

Installation Instructions

Reflex M Evolution S'Match-It

15 02 2012



NOTA BENE

As a natural and living material, wood is moving due to relative humidity (RH). The wood shrinks in dry conditions and it expands in high relative humidity. In areas where the wood has been influenced by high or low RH for a longer period, damage in the wood may arise. Therefore it is important to keep the RH in the hall between 40-60%.

In order to provide the customer with the best use of product, this installation guide has to be followed carefully to guarantee conformity and ensure sports performance. If not, Tarkett Sports will not be responsible for damages following installation. Any use of the product for purposes other than the ones set out in the conditions of use should be submitted to Tarkett for prior approval.

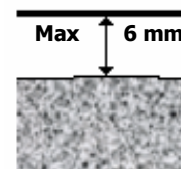
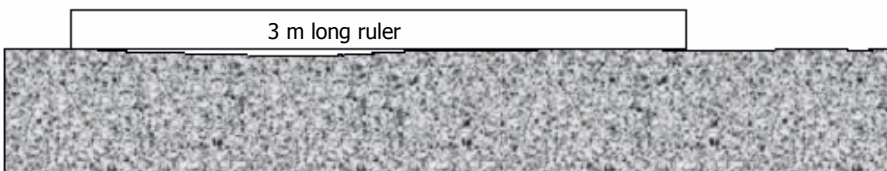
If you need any further information, please contact your dealer who will provide you with the appropriate advice.

Specification conditions before installation

I.1 Unevenness of the support



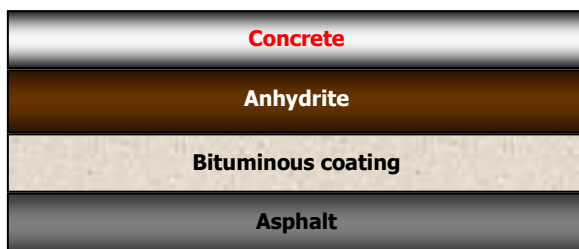
Following Standard EN 14 904 §5.11, all holes and bumps must not exceed 6mm height and/or depth, under the 3 meters long ruler. Before installing make sure this part is checked and in conformity with this Standard.



I.2 Support water content



The moisture rate in the screed must be in accordance with the local requirements, i.e. in France $\leq 4,5\%$ (concrete) - in Germany $\leq 2\%$ (concrete) anhydrite in France and Germany $<0.5\%$...



Installation Instructions

Reflex M Evolution S'Match-It

15 02 2012

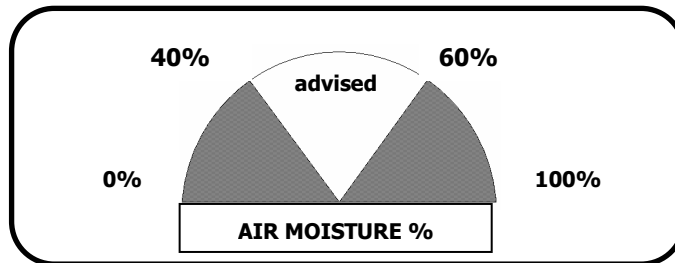
I.3 Atmospheric conditions



The timber products must be stored on their wedges, in a dry, heated indoor area – between 15 and 20°C (between 59 °F and 68°F), which means protected against wind and bad weather.

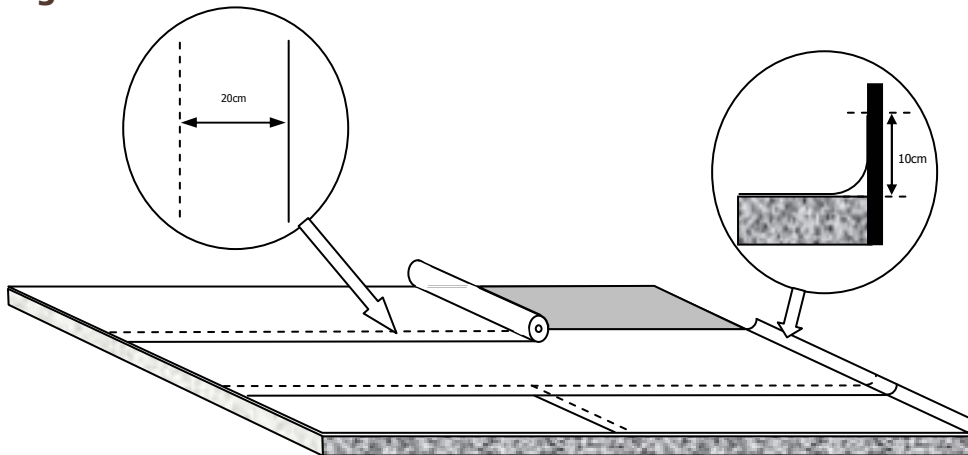
The packaging of timber products must not be removed before starting the installation.

The relative humidity must be between 40 and 60%.



II Installation of the sub-construction

II.1 Laying the Tarfilm



Lay the first sheet on the ground. The second sheet is laid with 20cm overlapping the first, then tape the both sheets together. Do not forget to leave 10cm of Tarkolay along the edges against the walls. Please note that on an asphalt screed or any other sub-floor with a risk of pollution or possible high humidity content, you will have to double the layers but in a 90° direction.

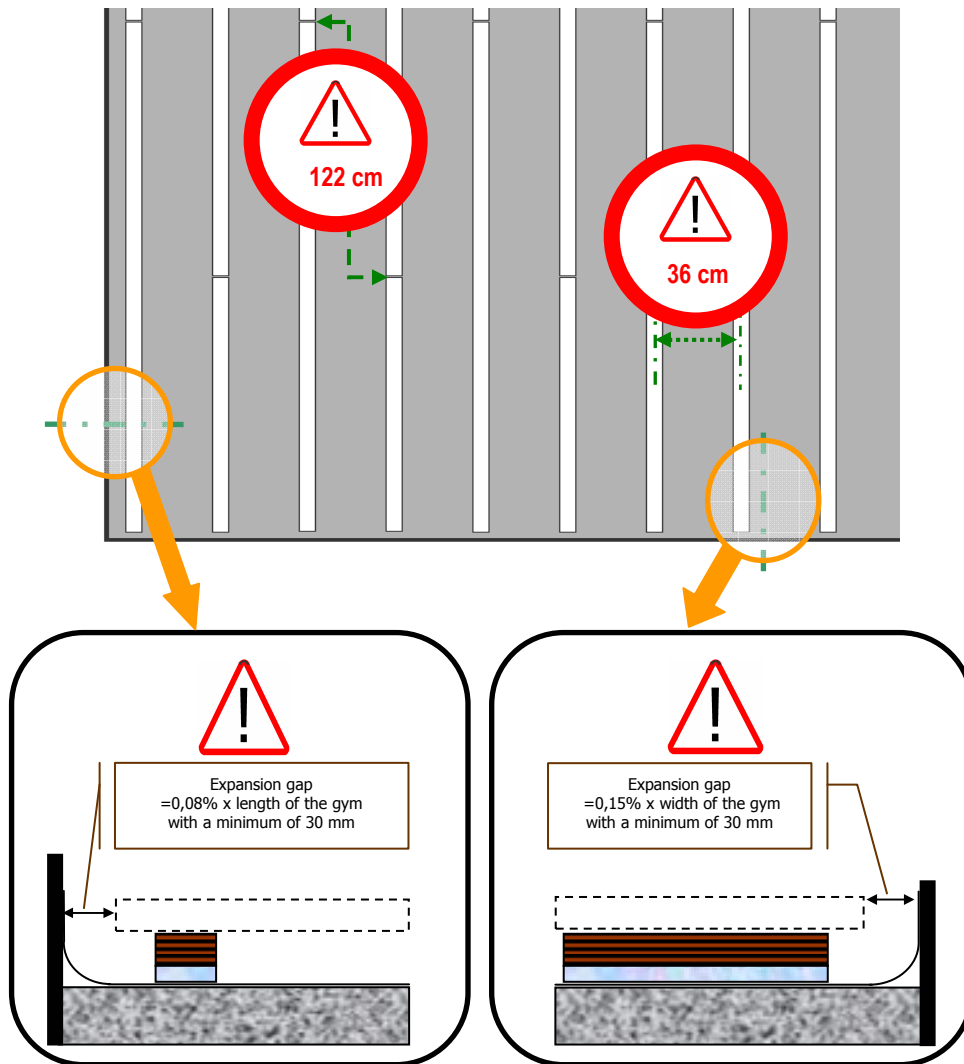
Installation Instructions

Reflex M Evolution S'Match-It

15 02 2012

Defining the expansion gaps

If we consider a 40 x 18m gym



If we consider a 40 x 18m gym

- 40000 mm x 0,08 % = 32 mm along the wall lengthwise
- 18000 mm x 0,15 % = 27 mm so 30 mm along the walls widthwise.

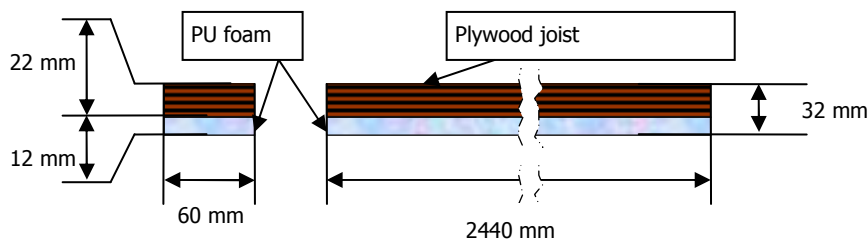
Installation Instructions

Reflex M Evolution S'Match-It

15 02 2012

II.2 Single joist system

Single joist presentation: joists are made of a 22mm thick plywood glued on a 12mm PU foam of 110 kg/cubic meter.



II.2.1 Joists first row

Each board wooden floor measures 2.52m long.

The first joist row: you must pay attention to the distance to be considered between the wall and the first joist line. Place the first row of joists at least at 5cm from the wall.



First joists row

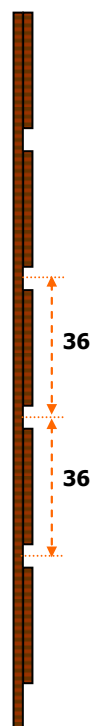
II.2.2 Other joists

The end of the 22mm wooden top covering planks must have a central position on joists, this, to avoid any weak point. The joists must be separated of a 36cm space, which will be defined by using the batten spacers.

Joists are laid with a 36cm space between one to the other (from axis to axis), except for the 2 first rows which are closer. As previously mentioned, the 22mm wooden top planks measure 2.52m long, as matter of fact, 8 joists are laid under a complete Multiply 22mm plank. One plank: $252\text{cm} / 36\text{cm} = 7$ spaces of 36cm => 8 joists

See the drawing below.

The first joist **1** is laid 5 cm far from the wall; the second joist will be laid at a distance of 36cm from the wall + the value of the requested expansion gap. (e.i.: consider a gymnasium of 40m long, the value of the expansion gap will be $40000 \times 0.08\% = 32\text{mm}$, as a matter of fact the second row of will have to be laid at à 36 cm+32 mm = 39,2 cm from the wall).

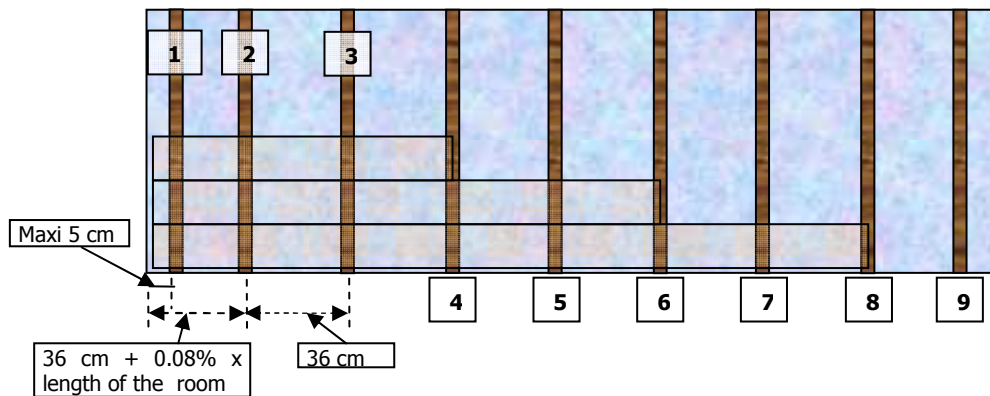


Batten spacer

Installation Instructions

Reflex M Evolution S'Match-It

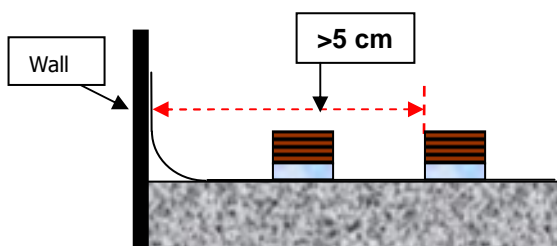
15 02 2012



Joists installations with positioning of 3 top layer planks

II.2.3 Last row of joists

If the remaining distance between the last joist and the wall is higher than 5cm, another row of joists must be laid to welcome the end of the 22mm multiply plank's end.



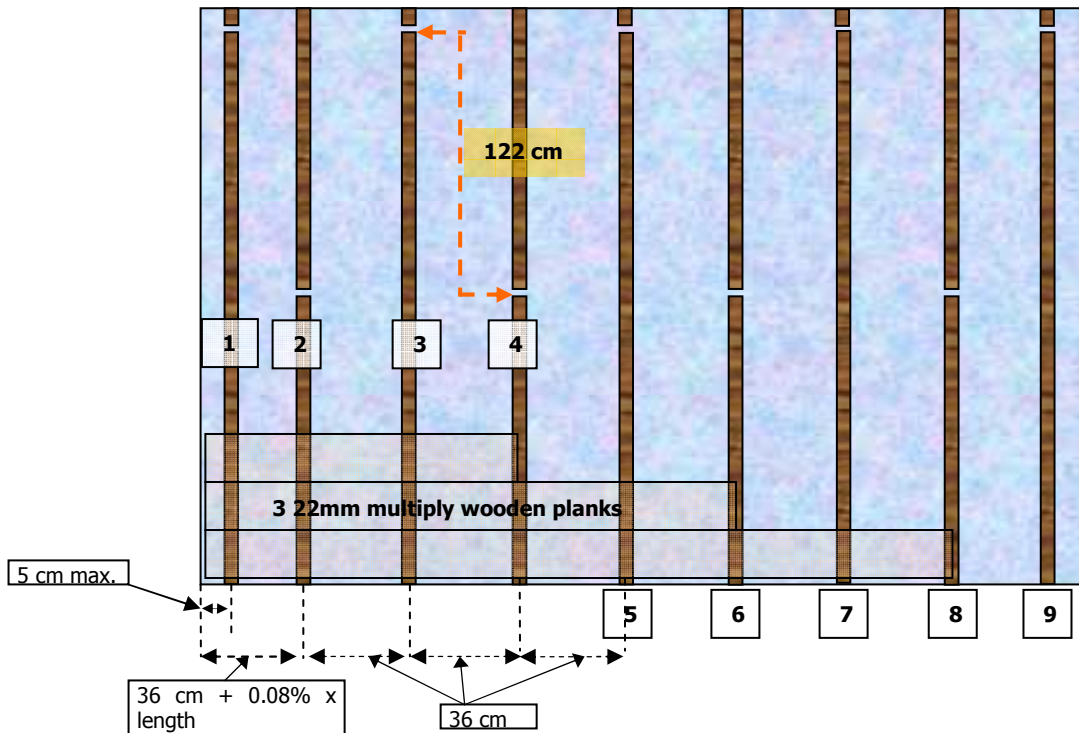
Installation Instructions

Reflex M Evolution S'Match-It

15 02 2012

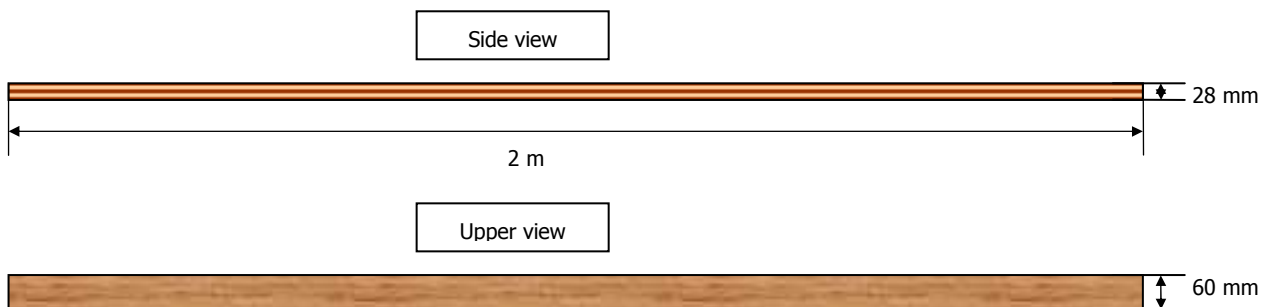
II.2.4 How to position the joists from one row to the adjacent one.

The distance between 2 joist shortends must be 122 cm widthwise, on the same line the joists are placed end to end; this allows the wooden floor to shrink and swell without creating any weak line or points.



II.2.5 Re enforced the installation.

Some areas need to be reinforced (for instance the place where are located the mobile backstops), this operation is possible by using joists, their laying have to be done in accordance with the below drawing.



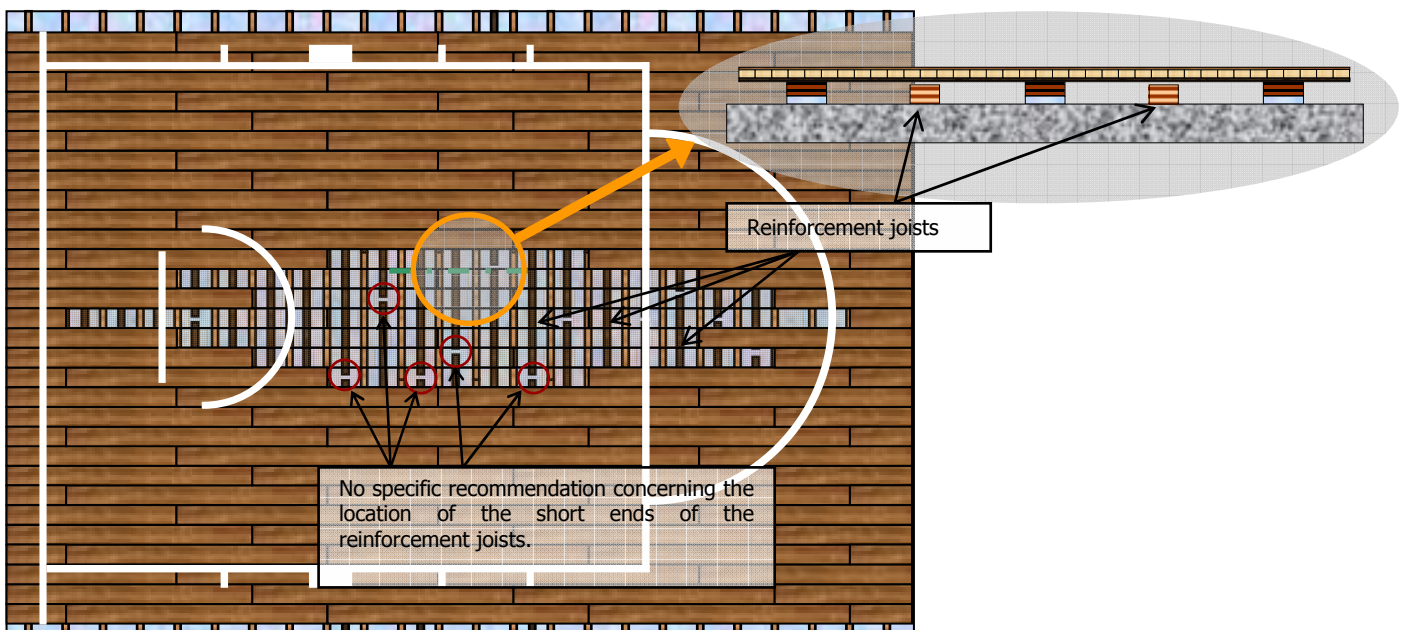
Installation Instructions

Reflex M Evolution S'Match-It

15 02 2012

How to position the joists dedicated to reinforce the installation:

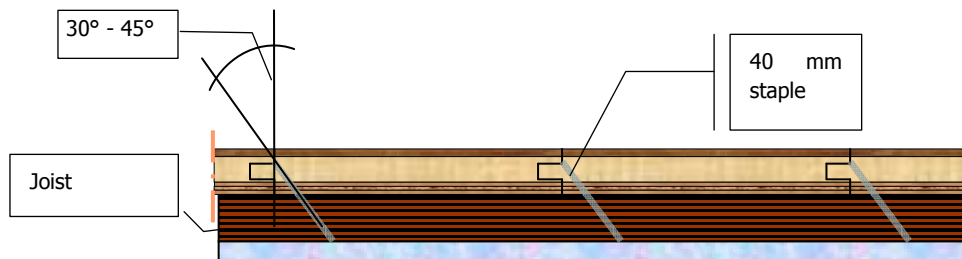
The reinforcement joists have to be installed between 2 Reflex Evolution joists. Their function consist in minimizing the top wooden covering deformation.



III Planks Fixing

III.1 Overview


The boards of the strip flooring shall be fixed to battens using 40mm pins. Affix the board to the batten through the tongue. Position the staples at the back of the tongue and drive it diagonally (around from 30° to 45° angle) into the board (see diagram below).



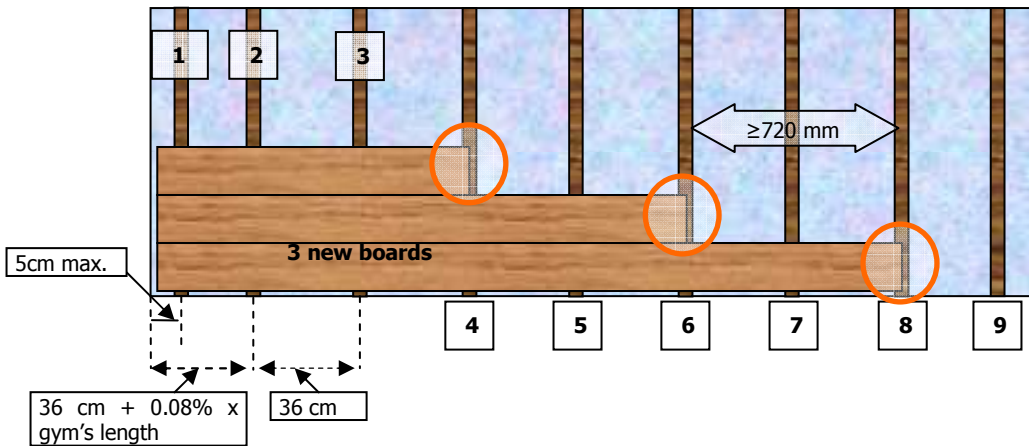
Installation Instructions

Reflex M Evolution S'Match-It


15 02 2012

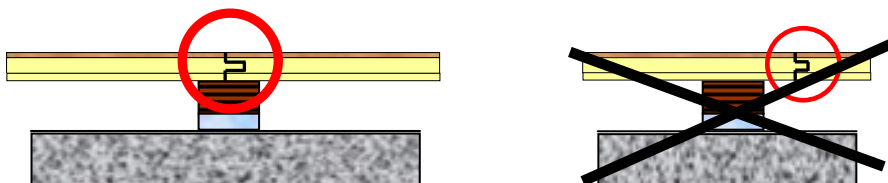
 Wood floor boards are always fixed on three joists. Start installing the first three rows of wood floor with a full board. **These 3 boards must be glued on joists.** The boards must be installed **staggered**, it is the easiest way to be sure that all the shorts wedges are laid on a batten. Following this procedure, shorts wedges are never in the same direction.

Pay attention to preserve a 720mm difference between the first board wedge and the end of the adjacent one (see the scheme below).



Starting process of boards in Reflex M Evolution

 This picture shows clearly where the wedges shall be installed. It is required to do so



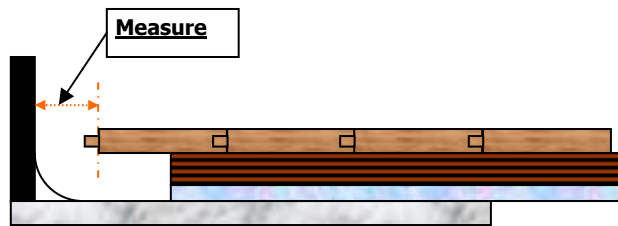
Installation Instructions

Reflex M Evolution S'Match-It

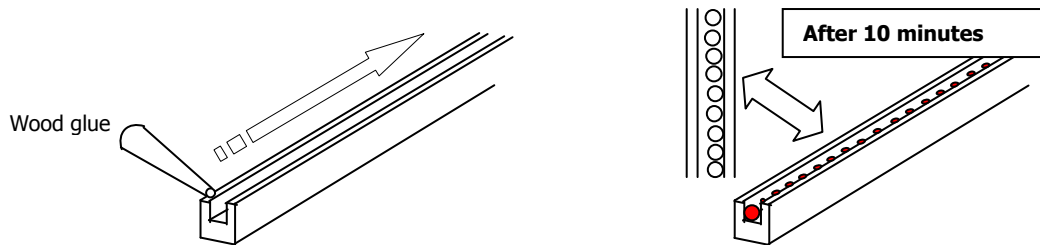
15 02 2012

III.2 Last wood floor board

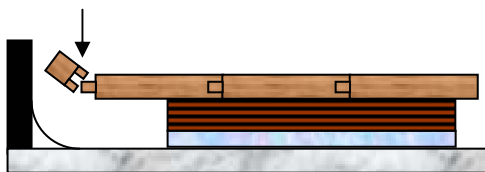
Every floor has special dimensions. Therefore the last board is usually not a full board. Normally the last row of wood floor before the final row, has a tongue.



For example, if a hall measures 20 meters width, and you have 4.5cm left to reach the wall, you need to consider the expansion gap: $0.15\% \times 20 = 3\text{cm}$. Therefore, it is required, to cut a board of 1.5cm in width and apply it as follow:



Apply a glue line quickly. When a few glue drops are observed, it is the right time to stick the board into the tongue.



First, present the groove at 45° on tongue, and push as much as you can



Second, use end wood floor former tool and a hammer to push, as a normal board, the last row of wood floor.

Installation Instructions

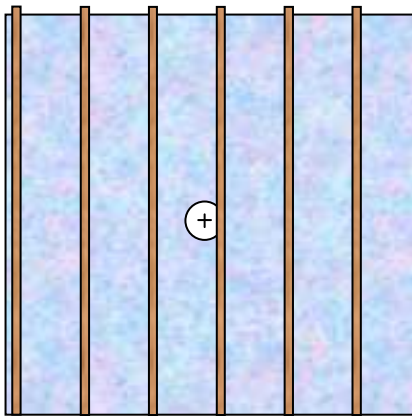
Reflex M Evolution S'Match-It

15 02 2012

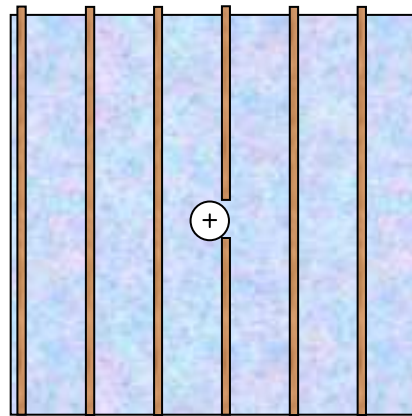
IV Fixing the trap door

IV.1 Mark location where trap door will be placed

Make a short mark on foam. The most important thing is to place the centre of the trap door. After this, draw a circle with a 21cm diameter. When the trap door is located and marked, install the joist on the foam (1). On the area of trap door, you must cut the joist (2)



(1) Mark the trap door



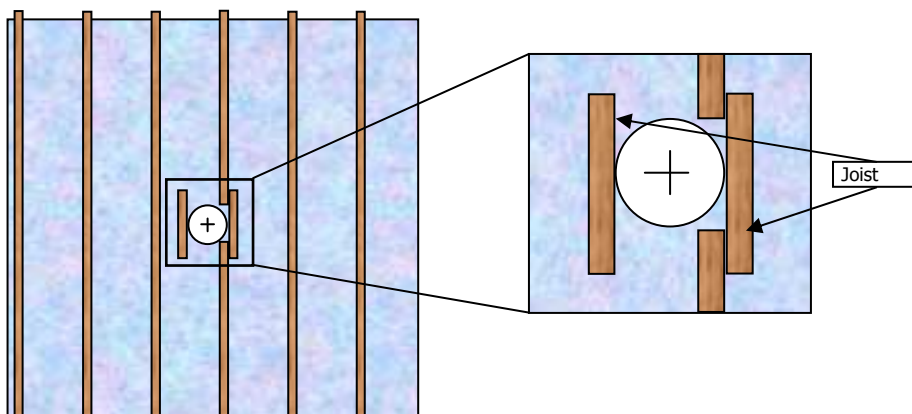
(2) cut the joist around trap door

Cut the joist

At the location where the trap door will be installed, cut the joist around the mark.

This location becomes a **weak point** which must be reinforced.

Ensure yourself that every wood floor board is supported by a joist. Only, use a joist in 60 x 32 mm. Make sure the joists are fixed on a 22 mm mortise. For the best grip, use wood glue and screws to fix each other.



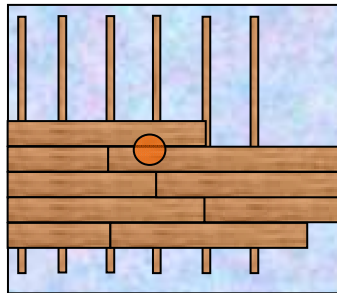
Installation Instructions

Reflex M Evolution S'Match-It

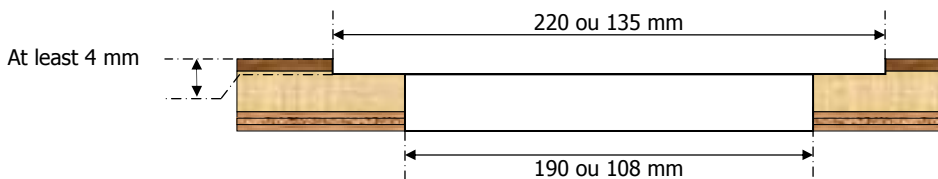
15 02 2012

IV.2 Lay the trapdoor

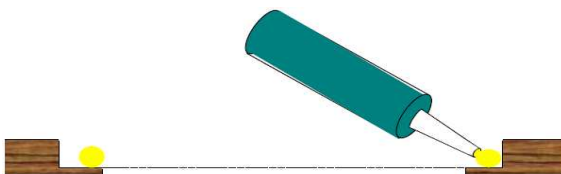
After having laid the top layer, locate the centre of anchor.



Form a circular recess adapted to the trap door you chose (check the diameter before cutting the wood floor).



Glue the frame using PU adhesive



Clean the frame carefully



V Game lines marking

Permanent marking

- Blanchon Thixo Tracé – Blanchon SA – Tel: +33 4 72 89 06 00 – www.blanchon.com

- Conipur 45 – BASF AG – Tel: +41 58 958 22 44 – www.conica.com

- Kipp – Indoor paint 2K for lines marking and Indoor paint 2C for painted surfaces – www.kipp-markierungen.de



Follow the manufacturers' recommendations

Temporary marking

3M – référence 471 – 5 cm wide – www.3M.com