RelWOOD™

TOUGH OUTSIDE. CARING INSIDE.

DECKING

GUIDELINES FOR INSTALLATION OF RELWOOD™ PLANK DECKING

ABOUT RELWOOD™

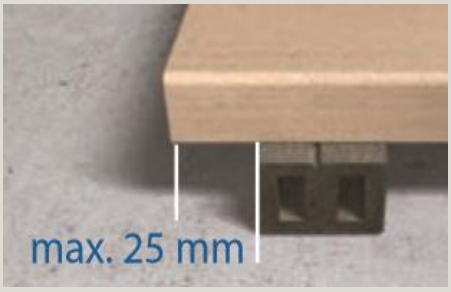
- **Look & Feel of natural hard wood**
- **100% Water Proof**
- **100% Termite Proof**
- **High Fire Resistance**
- **Fungus & Mould Proof**
- **VOC Emission free**
- **No Splintering**
- **Does not crack or chip**
- **100% Recyclable**
- **UV Resistant**
- **Skid resistant**
- **Saline water-resistant**
- **Chlorinated water-resistant**

FINISHED PRODUCT LOOK

Plank Decking

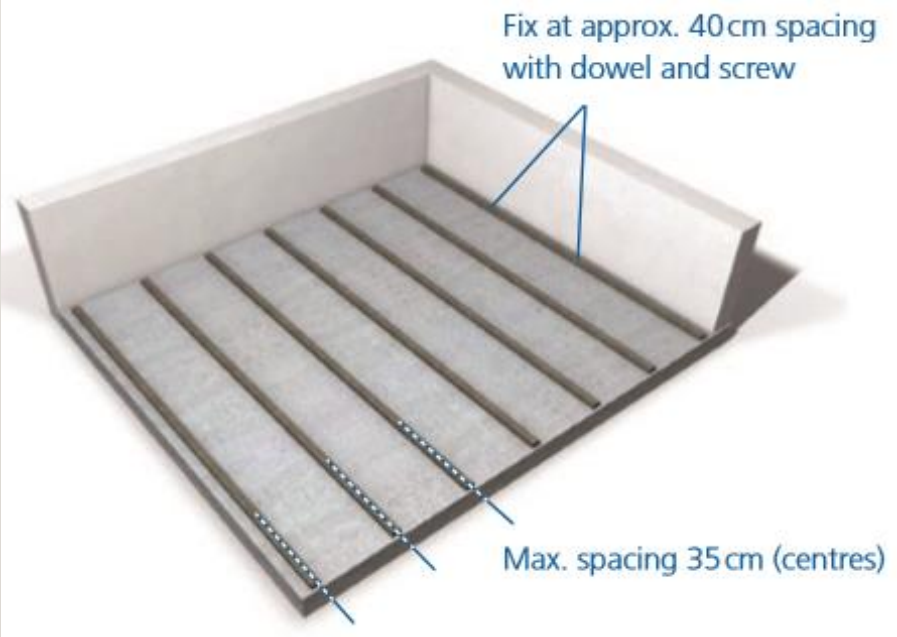
METHODOLOGY

- **KEY PRINCIPLES**
- A. Supporting Surface
  - It must be solid and capable of supporting the weight of the deck
  - It must allow adequate water run-off (at least 2°) or drainage
- B. Runners
  - Runners must be fixed to the supporting ground
  - Correct distance between runners must be ensured
- C. Expansion joint
  - A gap between decks (typically 4mm) to allow for linear expansion of decks must be ensured
- D. Support
  - Substructure pattern to be determined after deciding decking pattern
  - 2 runners must be used to support an end joint
  - A minimum of 30 mm of deck-end must rest on the supporting runner
  - Ends of each board must be fixed with a clip
  - Overhang of end of deck must be less than 25 mm



METHODOLOGY

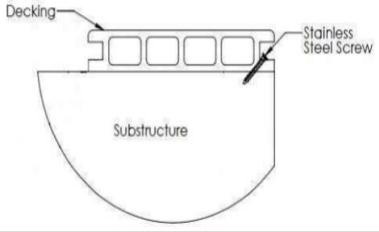
- **STEP I – Substructure**:
  - The solid, supporting surface (eg: concrete) must be clean and levelled
  - Runners must be with a maximum of 35 cm spacing between two
  - The runner must be fixed using screws (and not nails) with a spacing of approx. 40 cm between two screws

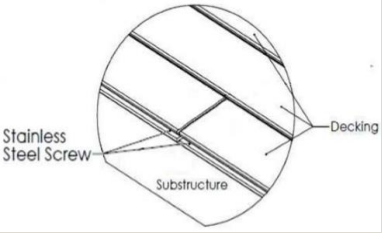


METHODOLOGY

- **STEP II – Installation**:
  - For the 1st board
    - Option 1: A 1 cm deep hole must be drilled and screw (with plug) must be inserted to fix the board to the runner

    - Option 2: If a single board in a row needs to be installed, the runner closest to the centre of the board must be located. Then, a hole must be drilled in the groove at the side of the board and the board must be screwed to the runner
    - Option 2: If 2 or more boards need to be installed in the same row, they must be screwed at the butt joints (not at the centre unlike previous case) to allow expansion in opposite directions, away from the butt joints

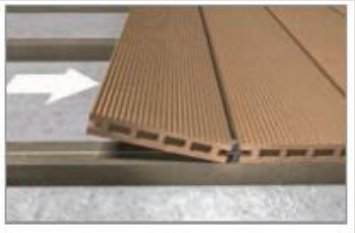


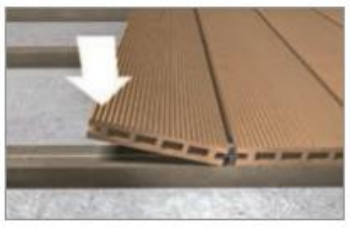


METHODOLOGY

- **STEP II – Installation**:
  - For 2nd board onwards, T-clips must be screwed in place and overtightening must be avoided

  - Then the board must be inserted at an angle, pressed down and then tapped fully into place



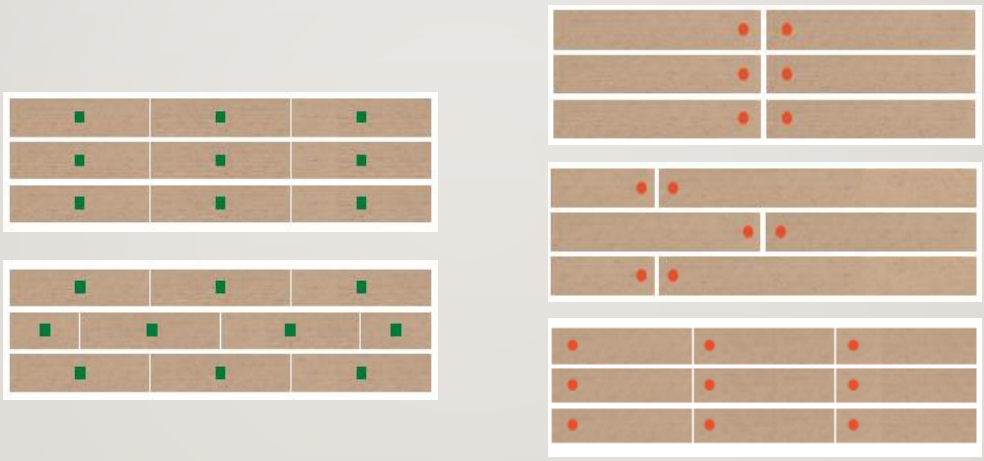


  - After tapping, the T-clip must be tightened slightly

  - For the last board, the fixing must be done similar to that of the first board

METHODOLOGY

- **Fixing Pattern**:
  - A uniform joint pattern and direction of expansion must be followed by fixing every board the same. The pattern may be chosen as shown below (red – start/end and green – middle)



- **Fixing the end batten (strip)**:
  - The end batten must be screwed directly to the runner using deck screws. The screws may be hidden using plugs
  - A 3-4 mm expansion gap must be provided between end of the board and the end batten

3-4 mm expansion gap

METHODOLOGY

- **Finishing the deck**:
  - To finish exposed sides of deck a groove must be first made to accept the batten (strip)
  - Adhesive must be applied evenly
  - The batten must be placed and pressed accordingly. Suitable strips can be cut from sheet or solid profile
  - The batten must be tapped firmly into place and lightly sanded if required

TECHNICAL DETAILS

Characteristics	Standard	Value
Density	ASTM D2395:2002	1.4 +/- 0.1 g/cm^3
Tensile Strength	ISO 527	21.8 N/mm^2
Tensile modulus	ISO 527	2340 N/mm^2
Bending strength	ISO 178	46 N/mm^2
Bending modulus	ISO 178	3850 N/mm^2
Screw withdrawal resistance	EN 320: 2011 -07	5777 N
Coefficient of Linear Thermal expansion	ASTM D696	3.6 *10(-5) m/mC
Water vapour diffusion resistance	DIN EN ISO 125752	High
Water absorption	Based on EN 317	< 1% (24h) – Res
Water absorption / length	Based on EN 317	< 0.1% (24h) – Res
Fire behaviour	BS 476 Part 6&7	Rating 1
Resistance against fungi	CEN/TS 15083-2	Class 1 (very durable)
Resistance to rotting	CEN/TS 15083-2	Class 1
Resistance to termites	ASTM D3345-08	Very high

Flooring concepts
that match your Style