

## 1. INSPECTION AND PREPARATION OF THE SUBFLOOR

The product may be laid on the following subfloors:

- New or old subfloors such as:
  - Separate cement screeds or concrete slabs
  - Concrete paving
  - Intermediate and upper concrete slabs and floors
  - Cement or calcium sulphate-based liquid screeds
  - Asphalt concrete
  - Asphalt screed
- The following are also concerned:
  - Glued old sports floor coverings (PVC, rubber, resin, etc.)
  - Painted concrete
  - Old glued parquet flooring (in this case, do not use plastic film)

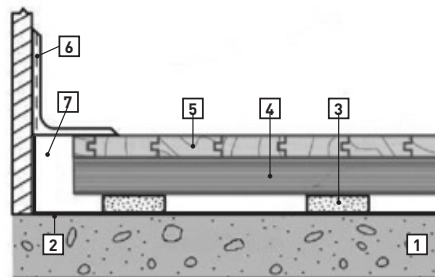
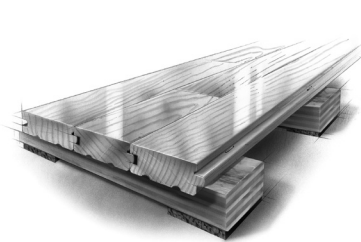
Local standards have to be applied and the following requirements must be satisfied:

- Surface evenness less than 5 mm when measured with a 2 m straightedge and 1 mm when measured with a 20 cm straightedge.
- Subfloor humidity less than 3 % at a depth of 2 cm using the carbide bomb meter test.
- The concrete must offer an average compressive strength of > 24.13 MPa after 28 days.

In the event of a nonconforming subfloor, it must be prepared in accordance with the product manufacturer's instructions.

## 2. PRODUCTS

**NOTE :** before you start work, check with our technical services whether this data sheet has been amended by a more recent version. Examine the materials prior to installation to ensure that there are no visual defects. If the flooring has already been installed, the cost of any remedial work will not be covered.



### DESCRIPTION

1. Concrete slab
2. Polyethylene (0.15 mm)
3. Resilient pads  
50 x 50 x 20 mm
4. Preassembled subfloor construction
5. Flooring
6. Vented cove base  
76 mm x 102 mm
7. Expansion space (38 mm)

## 3. SUBFLOOR CONSTRUCTION: FLOORING AND TOOLS

MATERIALS SUPPLIED WITH THE ORDER BY GERFLOR	MATERIALS AVAILABLE ON ORDER FROM GERFLOR	MATERIALS AND TOOLS SUPPLIED BY THE INSTALLER
FOR THE SUBFLOOR CONSTRUCTION		
		Staples 38 mm / 5,000 units / 1 box (900 m²)
Plywood sleepers (2.44 m x 7.5 cm / 2.4 cm)		Circular saw / jigsaw
Polyethylene 0.15 mm / 1 box (185.7 m²)	Vented cove base (1.22 linear metres) / 16 units	Electric screwdriver
Factory-mounted pads (50 x 50 x 12 mm) + pads supplied for repositioning during trimming		Wood adhesive sealant
		Hammer
		Staple gun
FOR THE FLOORING		
Flooring bundles = 1.6 m² / length from 0.23 m to 2.40 m Width: 57 mm	For Rezill Sleeper: Staples 50 mm / 5,000 units / 1 box (60 m²)	Staple gun, such as Bostitch MIIIIFS, for fixing Connor flooring
		Shims
	Spline	Hammer
		Adhesive sealant

## 4. CONDITIONS AND PREPARATION OF THE GYMNASIUM

### 4.1 - STORAGE

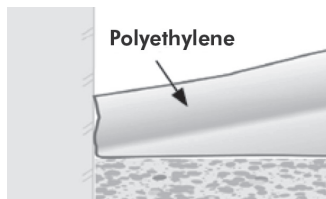
The materials required to install the REZILL SLEEPER subfloor construction must be stored on site, in a dry area of the gymnasium that is protected from variations in temperature.

### 4.2 - ACCLIMATISATION PERIOD

**IMPORTANT :** three days prior to installation, the ambient temperature in the room must be between 15 and 30°C. Relative humidity must be between 30 and 60 %. Once these conditions are met, all protective coverings and packaging can be removed to allow the materials to acclimatise. After unpacking, the materials must be left to rest for three days before installing.

While installing the subfloor construction, maintain the same conditions (i.e. ambient temperature from 15 to 30°C and relative humidity between 30 and 60 %). If there is any moisture in the room (such as a new build), you are advised to ventilate the room for four to six weeks before installing the subfloor construction. Ensure that the room is ventilated throughout installation.

## 5. LAYING THE POLYETHYLENE VAPOUR BARRIERE



A polyethylene vapour barrier with a thickness of at least 150 microns must be laid across the entire subfloor.

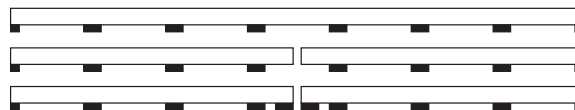
Coving: the vapour barrier must be turned up at the edges of the room by at least 5 cm to reach the finished floor level. After woodfloor's installation, the vapour barrier must not be viewable. It may be cut if necessary.

Use of two vapour barriers: the barriers must overlap by 20 cm minimum. Overlaps are bonded using single-sided moisture-resistant adhesive tape and by width of 5 cm.

## 6. INSTALLING THE SUBFLOOR CONSTRUCTION

- 1 Start installing the sleepers in one of the corners of the gymnasium.  
Install the sleepers widthways in the main gymnasium.

- 2 Cut 2,440 mm sleepers in half (2 x 1,220 mm).  
1,220 mm sleepers will be used to start each alternating row.

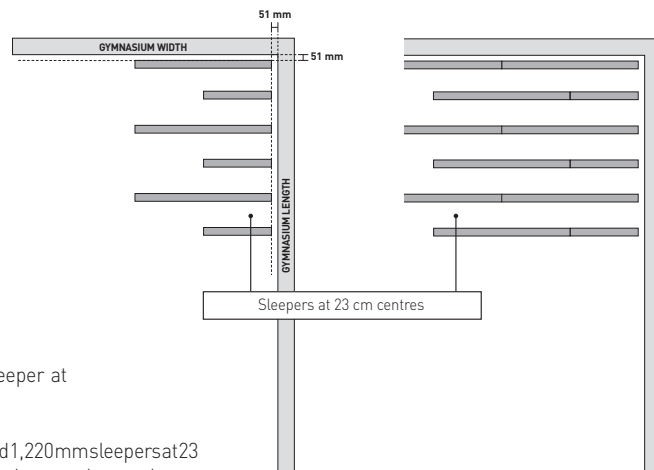


- 1 2,440 mm sleeper
- 2 Cut the sleeper in half
- 3 Attach two pads or blocks to the cut ends

- 3 Start the first row of sleepers with a 2,440 mm sleeper. Continue and end the row with 2,440 mm sleepers. If necessary, cut the last sleeper to ensure a 51 mm gap at the end of the row.

**IMPORTANT :** A 51 mm gap must be maintained along the walls and around any obstacles. Maintain a space of 6 mm between the ends of the sleepers. Temporary blocks may be helpful in maintaining the gap.

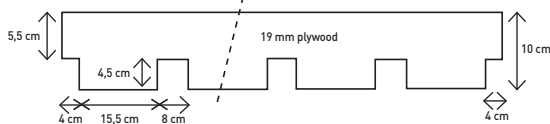
Make sure that they are removed after flooring is complete.



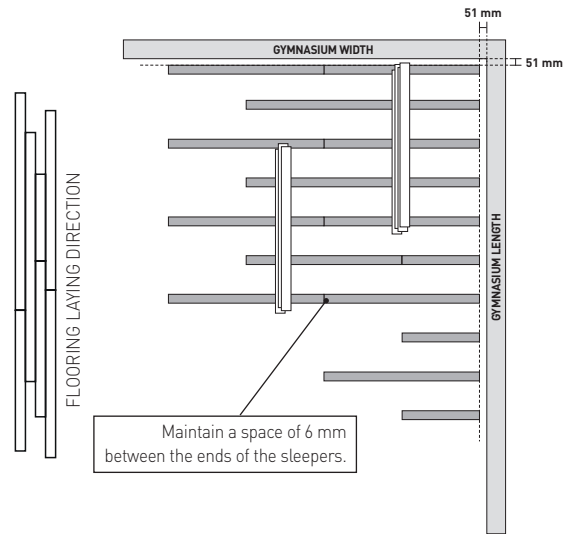
- 4 Start the second row of sleepers with a 1,220 mm sleeper at 23 cm centres.
- 5 Continue alternating the start of each row with 2,440 mm and 1,220 mm sleepers at 23 cm centres. Continue butting 2,440 mm sleepers end to end to complete each row. Maintain a space of 6 mm between the ends of the sleepers. If necessary, cut the last sleeper to ensure a 51 mm gap at the end of the row.



Template



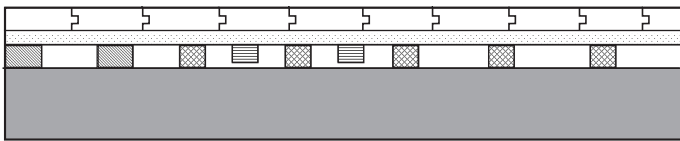
**TIP :** Set bundles of flooring and templates on the sleepers immediately after the sleepers are set into position. This will keep the sleepers aligned and spaced when fitting the flooring.



## 7. REINFORCEMENT BLOCKS

12 mm reinforcement blocks must be installed instead of resilient pads in areas subject to permanent or frequent high static loads (retractable seating systems in the stacked position, in front of access doors, storage areas, etc.).

8 mm partial reinforcement blocks must be added between resilient pads in areas subject to occasional high static loads (retractable seating systems in the open position, non-permanent portable equipment, etc.).



- 12 mm reinforcement block
- 8 mm partial reinforcement blocks
- 12 mm resilient pad
- Subfloor
- Flooring
- Sleeper

## 8. INSTALLING THE FLOORING

### 8.1 - DEFINE THE EXPANSION GAPS

1. After maple strips acclimatization period (§4.2), **realize moisture measurements** in the maple strips with a moisture indicator. Realize measurements using different maple strips bundles and in different localization in the bundles. The average value is your «maple moisture content during installation» (IMC).
2. According to your **local area knowledge about maple moisture** value in time:
  - a. If you know the highest maple value you can reach, consider it as «maple moisture level during its life» (LMC)
  - b. If you know the facility will have a controlled environment including relative humidity between 35% and 50%, consider 9% as your «maple moisture level during its life» (LMC)
  - c. If you don't know the highest maple value you can reach, consider 13% as your «maple moisture level during its life» (LMC).
3. **Calculate the difference** between your value of «maple moisture level during its life» (LMC) and your value of «maple moisture content during installation» (IMC). We will call this result the "maple moisture content to cover" (MCC) -> **(MCC) = (LMC) - (IMC)**
4. **Define the expansion gaps.** According your "maple moisture content to cover" (MCC) value, you can define the expansion gaps to manage on the playground during the installation.

	EXPANSION GAP BETWEEN EACH STRIP	EXPANSION GAP EVERY 4 STRIPS	EXPANSION GAP EVERY 6 STRIPS	EXPANSION GAP EVERY 8 STRIPS
0% < MCC < 1%	0,07 mm	0,28 mm	0,42 mm	0,56 mm
1% < MCC < 2%	0,15 mm	0,60 mm	0,90 mm	1,20 mm
2% < MCC < 3%	0,20 mm	0,80 mm	1,20 mm	1,60 mm
3% < MCC	0,25 mm	1,00 mm	1,50 mm	2,00 mm

Values to consider for maple strip of 57 mm width.

For example, if MCC = 1,5%, you need to insure a gap of 0,60 mm every 4 strips or a gap of 0,90 mm every 6 strips using shims.

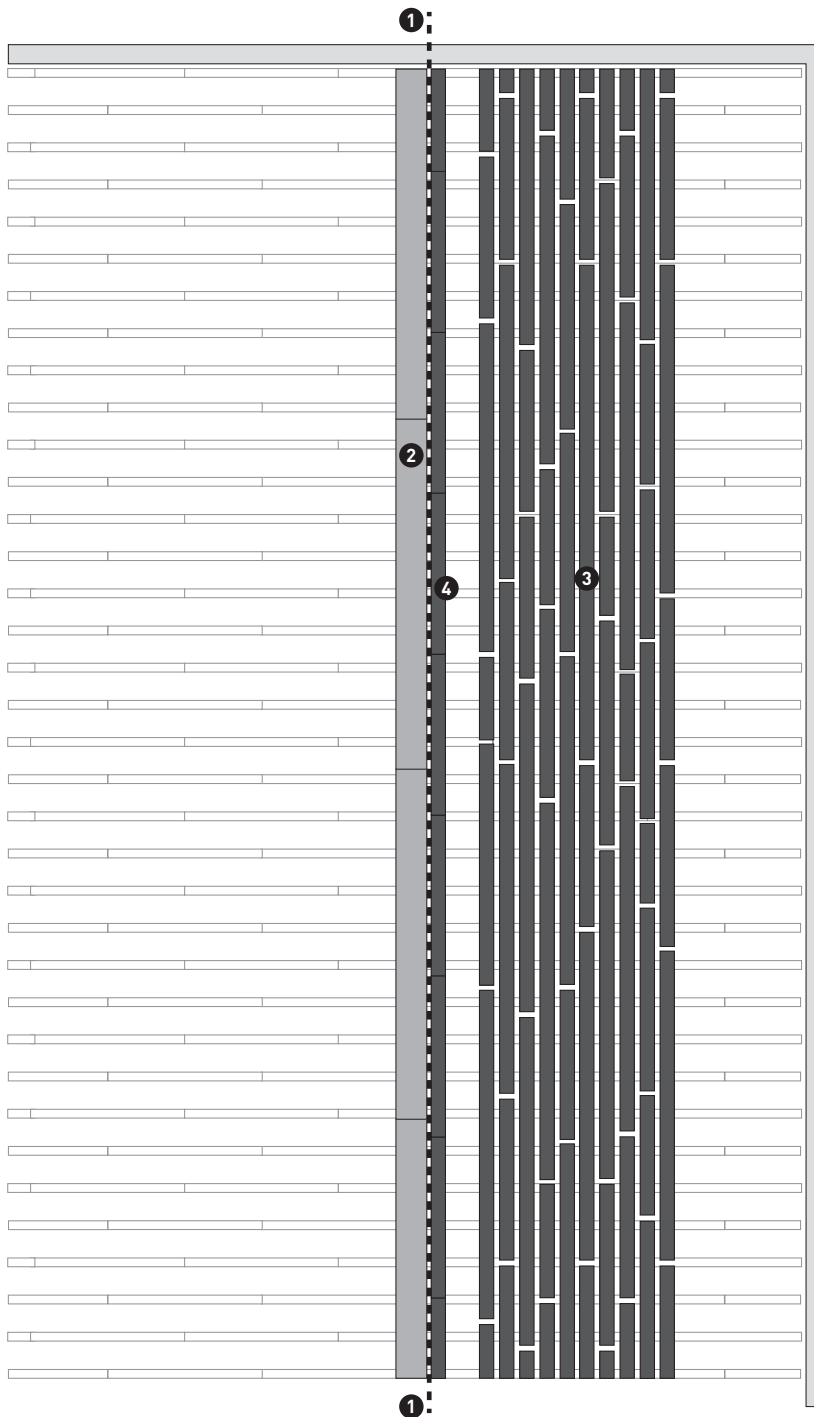
For aspect reasons:

- We recommend to realize expansion gaps under 1,50 mm,
- We recommend to provide smaller expansion gaps more frequently rather than wider expansion gaps in lower quantity.

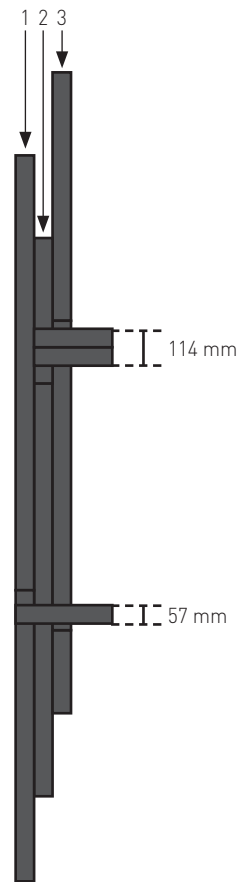
■ 8.2 - INSTALLING THE FLOORING ON SLEEPERS

8.2.1 - Installation along the longitudinal axis

Install the flooring strips by starting in the middle of the gymnasium.



- 1 Mark out the longitudinal axis along the subfloor construction.
- 2 Provisionally fix plywood sheets along the longitudinal axis.
- 3 Present and sort the strips so that they are ready to be stapled according to the following rule:



- The offset in joints between two consecutive rows must be greater than 114 mm (width of two strips).
- The offset in joints between three consecutive rows must be greater than 57 mm (width of one strip).

- 4 Staple a row of strips along the axis using the plywood sheets as a guide.

Add shims according to value you define using §8.1

Don't remove a line of shims before the realisation of a new line of shims

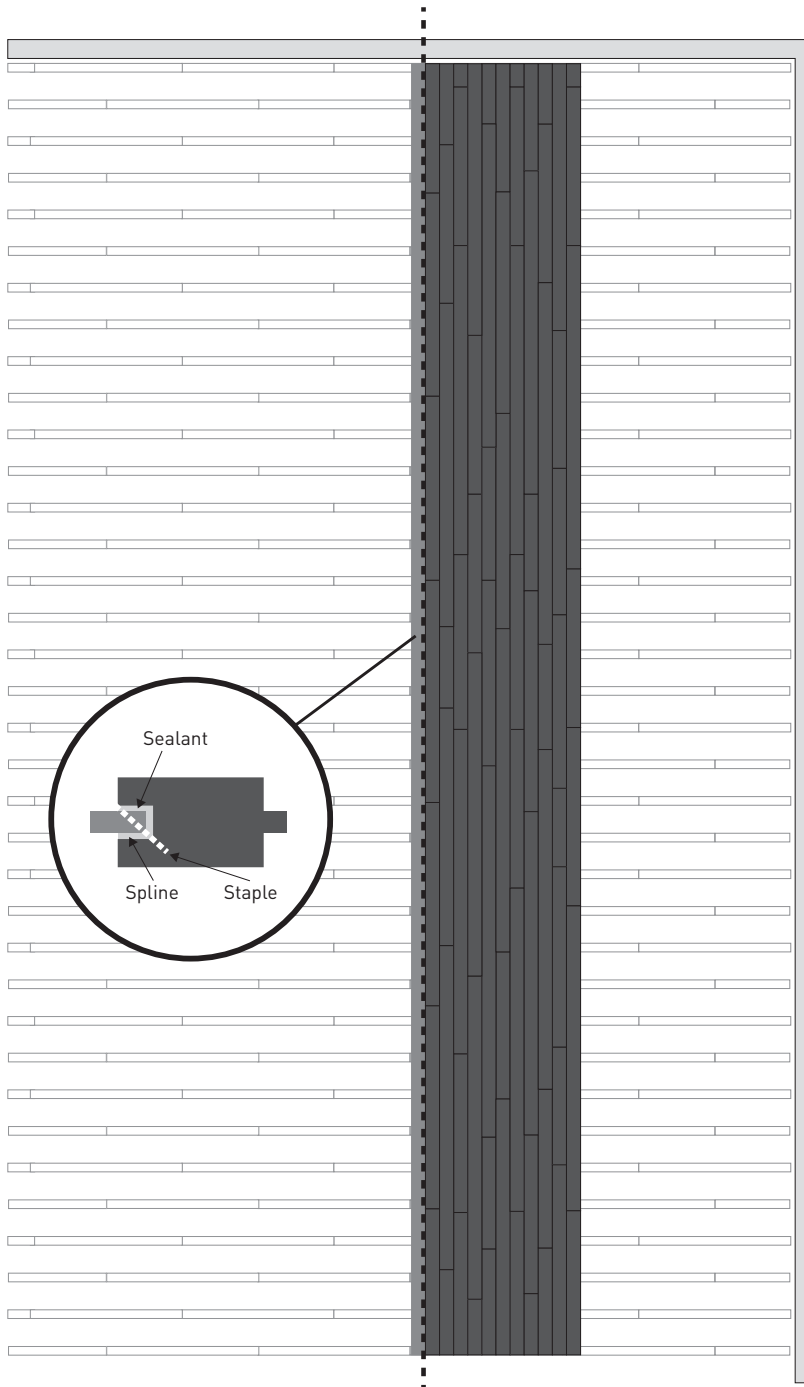


**TIPS**

To have shims easy removal:

- Be sure to respect the pressure recommendation of your staple gun.
- Remove your expansion gaps blocks at least at the end of the day.

9.2.2 - INSTALLING THE SECOND HALF OF THE GYMNASIUM



Fixing the spline



Applying the spline in the groove of the strips along the longitudinal axis:

- Remove the plywood sheets.
- Apply adhesive sealant to the bottom of the groove.
- Gently tap the spline into place using a hammer.
- Staple the spline to the flooring.

■ 8.3 - FIXING THE STRIPS

Connor flooring strip joints do not always fall on a sleeper ①

8.3.1- Installation

Strips must be stapled with a staple gun, such as Bostitch MIIIIFS (www.bostitch.fr).

**Recommendations for Alliance:**

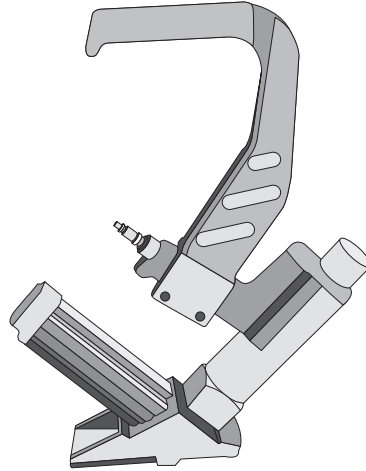
Staple the flooring strips to each sleeper.

Do not staple less than 3 cm from the end of a strip.

**TIPS**

To ensure the proper functioning of the staple gun:

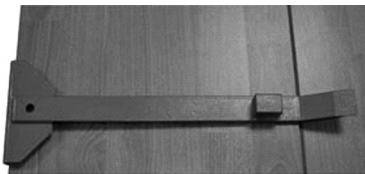
- Be careful to respect the pressure recommendation
- Use and add lubricant preconised by the staple gun provider every day of working.



8.3.2 - Finishes

8.3.2.1. Installing edging strips

The last rows of strips that cannot be stapled must be glued in the tongues and grooves. Use a pull bar to fit the last row, which will have been previously cut (using a marking gauge).



8.3.2.2. Peripheral expansion

- If installing on sleepers, leave a 51 mm expansion void at the perimeter.
- If installing a squash court, refer to the following extract of page 6 of squash federation specifications:

JUNCTIONS AND JOINTS				
CLASSIFICATION	REGIONAL	NATIONAL	INTERNATIONAL	OBSERVATIONS
Wall to floor junctions	There shall be no protrusion of any kind at the junction of the wall with the floor. A 6 mm expansion joint for fixed walls and a 12 mm expansion joint for movable walls are allowed.			-
Joints in playing surfaces	Joints shall not deflect the rebound of the ball in any way. Joints shall not be wider than 2 mm. Their properties must be similar throughout the court.			-

9. SANDING, SEALING AND PAINTING CONNOR FLOORING

GERFLOR validated the sanding and sealing associated with BLANCHON, BONA and POLOPLAZ suppliers.

Depending on the products used, refer to the corresponding Installation guideline.

