



# Decking Installation Guide

# Please Read All Sections of The Installation Guide Before You Start.



When dealing with any construction project, it is necessary to wear appropriate safety equipment to avoid any risk of injuries. During handling, cutting, and installing any products, it is advised to use, but is not limited to, the following safety equipment: gloves, respiratory protection, long sleeves, pants, and safety glasses.

## Tools

Use conventional woodworking tools. It is recommended to use carbide-treated saw blades and stainless steel screws.

## Environment

The products should be stored on neat and flat ground. A smooth, clean, firm, and flat surface is required before the installation officially begins.

## Planning

A reasonable plan ensures quick and smooth installation of the products. Make a construction drawing first to achieve the best result and reduce errors.

## Construction

Do not use our products alone as columns, beams, or other load-bearing structures. The installation should comply with the building codes.

## Static

Please be careful of static when using our products together with iron railings, metal chairs, and other readily conductive objects.

In the high latitude zone, static is more likely to occur because of the relatively low humidity in the air.

## Ventilation

A minimum of 1" (25mm) of the continuous net free area between the products and the ground or wall is required for adequate ventilation and the prevention of excessive water absorption. The installation should be done on a substructure instead of a flat surface directly.

## Heat and Fire

Excessive heat from outside sources, such as fire, can damage our products. Therefore, our products should not be installed near heat sources such as fireplaces. Low emissivity glass is designed to prevent passive heat gain within a structure and can cause unusual heat build up on exterior surfaces, resulting in heat reflection that creates a heat source in the environment. It is recommended that the glass manufacturer be consulted in advance for advice on reducing heat reflection.

## Fasteners

### Guidelines:

Draw the guidelines with water-soluble white chalk, a ruler, and a string line. **DO NOT USE COLORED CHALKS.** Colored chalks will permanently stain our products.

Install with the accessories as per the list shown below.

Before the official installation, please use a small part of the profile to test whether the screws are correct. Using improper screws will cause bulges on the profile surface.

Step 1: Test the screws.

Step 2: Pre-drill holes into the profiles.

Step 3: Drill the screws vertically into the pre-drilled holes of the profiles.

If there is any doubt towards the accessories provided, please contact your manufacturer.

## Accessories List

1 Self-tapping screw



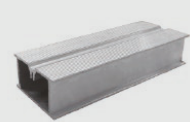
4 S/S decking clip for 1-3mm decking gap



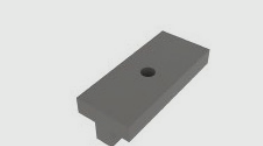
2 Drive expansion type screw



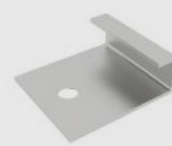
5 Joist



3 Plastic clip for 5mm decking gap



6 Starter clip



# Precautions for Decking Installation

A minimum of 30mm of the continuous net free area between the products and the ground or wall is required for adequate ventilation and the prevention of excessive water absorption.

- 1 Look up the maximum rainfall of the area to determine what height you would need to build to ensure no flooding of the deck occurs.
- 2 Make sure the installation areas drainage slope is 1-2%.

## ACCLIMATE

Acclimating at least 2 days prior to installation is recommended. When allowing the boards to acclimate at the job site it is important to put it on a flat and even surface. If put on an uneven surface there is a possibility that the boards could warp to the shape of the terrain.

## Span of Joist

The joist must be even, and adequate spacing in the joists is required to keep the deck boards from bending. Please review the chart below to see what spacing is required for your profile.

### Maximum Decking Spans on Centre-to-Centre

Region	Model	Size	Civil	Commercial
Asia South Korea excluded	DEL13923	139X23mm	300mm	250mm
	DEL139225	139X22.5mm	300mm	250mm
	DEP15021D	150X21mm	300mm	250mm
	DEL14022	140X22mm	350mm	300mm

### Joint Spanning on Centre-to-Centre with Angled Decking Installations

Degree of angle	Item	Spacing
90°	DEL13923	Refer to the other tables
60°	DEL13923	50 mm ( 2 inches) less than the stated other tables
45°	DEL13923	100 mm ( 4 inches) less than the stated other tables
30°	DEL13923	1/2 the distance stated in above tables

## Expansion and Contraction Values

The deck boards will experience expansion and contraction with changes in temperature. Expansion and contraction are most significant where extreme temperature changes occur. Fasten the deck planks according to the gapping requirements noted in the following table to accommodate for this movement.

Expansion and Contraction table values for Africa, Middle East, GCC, South America, and Latin America (Meters).

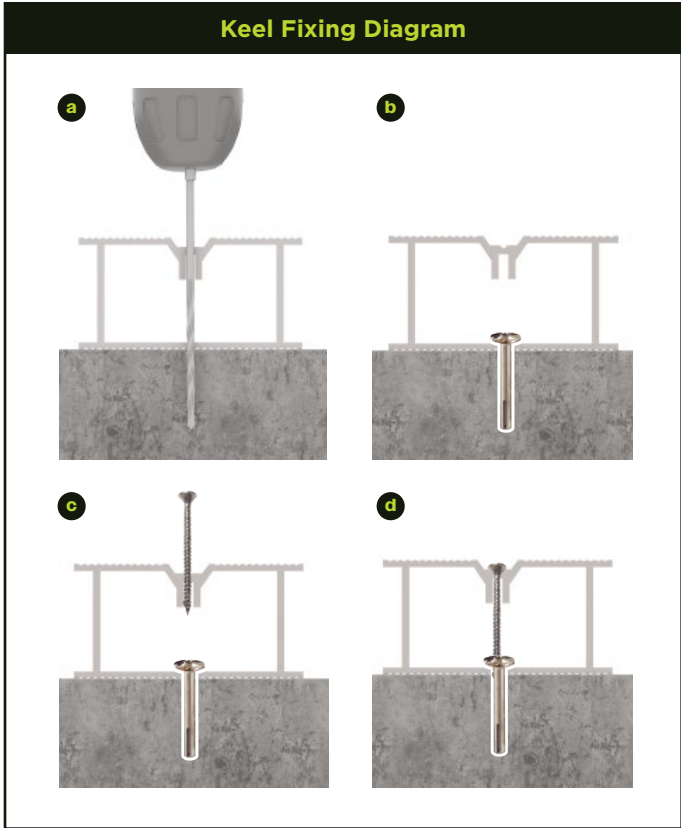
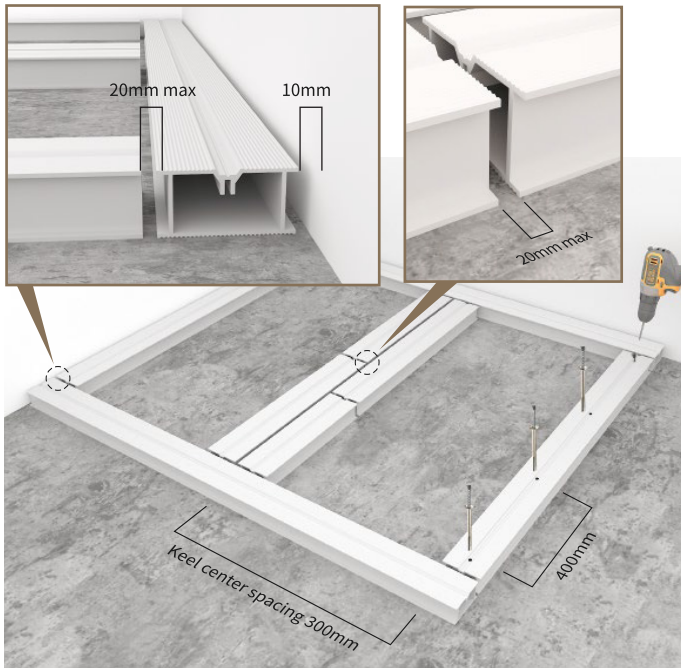
### Reserved expansion joint (Gap: mm)

Length	Installation Temperature (°C)							
	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C
1mm	1.6	1.4	1.2	1.0	0.8	0.6	0.4	0.2
2.44mm	3.9	3.4	2.9	2.4	2.0	1.5	1.0	0.5
2.8mm	4.5	3.9	3.4	2.8	2.2	1.7	1.1	0.6
3mm	4.8	4.2	3.6	3.0	2.4	1.8	1.2	0.6
3.66mm	5.9	5.1	4.4	3.7	2.9	2.2	1.5	0.7
3.9mm	6.2	5.5	4.7	3.9	3.1	2.3	1.6	0.8
4mm	6.4	5.6	4.8	4.0	3.2	2.4	1.6	0.8
4.88mm	7.8	6.8	5.9	4.9	3.9	2.9	2.0	1.0
5.4mm	8.6	7.6	6.5	5.4	4.3	3.2	2.2	1.1

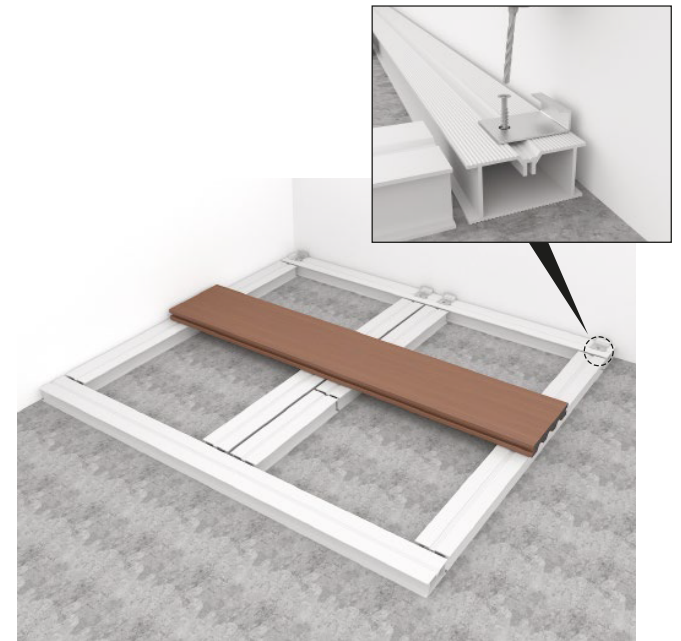
# Installation Steps

DEL139225 as an example

- 1 Make sure the ground is level and firm. Then fix the joist with expansion screws according to the spacing below (the center-to-center distance should be 300mm).

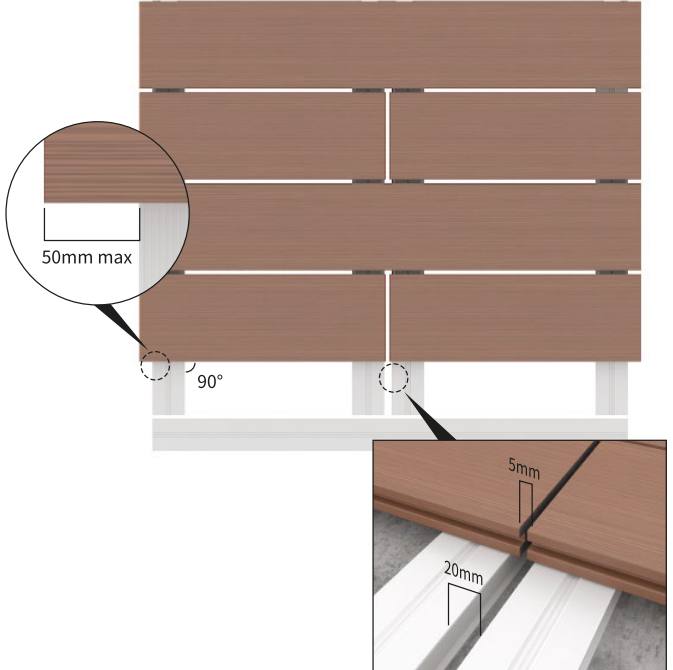


- 2 Pre-drill the joist and fix the starter clips into the joist (as shown in the figure below). Or pre-drill the decking board and screw it into the joist without using clips.



- 3 The edge of the decking board must be within 50mm on both sides.

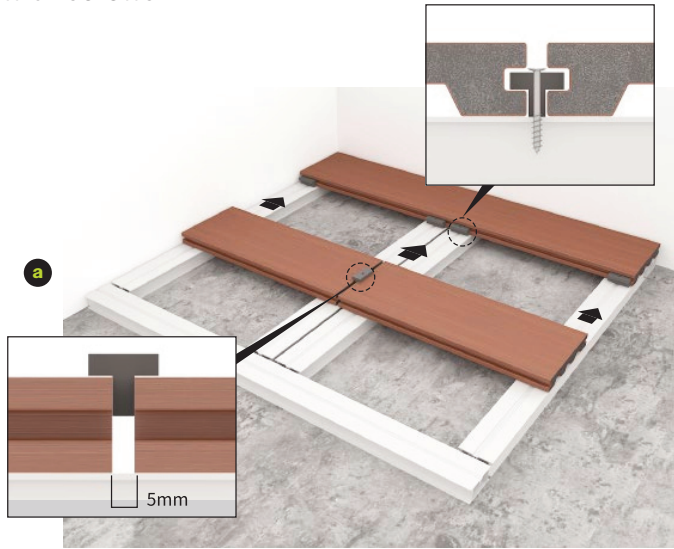
The decking board must be laid perpendicular to the joist. When butt-jointing planks, sister joists must be used so that each individual plank rests on its own beam to ensure that the plank does not slip off the joist, with a minimum distance of 5mm between the sister joists.



**4** Select clips for installation

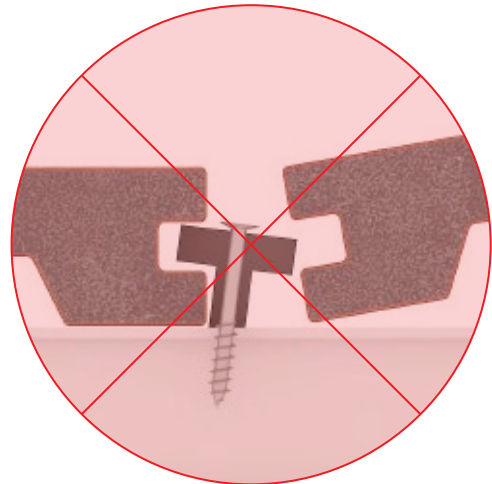
**Plastic Clip installation (for 5mm decking gap)**

The plastic clips can be installed in two ways, as indicated in figures a and b below. Choose one of the ways to install the plastic clips and fix them with screws.



The plastic clips must be screwed vertically onto the joist, as shown in the figure.

**Note:** The quickest way to install the decking boards is to first place them on the joist, then install the clips into the grooves from the side and fasten them from above.

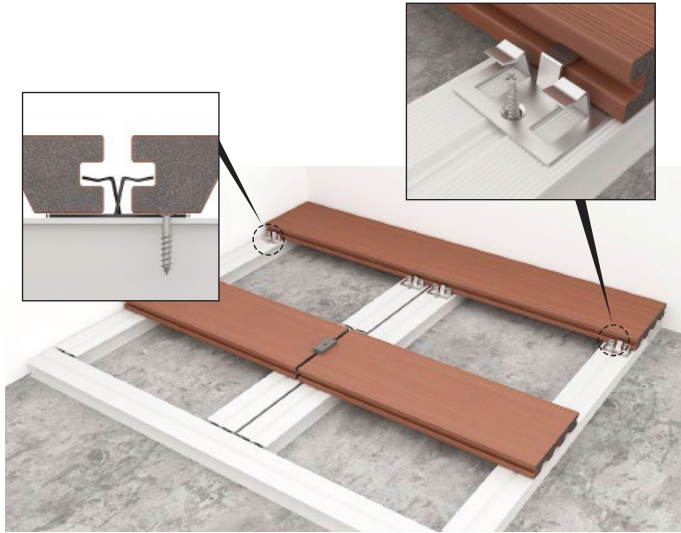


Check the reserved expansion joints between two decking boards (see Expansion and Contraction Values table on page 3) using the clips as a guide. Remove it after installing the next decking board.

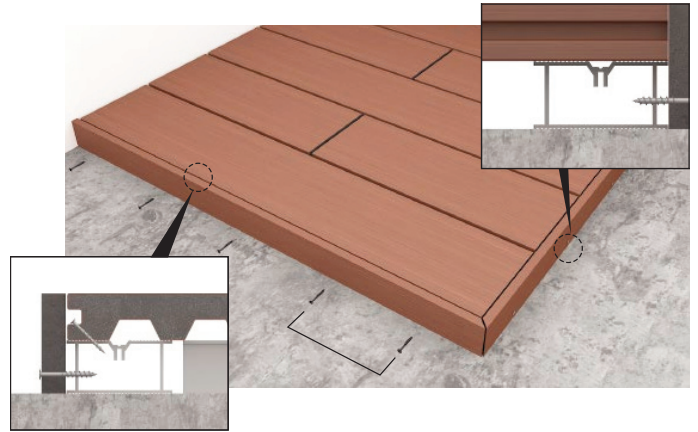


**S/S Clip installation (for 1-3mm decking gap)**

Install the S/S clips into the grooves of the decking boards and screw them in, as shown in the figure.



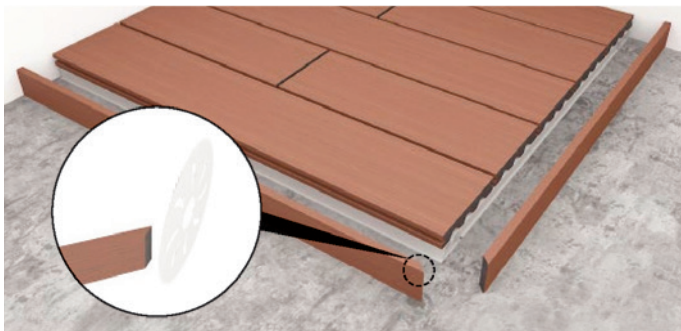
The fascia board should be pre-drilled or routed with larger holes to allow expansion and contraction. It should be fixed at either end or in the middle through the decking board into the joist. Do not fix the fascia directly into the decking board.



Place a small, smooth, clean board on the side of the second decking board and lightly tap it with a mallet to ensure that the floor sticks as much as possible to the clips. Install the next decking board in the same manner.



Recommend cutting the end of DEL7011 or WEL14011 at a 45-degree angle as a fascia board.



# Installation Steps of Decking Replacement

DEL139225 as an example

## Replacement of the decking (installed with S/S clips):

Remove all of the decking boards in front of the damaged one, and replace the damaged board with a good one. Reinstall the decking boards after replacement.

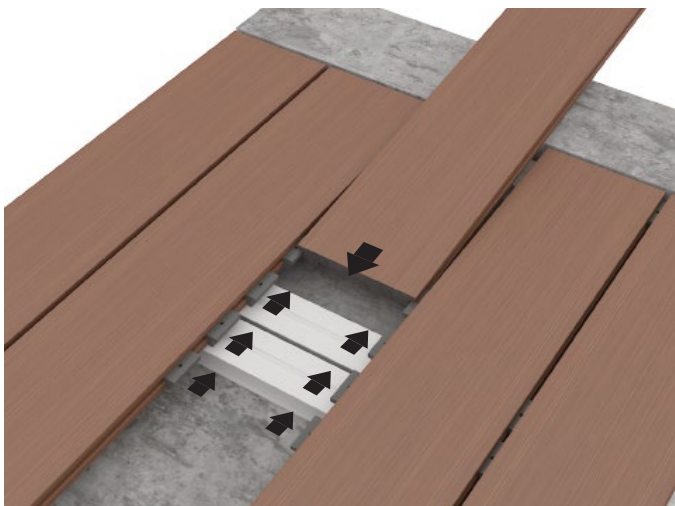
For easy installation and maintenance, it is not recommended to use S/S clips.

## Replacement of the decking (installed with plastic clips) Case 1: with stone blocking on both sides

- 1 Remove the damaged board and the clips by loosening all the screws on both sides of the damaged one and cutting the decking board in half (do not damage the decking joists).

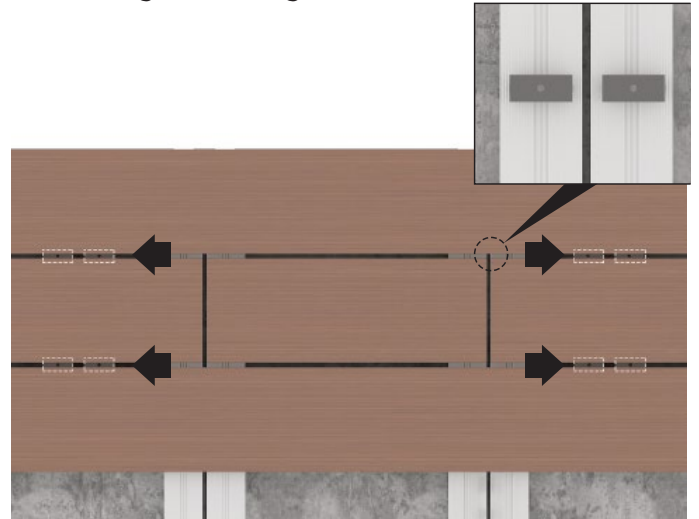


- 2 Place a new decking board of the same size into the groove, then secure it with screws as shown in the figure. Reserve enough space for the clips to install the new decking board before putting it down.

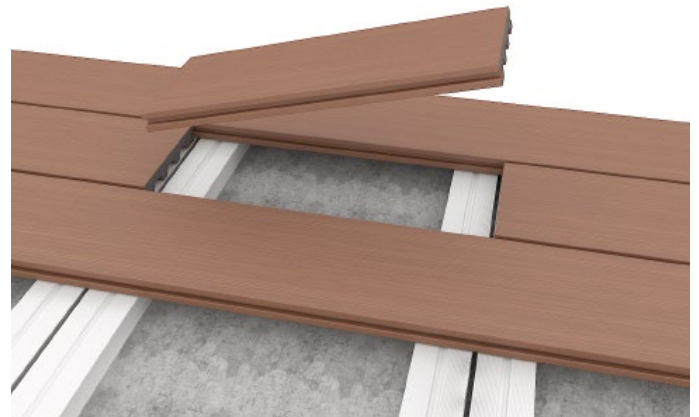


## Replacement of the decking (installed with plastic clips) Case 2: I-shaped installation

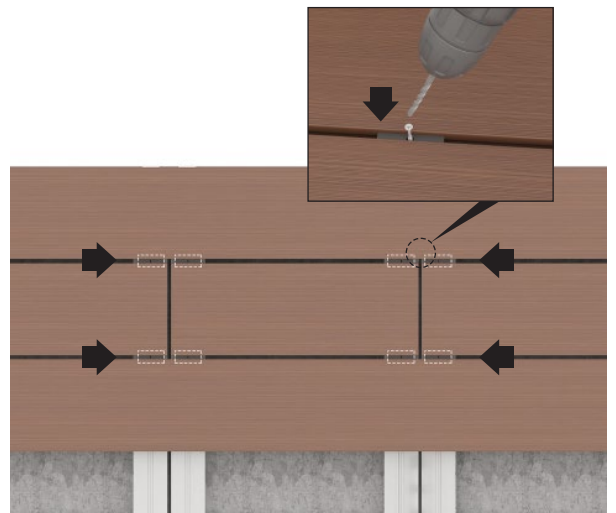
- 1 Remove the screws and the clips from the damaged decking board.



- 2 Take out the damaged decking board.



- 3 Place a new decking board of the same size into the groove, then secure it with screws as shown in the figure.





4-6 Charter Way, Macclesfield  
Cheshire SK10 2NG

01625 568335

07518 616738

[sales@lifetimecomposite.co.uk](mailto:sales@lifetimecomposite.co.uk)

**LIFETIME**  
COMPOSITE