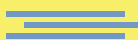


Rigid — FLOORS

by lalegno 

INSTALLATION MANUAL

1. Planks with 5G-click

(Page 2 - 8)

2. Planks

(Page 9 - 14)

3. Herringbone

(Page 15 - 24)

4. Tiles

(Page 25 - 30)

5. Tiles with 5G-click

(Page 31 - 37)

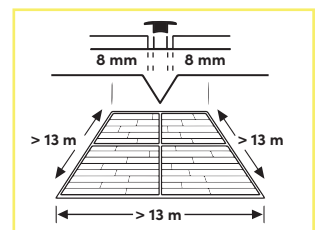
1. PLANKS WITH 5G-CLICK

Rigid Floors Planks with patented interlocking system is installed as a glueless floating floor. The Rigid Floors Planks are not designed for outdoor use, in saunas or solariums. Because of their floating installation Rigid Floors Planks can't be installed in areas into which drainage systems have been incorporated, such as walk-in showers.

In a newly installed underfloor heating system in a recently laid screed, the system must operate at maximum capacity before installation to remove any residual moisture from the screed. Consult the supplier of the heating system to ensure you do this safely. Turn off your underfloor heating or cooling 24 hours before you begin the installation.

- GENERAL INFORMATION

- Flooring should be transported and stored in a neatly stacked fashion on a smooth flat surface. (Never store this product outside)
- Acclimate the flooring and the rooms to be installed for 48 hours at a constant temperature between 18°C and 29°C before, during, and maintained after installation. If the boxes of flooring were exposed over 2 hours to extreme temperature (under 10°C or over 40°C) within the 12 hours before the installation, acclimation is required. In this case keep the boards in room temperature for at least 12 hours in unopened package before you start the installation. The room Temperature must be maintained consistent between 20°C to 25°C before and during installation.
- Rigid Floors Planks should be stored flat (never vertically) in their original packages. Stock maximum 5 boxes high.
- Rigid Floors Planks should only be installed after other trades have finished and the jobsite has been cleaned and cleared of debris that could potentially damage a finished planks installation.
- Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and/or installed.
- Mix and install planks from minimum 4 different cartons during installation to ensure a random appearance.
- Make sure that you mix up the floor panels sufficiently so that there are not too many identical, lighter or darker planks next to each other.
- Visual check each board before and during installation. Planks with defects must not be used.
- Floating installation only ! The floor should be able to expand and contract in every direction. Therefore, at all times, an expansion gap of 8 mm should be maintained between the floor and the wall or other fixed element. Never glue or nail the Rigid Floors planks down. When installing around pipes, drill the holes 20 mm larger than the diameter of the pipes.
- In most cases, no expansion joint is needed between different rooms. An expansion joint is necessary when:
 - 1. The temperature in adjacent rooms varies significantly above and below the temperature range of 18–25°C.
 - 2. The maximum room size is exceeded. This maximum room size is a space of 13 m x 13 m. Therefore, larger surfaces should have an expansion joint every 13 meters (both in length and width).



- Make sure to keep the room at a minimum of 10°C after installation. Excessively high or low temperatures may cause this product to contract or expand and lead to visual defects. This is not a product failure and will not be warranted.
- Measure the area to be installed. The boards width of the last and first row shall not be less than 50 mm wide. Calculate the room surface prior to the installation and take in account a 10% of flooring cutting waste.

- Decide the installation direction. It is recommended to install the length direction of the planks parallel to the main light direction.
- Rigid Floors Planks come with underlayment installed as a backing. In High moisture areas, such as bathrooms, we recommend applying water-tight foil beneath the planks. Although the planks are water resistant, water can always seep in between joints causing damage to the underground. (Rigid Floors Planks can therefore not be installed in swimming pool areas or saunas) If there is moisture in the subfloor please carry out sealing before installation. Excessive moisture can generate unhealthy mould or Fungus.
- Rigid Floors planks are water-resistant but not suitable as a moisture barrier. The subfloor must meet the following criteria: a maximum relative humidity of 65% at 20°C and a minimum floor temperature of 12°C. For areas without underfloor heating, cement-based screeds may contain a maximum of 2,50% moisture and anhydrite screeds a maximum of 0,70%, measured according to the CM method. In areas with underfloor heating, the maximum values are 1,50% for cement-based screeds and 0,50% for anhydrite screeds.

FLOOR HEATING/ COOLING

- Rigid Floors planks can be installed on floors with underfloor heating or cooling, as long as the surface temperature of the floor never exceeds 28°C and the floor cooling is not set below the dew point temperature. It is important not to cover the floor with carpet and to separate areas with and without underfloor heating with expansion profiles.
- Specific requirements apply for systems embedded **in the screed**:
 - Only low-temperature systems, whether electric or hot water, are suitable.
 - There must be at least 4 cm of space between the Rigid Floors and the heating elements.
- For systems with floor cooling, a control and safety system is necessary to prevent the temperature from dropping below the dew point, which can cause condensation between the screed and the Rigid Floors planks. The dew point temperature is not constant and depends on the room temperature and humidity. A general rule of thumb for the dew point is 18°C at a normal humidity of 50–60% and a room temperature of 20–22°C. At very high humidity, the dew point can reach 22°C. Therefore, do not use floor cooling to actively cool a room by setting the temperature very low.
- For systems **on the screed** (electric and infrared), the mats must not overlap, and the power must be limited to 60 W/m² to prevent damage to the floor.
- The installation of the underfloor heating must comply with the supplier's regulations and general rules. For more information, refer to the manufacturer or installer of the heating or cooling system.
- Before installation, the system must be turned off for at least 24 hours. During installation, the room temperature should be between 20 and 25°C. Starting 24 hours after installation, the underfloor heating should be gradually increased by 5°C per day until the standard operating temperature is reached, with a maximum operating temperature of 28°C. Switching the system on at full power immediately can damage your floor due to intense heat development.
- Different kind of subfloors need different preparations.
- Before installing please check if the subfloor needs to be removed.

TYPE OF SUBFLOOR	REMOVE
Carpet, needlefelt, cushion vinyl, floating laminate, floating parquet	YES
Ceramic tiles, glued PVC, Glued VCT, Glued linoleum, glued laminate, glued parquet	Not necessary (when joints between tiles exceed 4mm in width and 5mm in depth they should be filled and made level before installation)

In case you're subfloor isn't mentioned or you have any doubts, please contact you're dealer and don't commence the installation.

- SUBFLOOR PREPARATION

Rigid Floors floors can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood and many existing hard surface floors (check grid above). The subfloors must be clean, smooth, flat, solid (no movement), and dry. **Do not install planks over floors that are sloped for drainage.** Inspect your subfloor before you begin and remove all traces of plaster, paint, glue, oil, grease etc. It must be clean and level to 5mm within a 3 meters span. If the flooring is intended to be installed over an existing wooden floor it is recommended to repair loose boards or squeaks before the installation.

NOTE: Avoid subfloors with excessive vertical movement or deflection because subfloor movement may cause the locking mechanism to wear down, or even break. Indications of excessive deflection are subfloor fastener release, squeaking, compromised or sectional contours such as bowing or dipping in floors and uneven flooring material. Nail or screw subfloor panels to secure boards with excessive vertical movement or deflection prior to installation of the flooring material.

Concrete subfloors

Rigid Floors Planks can be installed over concrete on all grade levels if a proper moisture barrier is used underneath. Newly poured concrete floors must cure for a minimum of 90 days. Please note it is the person installing the floor and/or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installing the floor. The moisture content of the subfloor must be less than 2.50% CM in case of cement and 0,50% in case of anhydrite. In case of floor heating , results must be respectively 2% CM and 0,30% Anhydrite.

NOTE: Excessive moisture may cause the growth of unhealthy mold or mildew and/or cause staining of the flooring

Wooden subfloors

Rigid Floors Planks can be installed over a smooth, flat, level wood subfloor. Remove any existing floor covering on top of the wooden subfloor. Make sure the subfloor is level and nail down any loose parts. If not sufficiently level, it is mandatory to apply an appropriate wooden levelling board flooring grade plywood (Type FG1) is recommended to be installed if the subfloor is not clean and level to 5 mm within a 3 meters span.

- INSTALLATION

PRE - INSTALLATION INSPECTION

It is the duty of the person installing the floor to inspect all flooring before installation. If during inspection the installer or buyer feels the floors is the wrong color, improperly manufactured, is off-grade or is the wrong gloss level, he/she should NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased.

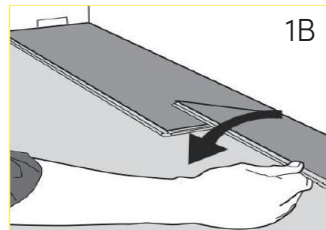
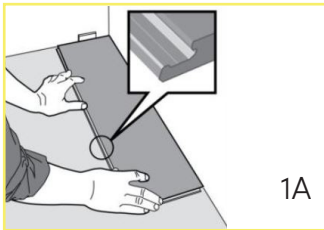
Check the batch number on the packaging of the delivered flooring before laying it to ensure they are identical. It is recommended to use only boxes with the same batch number in one room to avoid any color or gloss differences within a surface.

Determine the direction in which you want the floor to run. With planks, it is typical for the flooring to run lengthwise in the room. However, the final choice is a matter of preference.

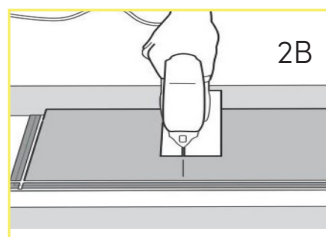
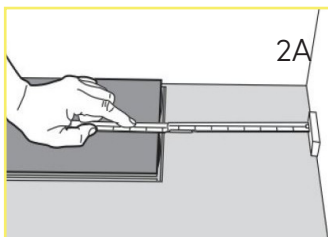
Some planning ahead is important to avoid narrow plank widths (less than 50 cm) or lengths (less than 30 cm) near walls/doors. Calculate how many full planks will fit across the width of the room and how much space will be left that needs to be filled with parts of planks.

Open the packages only right before installation. Ensure that the room temperature during installation is between 20 and 25°C.

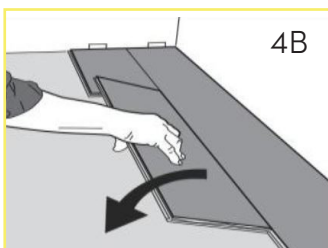
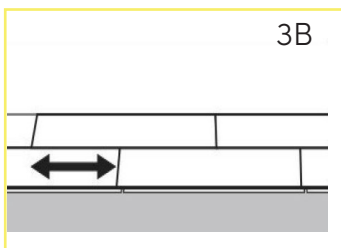
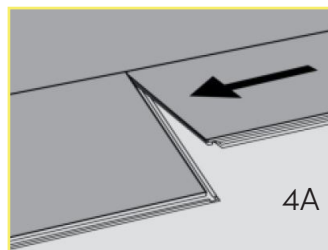
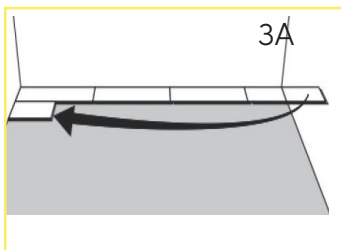
1. Start in the left corner of the room. Place a floor spacer from about 10 mm thick against the left corner of the wall and position the end of the plank to the wall (**see Diagram 1A**), the tongue must be facing into the room. Place 2nd plank gently and tight to the short end of 1st plank. Fold down the panel down in a single action movement. During the fold down make sure the panels are tight against each other. Afterwards press or slightly knock at the short end just installed (**see Diagram 1B**).



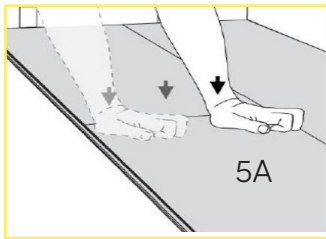
2. At the end of 1st row, put a distance about 10mm to the wall and measure the length of the last plank to fit (**see Diagram 2A**). Cut with a jigsaw make sure the decor of the plank is turned down or saw with a hand saw or stanley knife with décor facing up (**see Diagram 2B**).



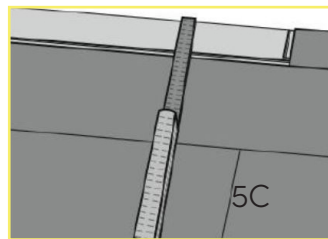
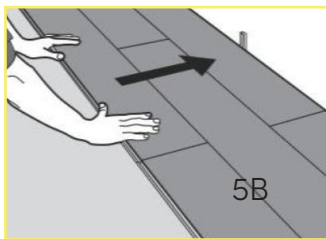
3. Second row : The section from the 1st row should be at least 50 cm long, then again use a 10 mm spacer block between the wall and the plank (**see Diagram 3A**). 2nd board, 2nd row, Press the plank gently against the end of the first plank (**see Diagram 4A**). Bring the plank down in a single action with a slight press to the short end of the previous plank. During fold down make sure the planks are tight against each other (**see Diagram 4B**).



4. Gently press or tap again the end of the installed plank to lock the plastic spring of the click system in place (see Diagram 5A).



5. After 3 rows also place spacers on the first long side of the first row (see Diagram 5B). Last row: The minimum width should be 50 mm. Do not forget the wall distance of 10 mm! Cut the plank lengthwise and glue the ends with PVAC glue! (see Diagram 5C).



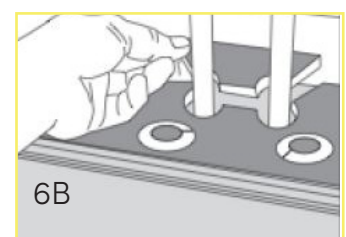
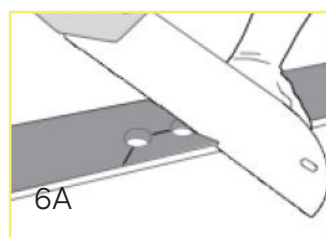
6. When fitting around door trim it will be necessary to slide the plank under the trim. This can be accomplished easily by starting the row on the side of the room with the door trim and then sliding the plank into place once it is attached. The row can be completed by inserting the tongue into the groove or the groove into the tongue depending on the direction.

BATHROOMS:

When SPC planks are installed in a bathroom the flooring can be laid under the toilet only if the floor is separated from adjacent rooms with a doorway threshold, and padding is not used. Otherwise the flooring should be installed around the toilet leaving a 3,50 mm expansion space. Use 100% silicone caulking to fill the expansion space at the tub, shower and all wet areas to help prevent surface water seepage under the floor.

PIPES:

For installation around radiator pipes, please drill with a diameter that is 20 mm larger than the heating pipes (see Diagram 6A & 6B).



TRANSITIONS, MOLDINGS, AND WALL BASE

All transition pieces should be attached to the subfloor with a high quality construction adhesive (Emfi High power), available at most Home Centers and Hardware stores. Place a generous bead of adhesive under the part of the transition that will sit directly on the subfloor, and then press the transition firmly in place. Be sure the transition sits firmly in the adhesive, and take care not to get any adhesive on the flooring.

Remove any adhesive from the surface immediately with mineral spirits and buff off any residue with a dry soft cloth. It may be necessary to place heavy weights on the transition until the adhesive dries to ensure it will lay flat. Never attach the transitions directly to the flooring.

FINISHING THE JOB

Inspect your work, as it will cost you more if you have to come back to do a repair later. Replace original baseboards, or install matching hardwood baseboard. Install matching transitions as needed or recommended by your dealer or installer. It is not recommended or necessary to seal this floor after installation. Protect your floor from scratches by using felt pads on chair legs or furniture feet.

Plastic rollers/castors can damage your flooring; if necessary try to replace with softer rubber wheels/castors. When moving heavy items like refrigerators, use at least two sheets of plywood while moving (sliding the appliance from one sheet to the next) to protect the flooring against scratching and denting.

- FLOOR MAINTENANCE

- Frequently moved furniture (chairs) should be equipped with felt pads to avoid scratching the floor and checked regularly. Heavy furniture and appliances should be equipped with non-staining large surface floor protectors. Furniture with castors or wheels must be easy swiveling, large surface non-staining and suitable for resilient floors. Do not use ball type castors as they can damage the floor.
- Avoid exposure to extreme temperature fluctuations. The floor may not be installed in areas where it will occasionally be exposed to extremely high temperatures (Saunas, verandas, etc.) Exceeding 45°C .Avoid exposure to long periods of direct sunlight causing the heat to accumulate on the floor surface exceeding 45°C.
- Use walk-off mats at entrances to prevent dirt and grit from being tracked on to the floor. (Ensure that the mat doesn't have rubber backing)
- Sweep or vacuum the floor regularly to remove loose dirt.
- Do not use abrasive cleaners, bleach , wax or oil to maintain the floor. Ask your dealer for our Rigid Floors cleaner. Other cleaning products may contain agents that damage the floor.
- Clean up spills immediately.
- Do not drag or slide heavy objects across the floor.

Damp mop as needed using clean water and a diluted floor cleaner. Do not use harsh cleaners or chemicals on the floor.

- REPAIRS

In the unlikely event that a plank is damaged for whatever reason, the simplest method is to disconnect the planks carefully (protecting the tongue and groove edges) until the damaged plank can be removed. Then replace the damaged plank with a new one and re-assemble the disconnected planks. This typically works for planks that are close to the two long perimeters of a room. For damaged planks that are not close to the perimeter, you may have to remove the damaged planks and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged plank by leaving approximately 1 inch (25,4mm) strip attached to the adjacent planks.
2. Carefully cut back from the four corners of the plank to the inside edges in space left by the cut out plank.
3. Remove the plank edges carefully from of the adjacent plank making sure the tongues and grooves of the adjacent planks are not damaged
4. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement plank. In addition, remove the groove strip of the short end of the replacement plank.
5. Place two-sided carpet tape with one half under the sides of the adjacent planks where the tongues and the groove of the replacement plank have been removed. Only the top side release paper of the carpet tape should be removed. Leave the bottom side of the release paper in place, as it should NOT be taped to the subfloor.
6. Hold the new plank at a 45-degree angle and slide the click mechanism into the groove of the adjacent plank. Gently lower the plank and use a rubber mallet and tapping block to firmly secure it in place.
7. Place a weight on the plank until the adhesive has completely dried.

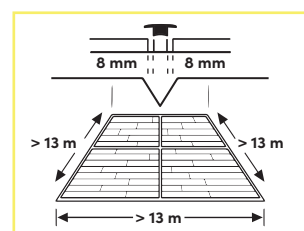
1. PLANKS

Rigid Floors Planks with patented interlocking system is installed as a glueless floating floor. The Rigid Floors Planks are not designed for outdoor use, in saunas or solariums. Because of their floating installation Rigid Floors Planks can't be installed in areas into which drainage systems have been incorporated, such as walk-in showers.

In a newly installed underfloor heating system in a recently laid screed, the system must operate at maximum capacity before installation to remove any residual moisture from the screed. Consult the supplier of the heating system to ensure you do this safely. Turn off your underfloor heating or cooling 24 hours before you begin the installation.

- GENERAL INFORMATION

- Flooring should be transported and stored in a neatly stacked fashion on a smooth flat surface. (Never store this product outside)
- Acclimate the flooring and the rooms to be installed for 48 hours at a constant temperature between 18°C and 29°C before, during, and maintained after installation. If the boxes of flooring were exposed over 2 hours to extreme temperature (under 10°C or over 40°C) within the 12 hours before the installation, acclimation is required. In this case keep the boards in room temperature for at least 12 hours in unopened package before you start the installation. The room Temperature must be maintained consistent between 20°C to 25°C before and during installation.
- Rigid Floors Planks should be stored flat (never vertically) in their original packages. Stock maximum 5 boxes high.
- Rigid Floors Planks should only be installed after other trades have finished and the jobsite has been cleaned and cleared of debris that could potentially damage a finished planks installation.
- Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and/or installed.
- Mix and install planks from minimum 4 different cartons during installation to ensure a random appearance.
- Make sure that you mix up the floor panels sufficiently so that there are not too many identical, lighter or darker planks next to each other.
- Visual check each board before and during installation. Planks with defects must not be used.
- Floating installation only ! The floor should be able to expand and contract in every direction. Therefore, at all times, an expansion gap of 8 mm should be maintained between the floor and the wall or other fixed element . Never glue or nail the Rigid Floors planks down. When installing around pipes, drill the holes 20 mm larger than the diameter of the pipes.
- In most cases, no expansion joint is needed between different rooms. An expansion joint is necessary when:
 - 1. The temperature in adjacent rooms varies significantly above and below the temperature range of 18–25°C.
 - 2. The maximum room size is exceeded. This maximum room size is a space of 13 m x 13 m. Therefore, larger surfaces should have an expansion joint every 13 meters (both in length and width).



- Make sure to keep the room at a minimum of 10°C after installation . Excessively high or low temperatures may cause this product to contract or expand and lead to visual defects. This is not a product failure and will not be warranted.
- Measure the area to be installed. The boards width of the last and first row shall not be less than 50 mm wide. Calculate the room surface prior to the installation and take in account a 10% of flooring cutting waste.

- Decide the installation direction. It is recommended to install the length direction of the planks parallel to the main light direction.
- Rigid Floors Planks come with underlayment installed as a backing. In High moisture areas, such as bathrooms, we recommend applying water-tight foil beneath the planks. Although the planks are water resistant, water can always seep in between joints causing damage to the underground. (Rigid Floors Planks can therefore not be installed in swimming pool areas or saunas) If there is moisture in the subfloor please carry out sealing before installation. Excessive moisture can generate unhealthy mould or Fungus.
- Rigid Floors planks are water-resistant but not suitable as a moisture barrier. The subfloor must meet the following criteria: a maximum relative humidity of 65% at 20°C and a minimum floor temperature of 12°C. For areas without underfloor heating, cement-based screeds may contain a maximum of 2,50% moisture and anhydrite screeds a maximum of 0,70%, measured according to the CM method. In areas with underfloor heating, the maximum values are 1,50% for cement-based screeds and 0,50% for anhydrite screeds.

FLOOR HEATING/ COOLING

- Rigid Floors planks can be installed on floors with underfloor heating or cooling, as long as the surface temperature of the floor never exceeds 28°C and the floor cooling is not set below the dew point temperature. It is important not to cover the floor with carpet and to separate areas with and without underfloor heating with expansion profiles.
- Specific requirements apply for systems embedded **in the screed**:
 - Only low-temperature systems, whether electric or hot water, are suitable.
 - There must be at least 4 cm of space between the Rigid Floors and the heating elements.
- For systems with floor cooling, a control and safety system is necessary to prevent the temperature from dropping below the dew point, which can cause condensation between the screed and the Rigid Floors planks. The dew point temperature is not constant and depends on the room temperature and humidity. A general rule of thumb for the dew point is 18°C at a normal humidity of 50–60% and a room temperature of 20–22°C. At very high humidity, the dew point can reach 22°C. Therefore, do not use floor cooling to actively cool a room by setting the temperature very low.
- For systems **on the screed** (electric and infrared), the mats must not overlap, and the power must be limited to 60 W/m² to prevent damage to the floor.
- The installation of the underfloor heating must comply with the supplier's regulations and general rules. For more information, refer to the manufacturer or installer of the heating or cooling system.
- Before installation, the system must be turned off for at least 24 hours. During installation, the room temperature should be between 20 and 25°C. Starting 24 hours after installation, the underfloor heating should be gradually increased by 5°C per day until the standard operating temperature is reached, with a maximum operating temperature of 28°C. Switching the system on at full power immediately can damage your floor due to intense heat development.
- Different kind of subfloors need different preparations.
- Before installing please check if the subfloor needs to be removed.

TYPE OF SUBFLOOR	REMOVE
Carpet, needlefelt, cushion vinyl, floating laminate, floating parquet	YES
Ceramic tiles, glued PVC, Glued VCT, Glued linoleum, glued laminate, glued parquet	Not necessary (when joints between tiles exceed 4mm in width and 5mm in depth they should be filled and made level before installation)

In case you're subfloor isn't mentioned or you have any doubts, please contact you're dealer and don't commence the installation.

- SUBFLOOR PREPARATION

Rigid Floors floors can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood and many existing hard surface floors (check grid above). The subfloors must be clean, smooth, flat, solid (no movement), and dry. **Do not install planks over floors that are sloped for drainage.** Inspect your subfloor before you begin and remove all traces of plaster, paint, glue, oil, grease etc. It must be clean and level to 5 mm within a 3 meters span. If the flooring is intended to be installed over an existing wooden floor it is recommended to repair loose boards or squeaks before the installation.

NOTE: Avoid subfloors with excessive vertical movement or deflection because subfloor movement may cause the locking mechanism to wear down, or even break. Indications of excessive deflection are subfloor fastener release, squeaking, compromised or sectional contours such as bowing or dipping in floors and uneven flooring material. Nail or screw subfloor panels to secure boards with excessive vertical movement or deflection prior to installation of the flooring material.

Concrete subfloors

Rigid Floors Planks can be installed over concrete on all grade levels if a proper moisture barrier is used underneath. Newly poured concrete floors must cure for a minimum of 90 days. Please note it is the person installing the floor and/or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installing the floor. The moisture content of the subfloor must be less than 2,50% CM in case of cement and 0,50% in case of anhydrite. In case of floor heating , results must be respectively 2% CM and 0,30% Anhydrite.

NOTE: Excessive moisture may cause the growth of unhealthy mold or mildew and/or cause staining of the flooring

Wooden subfloors

Rigid Floors Planks can be installed over a smooth, flat, level wood subfloor. Remove any existing floor covering on top of the wooden subfloor. Make sure the subfloor is level and nail down any loose parts. If not sufficiently level, it is mandatory to apply an appropriate wooden levelling board flooring grade plywood (Type FG1) is recommended to be installed if the subfloor is not clean and level to 5 mm within a 3 meters span.

- INSTALLATION

PRE - INSTALLATION INSPECTION

It is the duty of the person installing the floor to inspect all flooring before installation. If during inspection the installer or buyer feels the floors is the wrong color, improperly manufactured, is off-grade or is the wrong gloss level, he/she should NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased.

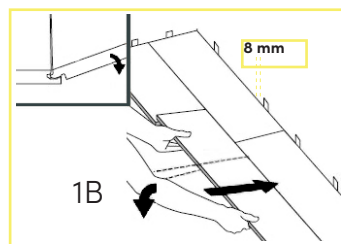
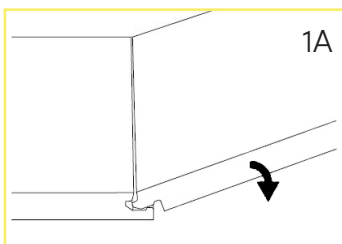
Check the batch number on the packaging of the delivered flooring before laying it to ensure they are identical. It is recommended to use only boxes with the same batch number in one room to avoid any color or gloss differences within a surface.

Determine the direction in which you want the floor to run. With planks, it is typical for the flooring to run lengthwise in the room. However, the final choice is a matter of preference.

Some planning ahead is important to avoid narrow plank widths (less than 50 cm) or lengths (less than 30 cm) near walls/doors. Calculate how many full planks will fit across the width of the room and how much space will be left that needs to be filled with parts of planks.

Open the packages only right before installation. Ensure that the room temperature during installation is between 20 and 25°C.

1. Start with a whole plank in the left hand corner of the room with the tongue side and end toward the wall. Lay the first row of planks along a chalk line and trim to fit to the wall allowing a 8 mm expansion space. If starting the first row with a whole width plank it will be necessary to trim the tongues next to the wall, then place the cut ends next to the wall. To trim the planks, use a utility knife and a straight edge to score the top surface of the plank, and then bend it downward to separate the pieces, you can also use a VCT (Vinyl Composition Tile) cutter for end cuts only; a table saw also works well for both end and length cuts.
2. Align and attach the end joints of the planks in the first row. Insert the tongue into the groove while holding the plank at a 20° to 30° angle to the floor. Apply pressure inward and down until the planks lock together (**Diagram 1a & 1b**). Use spacers between the long edge and end of the planks next to the wall to maintain the expansion space.



3. Start the second row using 1/3rd of a plank. Place the cut end against the wall. Insert the tongue on the long side of the plank into the groove of the plank in the first row. Hold the plank in a 20° to 30° angle while applying pressure inward and down until they lock together. To complete the second and all successive rows, it will be necessary to lock the short end into the previous plank first before locking the long side of the plank. Angle the plank and push the tongue into the groove and adjust it until the tongue locks into place. It may be necessary to lift both planks slightly to lock the joint together. Complete the second row allowing 8 mm expansion space at the start and end of the row.

After finishing the installation of every row, use scrap pieces and a small hammer or rubber mallet to gently tap the planks into the click of the previous row to make sure they are tightly clicked together and make sure there is no gap between the long sides of the planks installed. Minor gapping can compromise the whole installation. Never tap directly on the click system.

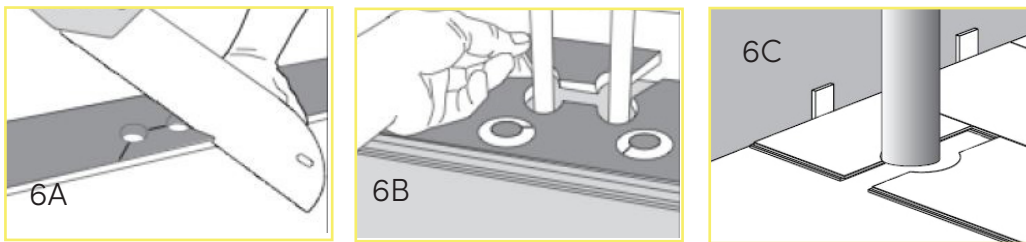
4. Start the third row using a 2/3rd length of a plank with the cut end against the wall. Complete each row thereafter using a random layout with end joints off-set by at 30 cm. Plan the layout to avoid using small planks (less than 30 cm) at the walls. The cut piece at the end of the row can often be used to start the next row provided it achieves a random layout. Always place the cut end against the wall and allow for the expansion space.
5. When fitting around door trim it will be necessary to slide the plank under the trim. This can be accomplished easily by starting the row on the side of the room with the door trim and then sliding the plank into place once it is attached. The row can be completed by inserting the tongue into the groove or the groove into the tongue depending on the direction. A tapping block and pull bar can also be used to lock the joints together while the planks are in a flat position. Use a series of light taps until the joint is gradually locked together.

BATHROOM:

When SPC planks are installed in a bathroom the flooring can be laid under the toilet only if the floor is separated from adjacent rooms with a doorway threshold, and padding is not used. Otherwise the flooring should be installed around the toilet leaving a 3.50mm expansion space. Use 100% silicone caulking to fill the expansion space at the tub, shower and all wet areas to help prevent surface water seepage under the floor.

PIPES:

In rows where there is a pipe or other vertical object through the subfloor, make sure the object lines up exactly where two boards will meet on the short ends. Take care to measure carefully before cutting, so the two boards end at the middle of the object. Use a drill or hole bit that is the diameter of the pipe or object, plus 20mm for expansion/contraction. Click the two short sides of the boards together, then drill the hole centered on the joint between the boards as shown. Now you can separate the two boards and install as normal. **See Diagrams 6A – 6C.**



TANSITIONS, MOLDINGS, AND WALL BASE

All transition pieces should be attached to the subfloor with a high quality construction adhesive (Emfi High power), available at most Home Centers and Hardware stores. Place a generous bead of adhesive under the part of the transition that will sit directly on the subfloor, and then press the transition firmly in place. Be sure the transition sits firmly in the adhesive, and take care not to get any adhesive on the flooring.

Remove any adhesive from the surface immediately with mineral spirits and buff off any residue with a dry soft cloth. It may be necessary to place heavy weights on the transition until the adhesive dries to ensure it will lay flat. Never attach the transitions directly to the flooring.

FINISHING THE JOB

Inspect your work, as it will cost you more if you have to come back to do a repair later. Replace original baseboards, or install matching hardwood baseboard. Install matching transitions as needed or recommended by your dealer or installer. It is not recommended or necessary to seal this floor after installation. Protect your floor from scratches by using felt pads on chair legs or furniture feet.

Plastic rollers/castors can damage your flooring; if necessary try to replace with softer rubber wheels/castors. When moving heavy items like refrigerators, use at least two sheets of plywood while moving (sliding the appliance from one sheet to the next) to protect the flooring against scratching and denting.

- FLOOR MAINTENANCE

- Frequently moved furniture (chairs) should be equipped with felt pads to avoid scratching the floor and checked regularly. Heavy furniture and appliances should be equipped with non-staining large surface floor protectors. Furniture with castors or wheels must be easy swiveling, large surface non-staining and suitable for resilient floors. Do not use ball type castors as they can damage the floor.
- Avoid exposure to extreme temperature fluctuations. The floor may not be installed in areas where it will occasionally be exposed to extremely high temperatures (Saunas, verandas, etc.) Exceeding 45°C. Avoid exposure to long periods of direct sunlight causing the heat to accumulate on the floor surface exceeding 45°C.
- Use walk-off mats at entrances to prevent dirt and grit from being tracked on to the floor. (Ensure that the mat doesn't have rubber backing)
- Sweep or vacuum the floor regularly to remove loose dirt.
- Do not use abrasive cleaners, bleach, wax or oil to maintain the floor. Ask your dealer for our Rigid Floors cleaner. Other cleaning products may contain agents that damage the floor.
- Clean up spills immediately.
- Do not drag or slide heavy objects across the floor.

Damp mop as needed using clean water and a diluted floor cleaner. Do not use harsh cleaners or chemicals on the floor.

- REPAIRS

In the unlikely event that a plank is damaged for whatever reason, the simplest method is to disconnect the planks carefully (protecting the tongue and groove edges) until the damaged plank can be removed. Then replace the damaged plank with a new one and re-assemble the disconnected planks. This typically works for planks that are close to the two long perimeters of a room. For damaged planks that are not close to the perimeter, you may have to remove the damaged planks and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged plank by leaving approximately 1 inch (25,4mm) strip attached to the adjacent planks.
2. Carefully cut back from the four corners of the plank to the inside edges in space left by the cut out plank.
3. Remove the plank edges carefully from of the adjacent plank making sure the tongues and grooves of the adjacent planks are not damaged
4. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement plank. In addition, remove the groove strip of the short end of the replacement plank.
5. Place two-sided carpet tape with one half under the sides of the adjacent planks where the tongues and the groove of the replacement plank have been removed. Only the top side release paper of the carpet tape should be removed. Leave the bottom side of the release paper in place, as it should NOT be taped to the subfloor.
6. Hold the new plank at a 45-degree angle and slide the click mechanism into the groove of the adjacent plank. Gently lower the plank and use a rubber mallet and tapping block to firmly secure it in place.
7. Place a weight on the plank until the adhesive has completely dried.

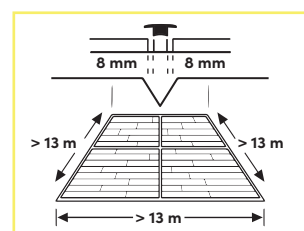
1. HERRINGBONE

Rigid Floors Planks with patented interlocking system is installed as a glueless floating floor. The Rigid Floors Planks are not designed for outdoor use, in saunas or solariums. Because of their floating installation Rigid Floors Planks can't be installed in areas into which drainage systems have been incorporated, such as walk-in showers.

In a newly installed underfloor heating system in a recently laid screed, the system must operate at maximum capacity before installation to remove any residual moisture from the screed. Consult the supplier of the heating system to ensure you do this safely. Turn off your underfloor heating or cooling 24 hours before you begin the installation.

- GENERAL INFORMATION

- Flooring should be transported and stored in a neatly stacked fashion on a smooth flat surface. (Never store this product outside)
- Acclimate the flooring and the rooms to be installed for 48 hours at a constant temperature between 18°C and 29°C before, during, and maintained after installation. If the boxes of flooring were exposed over 2 hours to extreme temperature (under 10°C or over 40°C) within the 12 hours before the installation, acclimation is required. In this case keep the boards in room temperature for at least 12 hours in unopened package before you start the installation. The room Temperature must be maintained consistent between 20°C to 25°C before and during installation.
- Rigid Floors Planks should be stored flat (never vertically) in their original packages. Stock maximum 5 boxes high.
- Rigid Floors Planks should only be installed after other trades have finished and the jobsite has been cleaned and cleared of debris that could potentially damage a finished planks installation.
- Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and/or installed.
- Mix and install planks from minimum 4 different cartons during installation to ensure a random appearance.
- Make sure that you mix up the floor panels sufficiently so that there are not too many identical, lighter or darker planks next to each other.
- Visual check each board before and during installation. Planks with defects must not be used.
- Floating installation only ! The floor should be able to expand and contract in every direction. Therefore, at all times, an expansion gap of 8 mm should be maintained between the floor and the wall or other fixed element . Never glue or nail the Rigid Floors planks down. When installing around pipes, drill the holes 20 mm larger than the diameter of the pipes.
- In most cases, no expansion joint is needed between different rooms. An expansion joint is necessary when:
 - The temperature in adjacent rooms varies significantly above and below the temperature range of 18–25°C.
 - The maximum room size is exceeded. This maximum room size is a space of 13 m x 13 m. Therefore, larger surfaces should have an expansion joint every 13 meters (both in length and width).



- Make sure to keep the room at a minimum of 10°C after installation . Excessively high or low temperatures may cause this product to contract or expand and lead to visual defects. This is not a product failure and will not be warranted.
- Measure the area to be installed. The boards width of the last and first row shall not be less than 50 mm wide. Calculate the room surface prior to the installation and take in account a 10% of flooring cutting waste.

- Decide the installation direction. It is recommended to install the length direction of the planks parallel to the main light direction.
- Rigid Floors Planks come with underlayment installed as a backing. In High moisture areas, such as bathrooms, we recommend applying water-tight foil beneath the planks. Although the planks are water resistant, water can always seep in between joints causing damage to the underground. (Rigid Floors Planks can therefore not be installed in swimming pool areas or saunas) If there is moisture in the subfloor please carry out sealing before installation. Excessive moisture can generate unhealthy mould or Fungus.
- Rigid Floors planks are water-resistant but not suitable as a moisture barrier. The subfloor must meet the following criteria: a maximum relative humidity of 65% at 20°C and a minimum floor temperature of 12°C. For areas without underfloor heating, cement-based screeds may contain a maximum of 2,50% moisture and anhydrite screeds a maximum of 0,70%, measured according to the CM method. In areas with underfloor heating, the maximum values are 1,50% for cement-based screeds and 0,50% for anhydrite screeds.

FLOOR HEATING/ COOLING

- Rigid Floors planks can be installed on floors with underfloor heating or cooling, as long as the surface temperature of the floor never exceeds 28°C and the floor cooling is not set below the dew point temperature. It is important not to cover the floor with carpet and to separate areas with and without underfloor heating with expansion profiles.
- Specific requirements apply for systems embedded **in the screed**:
 - Only low-temperature systems, whether electric or hot water, are suitable.
 - There must be at least 4 cm of space between the Rigid Floors and the heating elements.
- For systems with floor cooling, a control and safety system is necessary to prevent the temperature from dropping below the dew point, which can cause condensation between the screed and the Rigid Floors planks. The dew point temperature is not constant and depends on the room temperature and humidity. A general rule of thumb for the dew point is 18°C at a normal humidity of 50–60% and a room temperature of 20–22°C. At very high humidity, the dew point can reach 22°C. Therefore, do not use floor cooling to actively cool a room by setting the temperature very low.
- For systems **on the screed** (electric and infrared), the mats must not overlap, and the power must be limited to 60 W/m² to prevent damage to the floor.
- The installation of the underfloor heating must comply with the supplier's regulations and general rules. For more information, refer to the manufacturer or installer of the heating or cooling system.
- Before installation, the system must be turned off for at least 24 hours. During installation, the room temperature should be between 20 and 25°C. Starting 24 hours after installation, the underfloor heating should be gradually increased by 5°C per day until the standard operating temperature is reached, with a maximum operating temperature of 28°C. Switching the system on at full power immediately can damage your floor due to intense heat development.
- Different kind of subfloors need different preparations.
- Before installing please check if the subfloor needs to be removed.

TYPE OF SUBFLOOR	REMOVE
Carpet, needlefelt, cushion vinyl, floating laminate, floating parquet	YES
Ceramic tiles, glued PVC, Glued VCT, Glued linoleum, glued laminate, glued parquet	Not necessary (when joints between tiles exceed 4mm in width and 5mm in depth they should be filled and made level before installation)

In case you're subfloor isn't mentioned or you have any doubts, please contact you're dealer and don't commence the installation.

- SUBFLOOR PREPARATION

Rigid Floors floors can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood and many existing hard surface floors (check grid above). The subfloors must be clean, smooth, flat, solid (no movement), and dry. **Do not install planks over floors that are sloped for drainage.** Inspect your subfloor before you begin and remove all traces of plaster, paint, glue, oil, grease etc. It must be clean and level to 5 mm within a 3 meters span. If the flooring is intended to be installed over an existing wooden floor it is recommended to repair loose boards or squeaks before the installation.

NOTE: Avoid subfloors with excessive vertical movement or deflection because subfloor movement may cause the locking mechanism to wear down, or even break. Indications of excessive deflection are subfloor fastener release, squeaking, compromised or sectional contours such as bowing or dipping in floors and uneven flooring material. Nail or screw subfloor panels to secure boards with excessive vertical movement or deflection prior to installation of the flooring material.

Concrete subfloors

Rigid Floors Planks can be installed over concrete on all grade levels if a proper moisture barrier is used underneath. Newly poured concrete floors must cure for a minimum of 90 days. Please note it is the person installing the floor and/or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installing the floor. The moisture content of the subfloor must be less than 2.50% CM in case of cement and 0.50% in case of anhydrite. In case of floor heating , results must be respectively 2% CM and 0.30% Anhydrite.

NOTE: Excessive moisture may cause the growth of unhealthy mold or mildew and/or cause staining of the flooring

Wooden subfloors

Rigid Floors Planks can be installed over a smooth, flat, level wood subfloor. Remove any existing floor covering on top of the wooden subfloor. Make sure the subfloor is level and nail down any loose parts. If not sufficiently level, it is mandatory to apply an appropriate wooden levelling board flooring grade plywood (Type FG1) is recommended to be installed if the subfloor is not clean and level to 5mm within a 3 meters span.

- INSTALLATION

PRE - INSTALLATION INSPECTION

It is the duty of the person installing the floor to inspect all flooring before installation. If during inspection the installer or buyer feels the floors is the wrong color, improperly manufactured, is off-grade or is the wrong gloss level, he/she should NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased.

Check the batch number on the packaging of the delivered flooring before laying it to ensure they are identical. It is recommended to use only boxes with the same batch number in one room to avoid any color or gloss differences within a surface.

Open the packages only right before installation. Ensure that the room temperature during installation is between 20 and 25°C.

- Prepare the required installation tools: pencil, utility knife, tape measure/ruler, square ruler, saw, crowbar, rubber hammer.
- Refer to the 4 kinds of most common installation methods below (**see diagram 1**). Choose one according to your preferences.

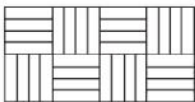
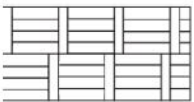
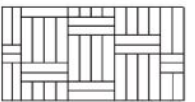
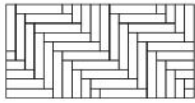
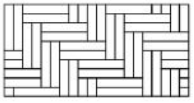
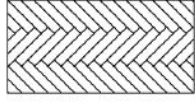
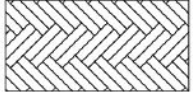
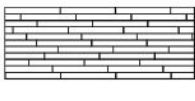
Form	Classic version	Special 1	Special 2	Method N°
Weave				1
Opposite angles				2
Disperse				3
Tradition				4

Diagram 1

- Method 1 is the simplest. We recommend providing 10% extra floor as a cutting loss.
- Preparation: There are 2 colors, namely black and gray, visible on the back of each plank. Each box contains the same number of black and gray planks. Pay attention to the color and install in pairs.
- The subfloor must be completely flat, level, dry, clean and sturdy. Carpet, nails or glue residue must be removed.
- First, divide the black and gray planks into two separate stacks. This makes it easier to distinguish when the flooring is cut and some markings are not visible (**see diagram 2**).

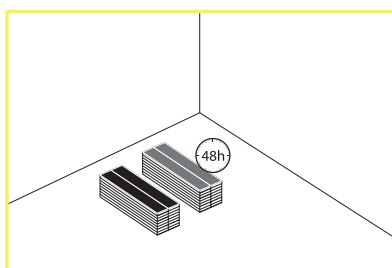


Diagram 2

- Rigid Floors planks are water-resistant but not suitable as a moisture barrier. The subfloor must meet the following criteria: a maximum relative humidity of 65% at 20°C and a minimum floor temperature of 12°C. For areas without underfloor heating, cement-based screeds may contain a maximum of 2,50% moisture and anhydrite screeds a maximum of 0,70%, measured using the CM method. In areas with underfloor heating, the maximum values are 1,50% for cement-based screeds and 0,50% for anhydrite screeds.

INSTALLATION METHOD 1

- For this method, take 4 planks with the same color as a unit. During installation, place a wedge every 20–50cm along the wall, leaving a 5–8mm expansion gap. Now install the 3rd unit according to **diagram 3 and 3A**. Lock the 12th plank with 11th plank, start from the right side of 12th plank, and click the 11th plank to interlock with the 10th plank. Always leave a 5–8mm expansion gap.
- When there is no more room to install an entire plank, you will need to cut the plank. Use a pencil and ruler to measure the excess, mark the floor and cut with a utility knife (**see “matching cutting method 1”**).

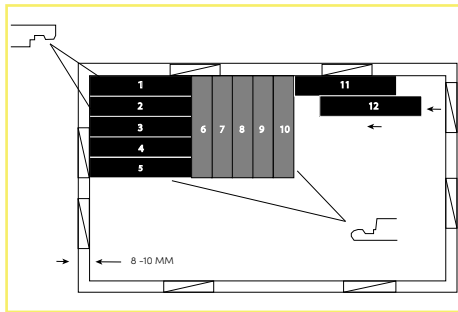


Diagram 3

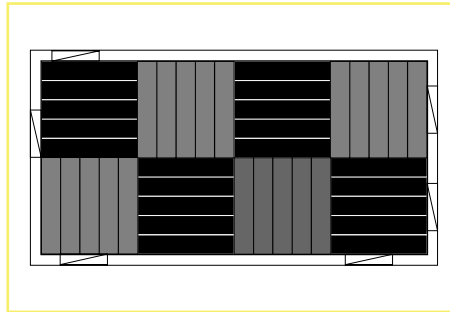
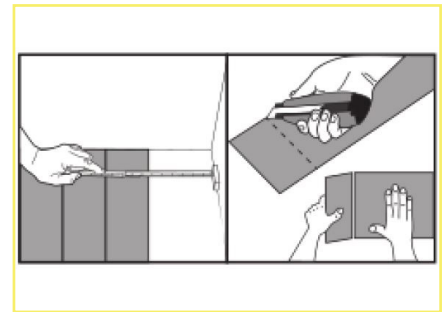


Diagram 3A



Matching cutting method 1

INSTALLATION METHOD 2:

- Draw a 45° line to align the floor. Please use a ruler and a pencil to mark two semicircles of the same radius on the ground and draw a line from the corner to the intersection of the two halves. During installation, place a wedge every 20–50 cm along the wall, leaving a 5–8 mm expansion gap.
- Start from the left side of the room entrance. The first shelf is a black shelf. The second shelf is a gray shelf. Lock the first shelf with the second shelf as shown in **diagram 4**. Other shelves should also be installed as shown in **diagram 4A**.
- When you need to cut planks, such as the 3rd plank, the 4th plank, and other planks along the wall, check the click first, making sure that the click can be locked with planks next to it. Then mark the length, finally cut the plank and take the correct part to install (**see “matching cutting method 2”**).

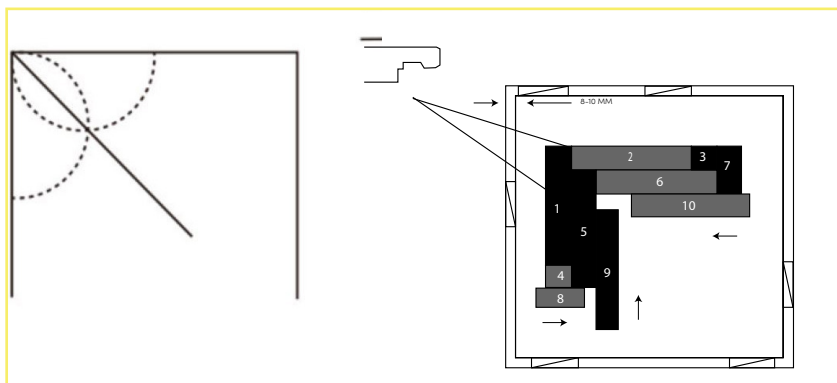


Diagram 4

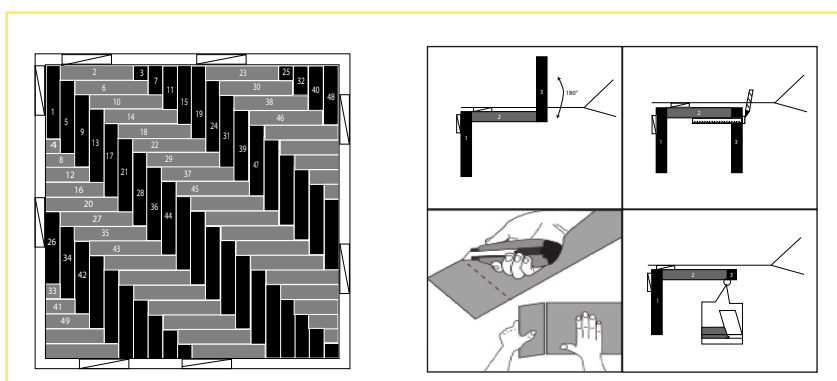


Diagram 4A - Matching cutting method 2

INSTALLATION METHOD 3

- First determine the center between the two walls facing each other and draw a line on the floor perpendicular to the wall (if the size of the room allows it, it is recommended to draw the line through the middle of the room). Wedge the wall every 20-50 cm to leave a 5-8mm expansion gap. Starting from the floor part labeled "B" (A1), the tongue is facing the wall and 3 rows are installed in the order shown in **diagram 5**. Then slide the installed floor to the wall wedge and align the centerline with as shown in **diagram 5A**. To fill the gap between the wall and the floor, see **"matching cutting method 3"**. The missing floor is then inserted into the gap of the next row in the sequence of images. Remember to fill the gaps on both sides each time you completely install a new line.

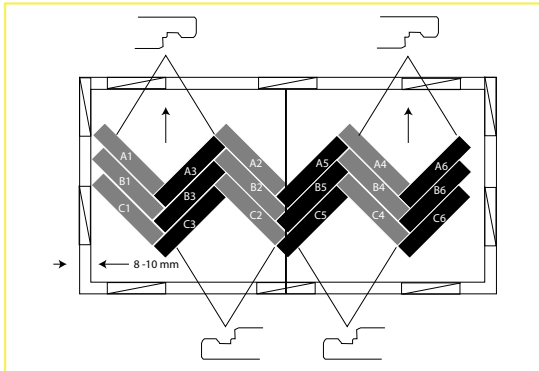


Diagram 5

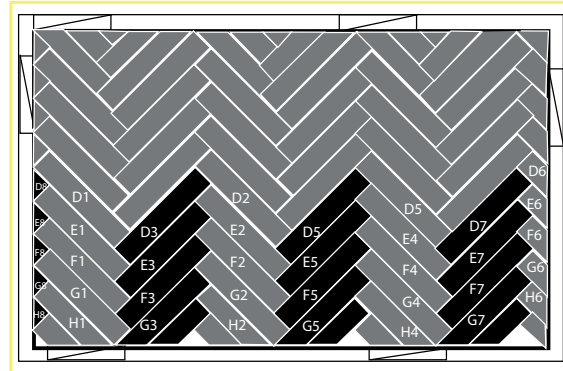
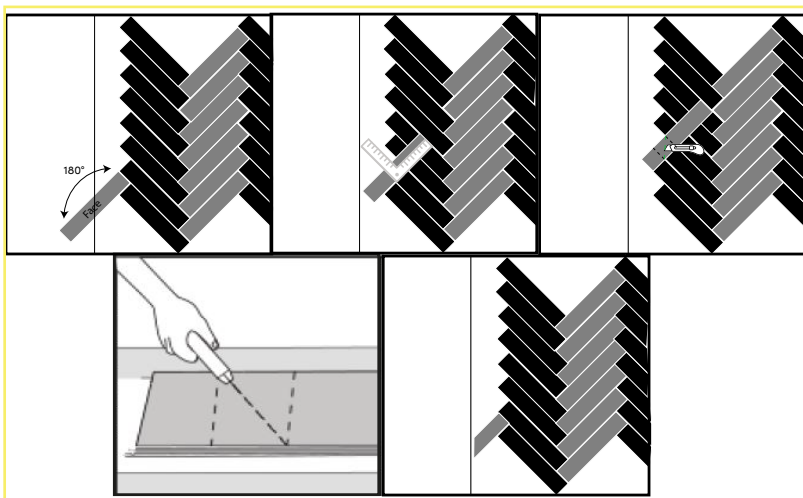


Diagram 5A

See **"matching cutting method 3"**:



1. When reaching the wall, remove the floor part to be cut and place it on top of the floor to make it fit (Take into account an expansion gap of 5-8mm from the wall). Rotate the floor 180° and take a square to draw the line.
2. Mark the floor as shown.
3. Draw a line at the distance of 149 mm from the marked line, as shown in the picture above. Draw a line between the two points you just marked and cut the floor along the line.
4. You can also use a pencil and ruler to measure the excess parts, mark the floor and cut with a utility knife.

The following steps only apply to B.C.D, see diagram 7 and 7A:

5. After cutting the floor at a certain angle, cut the groove on the short side of the floor **(as shown in diagram 7A)**
6. Add PVA glue to the newly cut gap. Always wipe off any excess glue from the floor surface with a damp cloth.
7. Install the plank at an angle of 45°.
8. Use the crowbar and gently tap the floor against the wall.
9. After filling the gap, place a weight on the floor where glue has been applied to ensure optimal fixing.

Diagram 7A

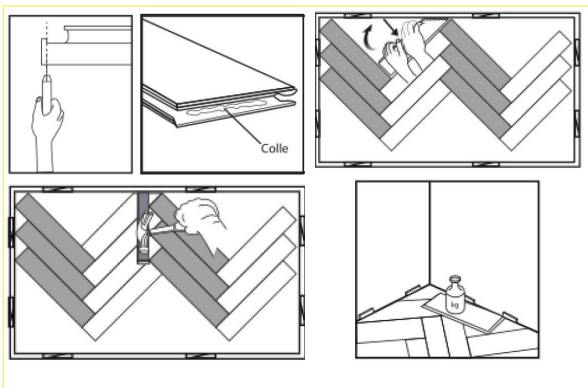
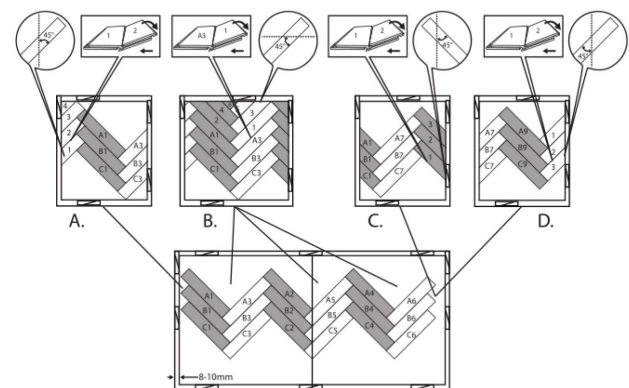


Diagram 7



INSTALLATION METHOD 4:

- With this method, the floors are installed in a row. This product is designed for a «V-shape,» which is why there are two different shelves (black and gray), but they can also be installed in a conventional way (side by side).

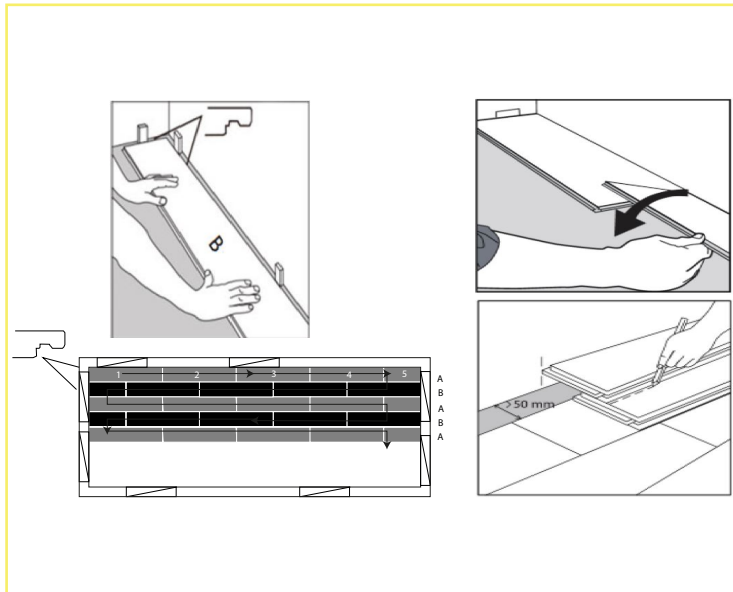
Further installation according to diagram 9:

1. Rest the first gray shelf against the wall. Place a wedge against the wall every 20-50 cm to leave an expansion gap of 5-8 mm.
2. At the end of the first row, start the second row with a black shelf.
3. For the following rows, alternate between gray shelves and black shelves, but ensure that the edge of the shelf is offset by at least 30 cm from the edge at the end of the previous row.

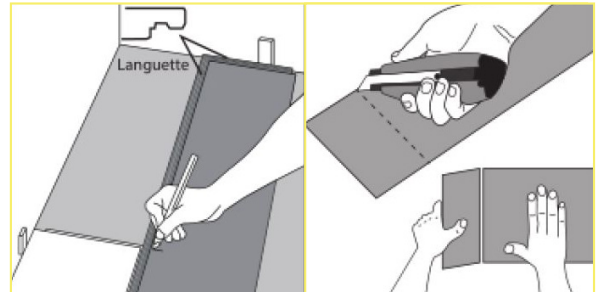
Last row:

- You can easily calculate the width of the last plank by measuring it and transferring its dimensions to the area to be adjusted.
- You can lay the overflow part flush with the last floor part. You must then lay a part with the same width on it. Lay these boards together with an expansion gap against the wall and draw a line on the middle board. This should be equal to the difference between the top and bottom plank.
- Using a knife and straight edge, cut the last piece of the row to size, making sure that there is a 5 mm-8mm gap between the end of the row and the wall. Mark the cutting line, use a square and a utility knife, cut the surface of the floor and separate the excess floor by hand, the floor will naturally separate and then install **(see "matching cutting method 4")**.

Diagram 9



MATCHING CUTTING METHOD 4

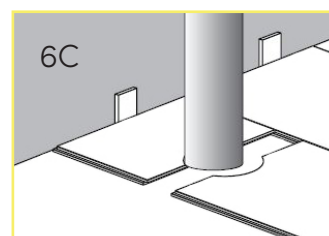
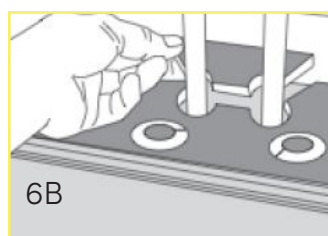
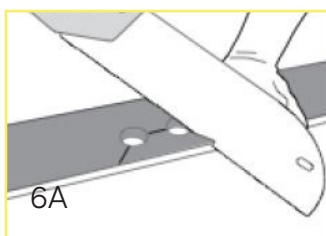


BATHROOMS:

When SPC planks are installed in a bathroom the flooring can be laid under the toilet only if the floor is separated from adjacent rooms with a doorway threshold, and padding is not used. Otherwise the flooring should be installed around the toilet leaving a 3.50mm expansion space. Use 100% silicone caulking to fill the expansion space at the tub, shower and all wet areas to help prevent surface water seepage under the floor.

PIPES:

In rows where there is a pipe or other vertical object through the subfloor, make sure the object lines up exactly where two boards will meet on the short ends. Take care to measure carefully before cutting, so the two boards end at the middle of the object. Use a drill or hole bit that is the diameter of the pipe or object, plus 20mm for expansion/contraction. Click the two short sides of the boards together, then drill the hole centered on the joint between the boards as shown. Now you can separate the two boards and install as normal. **See Diagram 6A – 6C.**



TRANSITIONS, MOLDINGS, AND WALL BASE

All transition pieces should be attached to the subfloor with a high quality construction adhesive (Emfi High power), available at most Home Centers and Hardware stores. Place a generous bead of adhesive under the part of the transition that will sit directly on the subfloor, and then press the transition firmly in place. Be sure the transition sits firmly in the adhesive, and take care not to get any adhesive on the flooring.

Remove any adhesive from the surface immediately with mineral spirits and buff off any residue with a dry soft cloth. It may be necessary to place heavy weights on the transition until the adhesive dries to ensure it will lay flat. Never attach the transitions directly to the flooring.

FINISHING THE JOB

Inspect your work, as it will cost you more if you have to come back to do a repair later. Replace original baseboards, or install matching hardwood baseboard. Install matching transitions as needed or recommended by your dealer or installer. It is not recommended or necessary to seal this floor after installation. Protect your floor from scratches by using felt pads on chair legs or furniture feet.

Plastic rollers/castors can damage your flooring; if necessary try to replace with softer rubber wheels/castors. When moving heavy items like refrigerators, use at least two sheets of plywood while moving (sliding the appliance from one sheet to the next) to protect the flooring against scratching and denting.

– FLOOR MAINTENANCE

- Frequently moved furniture (chairs) should be equipped with felt pads to avoid scratching the floor and checked regularly. Heavy furniture and appliances should be equipped with non-staining large surface floor protectors. Furniture with castors or wheels must be easy swiveling, large surface non-staining and suitable for resilient floors. Do not use ball type castors as they can damage the floor.
- Avoid exposure to extreme temperature fluctuations. The floor may not be installed in areas where it will occasionally be exposed to extremely high temperatures (Saunas, verandas, etc.) Exceeding 45°C .Avoid exposure to long periods of direct sunlight causing the heat to accumulate on the floor surface exceeding 45°C.
- Use walk-off mats at entrances to prevent dirt and grit from being tracked on to the floor. (Ensure that the mat doesn't have rubber backing)
- Sweep or vacuum the floor regularly to remove loose dirt.
- Do not use abrasive cleaners, bleach , wax or oil to maintain the floor. Ask your dealer for our Rigid Floors cleaner. Other cleaning products may contain agents that damage the floor.
- Clean up spills immediately.
- Do not drag or slide heavy objects across the floor.

Damp mop as needed using clean water and a diluted floor cleaner. Do not use harsh cleaners or chemicals on the floor.

- REPAIRS

In the unlikely event that a plank is damaged for whatever reason, the simplest method is to disconnect the planks carefully (protecting the tongue and groove edges) until the damaged plank can be removed. Then replace the damaged plank with a new one and re-assemble the disconnected planks. This typically works for planks that are close to the two long perimeters of a room. For damaged planks that are not close to the perimeter, you may have to remove the damaged planks and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged plank by leaving approximately 1 inch (25,4mm) strip attached to the adjacent planks.
2. Carefully cut back from the four corners of the plank to the inside edges in space left by the cut out plank.
3. Remove the plank edges carefully from of the adjacent plank making sure the tongues and grooves of the adjacent planks are not damaged
4. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement plank. In addition, remove the groove strip of the short end of the replacement plank.
5. Place two-sided carpet tape with one half under the sides of the adjacent planks where the tongues and the groove of the replacement plank have been removed. Only the top side release paper of the carpet tape should be removed. Leave the bottom side of the release paper in place, as it should NOT be taped to the subfloor.
6. Position the replacement plank by engaging the groove of the long side into the tongue of the adjoining plank and pushing down on the other three sides. The carpet tape will hold the replacement plank in place with its adjacent planks. Use a hand roller to further secure the tape.

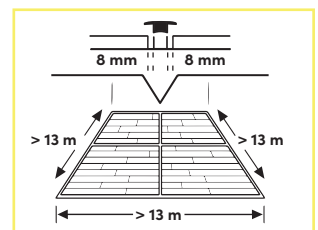
1. Tiles

Rigid Floors Tiles with patented interlocking system is installed as a glueless floating floor. The Rigid Floors Tiles are not designed for outdoor use, in saunas or solariums. Because of their floating installation Rigid Floors Tiles can't be installed in areas into which drainage systems have been incorporated, such as walk-in showers.

In a newly installed underfloor heating system in a recently laid screed, the system must operate at maximum capacity before installation to remove any residual moisture from the screed. Consult the supplier of the heating system to ensure you do this safely. Turn off your underfloor heating or cooling 24 hours before you begin the installation.

- GENERAL INFORMATION

- Flooring should be transported and stored in a neatly stacked fashion on a smooth flat surface. (Never store this product outside)
- Acclimate the flooring and the rooms to be installed for 48 hours at a constant temperature between 18°C and 29°C before, during, and maintained after installation. If the boxes of flooring were exposed over 2 hours to extreme temperature (under 10°C or over 40°C) within the 12 hours before the installation, acclimation is required. In this case keep the boards in room temperature for at least 12 hours in unopened package before you start the installation. The room Temperature must be maintained consistent between 20°C to 25°C before and during installation.
- Rigid Floors Tiles should be stored flat (never vertically) in their original packages. Stock maximum 5 boxes high.
- Rigid Floors Tiles should only be installed after other trades have finished and the jobsite has been cleaned and cleared of debris that could potentially damage a finished tiles installation.
- Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and/or installed.
- Mix and install tiles from minimum 4 different cartons during installation to ensure a random appearance.
- Make sure that you mix up the floor panels sufficiently so that there are not too many identical, lighter or darker tiles next to each other.
- Visual check each board before and during installation. Tiles with defects must not be used.
- Floating installation only ! The floor should be able to expand and contract in every direction. Therefore, at all times, an expansion gap of 8 mm should be maintained between the floor and the wall or other fixed element (see diagram 1B). Never glue or nail the Rigid Floors tiles down. When installing around pipes, drill the holes 20 mm larger than the diameter of the pipes.
- In most cases, no expansion joint is needed between different rooms. An expansion joint is necessary when:
 - The temperature in adjacent rooms varies significantly above and below the temperature range of 18–25°C.
 - The maximum room size is exceeded. This maximum room size is a space of 13 m x 13 m. Therefore, larger surfaces should have an expansion joint every 13 meters (both in length and width).



- Make sure to keep the room at a minimum of 10°C after installation . Excessively high or low temperatures may cause this product to contract or expand and lead to visual defects. This is not a product failure and will not be warranted.
- Measure the area to be installed. The boards width of the last and first row shall not be less than 50 mm wide. Calculate the room surface prior to the installation and take in account a 10% of flooring cutting waste.

- Decide the installation direction. It is recommended to install the length direction of the tiles parallel to the main light direction.
- Rigid Floors Tiles come with underlayment installed as a backing. In High moisture areas, such as bathrooms, we recommend applying water-tight foil beneath the tiles. Although the tiles are water resistant, water can always seep in between joints causing damage to the underground. (Rigid Floors Tiles can therefore not be installed in swimming pool areas or saunas) If there is moisture in the subfloor please carry out sealing before installation. Excessive moisture can generate unhealthy mould or Fungus.
- Rigid Floors tiles are water-resistant but not suitable as a moisture barrier. The subfloor must meet the following criteria: a maximum relative humidity of 65% at 20°C and a minimum floor temperature of 12°C. For areas without underfloor heating, cement-based screeds may contain a maximum of 2,50% moisture and anhydrite screeds a maximum of 0,70%, measured according to the CM method. In areas with underfloor heating, the maximum values are 1,50% for cement-based screeds and 0,50% for anhydrite screeds.

FLOOR HEATING/ COOLING

- Rigid Floors tiles can be installed on floors with underfloor heating or cooling, as long as the surface temperature of the floor never exceeds 28°C and the floor cooling is not set below the dew point temperature. It is important not to cover the floor with carpet and to separate areas with and without underfloor heating with expansion profiles.
- Specific requirements apply for systems embedded **in the screed**:
 - Only low-temperature systems, whether electric or hot water, are suitable.
 - There must be at least 4 cm of space between the Rigid Floors and the heating elements.
- For systems with floor cooling, a control and safety system is necessary to prevent the temperature from dropping below the dew point, which can cause condensation between the screed and the Rigid Floors tiles. The dew point temperature is not constant and depends on the room temperature and humidity. A general rule of thumb for the dew point is 18°C at a normal humidity of 50-60% and a room temperature of 20-22°C. At very high humidity, the dew point can reach 22°C. Therefore, do not use floor cooling to actively cool a room by setting the temperature very low.
- For systems **on the screed** (electric and infrared), the mats must not overlap, and the power must be limited to 60 W/m² to prevent damage to the floor.
- The installation of the underfloor heating must comply with the supplier's regulations and general rules. For more information, refer to the manufacturer or installer of the heating or cooling system.
- Before installation, the system must be turned off for at least 24 hours. During installation, the room temperature should be between 20 and 25°C. Starting 24 hours after installation, the underfloor heating should be gradually increased by 5°C per day until the standard operating temperature is reached, with a maximum operating temperature of 28°C. Switching the system on at full power immediately can damage your floor due to intense heat development.
- Different kind of subfloors need different preparations.
- Before installing please check if the subfloor needs to be removed.

TYPE OF SUBFLOOR	REMOVE
Carpet, needlefelt, cushion vinyl, floating laminate, floating parquet	YES
Ceramic tiles, glued PVC, Glued VCT, Glued linoleum, glued laminate, glued parquet	Not necessary (when joints between tiles exceed 4mm in width and 5mm in depth they should be filled and made level before installation)

In case you're subfloor isn't mentioned or you have any doubts, please contact you're dealer and don't commence the installation.

- SUBFLOOR PREPARATION

Rigid Floors floors can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood and many existing hard surface floors (check grid above). The subfloors must be clean, smooth, flat, solid (no movement), and dry. **Do not install tiles over floors that are sloped for drainage.** Inspect your subfloor before you begin and remove all traces of plaster, paint, glue, oil, grease etc. It must be clean and level to 5 mm within a 3 meters span. If the flooring is intended to be installed over an existing wooden floor it is recommended to repair loose boards or squeaks before the installation.

NOTE: Avoid subfloors with excessive vertical movement or deflection because subfloor movement may cause the locking mechanism to wear down, or even break. Indications of excessive deflection are subfloor fastener release, squeaking, compromised or sectional contours such as bowing or dipping in floors and uneven flooring material. Nail or screw subfloor panels to secure boards with excessive vertical movement or deflection prior to installation of the flooring material.

Concrete subfloors

Rigid Floors Tiles can be installed over concrete on all grade levels if a proper moisture barrier is used underneath. Newly poured concrete floors must cure for a minimum of 90 days. Please note it is the person installing the floor and/or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installing the floor. The moisture content of the subfloor must be less than 2,50% CM in case of cement and 0,50% in case of anhydrite. In case of floor heating , results must be respectively 2% CM and 0,30% Anhydrite.

NOTE: Excessive moisture may cause the growth of unhealthy mold or mildew and/or cause staining of the flooring

Wooden subfloors

Rigid Floors Tiles can be installed over a smooth, flat, level wood subfloor. Remove any existing floor covering on top of the wooden subfloor. Make sure the subfloor is level and nail down any loose parts. If not sufficiently level, it is mandatory to apply an appropriate wooden levelling board flooring grade plywood (Type FG1) is recommended to be installed if the subfloor is not clean and level to 5mm within a 3 meters span.

- INSTALLATION

PRE - INSTALLATION INSPECTION

It is the duty of the person installing the floor to inspect all flooring before installation. If during inspection the installer or buyer feels the floors is the wrong color, improperly manufactured, is off-grade or is the wrong gloss level, he/she should NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased.

Check the batch number on the packaging of the delivered flooring before laying it to ensure they are identical. It is recommended to use only boxes with the same batch number in one room to avoid any color or gloss differences within a surface.

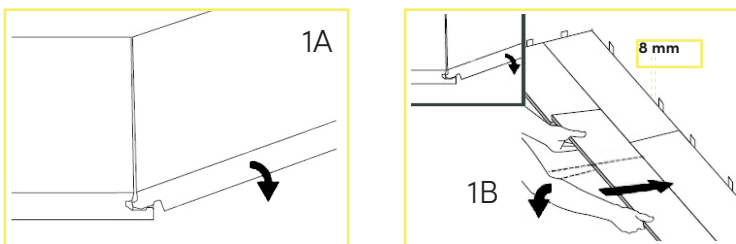
Determine the direction in which you want the floor to run. With tiles, it is typical for the flooring to run lengthwise in the room. However, the final choice is a matter of preference.

Some planning ahead is important to avoid narrow plank widths (less than 50 cm) or lengths (less than 30 cm) near walls/doors. Calculate how many full tiles will fit across the width of the room and how much space will be left that needs to be filled with parts of tiles.

Open the packages only right before installation. Ensure that the room temperature during installation is between 20 and 25°C.

1. Start with a whole tile in the left hand corner of the room with the tongue side and end toward the wall. Lay the first row of tiles along a chalk line and trim to fit to the wall allowing a 8 mm expansion space. If starting the first row with a whole width tile it will be necessary to trim the tongues next to the wall, then place the cut ends next to the wall. To trim the tiles, use a utility knife and a straight edge to score the top surface of the tile, and then bend it downward to separate the pieces, you can also use a VCT (Vinyl Composition Tile) cutter for end cuts only; a table saw also works well for both end and length cuts.

2. Align and attach the end joints of the tiles in the first row. Insert the tongue into the groove while holding the tile at a 20° to 30° angle to the floor. Apply pressure inward and down until the tiles lock together (**Diagram 1a & 1b**). Use spacers between the long edge and end of the tiles next to the wall to maintain the expansion space.



3. Start the second row using 1/3rd of a tile. Place the cut end against the wall. Insert the tongue on the long side of the tile into the groove of the tile in the first row. Hold the tile in a 20° to 30° angle while applying pressure inward and down until they lock together. To complete the second and all successive rows, it will be necessary to lock the short end into the previous tile first before locking the long side of the tile. Angle the tile and push the tongue into the groove and adjust it until the tongue locks into place. It may be necessary to lift both tiles slightly to lock the joint together. Complete the second row allowing 8 mm expansion space at the start and end of the row.

After finishing the installation of every row, use scrap pieces and a small hammer or rubber mallet to gently tap the tiles into the click of the previous row to make sure they are tightly clicked together and make sure there is no gap between the long sides of the tiles installed. Minor gapping can compromise the whole installation. Never tap directly on the click system.

4. Start the third row using a 2/3rd length of a tile with the cut end against the wall. Complete each row thereafter using a random layout with end joints off-set by at 30 cm. Plan the layout to avoid using small tiles (less than 30 cm) at the walls. The cut piece at the end of the row can often be used to start the next row provided it achieves a random layout. Always place the cut end against the wall and allow for the expansion space.

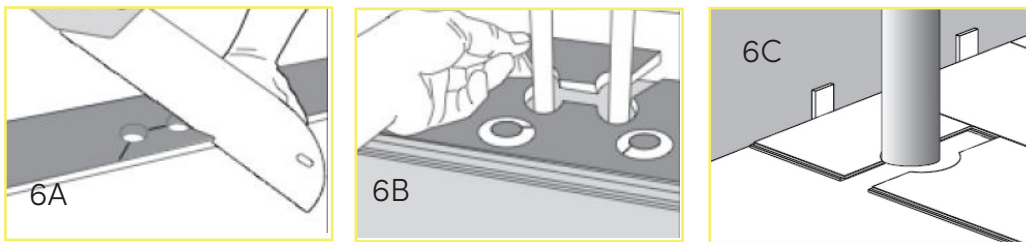
5. When fitting around door trim it will be necessary to slide the tile under the trim. This can be accomplished easily by starting the row on the side of the room with the door trim and then sliding the tile into place once it is attached. The row can be completed by inserting the tongue into the groove or the groove into the tongue depending on the direction. A tapping block and pull bar can also be used to lock the joints together while the tiles are in a flat position. Use a series of light taps until the joint is gradually locked together.

BATHROOM:

When SPC tiles are installed in a bathroom the flooring can be laid under the toilet only if the floor is separated from adjacent rooms with a doorway threshold, and padding is not used. Otherwise the flooring should be installed around the toilet leaving a 3,50mm expansion space. Use 100% silicone caulking to fill the expansion space at the tub, shower and all wet areas to help prevent surface water seepage under the floor.

PIPES:

In rows where there is a pipe or other vertical object through the subfloor, make sure the object lines up exactly where two boards will meet on the short ends. Take care to measure carefully before cutting, so the two boards end at the middle of the object. Use a drill or hole bit that is the diameter of the pipe or object, plus 20mm for expansion/contraction. Click the two short sides of the boards together, then drill the hole centered on the joint between the boards as shown. Now you can separate the two boards and install as normal. **See Diagrams 6A – 6C.**



TANSITIONS, MOLDINGS, AND WALL BASE

All transition pieces should be attached to the subfloor with a high quality construction adhesive (Emfi High power), available at most Home Centers and Hardware stores. Place a generous bead of adhesive under the part of the transition that will sit directly on the subfloor, and then press the transition firmly in place. Be sure the transition sits firmly in the adhesive, and take care not to get any adhesive on the flooring.

Remove any adhesive from the surface immediately with mineral spirits and buff off any residue with a dry soft cloth. It may be necessary to place heavy weights on the transition until the adhesive dries to ensure it will lay flat. Never attach the transitions directly to the flooring.

FINISHING THE JOB

Inspect your work, as it will cost you more if you have to come back to do a repair later. Replace original baseboards, or install matching hardwood baseboard. Install matching transitions as needed or recommended by your dealer or installer. It is not recommended or necessary to seal this floor after installation. Protect your floor from scratches by using felt pads on chair legs or furniture feet.

Plastic rollers/castors can damage your flooring. If necessary try to replace with softer rubber wheels/castors. When moving heavy items like refrigerators, use at least two sheets of plywood while moving (sliding the appliance from one sheet to the next) to protect the flooring against scratching and denting.

- FLOOR MAINTENANCE

- Frequently moved furniture (chairs) should be equipped with felt pads to avoid scratching the floor and checked regularly. Heavy furniture and appliances should be equipped with non-staining large surface floor protectors. Furniture with castors or wheels must be easy swiveling, large surface non-staining and suitable for resilient floors. Do not use ball type castors as they can damage the floor.
- Avoid exposure to extreme temperature fluctuations. The floor may not be installed in areas where it will occasionally be exposed to extremely high temperatures (Saunas, verandas, etc.) Exceeding 45°C. Avoid exposure to long periods of direct sunlight causing the heat to accumulate on the floor surface exceeding 45°C.
- Use walk-off mats at entrances to prevent dirt and grit from being tracked on to the floor. (Ensure that the mat doesn't have rubber backing)
- Sweep or vacuum the floor regularly to remove loose dirt.
- Do not use abrasive cleaners, bleach, wax or oil to maintain the floor. Ask your dealer for our Rigid Floors cleaner. Other cleaning products may contain agents that damage the floor.
- Clean up spills immediately.
- Do not drag or slide heavy objects across the floor.

Damp mop as needed using clean water and a diluted floor cleaner. Do not use harsh cleaners or chemicals on the floor.

- REPAIRS

In the unlikely event that a tile is damaged for whatever reason, the simplest method is to disconnect the tiles carefully (protecting the tongue and groove edges) until the damaged tile can be removed. Then replace the damaged tile with a new one and re-assemble the disconnected tiles. This typically works for tiles that are close to the two long perimeters of a room. For damaged tiles that are not close to the perimeter, you may have to remove the damaged tiles and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged tile by leaving approximately 1 inch (25.4mm) strip attached to the adjacent tiles.
2. Carefully cut back from the four corners of the tile to the inside edges in space left by the cut out tile.
3. Remove the tile edges carefully from of the adjacent tile making sure the tongues and grooves of the adjacent tiles are not damaged
4. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement tile. In addition, remove the groove strip of the short end of the replacement tile.
5. Place two-sided carpet tape with one half under the sides of the adjacent tiles where the tongues and the groove of the replacement tile have been removed. Only the top side release paper of the carpet tape should be removed. Leave the bottom side of the release paper in place, as it should NOT be taped to the subfloor.
6. Position the replacement tile by engaging the groove of the long side into the tongue of the adjoining tile and pushing down on the other three sides. The carpet tape will hold the replacement tile in place with its adjacent tiles. Use a hand roller to further secure the tape.

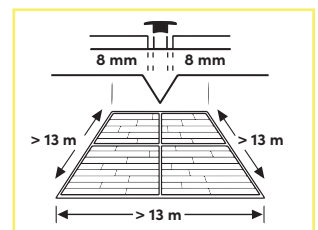
1. Tiles with 5G-CLICK

Rigid Floors Tiles with patented interlocking system is installed as a glueless floating floor. The Rigid Floors Tiles are not designed for outdoor use, in saunas or solariums. Because of their floating installation Rigid Floors Tiles can't be installed in areas into which drainage systems have been incorporated, such as walk-in showers.

In a newly installed underfloor heating system in a recently laid screed, the system must operate at maximum capacity before installation to remove any residual moisture from the screed. Consult the supplier of the heating system to ensure you do this safely. Turn off your underfloor heating or cooling 24 hours before you begin the installation.

- GENERAL INFORMATION

- Flooring should be transported and stored in a neatly stacked fashion on a smooth flat surface. (Never store this product outside)
- Acclimate the flooring and the rooms to be installed for 48 hours at a constant temperature between 18°C and 29°C before, during, and maintained after installation. If the boxes of flooring were exposed over 2 hours to extreme temperature (under 10°C or over 40°C) within the 12 hours before the installation, acclimation is required. In this case keep the boards in room temperature for at least 12 hours in unopened package before you start the installation. The room Temperature must be maintained consistent between 20°C to 25°C before and during installation.
- Rigid Floors Tiles should be stored flat (never vertically) in their original packages. Stock maximum 5 boxes high.
- Rigid Floors Tiles should only be installed after other trades have finished and the jobsite has been cleaned and cleared of debris that could potentially damage a finished tiles installation.
- Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and/or installed.
- Mix and install tiles from minimum 4 different cartons during installation to ensure a random appearance.
- Make sure that you mix up the floor panels sufficiently so that there are not too many identical, lighter or darker tiles next to each other.
- Visual check each board before and during installation. Tiles with defects must not be used.
- Floating installation only ! The floor should be able to expand and contract in every direction. Therefore, at all times, an expansion gap of 8 mm should be maintained between the floor and the wall or other fixed element (see diagram 1B). Never glue or nail the Rigid Floors tiles down. When installing around pipes, drill the holes 20 mm larger than the diameter of the pipes.
- In most cases, no expansion joint is needed between different rooms. An expansion joint is necessary when:
 - 1. The temperature in adjacent rooms varies significantly above and below the temperature range of 18–25°C.
 - 2. The maximum room size is exceeded. This maximum room size is a space of 13 m x 13 m. Therefore, larger surfaces should have an expansion joint every 13 meters (both in length and width).



- Make sure to keep the room at a minimum of 10°C after installation . Excessively high or low temperatures may cause this product to contract or expand and lead to visual defects. This is not a product failure and will not be warranted.
- Measure the area to be installed. The boards width of the last and first row shall not be less than 50 mm wide. Calculate the room surface prior to the installation and take in account a 10% of flooring cutting waste.

- Decide the installation direction. It is recommended to install the length direction of the tiles parallel to the main light direction.
- Rigid Floors Tiles come with underlayment installed as a backing. In High moisture areas, such as bathrooms, we recommend applying water-tight foil beneath the tiles. Although the tiles are water resistant, water can always seep in between joints causing damage to the underground. (Rigid Floors Tiles can therefore not be installed in swimming pool areas or saunas) If there is moisture in the subfloor please carry out sealing before installation. Excessive moisture can generate unhealthy mould or Fungus.
- Rigid Floors tiles are water-resistant but not suitable as a moisture barrier. The subfloor must meet the following criteria: a maximum relative humidity of 65% at 20°C and a minimum floor temperature of 12°C. For areas without underfloor heating, cement-based screeds may contain a maximum of 2,50% moisture and anhydrite screeds a maximum of 0,70%, measured according to the CM method. In areas with underfloor heating, the maximum values are 1,50% for cement-based screeds and 0,50% for anhydrite screeds.

FLOOR HEATING/ COOLING

- Rigid Floors tiles can be installed on floors with underfloor heating or cooling, as long as the surface temperature of the floor never exceeds 28°C and the floor cooling is not set below the dew point temperature. It is important not to cover the floor with carpet and to separate areas with and without underfloor heating with expansion profiles.
- Specific requirements apply for systems embedded **in the screed**:
 - Only low-temperature systems, whether electric or hot water, are suitable.
 - There must be at least 4 cm of space between the Rigid Floors and the heating elements.
- For systems with floor cooling, a control and safety system is necessary to prevent the temperature from dropping below the dew point, which can cause condensation between the screed and the Rigid Floors tiles. The dew point temperature is not constant and depends on the room temperature and humidity. A general rule of thumb for the dew point is 18°C at a normal humidity of 50-60% and a room temperature of 20-22°C. At very high humidity, the dew point can reach 22°C. Therefore, do not use floor cooling to actively cool a room by setting the temperature very low.
- For systems **on the screed** (electric and infrared), the mats must not overlap, and the power must be limited to 60 W/m² to prevent damage to the floor.
- The installation of the underfloor heating must comply with the supplier's regulations and general rules. For more information, refer to the manufacturer or installer of the heating or cooling system.
- Before installation, the system must be turned off for at least 24 hours. During installation, the room temperature should be between 20 and 25°C. Starting 24 hours after installation, the underfloor heating should be gradually increased by 5°C per day until the standard operating temperature is reached, with a maximum operating temperature of 28°C. Switching the system on at full power immediately can damage your floor due to intense heat development.
- Different kind of subfloors need different preparations.
- Before installing please check if the subfloor needs to be removed.

TYPE OF SUBFLOOR	REMOVE
Carpet, needlefelt, cushion vinyl, floating laminate, floating parquet	YES
Ceramic tiles, glued PVC, Glued VCT, Glued linoleum, glued laminate, glued parquet	Not necessary (when joints between tiles exceed 4mm in width and 5mm in depth they should be filled and made level before installation)

In case you're subfloor isn't mentioned or you have any doubts, please contact you're dealer and don't commence the installation.

- SUBFLOOR PREPARATION

Rigid Floors floors can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood and many existing hard surface floors (check grid above). The subfloors must be clean, smooth, flat, solid (no movement), and dry. Do not install tiles over floors that are sloped for drainage. Inspect your subfloor before you begin and remove all traces of plaster, paint, glue, oil, grease etc. It must be clean and level to 5 mm within a 3 meters span. If the flooring is intended to be installed over an existing wooden floor it is recommended to repair loose boards or squeaks before the installation.

NOTE: Avoid subfloors with excessive vertical movement or deflection because subfloor movement may cause the locking mechanism to wear down, or even break. Indications of excessive deflection are subfloor fastener release, squeaking, compromised or sectional contours such as bowing or dipping in floors and uneven flooring material. Nail or screw subfloor panels to secure boards with excessive vertical movement or deflection prior to installation of the flooring material.

Concrete subfloors

Rigid Floors Tiles can be installed over concrete on all grade levels if a proper moisture barrier is used underneath. Newly poured concrete floors must cure for a minimum of 90 days. Please note it is the person installing the floor and/or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installing the floor. The moisture content of the subfloor must be less than 2,50% CM in case of cement and 0,50% in case of anhydrite. In case of floor heating , results must be respectively 2% CM and 0,30% Anhydrite.

NOTE: Excessive moisture may cause the growth of unhealthy mold or mildew and/or cause staining of the flooring

Wooden subfloors

Rigid Floors Tiles can be installed over a smooth, flat, level wood subfloor. Remove any existing floor covering on top of the wooden subfloor. Make sure the subfloor is level and nail down any loose parts. If not sufficiently level, it is mandatory to apply an appropriate wooden levelling board flooring grade plywood (Type FG1) is recommended to be installed if the subfloor is not clean and level to 5 mm within a 3 meters span.

- INSTALLATION

PRE - INSTALLATION INSPECTION

It is the duty of the person installing the floor to inspect all flooring before installation. If during inspection the installer or buyer feels the floors is the wrong color, improperly manufactured, is off-grade or is the wrong gloss level, he/she should NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased.

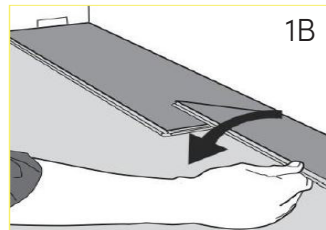
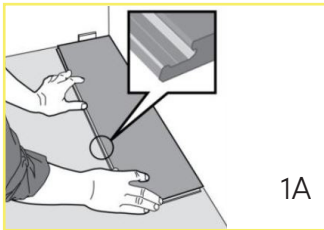
Check the batch number on the packaging of the delivered flooring before laying it to ensure they are identical. It is recommended to use only boxes with the same batch number in one room to avoid any color or gloss differences within a surface.

Determine the direction in which you want the floor to run. With tiles, it is typical for the flooring to run lengthwise in the room. However, the final choice is a matter of preference.

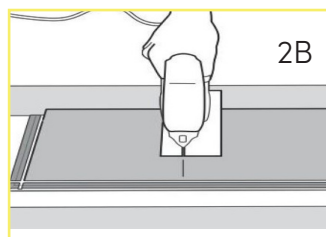
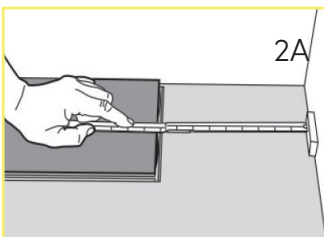
Some planning ahead is important to avoid narrow plank widths (less than 50 cm) or lengths (less than 30 cm) near walls/doors. Calculate how many full tiles will fit across the width of the room and how much space will be left that needs to be filled with parts of tiles.

Open the packages only right before installation. Ensure that the room temperature during installation is between 20 and 25°C.

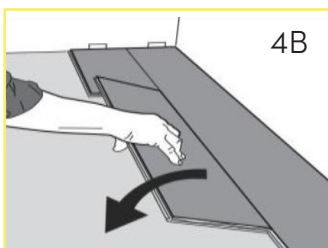
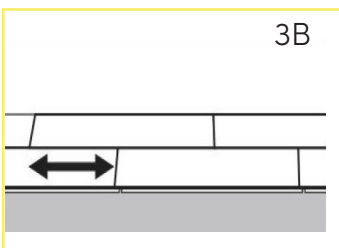
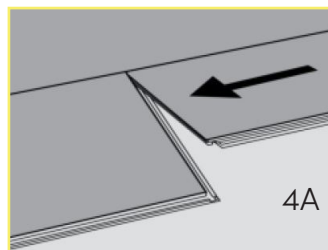
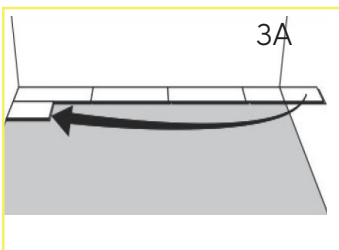
1. Start in the left corner of the room. Place a floor spacer from about 10 mm thick against the left corner of the wall and position the end of the tile to the wall (**see Diagram 1A**), the tongue must be facing into the room. Place 2nd tile gently and tight to the short end of 1st tile. Fold down the panel down in a single action movement. During the fold down make sure the panels are tight against each other. Afterwards press or slightly knock at the short end just installed (**see Diagram 1B**).



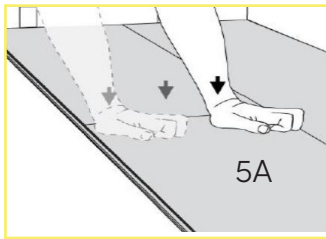
2. At the end of 1st row, put a distance about 10 mm to the wall and measure the length of the last tile to fit (**see Diagram 2A**). Cut with a jigsaw make sure the décor of the tile is turned down or saw with a hand saw or stanley knife with décor facing up (**see Diagram 2B**).



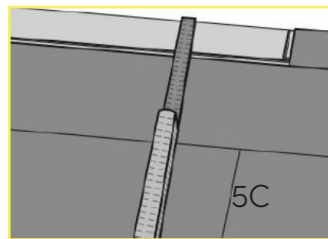
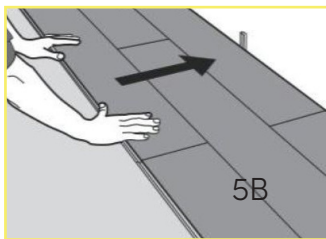
3. Second row : The section from the 1st row should be at least 50 cm long, then again use a 10 mm spacer block between the wall and the tile (**see Diagram 3A**). 2nd board, 2nd row, Press the tile gently against the end of the first tile (**see Diagram 4A**). Bring the tile down in a single action with a slight press to the short end of the previous tile. During fold down make sure the tiles are tight against each other (**see Diagram 4B**).



4. Gently press or tap again the end of the installed tile to lock the plastic spring of the click system in place **(see Diagram 5A)**.



5. After 3 rows also place spacers on the first long side of the first row **(see Diagram 5B)**. Last row: The minimum width should be 50 mm. Do not forget the wall distance of 10 mm! Cut the tile lengthwise and glue the ends with PVAC glue! **(see Diagram 5C)**.



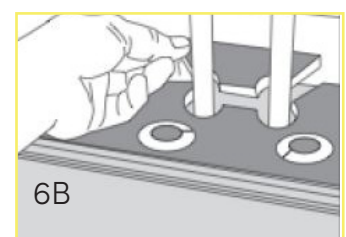
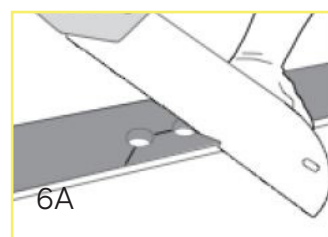
6. When fitting around door trim it will be necessary to slide the tile under the trim. This can be accomplished easily by starting the row on the side of the room with the door trim and then sliding the tile into place once it is attached. The row can be completed by inserting the tongue into the groove or the groove into the tongue depending on the direction.

BATHROOMS:

When SPC tiles are installed in a bathroom the flooring can be laid under the toilet only if the floor is separated from adjacent rooms with a doorway threshold, and padding is not used. Otherwise the flooring should be installed around the toilet leaving a 3,50 mm expansion space. Use 100% silicone caulking to fill the expansion space at the tub, shower and all wet areas to help prevent surface water seepage under the floor.

PIPES:

For installation around radiator pipes, please drill with a diameter that is 20 mm larger than the heating pipes **(see Diagram 6A & 6B)**.



TRANSITIONS, MOLDINGS, AND WALL BASE

All transition pieces should be attached to the subfloor with a high quality construction adhesive (Emfi High power), available at most Home Centers and Hardware stores. Place a generous bead of adhesive under the part of the transition that will sit directly on the subfloor, and then press the transition firmly in place. Be sure the transition sits firmly in the adhesive, and take care not to get any adhesive on the flooring.

Remove any adhesive from the surface immediately with mineral spirits and buff off any residue with a dry soft cloth. It may be necessary to place heavy weights on the transition until the adhesive dries to ensure it will lay flat. Never attach the transitions directly to the flooring.

FINISHING THE JOB

Inspect your work, as it will cost you more if you have to come back to do a repair later. Replace original baseboards, or install matching hardwood baseboard. Install matching transitions as needed or recommended by your dealer or installer. It is not recommended or necessary to seal this floor after installation. Protect your floor from scratches by using felt pads on chair legs or furniture feet.

Plastic rollers/castors can damage your flooring; if necessary try to replace with softer rubber wheels/castors. When moving heavy items like refrigerators, use at least two sheets of plywood while moving (sliding the appliance from one sheet to the next) to protect the flooring against scratching and denting.

- FLOOR MAINTENANCE

- Frequently moved furniture (chairs) should be equipped with felt pads to avoid scratching the floor and checked regularly. Heavy furniture and appliances should be equipped with non-staining large surface floor protectors. Furniture with castors or wheels must be easy swiveling, large surface non-staining and suitable for resilient floors. Do not use ball type castors as they can damage the floor.
- Avoid exposure to extreme temperature fluctuations. The floor may not be installed in areas where it will occasionally be exposed to extremely high temperatures (Saunas, verandas, etc.) Exceeding 45°C .Avoid exposure to long periods of direct sunlight causing the heat to accumulate on the floor surface exceeding 45°C.
- Use walk-off mats at entrances to prevent dirt and grit from being tracked on to the floor. (Ensure that the mat doesn't have rubber backing)
- Sweep or vacuum the floor regularly to remove loose dirt.
- Do not use abrasive cleaners, bleach , wax or oil to maintain the floor. Ask your dealer for our Rigid Floors cleaner. Other cleaning products may contain agents that damage the floor.
- Clean up spills immediately.
- Do not drag or slide heavy objects across the floor.

Damp mop as needed using clean water and a diluted floor cleaner. Do not use harsh cleaners or chemicals on the floor.

- REPAIRS

In the unlikely event that a tile is damaged for whatever reason, the simplest method is to disconnect the tiles carefully (protecting the tongue and groove edges) until the damaged tile can be removed. Then replace the damaged tile with a new one and re-assemble the disconnected tiles. This typically works for tiles that are close to the two long perimeters of a room. For damaged tiles that are not close to the perimeter, you may have to remove the damaged tiles and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged tile by leaving approximately 1 inch (25,4mm) strip attached to the adjacent tiles.
2. Carefully cut back from the four corners of the tile to the inside edges in space left by the cut out tile.
3. Remove the tile edges carefully from of the adjacent tile making sure the tongues and grooves of the adjacent tiles are not damaged
4. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement tile. In addition, remove the groove strip of the short end of the replacement tile.
5. Place two-sided carpet tape with one half under the sides of the adjacent tiles where the tongues and the groove of the replacement tile have been removed. Only the top side release paper of the carpet tape should be removed. Leave the bottom side of the release paper in place, as it should NOT be taped to the subfloor.
6. Position the replacement tile by engaging the groove of the long side into the tongue of the adjoining tile and pushing down on the other three sides. The carpet tape will hold the replacement tile in place with its adjacent tiles. Use a hand roller to further secure the tape.