



INSTALLATION GUIDE

RESYSTA FLOORING

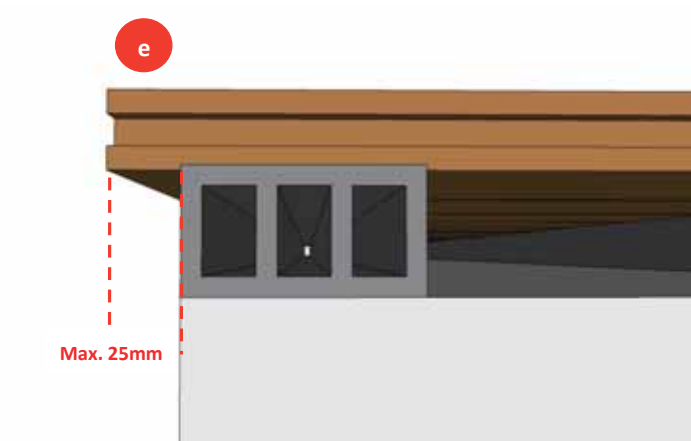
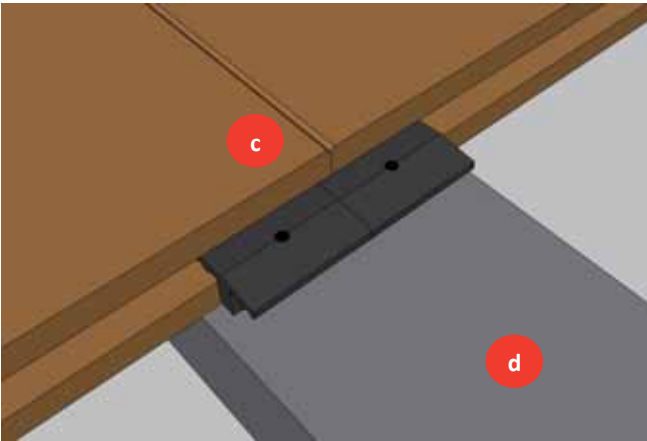
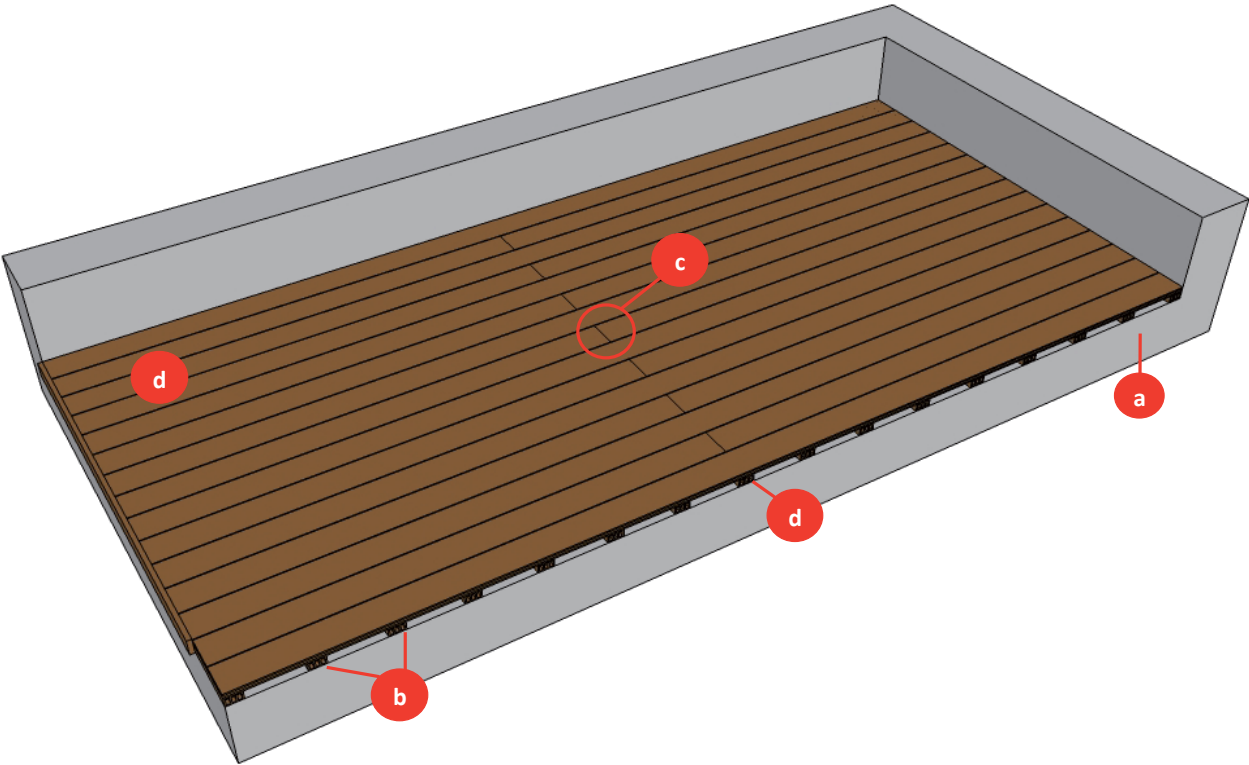




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1. BASICS

Overview of the critical points



a

Concrete Slab:

Ensure main contractor provides an accurate levelling concrete bed (Min grade 35 concrete is recommended).

b

Joist:

Decking DKG 12522 : The joists should be fixed at max. 300mm intervals into the concrete slab

Decking DKN 12520 : The joists should be fixed at max. 300mm intervals into the concrete slab

Decking DKG 5.5/1 : The joists should be fixed at max. 350mm intervals into the concrete slab

Decking DKG 14025 : The joists should be fixed at max. 350mm intervals into the concrete slab

Decking DKG 14038 : The joists should be fixed at max. 400mm intervals into the concrete slab

c

Expansion Joint:

Cater for temperature-dependent linear expansion of **1mm gap per running metre with every 10 degrees in temperature change** between the ends of the planks, e.g. **2.90m plank = approx. 3mm distance**. If the planks are installed closed to a wall, the distance here should be **10mm**. (Refer to expansion chart)

Surface Temperature	Gap (2.90 meter)	Gap (3.66 meter)	Ending
30°C - 40°C	2mm	3mm	10mm
15°C - 30°C	3mm	4mm	15mm
40°C - 60°C	1mm	2mm	10mm
60°C - 70°C	0mm	0mm	5mm

Decking Span Chart :

DECKING SPAN CHART - RESYSTA DECKING

Model	Span, L		Max. Uniform Live Load ,100 psf		Deflection (mm)	Deflection Limit (mm)	Complied to the deflection limit	Max. Uniform Live Load ,250 psf		Deflection (mm)	Deflection Limit (mm)	Complied to the deflection limit
	Inch	mm	lbs	N				lbs	N			
DKG 5.5/1	14	355.6	26.7	119	0.32	0.99	YES	66.8	297	0.6	0.99	YES
	16	406.4	30.6	136	0.58	1.13	YES	76.4	340	1.03	1.13	YES
	18	457.2	34.4	153	0.67	1.27	YES	85.9	382	1.34	1.27	NO
DKG14025	14	355.6	26.7	119	0.474	0.99	YES	66.8	297	0.804	0.99	YES
	16	406.4	30.6	136	0.73	1.13	YES	76.4	340	1.23	1.13	NO
FPHG14020BE	14	355.6	26.7	119	0.48	0.99	YES	66.8	297	0.93	0.99	YES
	16	406.5	30.6	136	0.54	1.13	YES	76.4	340	1.69	1.13	NO
FPH14020	12	304.8	22.9	102	0.46	0.85	YES	57.3	255	0.75	0.85	YES
DKG14038	16	406.4	30.6	136	0.45	1.13	YES	76.4	340	0.66	1.13	YES
	18	457.2	34.4	153	0.56	1.27	YES	85.9	382	0.87	1.27	YES
	20	508	38.2	170	0.74	1.41	YES	95.5	425	1.13	1.41	YES
DKG12522	12	304.8	22.9	102	0.2	0.85	YES	57.3	255	0.45	0.85	YES
	14	355.6	26.7	119	0.66	0.99	YES	66.8	297	1.08	0.99	NO
DKN12522	12	304.8	22.9	102	0.23	0.85	YES	57.3	255	0.55	0.85	YES
	14	355.6	26.7	119	1.7	0.99	NO	66.8	297	2.3	0.99	NO

Note :

1. Tabulated spans are based on a deflection limit L/360.

2. Design values indicated are applicable for uses where temperatures do not exceed 52 deg. C.

d

Placing of the Planks:

A min. of 30mm of the plank end should lie upon the joists.

When using the joist RUH 7038 to support two adjoining planks, one piece of T4A clips for each plank are required to secure them.

Decking joints need to be chamfered.

e

Overhang:

Adhere to a max. overhang of 25mm.



Flooring Pattern:

The flooring pattern should be determined in advance because the substructure depends on this.

- * Do not cover the flooring with plastic foils or similar materials, either in installed or un-installed condition.
Condensation or backwater can cause stains.


2. Scope of Delivery

Decking profile


	Material : Resysta DKG 12522 Colour : Natural Width x Height : 125 x 22mm Standard Length : 2900mm OR 3660mm
	Material : Resysta DKN 12520 Colour : Natural Width x Height : 125 x 20mm Standard Length : 2900mm OR 3660mm
	Material : Resysta DKG 14025 Colour : Natural Width x Height : 140 x 25mm Standard Length : 2900mm OR 3660mm

	Material : Resysta DKG 5.5/1 Colour : Natural Width x Height : 140 x 25mm Standard Length : 2900mm OR 3660mm
	Material : Resysta DKG 14038 Colour : Natural Width x Height : 140 x 38mm Standard Length : 2900mm OR 3660mm


Joist

	Material : Resysta RUH 7038 Colour : Black Width x Height : 70 x 38mm Standard Length : 2900mm OR 3660mm
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Fascia board/end plate profile

	Material : Resysta FPS 7020 Colour : Natural Width x Height : 125 x 22mm Standard Length : 2900mm OR 3660mm
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Plug in

	Material : Resysta RR 12 Colour : Natural Width x Height : 12mm dia Standard Length : 1000mm
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Decking clip

	Material : T4A Colour : Black Gap spacing : 4mm
	Material : ALJ50 Colour : Black Gap spacing : 4mm

Stainless steel screw with black head

	Material : SS40 Colour : Black Head Length : 40mm
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3. General Advice

Resysta Flooring must be installed by an authorised professional

- ❖ Resysta Flooring can be processed with standard woodworking machines.
- ❖ Only use sandpaper with a grit of between 24 and 60.
- ❖ Sand in longitudinal direction only.
- ❖ Resysta Flooring can be glued with standard PU glues (D3 or D4).
- ❖ Owing to the special production and composition of Resysta, small air inclusions may exist, however, this does not affect quality or stability.



Storage

- ❖ Resysta products should be stored on plain ground.
- ❖ If the planks are stored on bars, ensure that there is a distance of 30cm between them.

Legal Advice :

Resysta Decking and joists have been specially developed for their named applications and are not structural material. The items have no general technical approval and are therefore not suitable for supportive construction purposes. Local building codes as well as installation instructions and technical information should be taken into account.

4. Pre-Treatment

Application of the surface finish

To ensure a smooth and ideal result in colour, the surface finish should be applied during consistent conditions. It is recommended that the finish be applied on each plank before installation, in temperatures of between 5 to 25 degrees, and relative humidity of 50 to 60%.



Do not apply under direct sunlight or in rainy conditions.

Advice

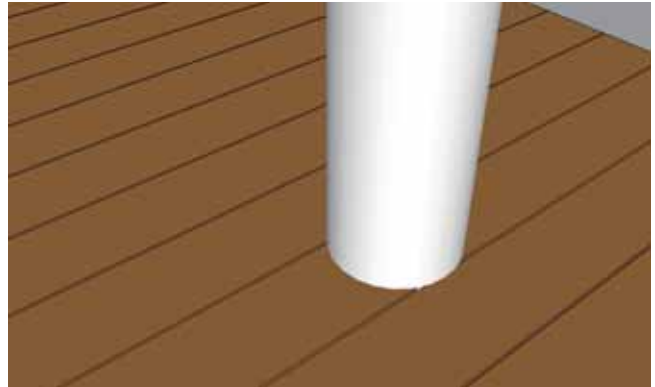
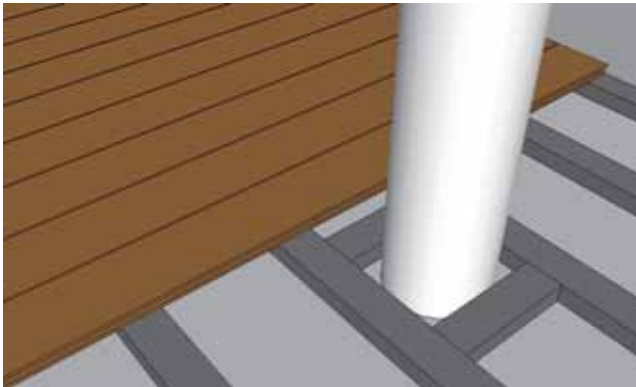
The surface finish should be applied using a broad brush (surface brush).

If the surface finish is applied after installation, adhere to the points mentioned above and paint a max. surface of 4 to 5 m² at once by an experienced person.

5. Installation

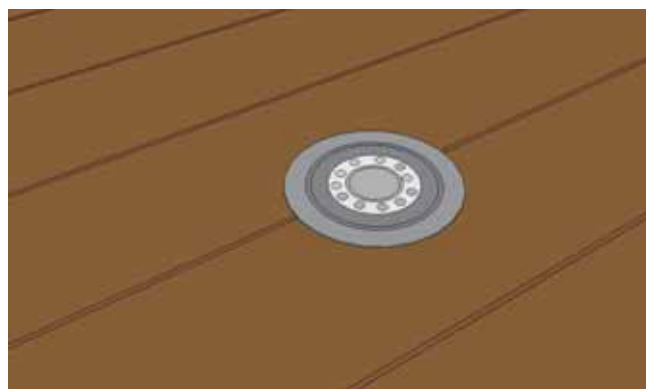
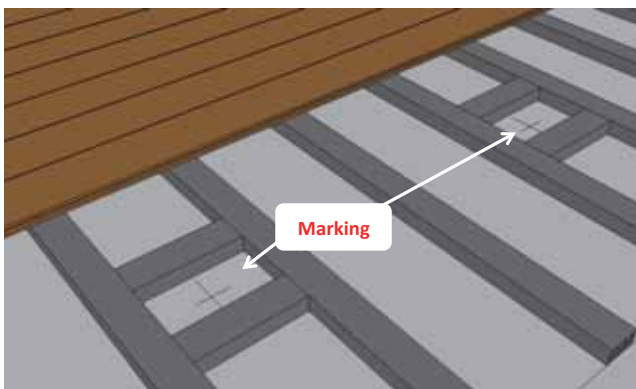
5.1 Runner support for round column

- ❖ Column: To be installed with a runner surrounding the concrete column (refer to picture below).



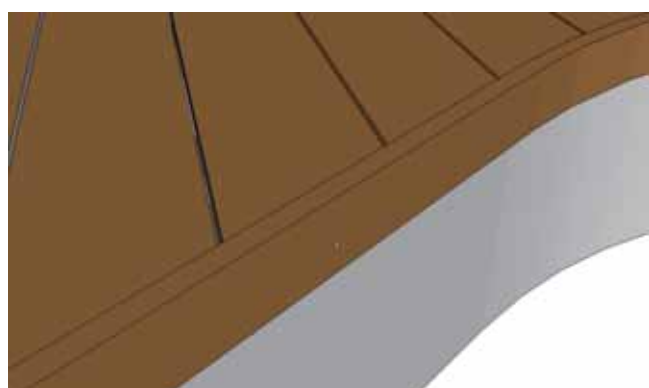
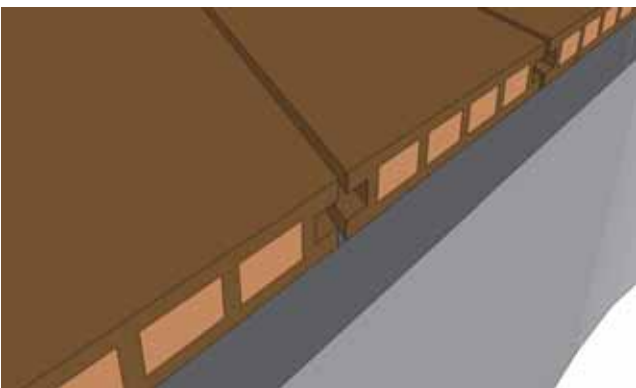
5.2 Runner support for outdoor lights

- ❖ Outdoor light: A marking must first be made on the floor. The runner must also be installed surrounding the lighting. The size must be confirmed with the client.



5.3 Runner support for curved edging

- ❖ Curved Edge: The runner has to be installed surrounding the straight or curved edge.
 - : Inserts have to be used for hollow decking.
 - : Fascia boards must be installed along the edge and fastened to the joists.



6. Completion

Drilled holes, dowels and cuts done after installation should be glazed afterwards as well. In this case we recommend pouring the finish on a towel and rubbing the affected surface with it.

7. Application of the Transparent Sealing

The Transparent Sealing can subsequently be applied on the glazed surface or the untreated material. For more information see supplier data sheet for finishes and varnishes.

If required, the colour can be refreshed. Therefore, the finish shall be mixed at a ratio of 1:3 with water and consequently be applied with a mop.

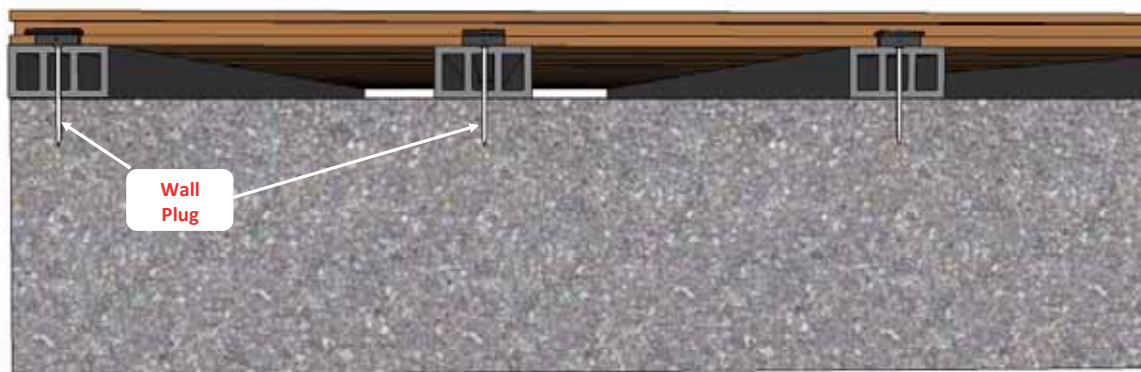
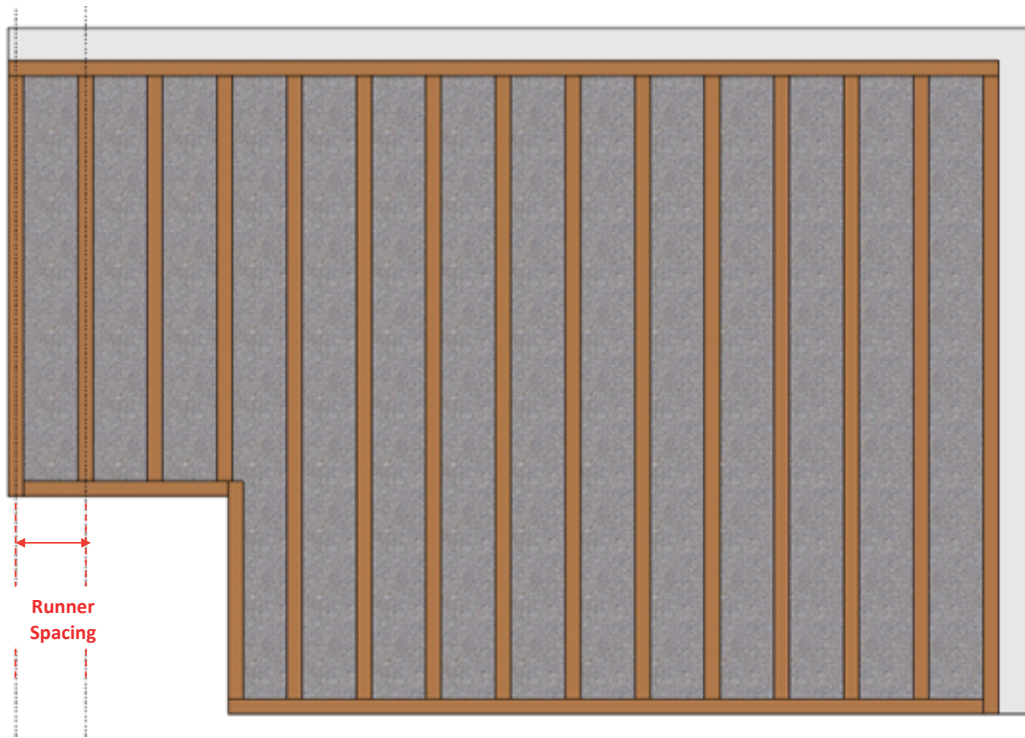
Make sure the surface is cleaned beforehand. Refreshing the surface is only possible if no transparent sealing has been applied.

For information on heavy damage or dirt, refer to the information sheet at www.resysta.de.

8. Tips

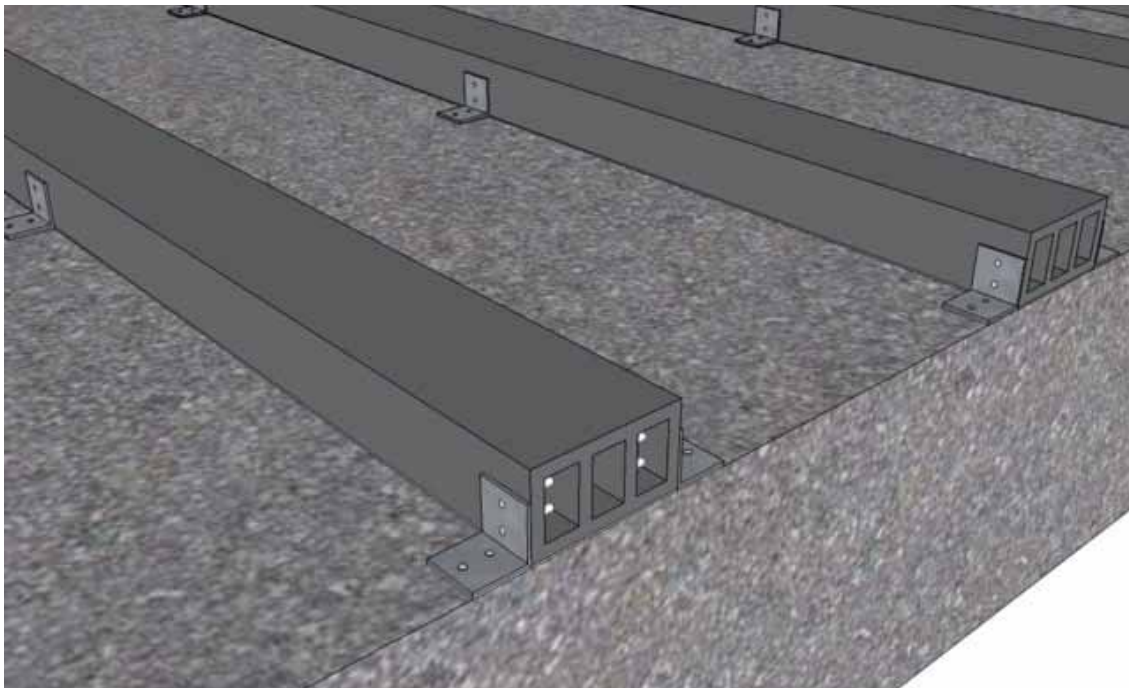
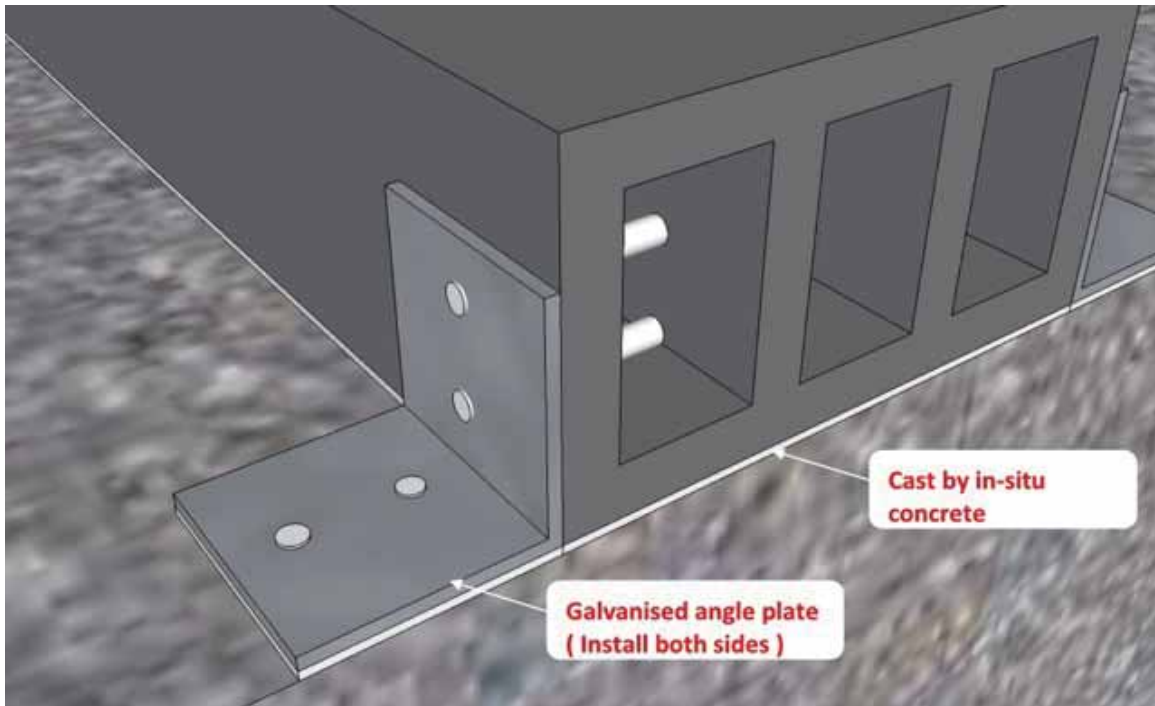
8.1.1 Installation of Resysta runner (On concrete floor without waterproofing)

- ❖ Runner
 - : Runner must be installed at perimeter wall and edging.
 - : Runner spacing is based on decking profile (refer to decking profile chart).
 - : Install runner using wall plugs.
 - : Always check the levelling of the runner before installing the Resysta decking board - making sure it is 100% level.



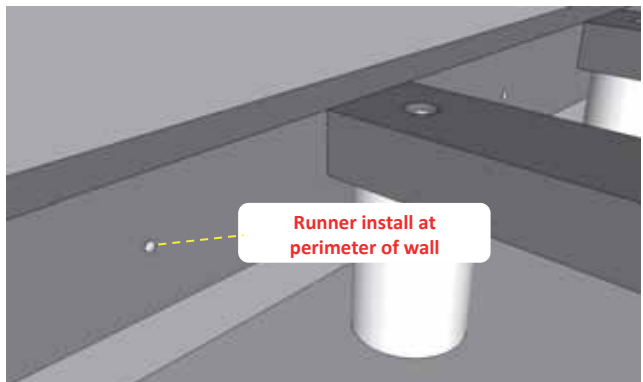
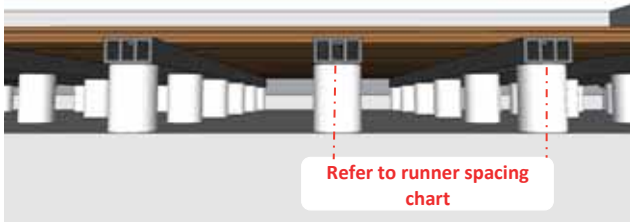
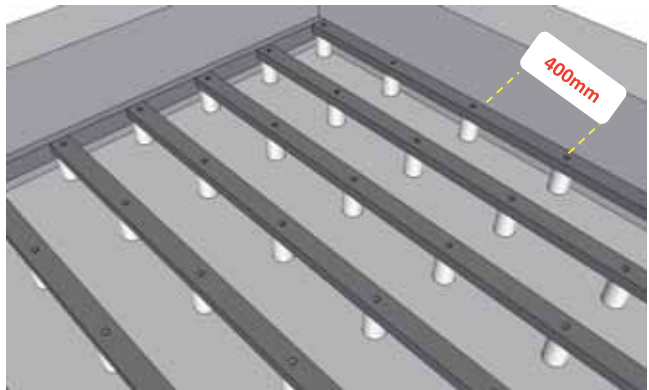
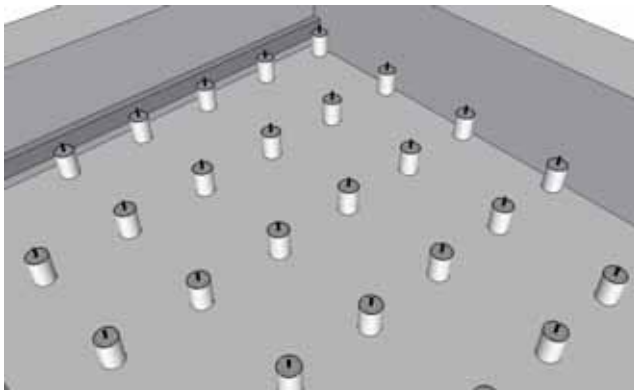
8.1.2 Installation of Resysta runner (On concrete floor with waterproofing)

- ❖ Runner must be cast in place using concrete.
- ❖ The L-bracket must be secured to the runner with stainless steel screws. The interval between each L-bracket is 400mm.



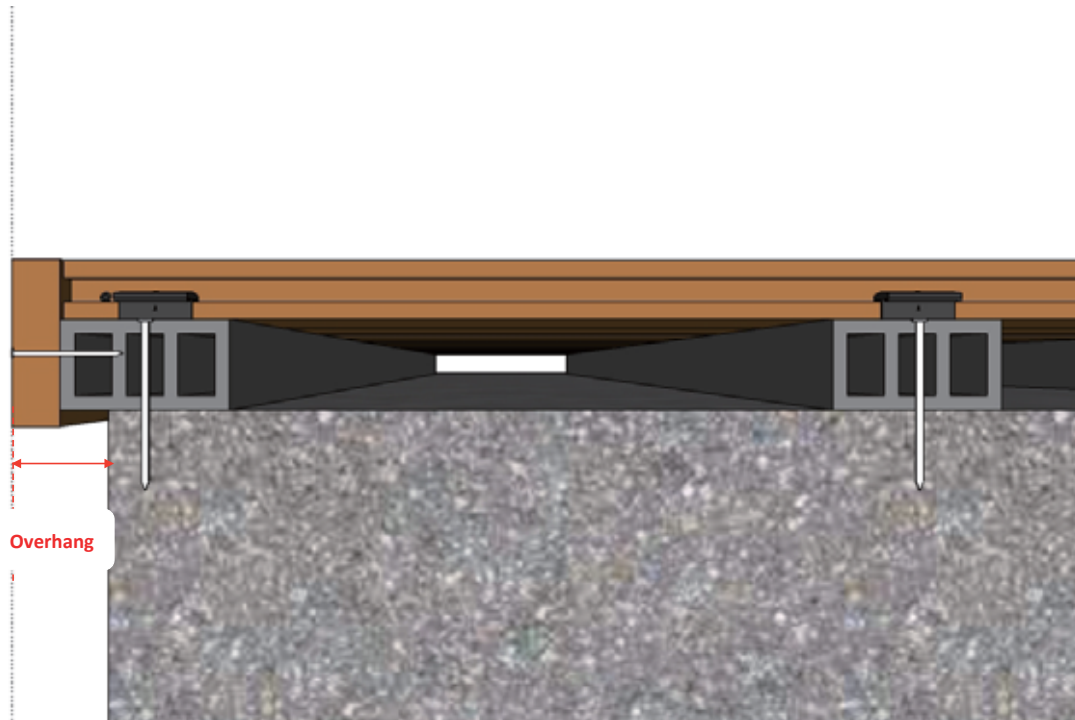
8.1.3 Raised floor system (At waterproofing areas)

- ❖ PVC pipe raised floor system: Use PVC pipes of min 100mm diameter as raised floor system. Cast PVC pipes directly on concrete floor with 12mm diameter threaded rods (concrete grade 35).
- ❖ Runner: A perimeter wall must be installed before the runner can be installed.
- ❖ PVC pipe spacing: 400mm centre to centre.
- ❖ Runner spacing: Dependent on the decking profile (refer to spacing chart).



8.2 Overhang

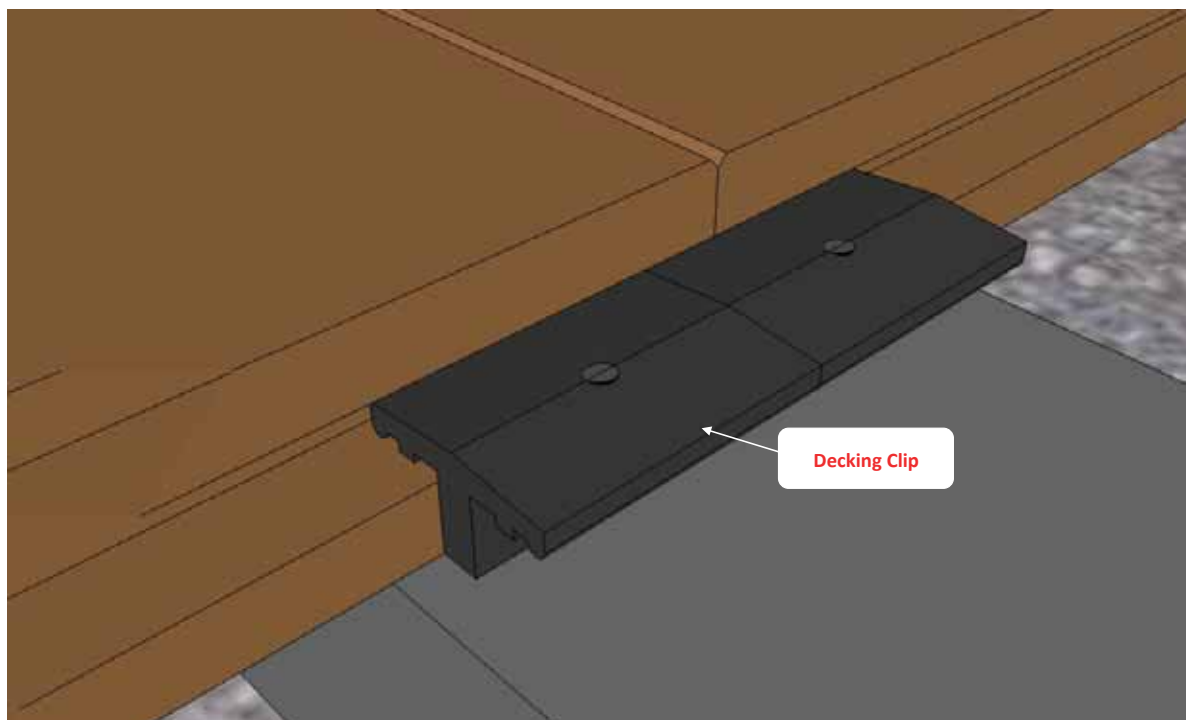
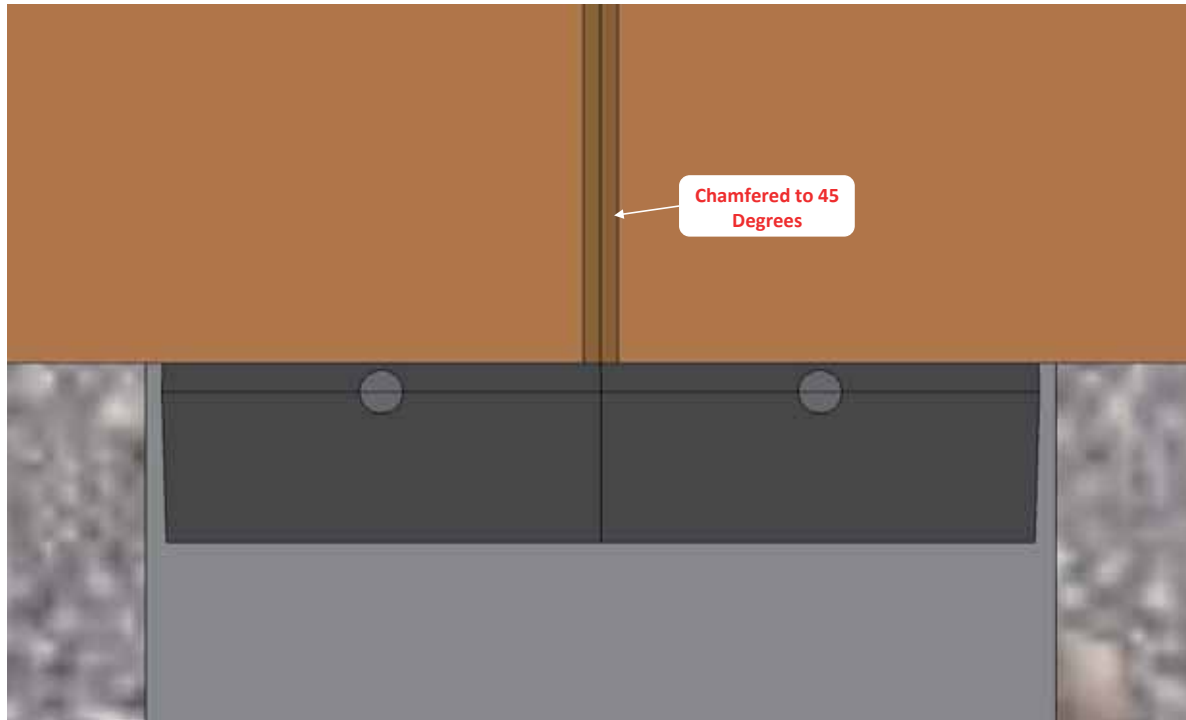
- ❖ Decking : Maximum overhang for decking is 25mm.
- ❖ Fascia Board : Fascia Board FPS 7020 must fastened to runner support (refer to picture).



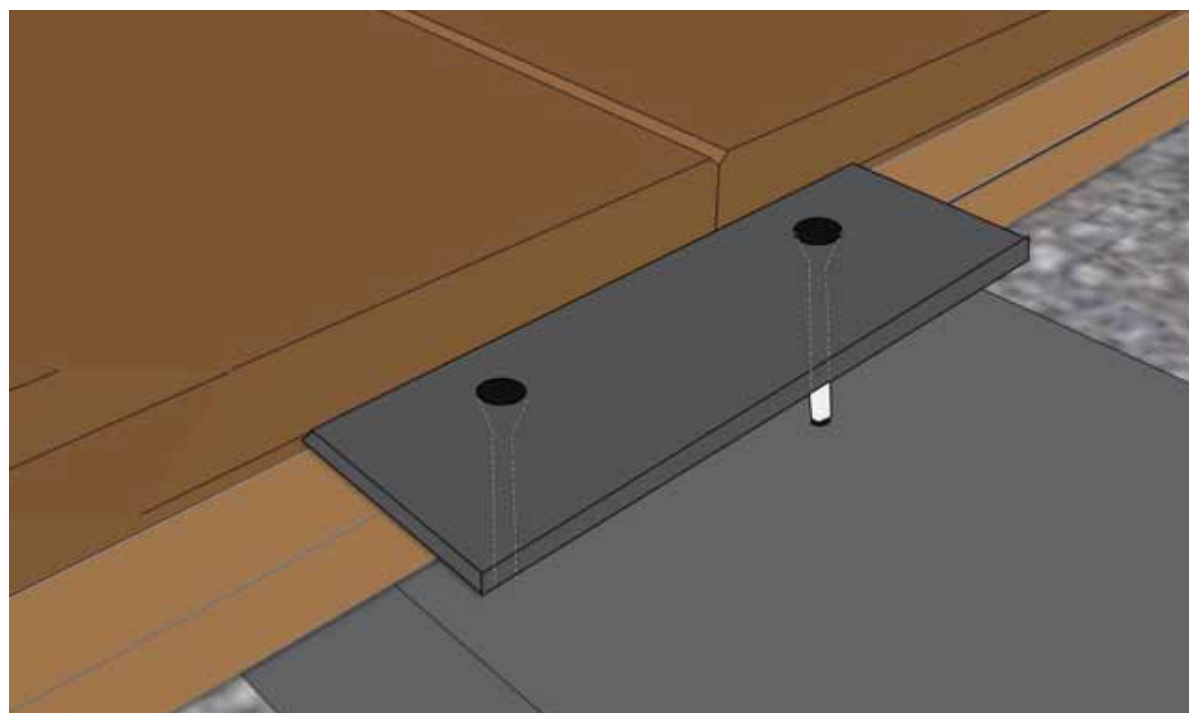
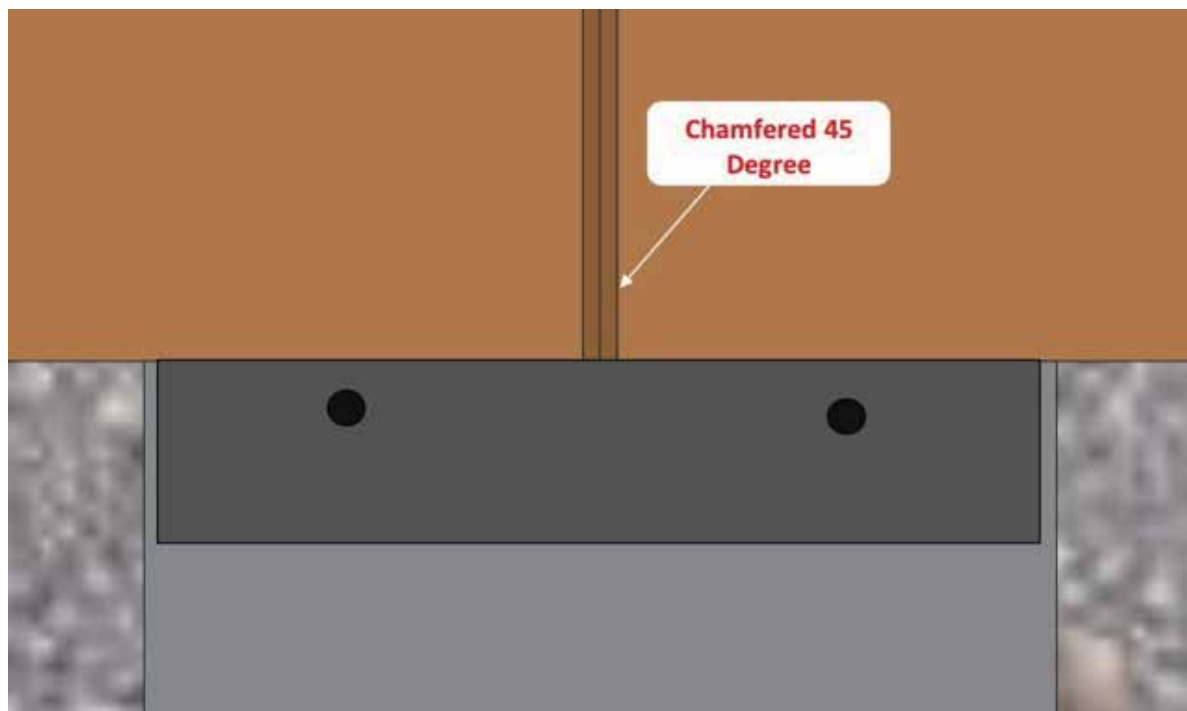
8.3 Clip installation for staggered deck

- ❖ Staggered Joint : No gap at joining area.
- ❖ Runner : Runner has to be wide enough to install 2 pieces of decking clips.
- ❖ Decking Clip : Each decking board has to be secured with either aluminium clips or T4A clips (refer to picture).
- ❖ Decking Edge : Edge of joining area must be chamfered to 45 degrees before installing decking.

Option 1: Using 2 pieces of T4 clips to secure.

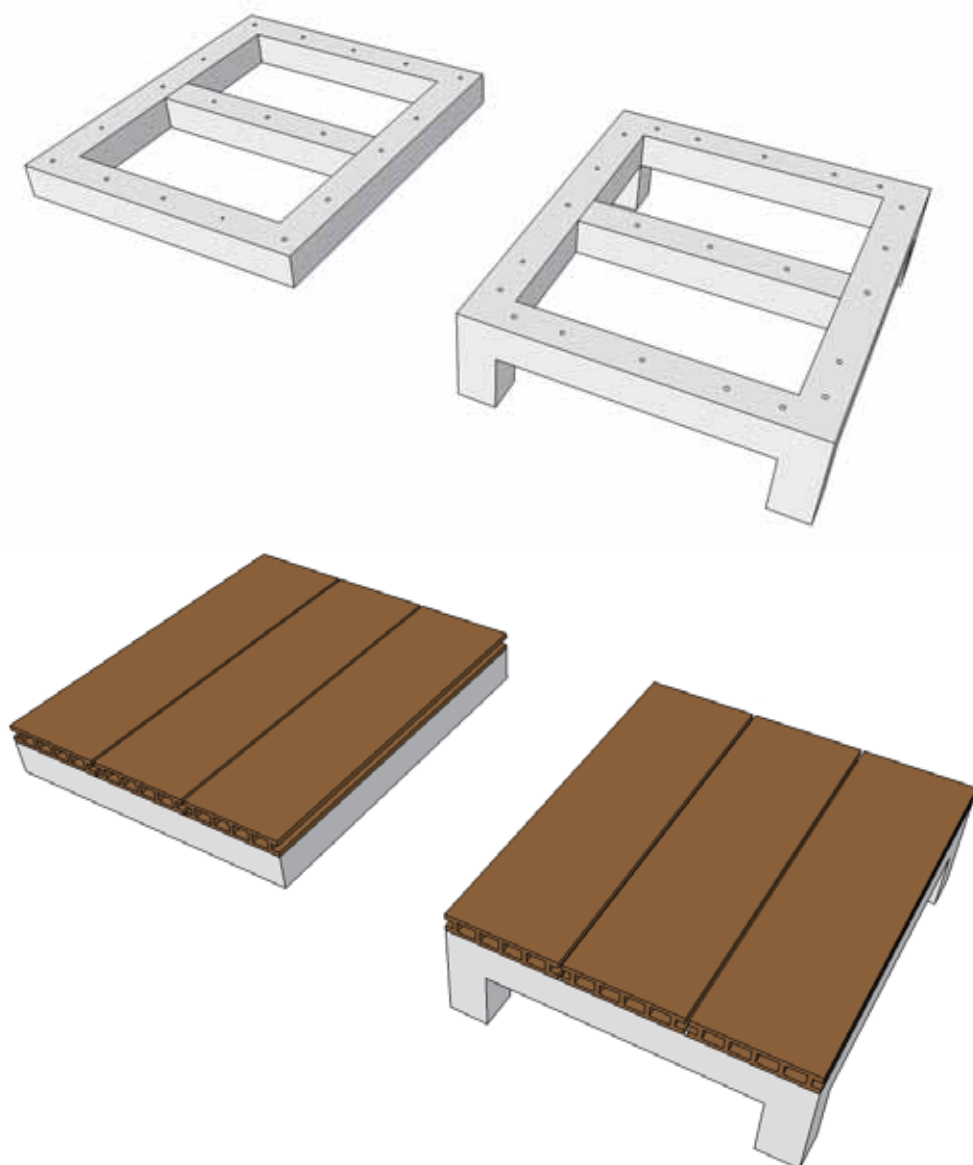


Option 2 : Using an aluminium clip and 2 screws to secure.



8.4 Access panel

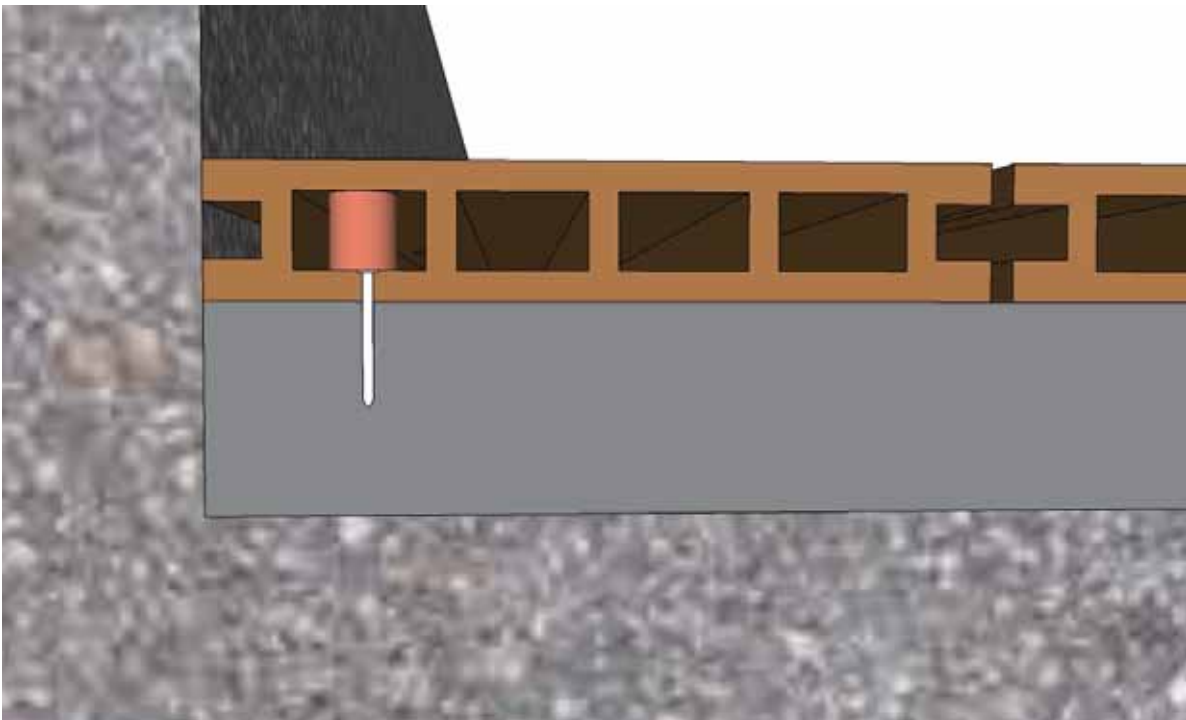
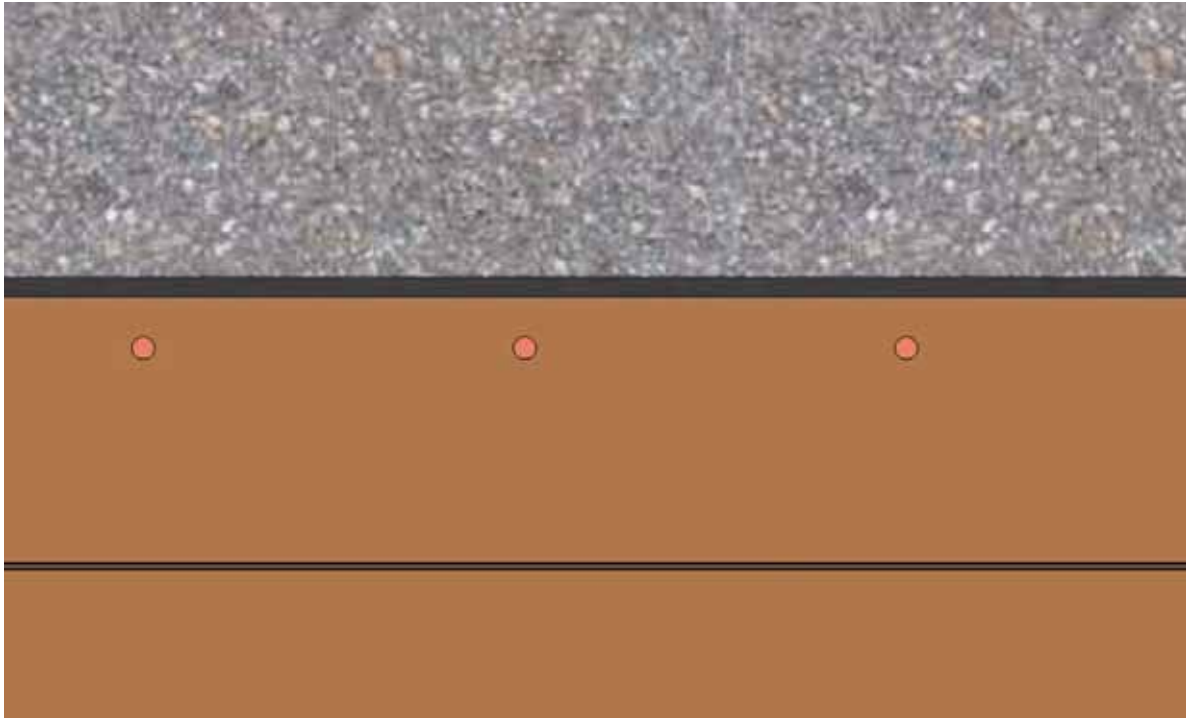
- ❖ Access Panel
 - : Galvanised steel frame/stainless steel frame with pre-drilled holes must be prepared/used for installation. Intermediate support is to follow the runner spacing (refer to our recommendation).
 - : Must be of the same size as decking board.
 - : Must have pre-drilled holes.
 - : The thickness of the stainless steel support must be equal to that of the joist supporting the deck.
 - In the case of a raised floor, additional legs for the access panel have to be provided to compensate for the difference.
- ❖ Installation
 - : Screws must be fastened below the metal frame.
- ❖ Screw
 - : Stainless steel screws must be used.
- ❖ Hook
 - : T-shaped metal hooks must be provided to the customer. The diameter of the hook must be less than the decking gap.



8.5 Installation for decking edge (Beside wall)

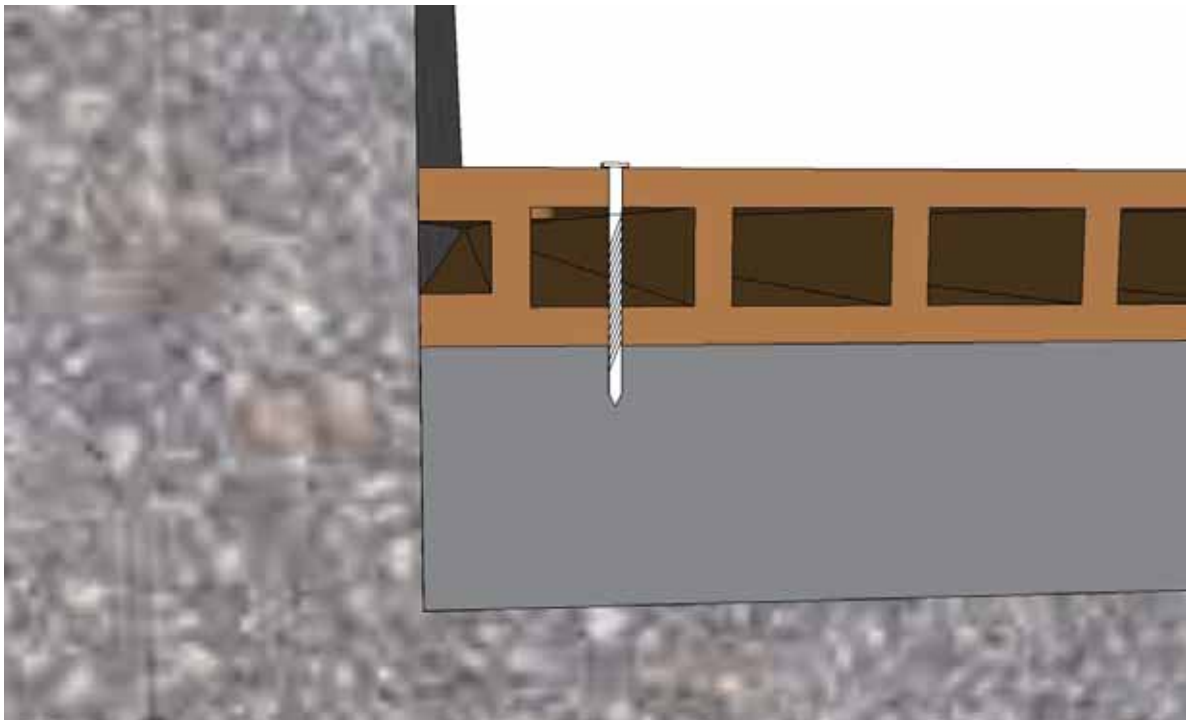
❖ Decking Edge (Option 1)

: Install decking edge with Resysta 12mm diameter plugs.

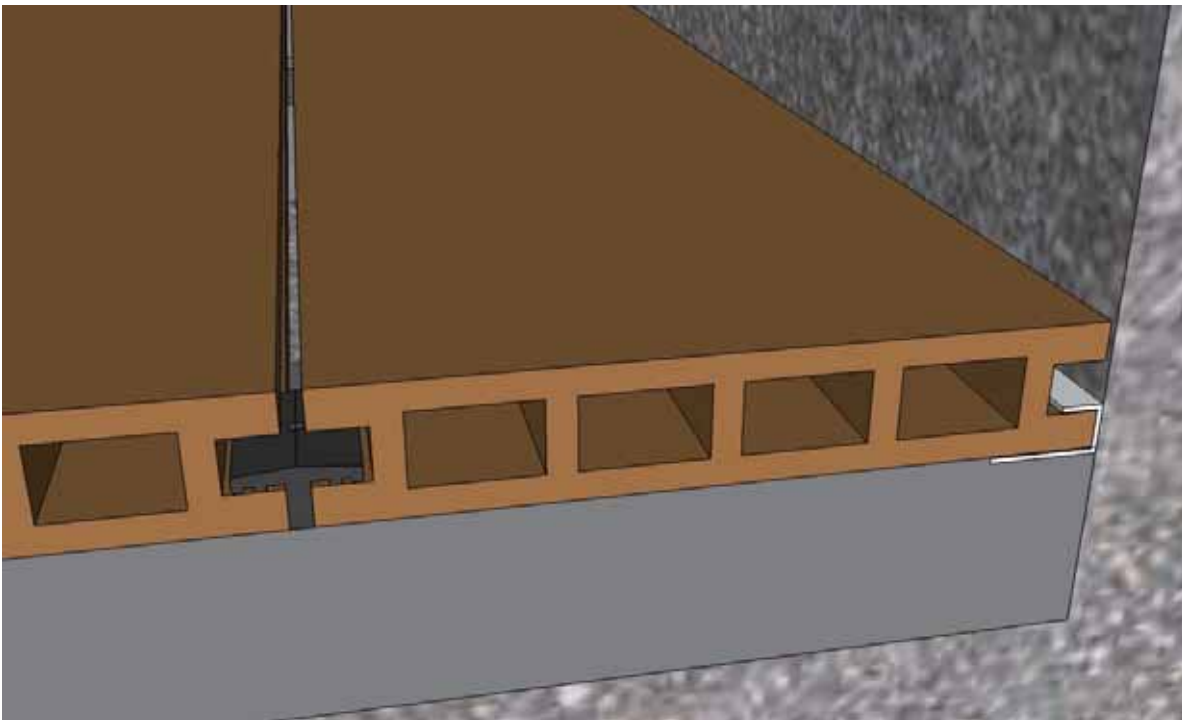
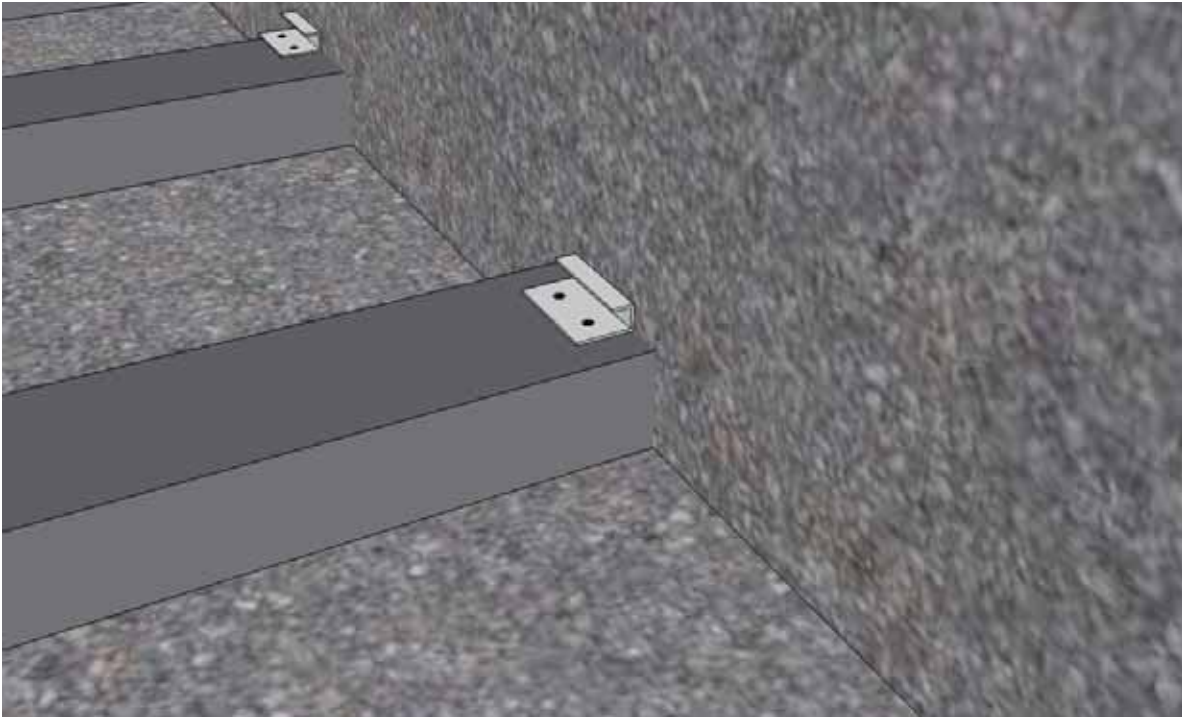


❖ Decking Edge (Option 2)

: Install decking edge with countersunk stainless steel black head screws.

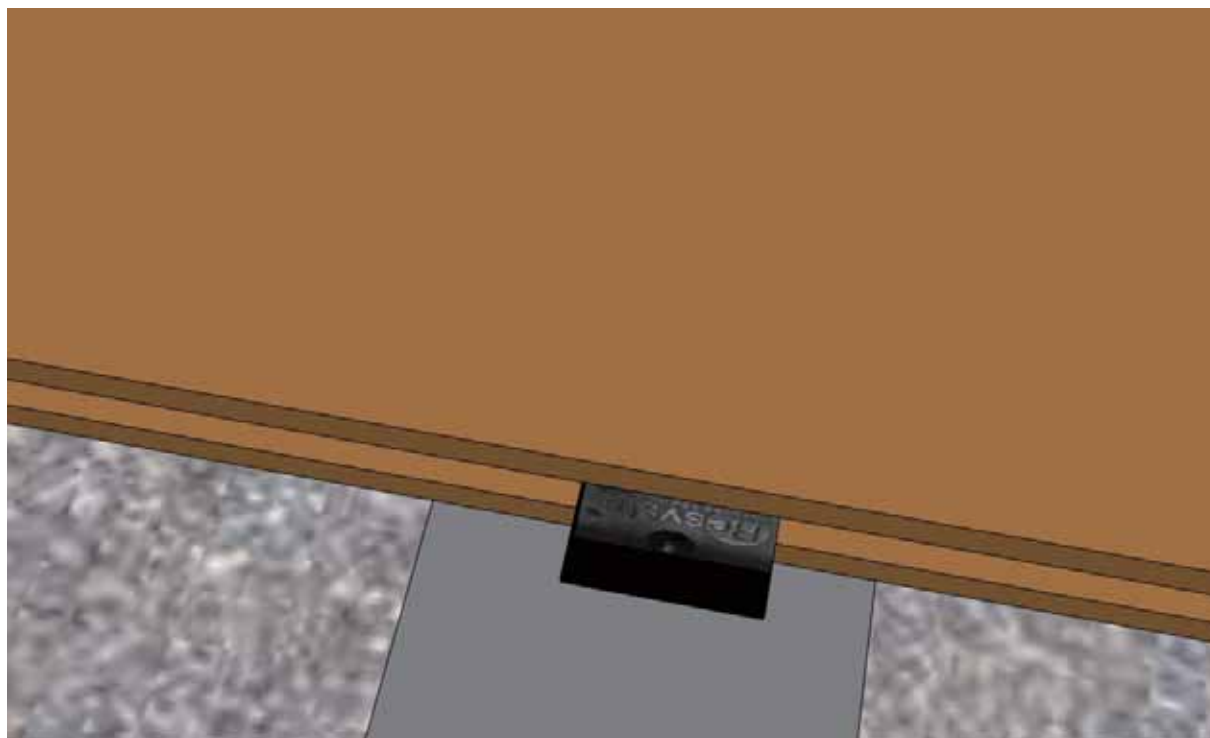


- ❖ Decking edge (Option 3)
 - : Secure the first plank with stainless steel U-clips



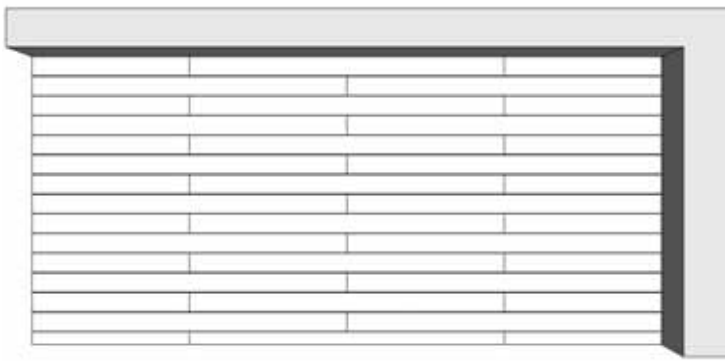
8.6 Installation with decking clip

- ❖ Decking clip T4A : The "Resysta" mark on the clip must face inwards

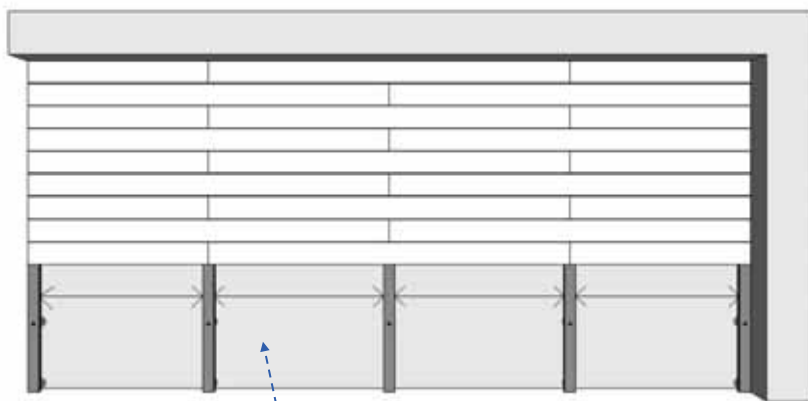


8.7 Decking layout (One method of laying the deck)

- ❖ Decking layout: The decking layout must be designed first

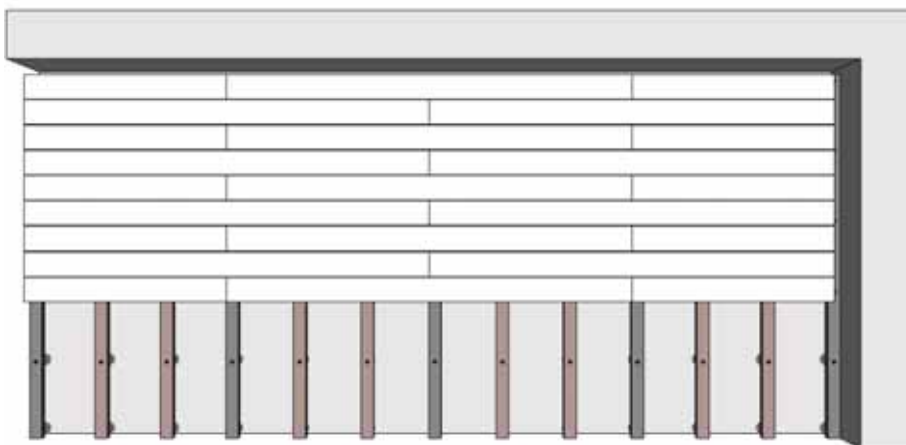
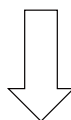


- ❖ Main Runner: Plan and locate the main runner at the edges and joining areas.
- ❖ Intermediate runner: Main runners are to be placed before intermediate runners, so that the space between these is even (refer to decking profile chart).



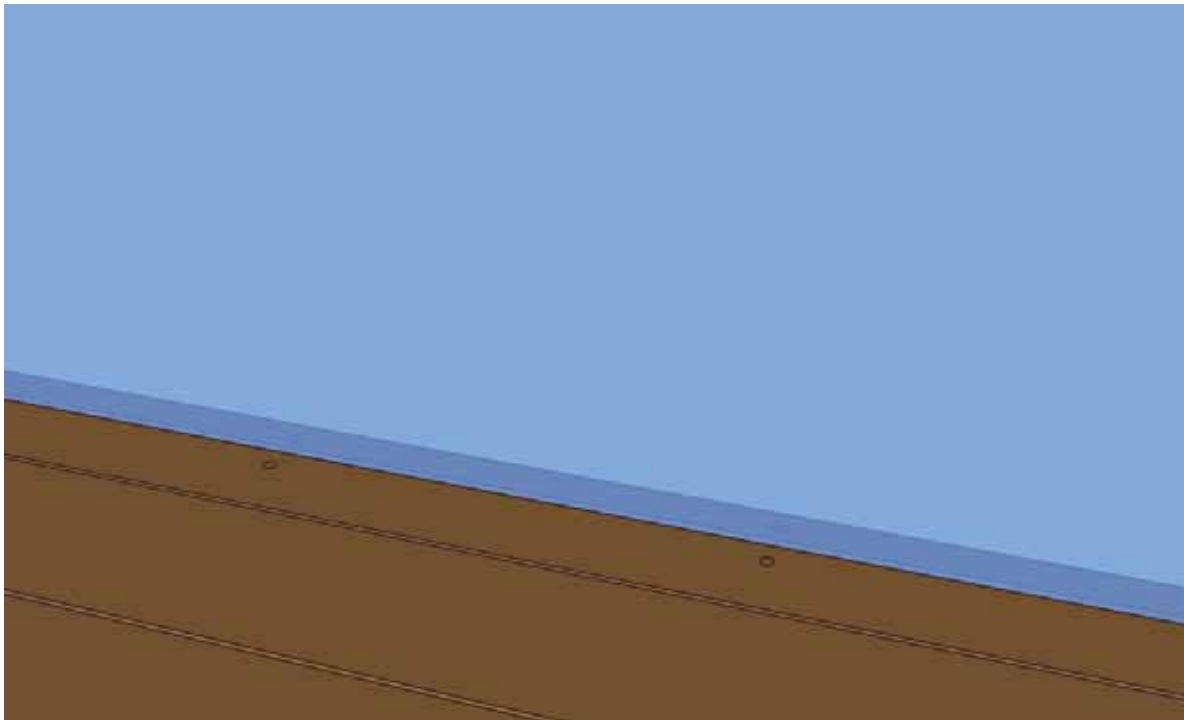
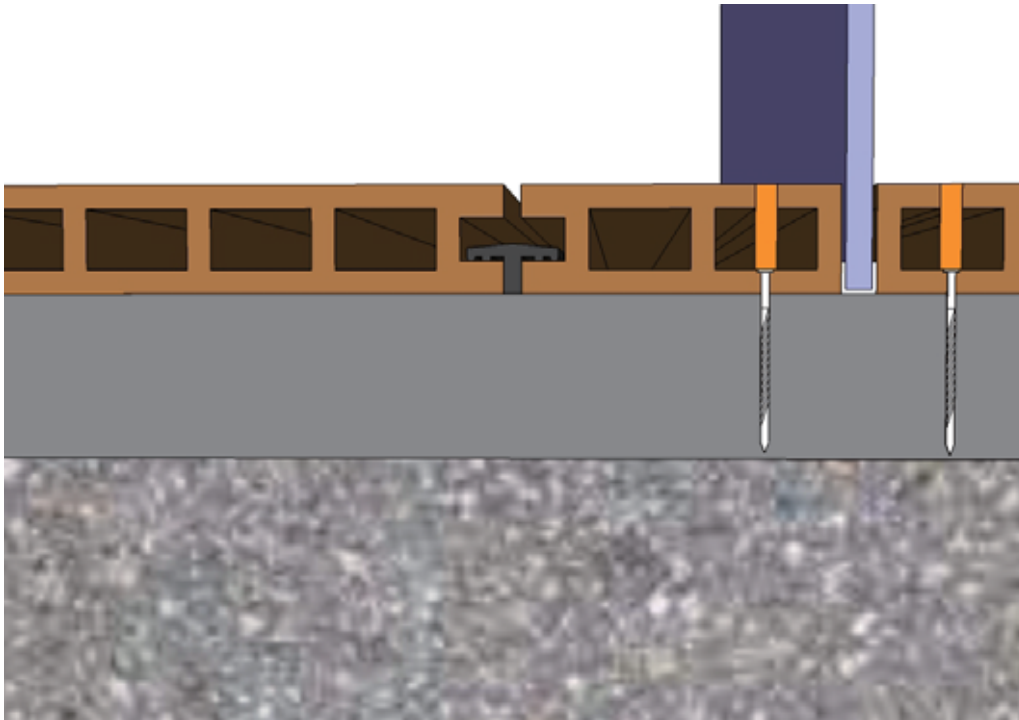
Intermediate Runner Support
Divide by Runner Spacing

Main Runner Support
Divide by Runner Spacing



8.8 Installation of tempered glass

- ❖ The recess for the piece of tempered glass must be cut through the decking board in order for it to sit on the substructure (
- ❖ Then use 12mm plugs together with stainless steel screws to fasten the board to the runner with the recommended spacing (refer to 1b).



9. Fixing

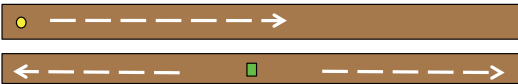
9.1 Hard fastening without clips

- ❖ The minimum length of the plank is 1.5m.

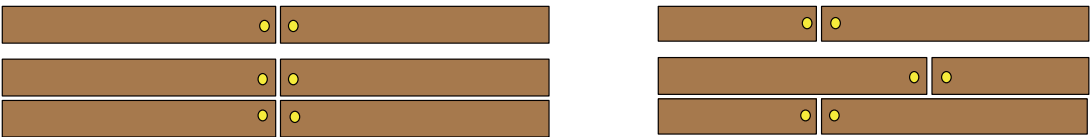
9.2 Pinning

To control the direction of expansion of Resysta planks, each plank needs to be fixed. This can either be done at the end of a plank or axial.

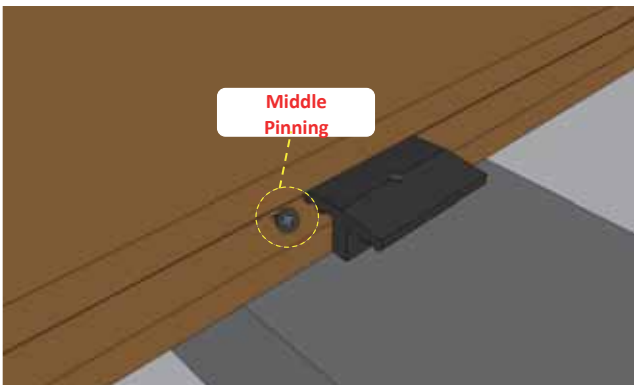
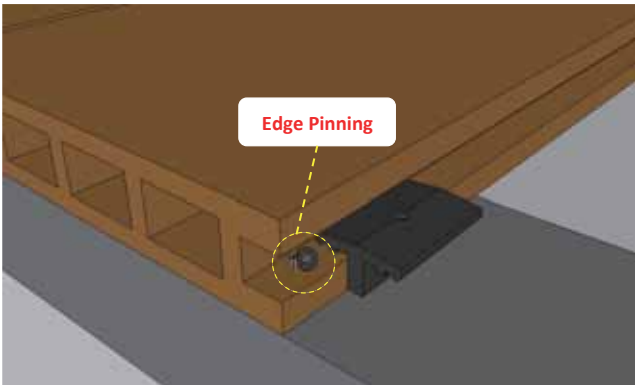
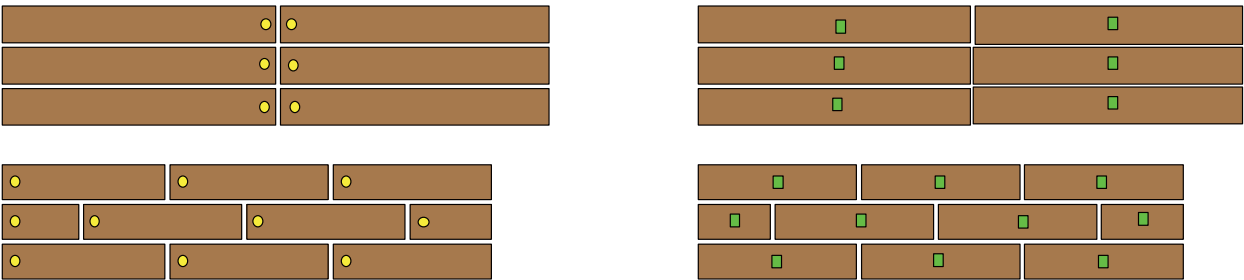
- Alternative A = Pinning at the End
- Alternative B = Pinning at the Centre



Fixing two planks in longitudinal direction:



Fixing more than two planks in longitudinal direction:



The above points must be observed when fixing with clips only.