

# Installation

Transport & storage	1
Handling	2
Subfloor control	3
Installation	4
Inspection	5
After installation	6
Reminder	7



THE ULTIMATE FLOORING EXPERIENCE

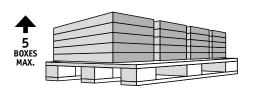
# 1. TRANSPORT & STORAGE

#### In general the rolls and boxes must be stored in a sheltered clean and dry indoor place and free from any pollution. Before installation, the rolls with 2ml width should be stored upright and safely secured; other dimension above 2ml should be stored horizontally. Tiles should be stored flat in their packages, in small neat p-iles (not more than 5 boxes high in the locality prior to installation).

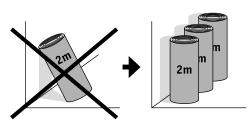
They should also be protected from extreme temperature (heat and cold), moist, rust, rot, free from any contamination and not piled-up nor crushed under heavy weight. State of the art handling must be respected.

Rolls and tiles must be stored during 48 hours before starting the operation. For installation, room temperature should always be above 15°c or 18°c for linoleum. Check the rules in your country; those temperatures could be different.

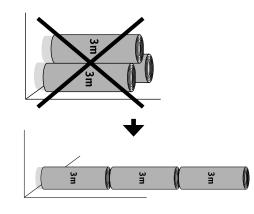
Before installation, sheets and tiles should relax minimum 24h, out of packaging.



• For modular products



• For 2m rolls: upright storage



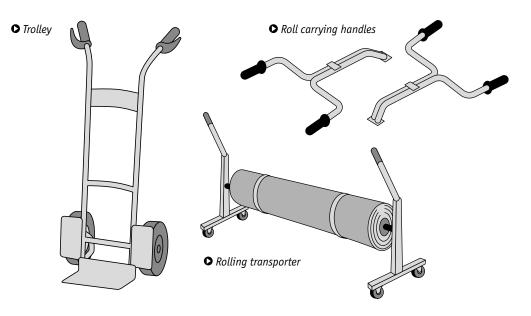
● For ≥2m rolls: horizontal storage

# 2. HANDLING

For the best results, follow the installation instructions below, and use the tools and the accessories recommended by the manufacturer.

Care should be taken when handling all types of floorcoverings to ensure that safety procedures are followed and damage does not occur to the material or people. Check the material for visible defects and/or damage before and during installation and report to Tarkett representative.

For each continuous surface use the same batch number and install rolls/ boxes in sequential order



Wrong transport, storage and/or handling could damage the flooring, causing aesthetical or technical issues. Tarkett does not warrant or guarantee flooring problems caused by inappropriate storage or handling.



The subfloor quality is the 1<sup>st</sup> condition for a successful installation, so make sure it is in good condition to do a flooring installation.

Always bear in mind that in most countries, the installer is responsible for the acceptation of the subfloor on which he will do the installation. He will then be held responsible for any potential claim/litigation.

The subfloor must be flat, clean, free from all debris & residues, without any marks (no felt pen, marker of any type, ballpoint pens, paint, etc. that could cause discolouration due to migration) sound, dry, solid, hard, smooth.

The absorbency must be checked and subfloor should not be exposed to humidity. The preparation/dryness of the subfloor and installation procedures should all be as per the current relevant Standard within the country of use. The dryness of a solid subfloor should be below the maximum moisture level permitted when tested in accordance with the said Standard. *Check the rules in your country to define the appropriate method and values*.

For marking, only use a non-oily graphite pencil.

# 3.1 SUBFLOOR CHARACTERISTICS

## Humidity rate

Always refer to each country regulations. For info, the drying time of a concrete floor is approx 2 weeks per cm. For testing, refer to the regulations valid in your country (Relative Humidity test, Calcium carbide system...).



• Calcium Chloride Moisture Test Kit



• Concrete Moisture Meter

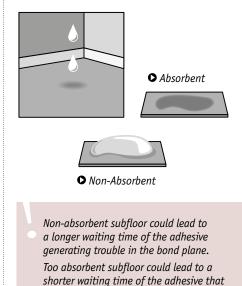
- Excessive humidity rate can cause
- disbonding, bubbles, colour migration that Tarkett does not warrant or guarantee.

# Absorbency – Porosity

Check local regulations, but in general a subfloor is said too absorbent when the absorbency time of a drop of water on concrete is less than one minute. In this case, a primer must be used before leveling compound, with a 1/1 dilution.

A subfloor is said non-absorbent when the absorbency time of a drop of water on concrete is more than 10/ 15 minutes. In this case, the primer should be used non-diluted.

Prior to the use of a primer, always follow manufacturer's instructions.



could cause disbonding issue.

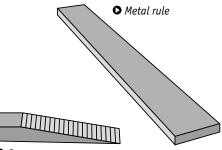
## Planarity / Flatness

Different ways for measuring acc. countries.

France: tolerance must be less than 7mm over 2m for concrete subfloor and 5 mm for wood subfloor.

- UK/Nordic: 3mm over 2m (& depending on localities, SR1 or 2...).
- Germany: 4mm over 2m (Din 18202).
- NL/Australia: 2mm over 2m.

Tolerance must be less than 2mm over 20 cm of concrete/wood subfloor.



Gauge

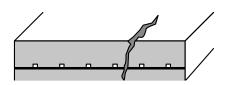
Non-flat surface could lead to visual issues or generate additional cost for the installer when using more levelling compound to recover the surface flatness.



## Cracks & joints

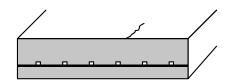
First step will be to identify the type of crack or joint that will be discovered on the building site to adapt the treatment.

#### Cracks



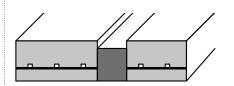
Cracks (0.3 to 1mm large) can appear during the drying of the concrete by contraction.

#### **Micro-cracks**



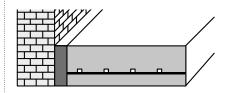
Cracks almost not visible ( $\leq 0,3 \text{ mm}$  large).

#### Expansion joints



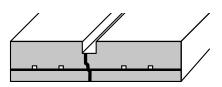
Expansion joints are used to compensate dimensional variations and building movements.

#### **Isolating joints**



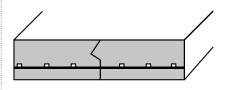
Isolating joints separate the screed from other independent building constructions (walls, pillar).

#### **Contraction (dividing) joints**



Contraction joints allow free contraction of concrete and avoid cracks during drying.

#### Construction joints



Construction joints are used to stop daily pouring of concrete slab.

## Hardness

The subfloor has to be resistant enough to compression and indentation.

to compression and indentation. To measure the hardness of the concrete, installer can use a sclerometer.

Isolating joints separate the screed from other independent building constructions (walls, pillar).

When the subfloor is not hard enough, significant traffic our heavy load could damage screed/levelling compound and could cause visual/technical defects.

## Sound

The subfloor has to be free from contaminants such as hydrocarbon stains, paints, chemical residues or laitance on the surface.

- Any contaminant left on the subfloor could
- cause colour migration and product damage.

## Clean

The subfloor has to be free from any particles, dust, traces of felt pen or marker.

Particles, scratches and residues could

cause visual defect (telegraphing effect).



Mirco-cracks should be treated with a primer.

Cracks and construction joints should be sawed, cleaned and full filled with an epoxy resin on which sand will be spread.

Contraction joints should be full filled with an epoxy resin on which sand will be spread.

*Expansion joint will be treated with a profile inserted or overlapped. Levelling compound and floorcovering will be stopped on both sides. Isolating joints will be filled with soft material (e.g. polystyrene).* 

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# 3.2 SUBFLOOR TYPES - PREPARATION

## New subfloor

#### **Concrete/cement base**

**Preparation:** water base primer compound + self levelling compound adapted to the traffic level.

#### Wood or wood particles/plywood base

**Preparation:** wood adapted primer compound recommended, direct installation possible or add a special wood fiber levelling compound. For wood base, you should check:

- flexibility (thickness length)
- fixing cupping (opening)
- glued grooves and tongues
- caulking of joints (wood paste)
- sanding (smoothing).

#### **Bitumen base**

**Preparation:** neoprene vinyl emulsified primer or bitumen adapted primary + bitumen adapted self levelling compound.

#### Anhydrite base (humidity rate < 0.5% CM)

**Preparation:** sanding of the surface then apply an adapted primer or emulsion, in principle, screeding is not necessary.

#### Metal

**Preparation:** apply an anti-rust primer + gluing, after thorough cleaning of any oily residue.

## Old subfloor (renovation)

#### Terrazzo or ceramic tiles

**Preparation:** 1<sup>st</sup> make sure that all tiles are still well bonded to subfloor. Removal of surface coating or sealer - Apply an emulsified primer + adapted self levelling compound.

#### Wood parquet (glued, not floating)

**Preparation:** 1<sup>st</sup> check that all wood planks and pieces are well in place, solid and securely fixed, then apply a primer or adapted emulsion + fibre reinforced self levelling compound specific for wood.

NOT recommended for HOMOGENEOUS Vinyl Products.

## Old floorcovering

#### Textile

**Preparation:** must be fully removed, scraped, and then apply a self levelling compound adapted to the area.

#### Vinyl

**Preparation:** we recommend removing all old floorings (for security, fire regulations, migration prevention etc...), scraping and applying an emulsified primer + self levelling compound adapted to the area.

It may exceptionally be possible to install over old HO compact Vinyl floorings or even VCT type which are in good conditions & well bonded to the subfloor, and mainly applicable for small areas. Two possibilities: thorough cleaning and degreasing of the surface & either install directly after application of an acrylic base adhesive adapted for PVC on PVC installation. Or, application of cement base levelling compound, according to manufacturer's recommendations.

If installing over old floorcovering, specific safety regulations have to be strictly followed. Please check with all local regulations. For heavy duty usage, old floorings must be removed.

## Underfloor heating

Stop heating at least 48h before screeding and/or floorcovering installation. Re-start heating progressively 48h after installation (few degrees per day). In case of underfloor heating, we recommend that the vinyl tiles are hot welded.

The temperature should never exceed the floorcovering industry agreed maximum of 27°C. Ensure that the room temperature will remain at minimum 18°c for installation.



**INSTALLATION** INSTRUCTIONS 5

# 3.3 MATERIALS FOR INSTALLATION

Application:

80 - 120 g/m<sup>2</sup>.

instruction.

in general, the primer is

planarity of the subfloor:

applied with a brush/roller.

Consumption depends on the

Strictly follow manufacturer's

#### Primer

#### Different types:

solvent/water based, PU, Epoxy.

#### Main actions:

- grade the site & the overabsorbent and/or different subfloor surfaces.
- grade the permeability of subfloor where drying time could be too quick
- improve the bonding performance of the leveling compound on nonporous subfloor.

Applying a leveling compound without using first a primer could cause delamination or cracks of the levelling compound.

## Self-levelling compound

#### **Definition:**

Is a smoothing cement based compound finish for indoor use that will be covered by a floorcovering.

#### Main actions:

- rectify the subfloor porosity = possibility to glue without any particular preparation
- self levelling action resulting in homogeneous & smooth surface

 allow regularity of glue layer and drying time on the whole surface.

Consumption (average): 1.5 Kg / 1 mm / m Heavy duty = 2-3 mm thickness (acc. country).

Strictly follow manufacturer's instructions.

## Adhesive

Although Tarkett may recommend a selection of manufacturer adhesive, we do not however guarantee the products listed. The list of products and manufacturers are not guaranteed complete or current.

Tarkett would not accept any liability for any of these products failing to perform in conjunction with any of their products.

It is the responsibility of the adhesive manufacturer and flooring contractor to ensure the products being used are appropriate for use and applied in accordance with the manufacturer recommendations.

#### In general:

Moderately absorbent subflor: use finely notched trowel (approx. 250g/m<sup>2</sup> to 300g/m<sup>2</sup>).

- For compact products (smooth backink): use **A1** spatula (TKB model).
- For acoustic products (honey comb foam): use A2 spatula (TKB model). Non absorbent subflor: use very finely

notched trowel (approx. 150g/m<sup>2</sup> to 200g/m<sup>2</sup>).

• May be the case for wall, Tarkolay, etc: use A4 spatula (TKB model).

#### For best selection, always check:

 Compatibility with the flooring product backing (PVC, PU, jute...)

 Aspect of the backing: rough, smooth, fibers, grid...

- Flooring porosity (textile, jute....)
- Subfloor porosity (absorbent or not)
- Quality/Performance (polyvalence, consumption...).

Consider flooring nature, subfloor type and conditions of use to determine the adhesive type and the spatula. According manufacturer's instructions and building site conditions, determine the drying and working time.

#### For linoleum:

For Linoleum use a notched trowel, type will depend on the backing (approx. 300g/m<sup>2</sup> to 350g/m<sup>2</sup> for jute backing, 200g/m<sup>2</sup> to 300g/m<sup>2</sup> for foam backing).

- For compact products (jute backing): use **B1** spatula (TKB model).
- For acoustic products (foam backing): use A2 spatula (TKB model).

Waiting time Open time Waiting time = time needed till you are able

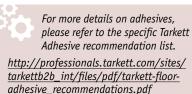
to lay the floorcovering in the glue with correct bonding.

Working time = time for laying, heavy rolling and trimming of the floorcovering.

In general, the application of glue is made with a serrated spatula (TKB ref.: A1 for compact, A2 for acoustic, B1 for Linoleum...) or a roller (for special glue).

Before laying down the floorcovering, in case application require a drying time of the adhesive, always check that water or solvents are evaporated (finger test - no transfer). Other application may require wet bonding (see Manufacturer instruction) like for linoleum or LVT.

#### Heavy roller must be used to ensure bonding.

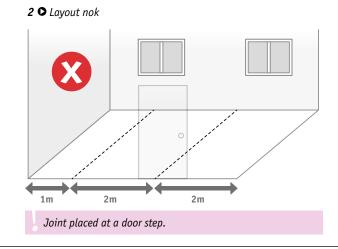


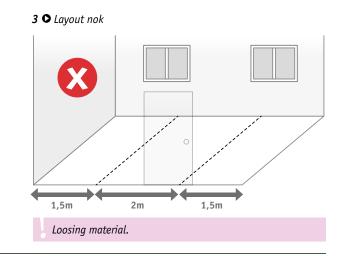
Please refer to each individual installation notice per product range, adhesive chart with Tarkett selection as guide line.

# 4.1 GENERAL RULES

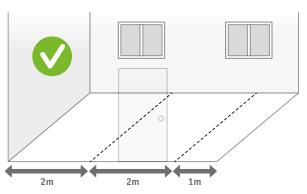
## Laying - Sheets

# 1 Room dimensions 311 5m 311 5m 311 0 5m 5m

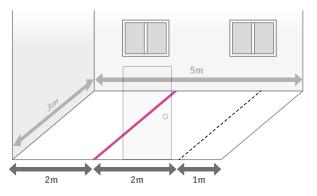




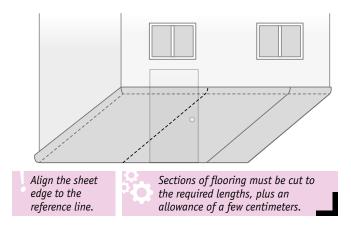
#### **4 ●** Layout ok



#### 5 ● Reference line



#### **6** • Sheets preparation (cutting and relaxation)



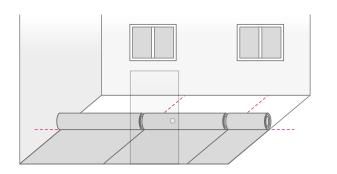


**INSTALLATION** INSTRUCTIONS 7

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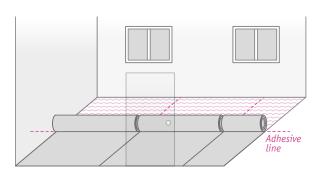
## Laying - Sheets

#### 7 • Half folding or rolling



Can be rolled or fold.

#### 8 🛛 Gluing



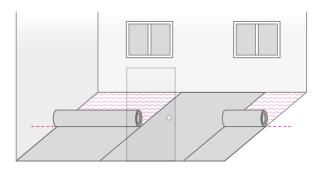
Spread the adhesive with the appropriate spatula.



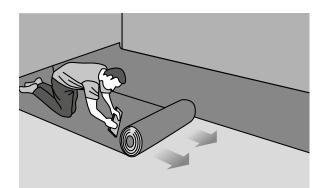


Pay attention to spread adhesive till the line. For the second half, ensure not to let space without adhesive or to overglue.

#### 7 • First sheet folding back into the adhesive and pressing



It's important to use the cork press when you gradually roll out the sheets onto the adhesive. In this way, you will avoid catching air under the sheets that may cause blisters later on.

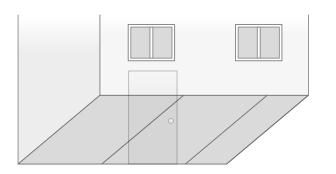




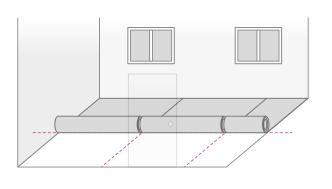
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## Laying - Sheets

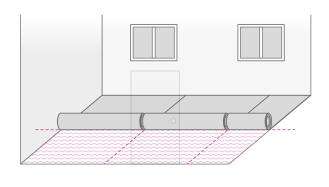
#### 10 • Next sheets folding back and pressing



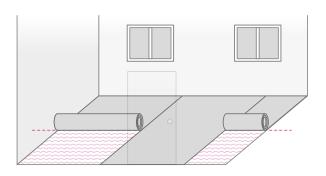
#### 11 • Repeat for the second half

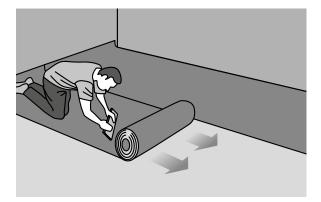


#### **12 O** Gluing



13 • First sheet folding back into the adhesive and pressing





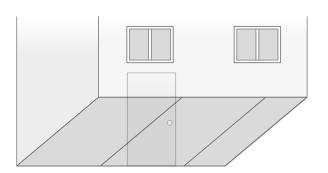
It's important to use the cork press when you gradually roll out the sheets onto the adhesive. In this way, you will avoid catching air under the sheets that may cause blisters later on.

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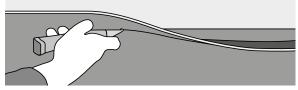
Please refer to each individual installation notice per product range, adhesive chart with Tarkett selection as guide line.

## Laying - Sheets

#### **14** • Next sheets folding back



Repeat the same operation with the second half of sheets.



When gluing and pressing is done, excess of material close to walls and obstacles can be trimmed/flushed (freehand cut).

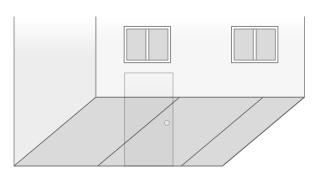
#### **Tools for freehand trimming:**

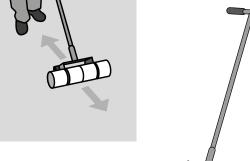
#### • Knife:

• Hook and concave blades:



#### 15 • Final pressing

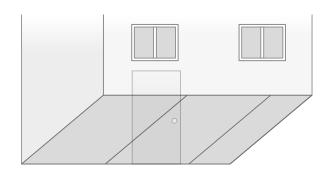


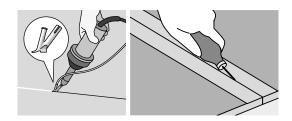


And then, use the heavy roller (mini 50kg) to ensure the final bonding.



#### 16 • Hot or cold welding





#### More détail page 14 & 15

#### Specific case of Linoleum:

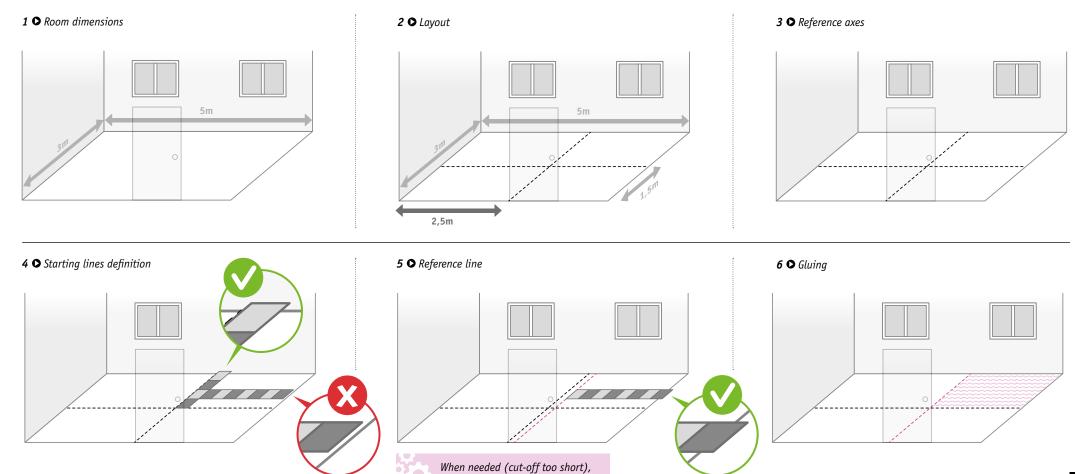
Due to jute backing, linoleum will require wet bonding installation and due to its construction, installer will have to use scribing tools to trim edges and joints. For more details, please refer to the specific Linoleum installation instruction.



Please refer to each individual installation notice per product range, adhesive chart with Tarkett selection as guide line.

# 4.1 GENERAL RULES

## Laying - Tiles

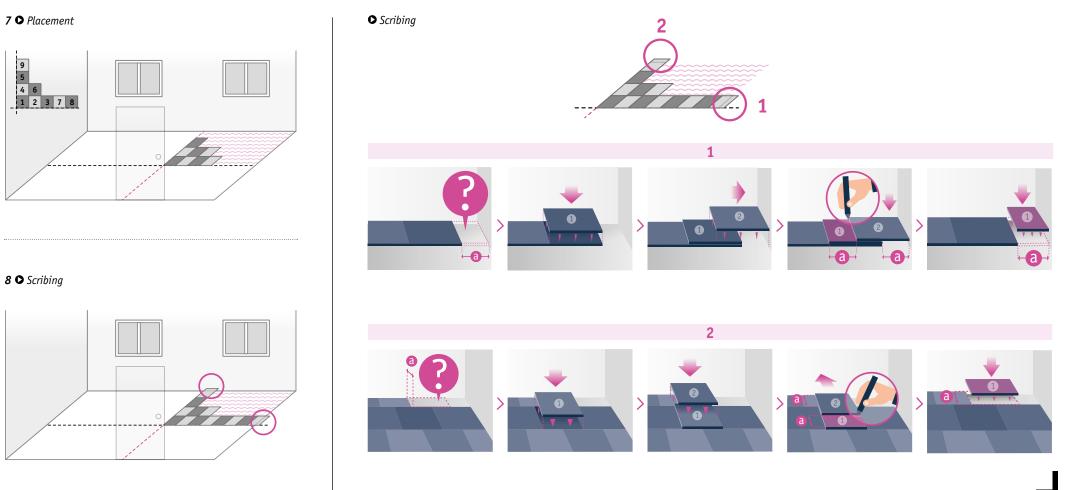


shift the reference line.



Please refer to each individual installation notice per product range, adhesive chart with Tarkett selection as guide line.

## Laying - Tiles



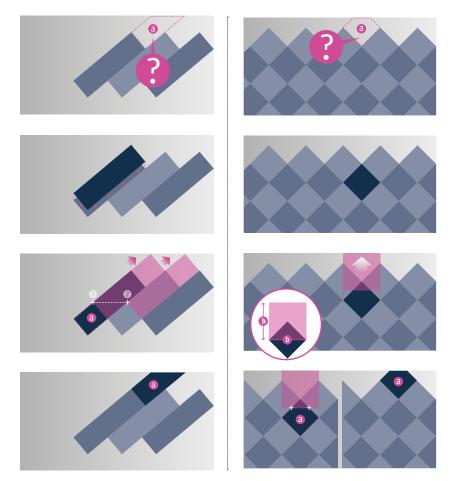


**INSTALLATION** INSTRUCTIONS 12

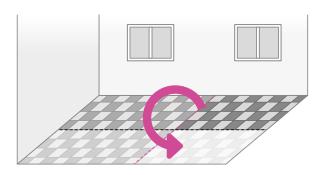
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## **Laying - Tiles / Diagonal installation**

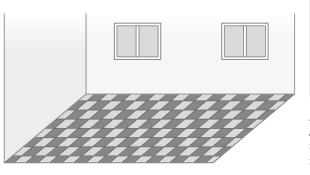


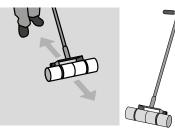


#### • Continue with the other quarters



• Pressing of the whole installation





Repeat the same operation with the second half of sheets. And then, use the heavy roller (mini 50kg) to ensure the final bonding.

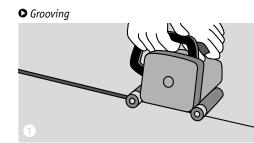


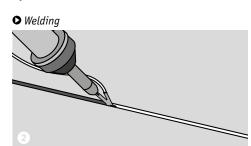
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## Joints welding

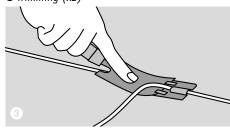
According to the product installed and the classification of the room, you could either hot weld (all types of flooring) or cold weld the joints (PVC HE only). Joints treatment depends on room classification; please refer to your country regulation to determine which type is accepted/required.

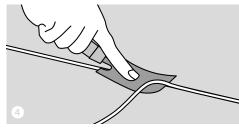
#### Hot welding (min. 24h after installation):





• Trimming  $(x^2)$ 

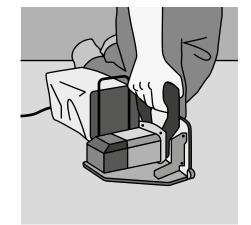


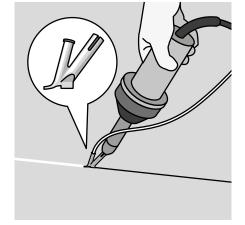




• Quater moon knife





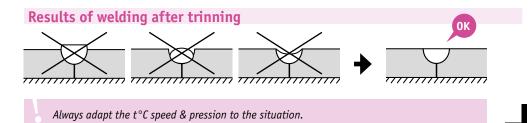


• Hot air welding gun + Nozzle

• Grooving machine

#### **Recap table of welding parameters**

Flooring	Gap between product	Groove	Deepness	Nozzle	Т°с	Speed	Trimming guide
Но	Crédit Cart 0.8mm		2/3 of the thickness	Hot spped	350 -		0.5 for compact and 0.7
Не	0		for compact, till foam for accoustic and	nozzle	400°C	± 2ml/min	for acoustic
Li	Crédit Cart 0.8mm		till jute for linoleum but max. 2.5mm	Open nozzle	500 - 550°C		Flooring



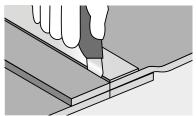


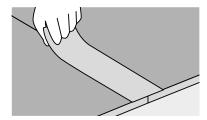


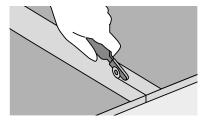
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## Cold welding (min. 24h after installation):

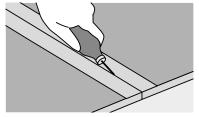
#### • Overlap flooring and cut both layers







#### • Apply cold welding solution





- Overlap the 2 sheets till the potential pattern match is achieved.
- The overlapping will be double cut in one step or 2 in case of thick flooring alongside a metal ruler.

Result should be an extremely tight joint.

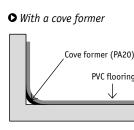
- Fix a special masking tape, centred over the cut seam, then cut the masking tape with the rolling knife within the seam.
- Apply the cold welding liquid by pressing the needle deeply into the seam.
  - Important: ensure you apply enough liquid along the entire joint.
- After 10 minutes the cold-welding liquid on the masking tape should be dry and the tape is removed carefully backwards.
  - The seam can be walked on after 24h.

# **4.2 SPECIFIC PRODUCTS**

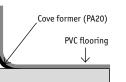
For the following products: Linoleum, conductive floorcovering, stairs, wet room concept, please refer to specific installation instructions.

# 4.3 COVE FORMING

In particular cases (wet room concept, hospital...), cove forming could be mandatory.

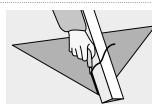


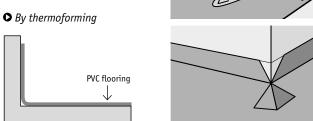
INSIDE CORNER

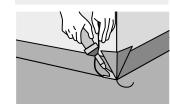








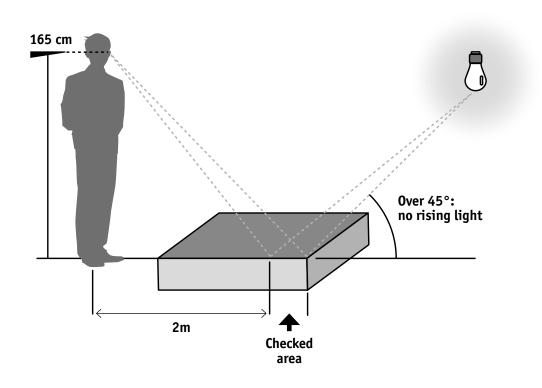




# **4.4 ACCESSORIES**

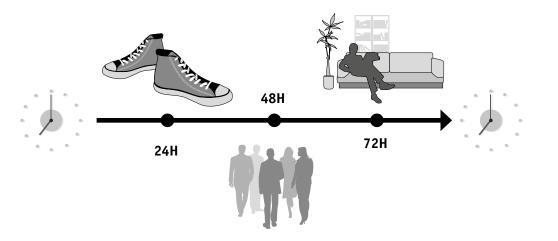
Many accessories are available to complete the installation: stairs profiles and borders, warning strips and signage, wall profiles, skirting...

# 5. INSPECTION (acc. to DTU 53.2 P1-1)



# 6. AFTER INSTALLATION

- Clean working area from all adhesive marks, stains and dust.
- Prevent soiling by protecting the area.
- Open the area to normal traffic 48 hours after installation and move furnitures after 72 hours.





# 7. REMINDER

	Linoleum	PVC He	PVC Ho			
Transport & Storage						
Transport & Downloading	Transport:Transport:- Truck: laying (3 rolls max)- Truck: laying (3 rolls max)- Container: standing- Truck : laying (3 rolls max)- Unloading: very carefully (role should not fall down)- Container : standing- Unloading: carefully- Unloading: carefully		Transport : - Truck : laying (3 rolls max) - Container : standing - Unloading : carefully			
Handling	Trolley	Trolley	Trolley			
Transport & Downloading	Standing Let labels visible ! Acclimatization 48h	2m: standing, +2m: laying Let labels visible ! Acclimatization 48h	2m: standing, +2m: laying Let labels visible ! Acclimatization 48h			
Installation						
Tooling	Specific tools: long scribber, joints scribber, edge trimmer, linoleum hammer, spatula B1 for compact and spatula A2 for Silencio	Spatula A1 compact and A2 acoustic	Mix of linoleum and PVC He, you can use some of the tools from both products spatula A1			
Subfloor preparation	Same preparation, see rules in each country					
Subfloor conditions	Same confitions, depends on the country, not the product (maximum humidity level with CCM 4,5% in France, 2% for internationnal)					
	Min 18°c in the room Min 15°c on the floor	Min 15°c in the room Min 10-12°c on the floor				
Room conditions	35 to 65% of humidity in the room (for acrylic glue)					

Tarkett THE ULTIMATE FLOORING EXPERIENCE

# 7. REMINDER

	Linoleum	PVC He	PVC Ho	
Installation				
Installation	Long scribber for walls, edge trimmer one side, overlapping one side with joint scribber	Edge to edge tight, when damaged or for overlapping re-cut with steel roller (called also double cut)	Mix of linoleum and PVC He, you can use some of the installation mode from both products	
Laying down	Same laying direction (except for Elle design), no coving of edges floor / wall rolls: ≤32lm for compact and ≤30lm for Silencio Carefully, from wall to wall	Opposite laying direction, expect wood (not bambou) rolls: 23 ml Easy, from middle of room	Mix of linoleum and PVC He, you can use some of the laying mode from both products (depends on room)	
Cutting	Pre-cut with long and joint scribber + cutting with hooked knife	Free hand along the wall with hooked knife	Mix of linoleum and PVC He, you can use some of the laying mode from both products (depends on room)	
Gluing	Compact : wet bonding with lino adhesive, B1 spatula / Silencio: standard bonding with adhesive for PVC , A2 spatula	PVC adhesives, A1 compact and A2 acoustic spatula, finger test to check waiting time	PVC adhesives, A1 compact spatula, finger test to check waiting time	
Welding	Lino welding rod (thermo-gluing), 500°c minimum, 2 to 2,5mm grooving deepness and lino speed nozzle, double cut (trim) of the rod, first one after 5 minutes and second one when the rod is cold	PVC welding rod, 400°c, hot speed nozzle, 1,5mm grooving deepness, double cut (immediate and after 5 minutes) of wleding rod		
Initial cleaning	Depending on protection of the floor and on dirtiness, clean with neutral detergent and water, stains with adapted chemical product, follow maintenance instructions given by Tarkett.			

