

# INSTALLATION GUIDE



TECHNICAL GUIDELINES

### CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

The main method recommended for installing Ted Todd Design Panels should be:

- Fully-Bonded (Glued down) using Ted Todd MS Flex adhesive.
- Always check with the end-user that the correct product has been delivered and that they are happy with the grade and visual appearance of the floor. Open several packs at a time and mix the pieces to ensure a good selection pieces so the installation is visually wellbalanced.
- Agree on the laying pattern and the orientation of the pattern within each room. Normally the longest run of the room is the direction the pattern should be laid, but do consider other factors such as lighting, windows and doors.
- All installations should comply with BS8201.

Please note that in any patterned installation, the normal expansion and contraction of the wood blocks through natural humidity change will be enough to cause small gaps in the installation. Please check with the end client that this is acceptable and that the end-client has seen the appropriate large-format display panels in a Ted Todd Partner showroom or elsewhere.

If the end client requires an installation with a seamless accuracy, then the best results will be obtained by installing unfinished wood elements which can be filled and sanded after installation and finished on site.



Parquet de

Versailles



Figure 1: A typical arrangement of design panels (Chantilly Panel), bonded down with MX Flex.

Ted Todd Fine Wood Flooring Wood Floor Installation guide Contact: 01925 28 3000 enquiries@tedtodd.co.uk



Additional guides available at www.tedtodd.co.uk/guides/floor-care/

Page 82 Page Chapter 11 Version updated 09/2024

Page 82 of installation guide

**TECHNICAL GUIDELINES** 

## CHAPTER #11

Installation of **Design** panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

## 11.1 Site Checks

Before commencing installation ensure the requirements have been met for:

- Jobsite Conditions, Moisture Testing and Acclimatisation (Chapter 1A, 1B and 1C).
- Ambient temperature range of 16 . to 24 Deg C.
- Ambient relative humidity of RH of . 45 to 65%
- Subfloors, see Chapter 2 for a full check list.

## **11.2 Acceptable Sub Floors**

- For Wood based subfloors there should be no more than 12%MC and should be no more than +/- 2% Moisture Content difference to the Wood Flooring.
- Concrete / Screed. For concrete screeds • moisture content should not exceed 2% (calcium carbide measure) or RH of 65%. Anhydrite-based screeds with MC of no more than 0.5% (0.3% with UFH).
- Tiles when flat and overlayed with ٠ minimum 9mm ply
- Subfloors must be Dry and Flat. See • Chapter 2.
- The flatness of subfloors is absolutely . critical in obtaining a good installation when installing parquet flooring. Any unevenness in the subfloor can cause the pattern to run-out across the floor resulting in gaps between the elements.

### 11.3 Installation Guidelines, All Parquet installations.

#### 11.3.1 Material check

- Please check that the correct product has been ordered and delivered
- It is important to understand any critical visual elements that are required - laying directions, staggering of joints, mixing of tones across a floor for example
- Please always inspect material to decide on how the material needs to be installed to meet the projects objectives, e.g. if certain elements are best positioned in particular locations
- It is vital that you ensure that the quantity of material you have is sufficient to complete the area you are installing. It is normal in all natural products for there to be some batch-to-batch variation and if you need to order another batch to complete the area please expect some variation.
- Also consider ordering planks or strip flooring to finish off the perimeter of the parquet pattern



Parquet de Versailles



Chantilly panel



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles



Additional guides available at www.tedtodd.co.uk/guides/floor-care/



Page 83 of installation guide

TECHNICAL GUIDELINES

### CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

#### 11.3.2 Fixing method – only fully bonded

We only recommend fully bonded installation method for our patterns & panels floors

We only recommend Ted Todd MS Flex, this is a high tensile, high bond adhesive designed for high quality installations.

Ms flex should be evenly applied to a timber sub-floor with a 3mm notched trowel and to concrete and screeded floors with a 5mm notched trowel. Apply adhesive to an area just sufficient to allow the panels to be glued in place within the "open time" of the adhesive.

Care should be taken to not get the adhesive on the finished face of the floor, as the adhesive is made to adhere and is therefore difficult to remove once dry.

If you do get it on the face of the floor, it should either be removed quickly or left to dry.

We do not recommend intermittent lines of adhesive, as this will not give you an adequate bond. Ms flex is a full spread adhesive and will give you an unrivalled bond across the whole floor.

Always open several packs at a time and mix the elements to ensure that the installation is visually well-balanced.

**PRIMERFAST:** Application with nylon roller, coverage 6kg tub =120-450g/m<sup>2</sup>. Suitable for underfloor heating. Single coat. Fast drying within 45-50min **MX FLEX ADHESIVE:** 1.45 Kg/Ltr. Coverage 700/1200 g/m<sup>2</sup> depending on the subfloor. free from water, solvents, amines, epoxy resins and isocyanates. Suitable for underfloor heating.



We do not recommend floating installation for Design Panels as it can be difficult to avoid gaps between elements if the patterns run-out.

#### 11.3.4 Subfloor Priming

It is good practise to prime prepared screeded and concrete floors with Ted Todd Primerfast.

A single coat of Primerfast aids the spread and adhesion of the MS Flex full bond adhesive. However a second coat of Primerfast, for use where there is no underfloor heating, provides a moisture barrier too.

Primerfast dries within an hour and the installation can commence using Ms Flex full bond adhesive.





h	an	till	
р	an	nel	



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles

Ted Todd Fine Wood Flooring Wood Floor Installation guide Contact: 01925 28 3000 enquiries@tedtodd.co.uk



Additional guides available at www.tedtodd.co.uk/guides/floor-care/

<sup>X</sup> FLFX ADHES

> Page 84 Page Chapter 11 Version updated 09/2024

Page 84 of installation guide

TECHNICAL GUIDELINES

### CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

#### 11.3.5 Expansion

Expansion and contraction of patterned floors is more even in direction when compared to Plank floors.

Plank floors move predominantly across the width, but patterned floors which have different elements, or wood pieces, laid with the grain in different orientations move more evenly across the room.

A minimum expansion space of 15mm must be left around all of the perimeter and round all obstructions.



Figure 2: a 15mm expansion gap should be left around the perimeter and all obstructions.

### 11.4 Overview for installation of Design Panels

The layout of design panels within a space needs to be carefully considered. One benefit of panels is that they are easy to loose-lay out within a space, allowing you to visually see how the floor will look prior to installing. The main consideration is whether the panels are laid on the diagonal or square to the walls. Traditionally Parquet de Versailles are laid on the diagonal. This is a subjective decision, and every project has its own objectives.

The same installation guidance applies to Panels in that we only recommend that they are fully bonded with Ted Todd MS flex adhesive.

With many of our panels being 980 x 980mm in size any bows or undulations in the subfloor will make the panel reduce in width once it has taken into account this undulations, this will make the panel in effect a different size to its neighbour. This point hopes to reinforce the requirement for a level and flat sub floor.

Utilising weighty objects, like tins of adhesive etc. to weigh down the panels as they are installed is a good approach.



Parquet de Versailles



Chantilly panel



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles

Ted Todd Fine Wood Flooring Wood Floor Installation guide Contact: 01925 28 3000 enquiries@tedtodd.co.uk



Page 85 of installation guide

Additional guides available at www.tedtodd.co.uk/guides/floor-care/

Page 85 Page Chapter 11 Version updated 09/2024

**TECHNICAL GUIDELINES** 

### CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

#### 11.4.1 Professional Installation

Installation of engineered flooring panels requires a high degree of technical ability and should only be performed by a qualified and experienced professional wood floor installer.

It is not suitable as a DIY project nor suitable for installation by joiners or builders unless they are fully qualified professional wood floor installers.

Site conditions fully comply with the guidelines in sections 5.1 Site Conditions, 5.2 Acceptable Sub-floors, and 5.3 Installation

Most installation problems can be traced back to an inadequately levelled sub floor.

#### 11.4.2 Simple mistakes

Panels should not be installed in a "floating" method.

Site conditions are critical - damp and humid site conditions will cause large panels to move and this will make accurate installation challenging.

#### 11.4.3 Overall design:

Before even ordering any panels, please check that the dimensions of the panels are understood, that the dimensions of the room or area to be installed are understood and that the general pattern and layout is agreed with the end client.

It should also be considered that the panels may be best arranged in a pattern diagonal to the room. This may make edge details around obstructions e.g. fireplaces, or out of square walls easier to deal with.

When planning the installation layout it is usual to start from the centre of the area to be installed.

Consideration will need to be given to the detailing of the outside edges of the room. It may be better to provide for some "Border Strips" of plank flooring to complete the edges.

If required, do order the border strips at the same time as the panels so that the finish and thickness can complement the panels.

Do remember to follow the general recommendations regarding expansion gaps, etc.



Parquet de Versailles



Chantilly panel



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles



Additional guides available at www.tedtodd.co.uk/guides/floor-care/



Page 86 of installation guide

TECHNICAL GUIDELINES

## CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

#### 11.4.5 Design Panels Pattern Layouts.

A key factor is how the floor is laid out across the space it will be installed in.

The laying direction and the mapping of the pattern within the space is also very important.

The standard approach is for the centre line in the space to be the starting point, with the floor installed down this line and then working out to the perimeter.

But this may not always be the best approach and understanding where the pattern finishes on the perimeters may dictate that it makes more sense to move the layout away from the centre line to achieve a better finish point of the pattern around the perimeters.

Also consider the use of planks or narrow plank flooring to finish the perimeter of the pattern.

Designing layouts in CAD can be time well spent for highly complex installations, especially where borders are incorporated into the floor.



#### Do remember:

- Where possible, expansion gaps must be left though doorways/archways and covered with T-sections to break up large areas of installation. A minimum expansion space of 15mm must be left around the perimeter and all vertical obstructions.
- Remember that the floor must be allowed to expand and contract under the thresholds, skirting and other joint covers.
- Door architraves can be undercut to allow for the floor elements to fit underneath and still permit the expansion and contraction of the floor.
- Consider how the perimeter expansion gaps will be covered after installation. Skirting boards or scotia and other profiled shapes are available for this. They must be installed to allow for movement of the flooring below.
- For installations with Under Floor Heating we recommend the use of the Ted Todd Fidboxes for monitoring the temperature and humidity conditions inside the wood floor. See Chapter 13 for detailed information.

Figure 3 (left): Consider the use of planks or narrow planks to finish the perimeter of the pattern.





Chantilly panel



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles

Ted Todd Fine Wood Flooring Wood Floor Installation guide Contact: 01925 28 3000 enquiries@tedtodd.co.uk



Page 87 of installation guide

Additional guides available at www.tedtodd.co.uk/guides/floor-care/

Page 87 Page Chapter 11 Version updated 09/2024

**TECHNICAL GUIDELINES** 

## CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

### 11.5 Guidance on how to set out your floor.

#### 11.5.1 How to achieve a square layout from the Centre of the Room

Start by snapping a chalk line through the centre of the room (line Y).

The next line (X) must be exactly 90 degrees to line Y to form a perfect square corner.

To ensure this angle, do the following:

- From the centre point (A) of line Y, measure 800mm along line Y and mark that point (B); From the same centre point, measure 600mm in the general direction of where line X will be and scribe an arc.
- Return to the original 800mm mark on . line Y and measure 1000mm, scribing an arc that crosses (point C) the 600mm arc you made in the previous step (double check for accuracy by following a similar measurement and arc-scribing process on the other side of line Y and the opposite side from the expected position of line X)
- Snap a chalk line through the conjunction of the two arcs at point C and the centre point of line Y. This will be line X, at an exact 90-degree angle to line Y.

#### 11.5.2 How to achieve a diagonal Layout from the Centre of the Room

From the centre point, measure 800mm down in each direction on lines X and Y, which you have already determined by the method described above.

From each of these points, measure 800mm and scribe an arc. The conjunction of these arcs creates points D and E. Snap a chalk line between points D and E, and the centre point. This line represents a 45 degree angle.

### 11.5.3 Square Layout from the Wall









Chantilly panel



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles

Ted Todd Fine Wood Flooring Wood Floor Installation guide Contact: 01925 28 3000 enquiries@tedtodd.co.uk



Additional guides available at www.tedtodd.co.uk/guides/floor-care/



TECHNICAL GUIDELINES

### CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

Panels or basket weave parquet can be laid wall to wall without centring the product in the room. The results will not be balanced but the products have no edge treatment to delineate the difference in sizes when unbalanced. More intricate patterns generally require the flooring to be centred.

If the room dimensions allow, in at least two places from the corner, measure out and establish a chalk line parallel to and the width of 2 panels plus 15mm away from the starting wall opposite the entrance doorway.

Start by snapping a chalk line and the width of 2 panels plus 13mm from the starting wall, opposite the entrance doorway (Line Y). The next line (X) must be exactly 90° to Line Y to form a perfect square corner. To ensure this angle:

Measure and the width of 2 panels plus 13mm along Line Y from the right-angle wall and mark it Point A. From Point A, measure 800mm along Line Y and mark that Point B.

From Point A, measure 600mm in the general direction of where line X will be and scribe an arc.

From Point B measure 1000mm, scribing an arc that crosses Point C. Verify all measurements before proceeding. If correct, snap a chalk line through Point A and the conjunction of the two arcs at point C. This will be Line X, at an exact  $90^{\circ}$  angle to Line Y

Make any necessary adjustments to allow for walls out of square before proceeding.





Figure 6: Square Layout from the Wall





Additional guides available at www.tedtodd.co.uk/guides/floor-care/

TECHNICAL GUIDELINES

## CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

## 11.6 Tongue and Groove.

Panels may be supplied with differing T&G arrangements. Please check below:

- i. Panels may be supplied with 2 tongues and 2 grooves in which case there may be left and right-handed versions depending upon the pattern. Please check the layout before installing.
- Panels may be supplied with 1 tongue ii. and 3 grooves which should facilitate most pattern arrangements without left or right-handed versions. Please check the arrangement of the panels before installing. Loose tongues may be used to help the alignment of the panels on those edges where two grooves meet. Glue the loose tongues into one of the panels to be joined, using Ted Todd T&G adhesive. Allow the loose tongue to be a press-fit into the adjoining panel so that the loose tongue is only glued to one of the panels to be joined together. Do not glue the panels together with the loose tongue. This is normal in a fully bonded installation and allows natural expansion - contraction movement between the panels.
- iii. Panels may be supplied with 4 grooves which should facilitate all pattern arrangements without the need for left and right-handed panels. In this case the use of loose tongues in all joints is highly recommended to ensure tight alignment between the panels. Glue the loose tongues into one of the panels to be joined, using Ted Todd T&G adhesive. Allow the loose tongue to be a press-fit into the adjoining panel so that the loose tongue is only glued to one of the panels to be joined together. Do not glue the panels together with the loose tongue. This is normal in a fully bonded installation and allows natural expansion-contraction movement between the panels.



Figure 7: Panels may be supplied with 2 tongues and 2 grooves in which case there may be left and righthanded versions



Ted Todd Fine Wood Flooring Wood Floor Installation guide Contact: 01925 28 3000 enquiries@tedtodd.co.uk



Additional guides available at www.tedtodd.co.uk/guides/floor-care/

Page 90 Page Chapter 11 Version updated 09/2024

Page 90 of installation guide

TECHNICAL GUIDELINES

## CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

## 11.7 Installation:

Do follow the general recommendations for installation of a glue-down floor as well as the specific guidelines mentioned in this chapter for installing panels.

Do always remember to start from the centre of the room or area to be installed and "dryfit" the panels in the general orientation and gain approval from the end client. Similarly obtain agreement with end client that they are happy with the product as delivered, including grade, finish, etc.

Please check that dimensions of the panels as supplied are as expected!

Please refer to Chapter 10 under floor heating guidelines if system is present or to be installed.

### 11.7.1 Installation Tips

- Uneven subfloors will cause patterns to run out, as precise patterns require precise subfloors as their foundation.
- Where possible, install the first line of product the day before. It will then be securely adhered in position for when you start to install the rest of the floor.
- Do not walk or kneel on elements before the adhesive is fully cured as the elements my move.
- Allow a minimum of 24 hours drying time before moving furniture or walking on the newly laid parquet floor.
- If you need to knock up the components always use an off cut to avoid damaging the edges of components
- Caulking open joints as part of the installation is good practise where the project objective requires a gap free result.



Parquet de Versailles



Chantilly panel



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles



Additional guides available at www.tedtodd.co.uk/guides/floor-care/

Page 91 Page Chapter 11 Version updated 09/2024

TECHNICAL GUIDELINES

## CHAPTER #11

Installation of Design panels

Fully Bonded

# INSTALLATION OF: DESIGN PANELS - FULLY BONDED

## 11.8 Summary

- Subfloor preparation must be flat to a high degree
- Professional floor-layer installer only
- Fully bonded (glue down) installation
- Layout and planning of the pattern is critical
- Mark out the room to locate the centre and mark out the starting line.

## 11.9 FAQ's

#### Is all of the above really necessary?

The success of a good wood floor installation depends upon many factors. In instances where things go wrong, the problems will almost certainly be traceable back to failure to correctly follow some of the guidelines listed above. Even in apparently simple installation projects all of the above points must be checked to ensure compliance.

In any wood floor installation there will always be small tolerances at the edges of the T&G's (known as Lipping). Any lipping in a pre-finished floor is usually not noticed because of the rounded edges or bevels. In an unfinished Pattern installation, the edges between the blocks may be square and after installation the complete surface will be sanded before a final surface finish is applied. This means that the edges between the block elements will be perfectly smooth.







Chantilly panel



Circular design panel



Parquet de Chevney



Parquet de Ardeche



8 tile parquet de versailles



Ted Todd Fine Wood Flooring Wood Floor Installation guide Contact: 01925 28 3000 enquiries@tedtodd.co.uk



Page 92 Page Chapter 11 Version updated 09/2024

Page 92 of installation guide