3- Pressed materials, such as GTI tiles, may have dimensional tolerances between series or between colours. In this case, the tiles can become slightly offset.

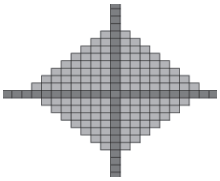
Therefore, the entire row of tiles must be overlapped to continue laying. These two rows will be hot-welded.

• Layout

Tiles must always be laid over large areas by working from the two guidelines marked out.
It is advisable to apply glue or affix these guidelines using adhesive tape to make it easy to position the tiles and weld them.
You can also apply glue or adhesive tape over the entire surface.
Start laying the tiles by marking guidelines either along a wall, or in a cross pattern from the middle of the room.



Guideline drawn from the wall



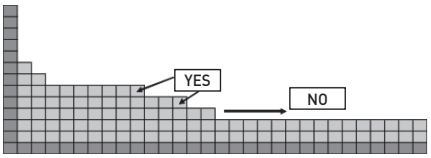
Guideline drawn from the middle of the room

Gluing or fixing of tiles under the guidelines

• Positioning the tiles

- Lay the tiles in staircase pattern starting from the guidelines.
- Position the tile by pressing it into the corner of two other tiles to avoid offsets.
- **ALL** the tiles are laid in the same direction (see arrows on back of the tiles).

Do not lay tiles in rows to avoid offsets.

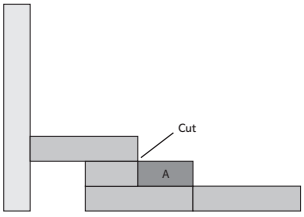


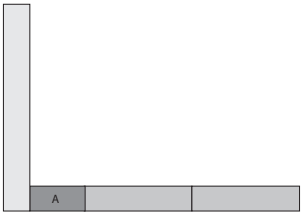
• Edge trimming

The tiles are to be laid out such that any cut edges are more than 1/2 tile wide.

• Cutting out (procedure, tools, etc.)

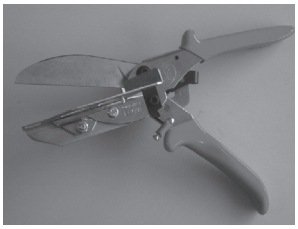
- Edge clearance: in standard sections, the edge clearance is to be 0.5 cm
- Keep a circular saw bench available for use throughout the job.
- Cuts are to be made with a trimming knife (1 cut on the top surface and one on the back) or by overlap cutting (gauging)
  Overlap cutting: A procedure for marking or cutting out parallel lines. For this, a marking gauge or a tile gauge is used.
- Position the tile to be cut on the last full tile laid
- Use an uncut tile as gauge piece
- Place the gauge piece over the tile to be cut, pushing it against the partition (wall).
  Leave 0.5 cm clearance
- Mark the tile to be cut all along the edge of the gauge piece using a knife with a straight blade





- Cut off the part of the tile to be laid neatly and then fit it into place.

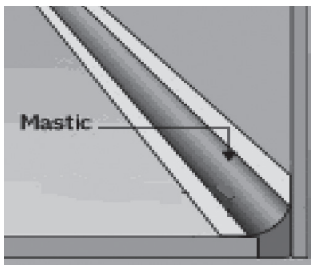
Mitre shears
Reference: Romus: 93415 / Janser: 237 530 000
For cutting around door frame bases and areas which are difficult to access.



High leverage gripper shear
Reference: Janser: 262 284 000
For cutting around door frame bases, areas which are difficult to access.

• Applying a sealant along the edges

We recommend that you apply a polyurethane or hybrid sealant (MS Polymer) in the edge clearance to prevent penetration of water or other substances.



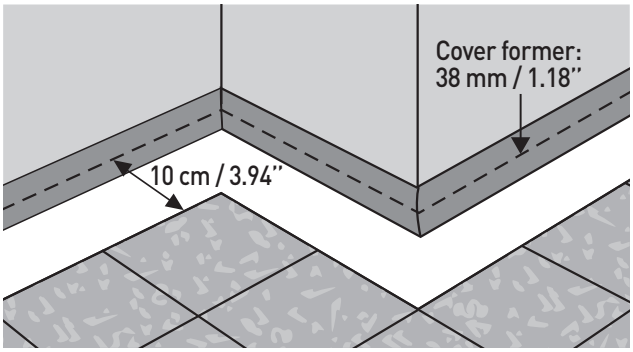
3.3.3 Laying with coving

The laying procedure for GTI MAX CLEANTECH tiles WITH COVING starts with the uncut tiles and ends with the coving.

For laying Mipolam Biocontrol in the corners on the sublayer, please refer to the Corner System installation guidelines.

• Marking and layout

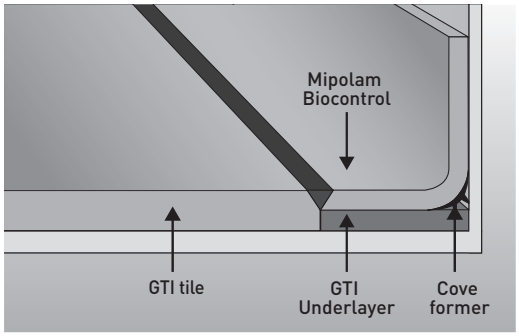
Mark out a line around the room 10 cm from the wall in all places, using a skirting scriber or a template on the wall



- Do not use a chalk line as it will not follow the line of the wall
- On the walls, draw a straight line to mark out the top of the coving (maxi 15 cm).
- Starting from the new area marked out, lay the GTI MAX CLEANTECH tiles making sure the cuts are the same on each side so that there is no cutting less than 1/2 tile.

INSTALLATION OF GTI MAX CLEANTECH TILES

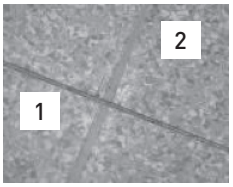
- Start laying all the uncut tiles.
- Place the GTI Underlayer along the edges of the room
- Glue or affix the cove former using an adhesive tape (acrylic glue or double-sided tape) ensuring the good quality of grouting in the corners (cut using a mitre box or shears).



4. HOT WELDED JOINTS

On coving: Start by welding the coving
The tile joints are welded with a welding cord (Gerflor CR40 or CR50).

IMPORTANT :
- The tiles are not supplied chamfered.
- 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.
- Great care must be taken when using the electric chamfering machine to avoid cutting grooves outside the joints.

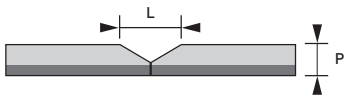


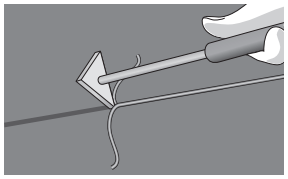
Step 1 : Levelled weld
Step 2 : Chamfering in the other direction

4.1 WELDING THE COVING

- **Chamfer the joints** with the triangular grooving tool and the cutter for corners

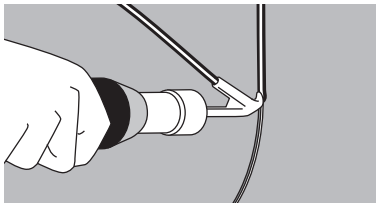
Chamfering GTI MAX CLEANTECH
Width: 3,3 à 3,5 mm
Depth: 1,5 à 1,8 mm





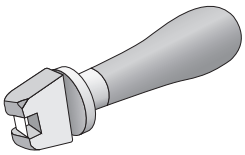
- **Hot weld the joints**, using a Triac S hot air tool
Use a hooked Rapid Ultra nozzle.
Clean the nozzles regularly to prevent the formation of deposits along the welding cord.

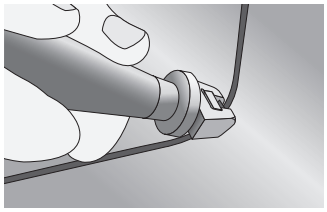
We recommend the hooked Rapid Ultra nozzle:
Janser code 224 800 013 or ROMUS code 95028.



- **Level the welding cord** using a special coving tool after the welding cord has cooled down.

We recommend a tool that has been specially designed for coving:
Gerflor code 0562 0001.

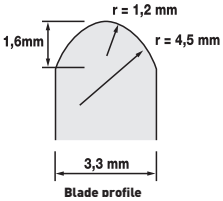


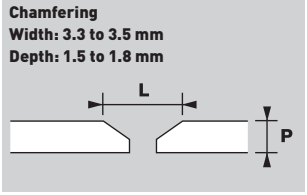


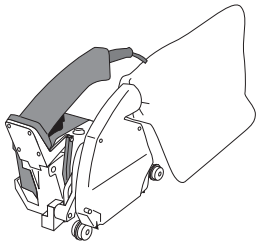
4.2 - FLAT WELDING

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.

- **Chamfer the joints** using an electric chamfering machine, blade width 3.3 mm, depth 1.5 to 1.8 mm.





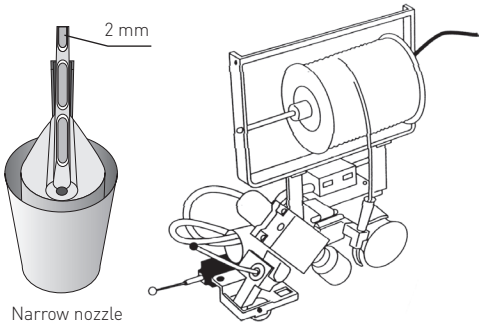


Chamfering machine

INSTALLATION OF GTI MAX CLEANTECH TILES

• Hot-weld the joints using a welding trolley.
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.

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



Narrow nozzle

4.3 LEVELLING THE WELDING CORD:

• Using a MOZART knife:
First pass: Make an initial cut by placing the levelling guide under the MOZART knife blade (Fig. 1)
Second pass: Leave the welding cord to cool down completely
Rotate the levelling guide to 90° on the side to completely remove the excess welding cord material. (Fig. 2).

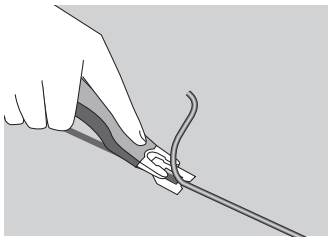


Fig. 1 - Levelling guide under the blade

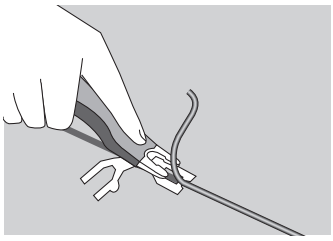


Fig. 2 - Levelling guide at 90°

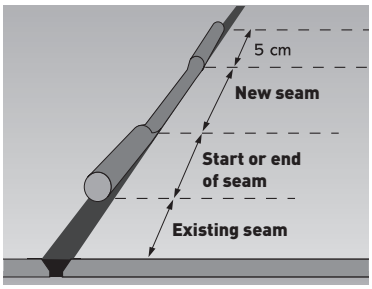
TOOLS	GERFLOR CODE
MOZART knife	0561 0001
Spare blades	0542 0001

This trimming method avoids leaving hollow weld seams

• Level the welding cord in two passes after the welding cord has cooled down.

4.4 JOINING OR REPAIRING WELDS

- Make an initial levelling cut of the welding cord
- 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 welding cord
- Weld using a hot air tool with the Rapid nozzle as explained above, starting and ending at the existing welds (about 5 cm).



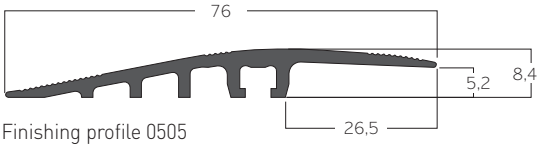
5. SPECIAL FEATURES

5.1 - SKIRTING

Gerflor VYNAFLEX skirting or Décor skirting for the finish between the floor and wall, when the floor covering does not have coving.

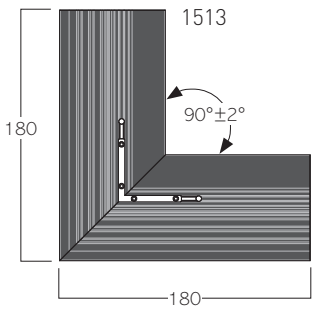
5.2 - ENDS AND DOORWAYS

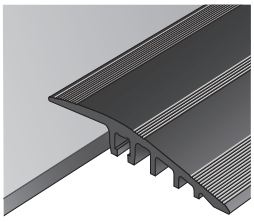
Use the following profiles depending on the conditions of use: traffic, humidity, etc.
Install the GTI 0505 edge profile, checking that it is attached 5 cm from the edges.
• Stainless steel screws and plugs are supplied with the profiles.



Finishing profile 0505

3 m long profile with 9 drilled holes with 4.3 mm diameter
The centre distance between the holes is 313 mm
The first hole is 90 mm from the end
Deburr the holes after drilling





Inside corner profile
Packaging: 4
Supplied with 8 screws, 8 plugs and 4 connectors
Dimensions: 180 x 180 mm

TFZ 4x50 mm screw and 6x30 mm plug

TFZ screw, diameter 4 mm and length 50 mm 

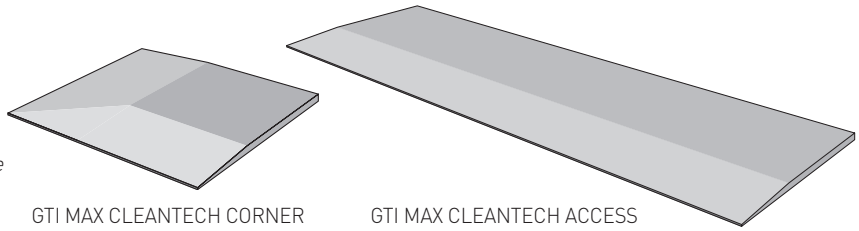
Dowel, diameter 6 mm and length 30 mm 

INSTALLATION OF GTI MAX CLEANTECH TILES

5.3 - FINISHING

GTI MAX CLEANTECH ACCESS 600 mm x 300 mm
GTI MAX CLEANTECH CORNER 300 mm x 300 mm
GTI MAX CLEANTECH Access and Corner can be used to finish the contour of a surface.

These accessories need to be bonded with a reactive adhesive and weighted while the adhesive sets (6 to 12 hours), or with a double-coated adhesive (neoprene or acrylic).



GTI MAX CLEANTECH CORNER GTI MAX CLEANTECH ACCESS

6. PUTTING FIXTURES BACK IN PLACE

- Process machines or other machines (empty or loaded) should be put back in place only after laying load-distribution panels to prevent loose-laid material from slipping and becoming scratched.
- **Any damage to the material caused by putting fixtures back into place shall not be accepted by the installer or material manufacturer.**

7. REPAIR AND MAINTENANCE

MONITORING, MAINTENANCE AND REPAIR
The user should regular monitor that the structure appears to be securely in place and notify the client and/or original installer of any anomalies that the user believes may result in potential risks for the durability of the structure.
The technical analysis, requested by the user from the other parties, should differentiate between ageing due to normal wear and tear due to the traffic and use of the premises and accidental damage.
If the observations made by the user are found to be justified following the technical analysis, the installer shall conduct the repair work within the scope of its contractual and/or legal commitments.

NOTE:
As part of this monitoring, the user should report any accidents linked with the operation of the premises without delay for repairs, in particular: cuts due to falling sharp objects, occasional burns, etc.
This maintenance may be carried out by the user's maintenance department.