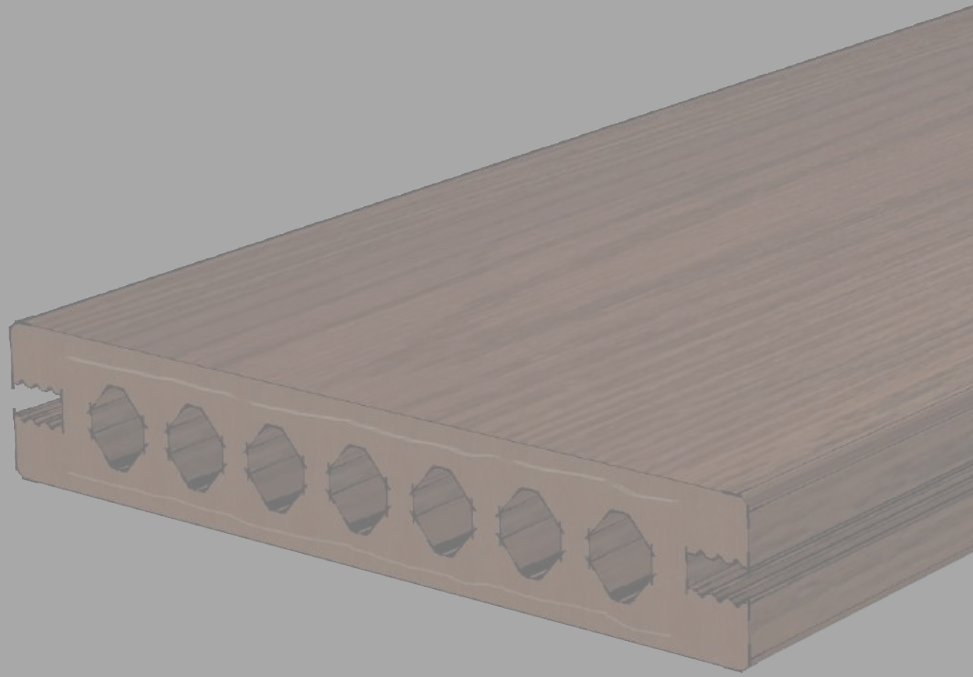


**IMPORTANT :** All INNOWOOD products must be installed in strict accordance with INNOWOOD'S latest (at time of installation) "INSTALLATION MANUAL" and "CARE AND MAINTENANCE GUIDELINES" which can be downloaded from our website : [www.innowood.com](http://www.innowood.com). Failure to comply with these documents may void warranty and result in an unsatisfactory outcome.



# PREMIUM FIBA-DEK®

SMART CLIP FIXING  
INSTALLATION MANUAL 

DB14025

# BEFORE YOU COMMENCE

Please note that:







The Product is subject to natural variation\* in finish as part of the manufacturing process. The purchaser or their installer/ builder is responsible for inspecting, prior to installation, the colour, finish and size of the product, identifying whether the Product has any other defect or manufacturing fault, and for ensuring the Product meets surface appearance and product specification requirements. Subject to the terms of our warranty, INNOWOOD is not liable for claims made after the installation of the Product that relate to surface appearance and product specification.

\*INNOWOOD product is made predominantly from timber waste, colour will vary up to +/-20% according to the timber used in its manufacture.

It is the responsibility of the specifier or other party to ensure that the information in this manual is appropriate for the intended application and further design detailing may have to be made for specific applications that fall outside the scope of the manual.

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## PREMIUM FIBA-DEK SPECIFICATION

PROFILE		ACCESSORIES	
SECTION		FASCIA TRIM	
PRODUCT CODE	DB14025	FINISHING TRIM	
STANDARD BOARD LENGTH	4500mm	STARTER CLIP	
COVERAGE	146mm		
SPAN CENTRES* RESIDENTIAL	400mm		
SPAN CENTRES* COMMERCIAL	350mm		
HIDDEN CONNECTORS ( CLIP CODE PL14025 )	 6mm gaps between boards		

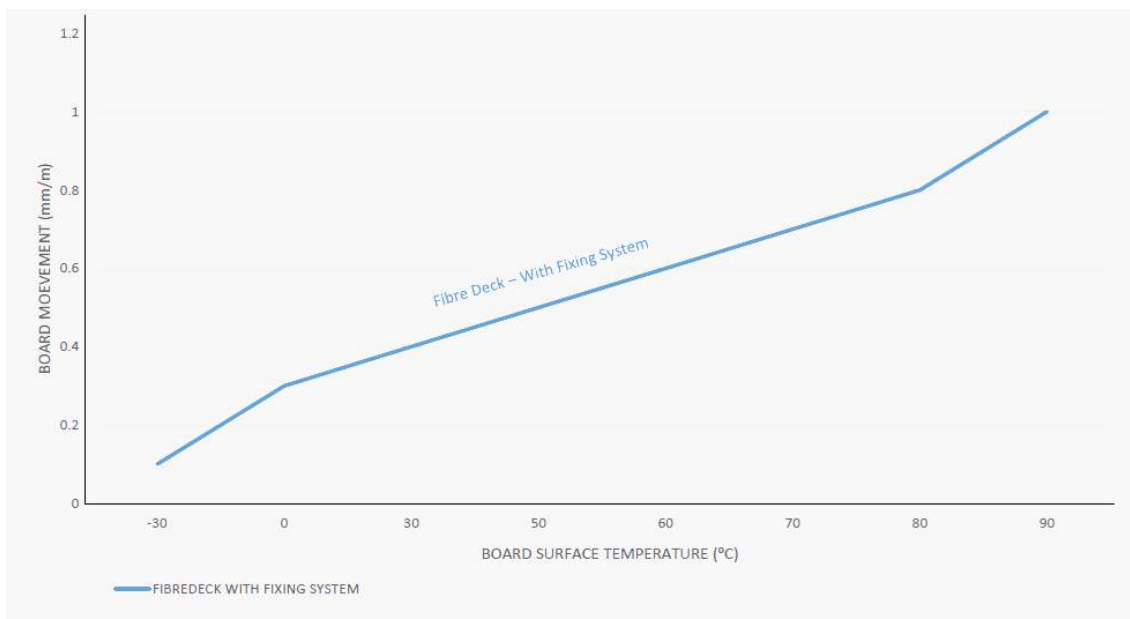
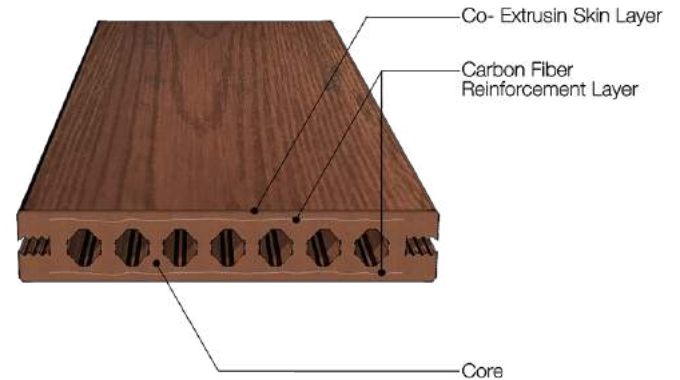
### NOTE:

\*These are maximum spans however shorter spans may be required dependent on region and wind load, please confirm with structural engineer prior to installation.

## New Patented Decking Solution

Premium FIBA-DEK System is a revolutionary composite product that utilises a new patented technology, which fuses two Fibre glass layers during the production process, within the co extruded wood composite material layers.

This patented technology enhances the rigidity, durability and toughness of the decking board to achieve better performance by significantly minimising the boards thermal movement at different temperatures. The graph below illustrates the thermal movement of Premium FIBA-DEK. These performance figures were generated from our factory testing results and show the superior minimal thermal movement of Premium FIBA-DEK. The results shown below might slightly vary depending on the external conditions.



Premium FIBA-DEK looks and feels like natural timber and is available in four colours with an embossed finish to aid in slip performance but also to create the beautiful surface expected in a premium quality timber decking .

Premium FIBA-DEK pre-finished boards are water, termite and fungus resistant with the added benefits of easy care and low maintenance.

Premium FIBA-DEK decking is perfect for rooftops, courtyards, walkways, Pool areas, Schools, Child Care, Aged Care, residential balconies and other public spaces.

## Installation Tips and Requirements

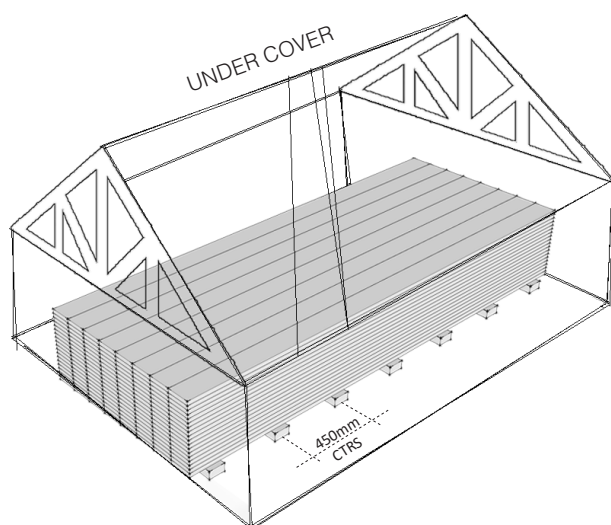
INNOWOOD products can be worked with ordinary woodworking tools such as:

Circular Saw	Cordless Drill
Crosscut Mitre Saw	Level & Chalk Line
Carpenters Square	Tape Measure

Note : Please ensure to wear the safety glove and mask during the cutting process.

### Site storage & Product Handling

- INNOWOOD boards should not be stored in the open or covered or wrapped with plastic sheet. INNOWOOD boards are a finished product, do not dump or drop when loading or unloading. Always handle with care.
- INNOWOOD boards should be stored under cover and protected from the elements (including direct sunlight and rain) until ready to install. Remove any plastic wrap including shrink wrap and store on a dry and flat surface supported at max. 450mm centres.
- When removing INNOWOOD boards from the pack, do not slide boards against each other, lift the boards and set them down carefully.
- INNOWOOD boards should be carried on their edge for better support.
- When handling INNOWOOD boards take care to avoid scratches, nicks and other damage to the boards.



### NOTE:

To ensure long- term performance, we recommend that a professional trade person carry out the installation. The installation **MUST** be carried out in accordance with these instructions including the use of all trims and accessories.

### Thermal movement

Any wood based products will expand and contract with changes in temperature. The amount of expansion varies according to the amount of change in temperature. Although thermal movements are reversible, these movements due to temperature change may vary by up to 1mm per meter on this Premium FIBA-DEK decking during the installation process. This might slightly vary depending on the external conditions.

INNOWOOD boards that have been exposed to direct sun for several hours, prior to installation will have expanded more than boards left in the shade. It is important to maintain an average consistent temperature for all boards as they are being installed.

Avoid installing in full sun if ambient temperature is above 30°C. However if this cannot be avoided ensure the boards are kept out of the sun until installed to limit the boards expansion prior to installation. Premium FIBA-DEK can tolerate a temperature range from -30°C to +80°C.

If the product is to be used in an environment outside of this temperature range, please consult INNOWOOD.

### Please bear in mind that:

- Where INNOWOOD boards are to be screw fixed, clearance holes must be pre-drilled before fixing (both INNOWOOD boards and accessories).
- The clearance hole to be drilled must be slightly greater than the outside screw thread diameter.
- Screws must be minimum 15mm but maximum 25mm away from board edges (unless noted otherwise)
- INNOWOOD products must not be used for any structural purpose.
- The cut surface must be sealed with a layer of protective coating such as a water based deck sealer before installation.
- When exposed to direct sunlight, surface temperature may be significantly hotter than ambient temperature.

## Framing Construction Requirements

All building codes and Australian Standards must be adhered to when building the structural support framing for any deck. Be sure to consult with a licensed builder, architect or engineer prior to designing or building your deck to ensure the regulations are met for such criteria as the stress grades, size and spans of posts, bearers and joists and other structural elements. For specification and design of commercial or industrial applications refer to AS1170: Dead and Live Loads and Load Combinations.

Premium FIBA-DEK should be fixed to seasoned timber joists or to a proprietary structural system.

Joist spacing for Premium FIBA-DEK is nominally set at 400mm centres max for residential and 350mm centres max for commercial applications in urban and non-cyclonic wind load areas. For higher wind-load areas reducing joists may be required. All boards must span across a minimum of 3 joists.

As with all decking products the adequacy of a proposed installation should always be checked by a qualified engineer.

Joists must have a face not less than 45mm for timber and 38 mm for steel.

Additional joists must always be set between the 1st & 2nd joist at each end of deck. Where butt joints occur, framing must be "Blocked Out " with 190 x 45mm timber blocks with 190mm face upwards.

## Timber Framing

The joints between posts, bearers and joists need to be able to transfer load efficiently through the structure, refer to AS1684 for design of these elements.

It is important to use adequately seasoned timber to minimise shrinkage and associated building movement which may damage the decking system.

## Steel Framing

Steel framing must comply with AS/NZS 4600: Cold-Formed Steel Structure or AS 3623: Domestic Metal Framing.

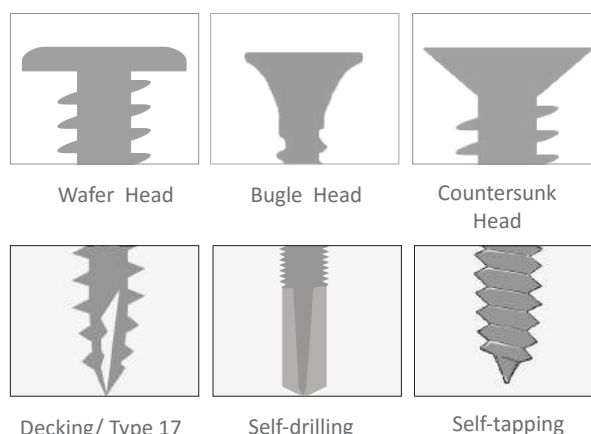
Where steel framing members are specified, use only corrosion resistant galvanized steel framing. Specific instructions for fixing to steel frames are included where appropriate.

## Screws

Screws must comply with AS 3566 Self Drilling Screws for the Building and Construction Industries.

Screws must have a minimum Class 3 corrosion resistance, suitable for external applications in mild, moderate industrial and marine environments and Class 4 or stainless steel for severe environments.

Screws with class 1 or 2 corrosion resistance may be used for internal use depending on the individual application.

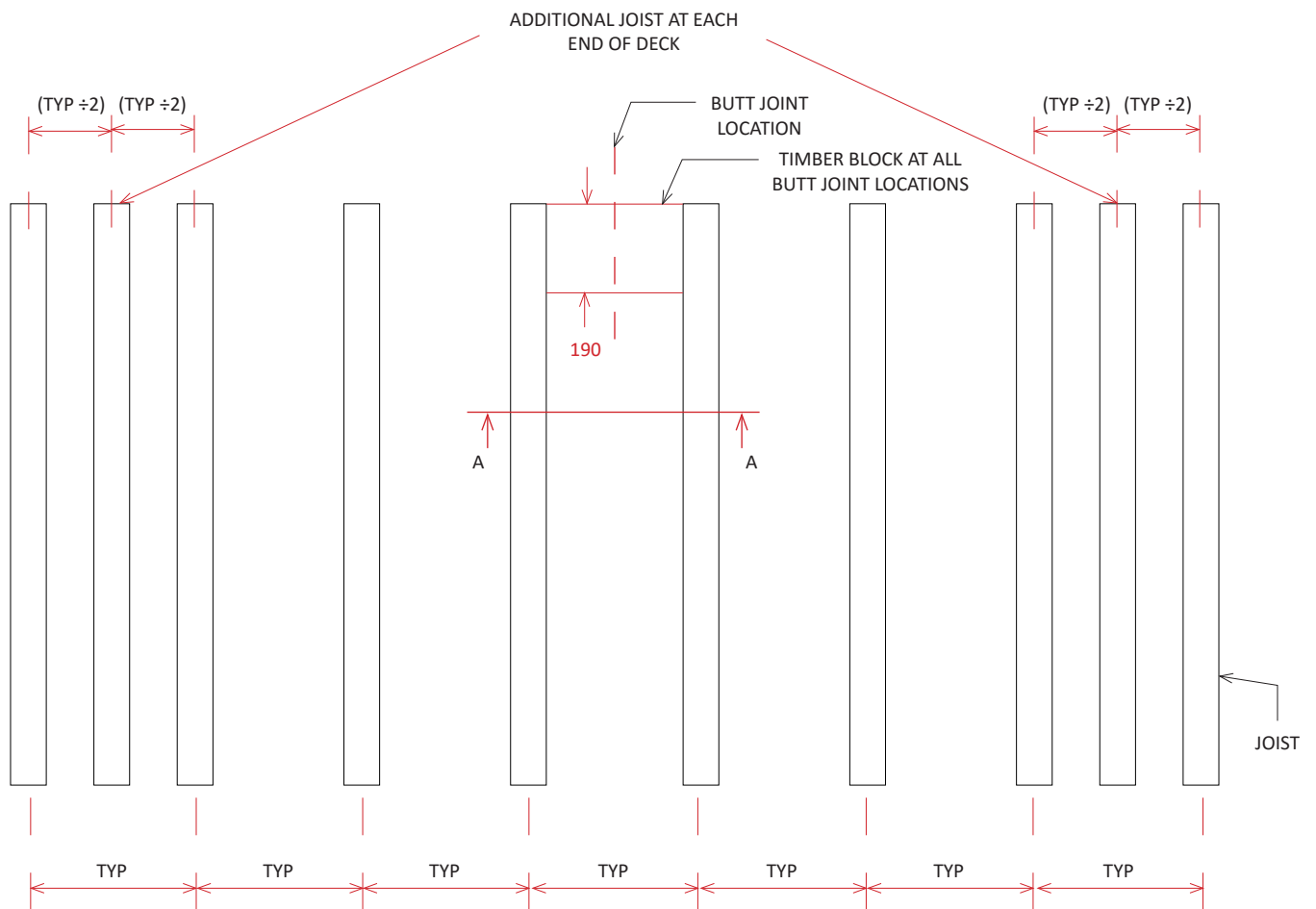


## Design Considerations

**Expansion/ Contraction** - Premium FIBA-DEK boards will expand and contract slightly with changes in temperature. The maximum amount of expansion and contraction that may occur is 0.3-0.5mm per lineal metre of board. This should be taken into account when designing board layout.

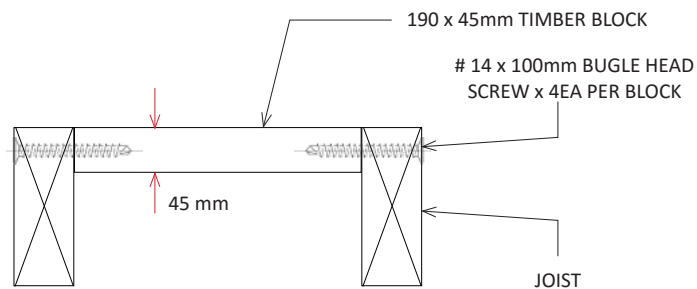
**For extreme temperatures, where the board temperature is above 80°C then please contact INNOWOOD for further details.**

## Framing Design Requirements



\* TYP= MAXIMUM 350mm (COMMERCIAL)  
MAXIMUM 400mm (RESIDENTIAL)

**TOP VIEW**



**SECTION A-A**



## Joist Spacing and Loading

Joist or batten spacing for Premium FIBA-DEK is nominally set at maximum 400mm centres for residential and 350mm centres for commercial.

Uniformly Distributed Load (kPa)	Concentrated Load (kN)
3	1.8

Allowable long term uniformly distributed load (kPa), is limited by the allowable bending strength of the Premium FIBA-DEK and should not exceed the loads per support span, as shown in the table below.

The allowable concentrated live load (kN), is limited by the deflection of the Premium FIBA-DEK between the supporting joists, and should not exceed the maximum loads, as shown in table.

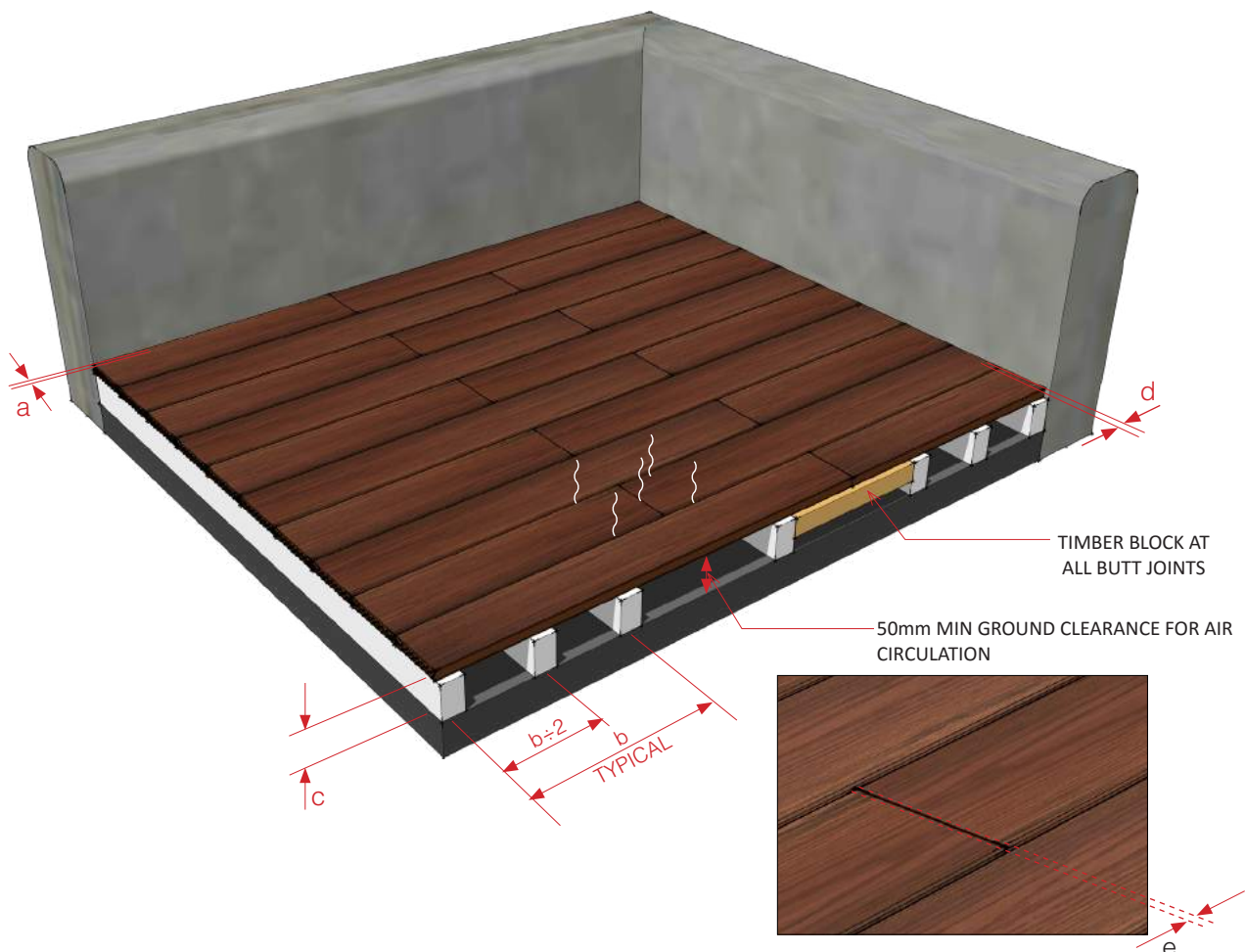
Refer AS/NZS 1170.1 Section 3

Dimensions Table:

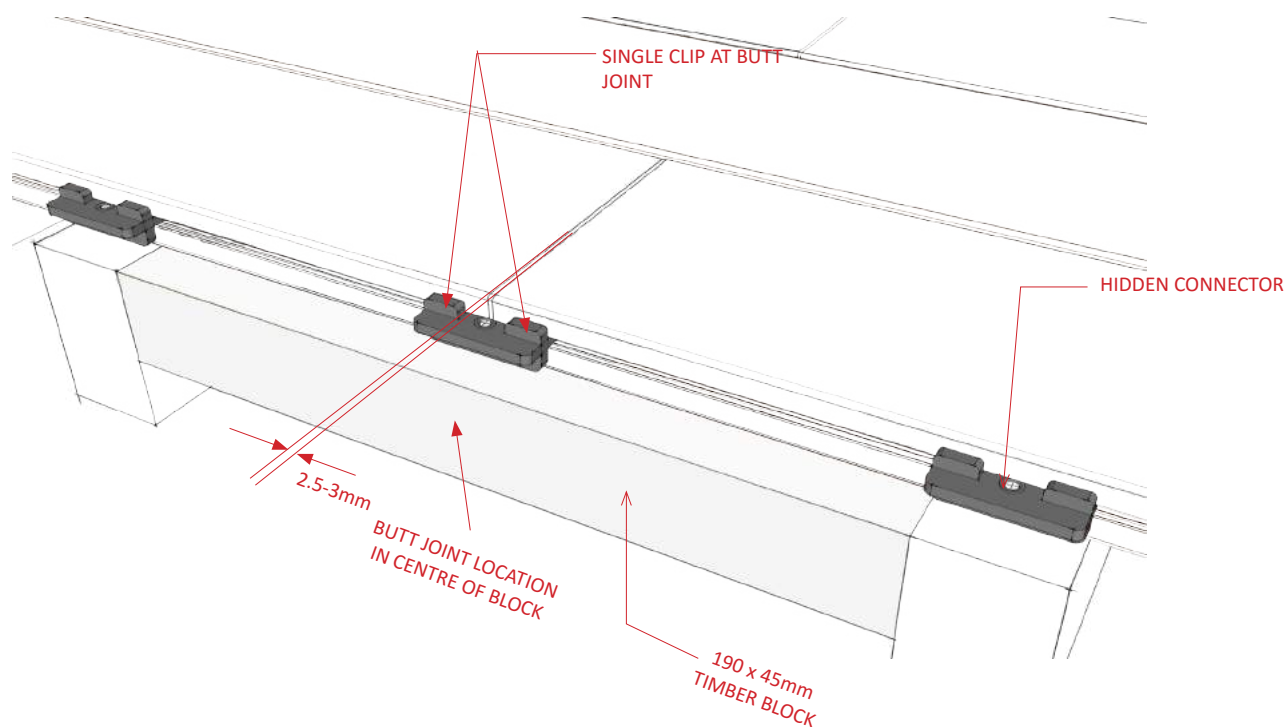
Description	Millimetres
"a" min dis. to solid structure	2mm
"b" max joist centres	350mm Commercial 400mm Residential
"c" min ground clearance	50mm
"d" min dis. to solid structure at board end	2mm
"e" gap at butt joints	2.5-3mm

### \* Ventilation

Premium FIBA-DEK requires ventilation, which can be achieved by allowing a min. 50mm ground clearance. This will prevent the decking from over heating and causing any distortion to the boards.



## **Butt Joint Requirements**



- All butt joints must be set as indicated in the fig. above.
- Butt joints must always be blocked out underneath with a 190 x 45mm timber block and be fixed of with connectors as shown.
- Failure to follow the above may result in excessive movement and / or board distortion.



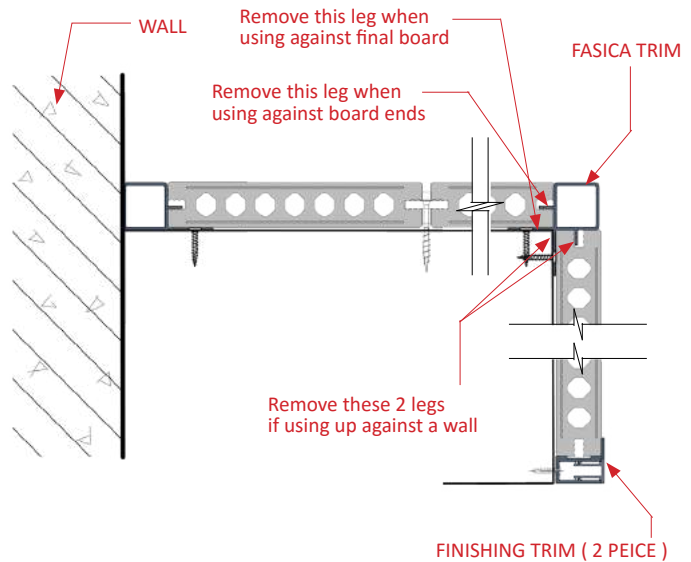
## CHOOSE STARTER / FRAMING OPTION

### STEP 1

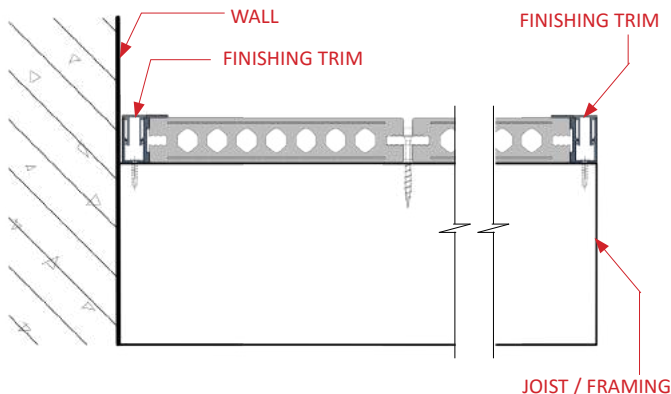
#### OPTION 1: FASCIA FRAMING

##### Considerations

- All boards must be full width boards (no ripped boards) otherwise finishing trim must be used on ripped boards.
- Can be used around full Perimeter of deck.
- if being used up against wall then decking must start from wall & work out. Also in this case bottom 2 legs of trim must be removed (for trim against wall only).
- Allows Seamless transition with fascia boards.
- When used against board ends small leg must first be removed.
- Must be installed before boards.



#### OPTION 2: STANDARD FRAMING



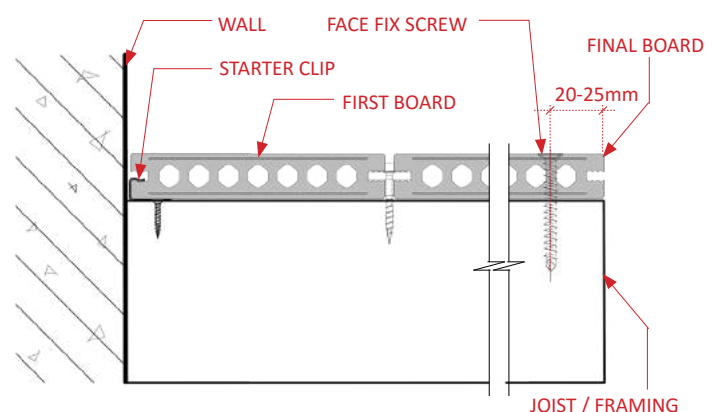
##### Considerations

- Can be used around full perimeter including ripped boards and irregular shapes.
- Does not accommodate fascia boards.
- Must be installed after boards.
- Can be used in conjunction with fascia trim eg. fascia trim on 3 sides & finishing trim on the wall side.

#### OPTION 3: STARTER CLIP

##### Considerations

- Can be used on starting side only (including if starting against wall).
- Clips are approx 45mm long (not continuous)
- Must be used at every joist position for starting board.
- Finishing board must incorporate fascia or finishing trim or alternatively by face fixed at max 400mm centres.

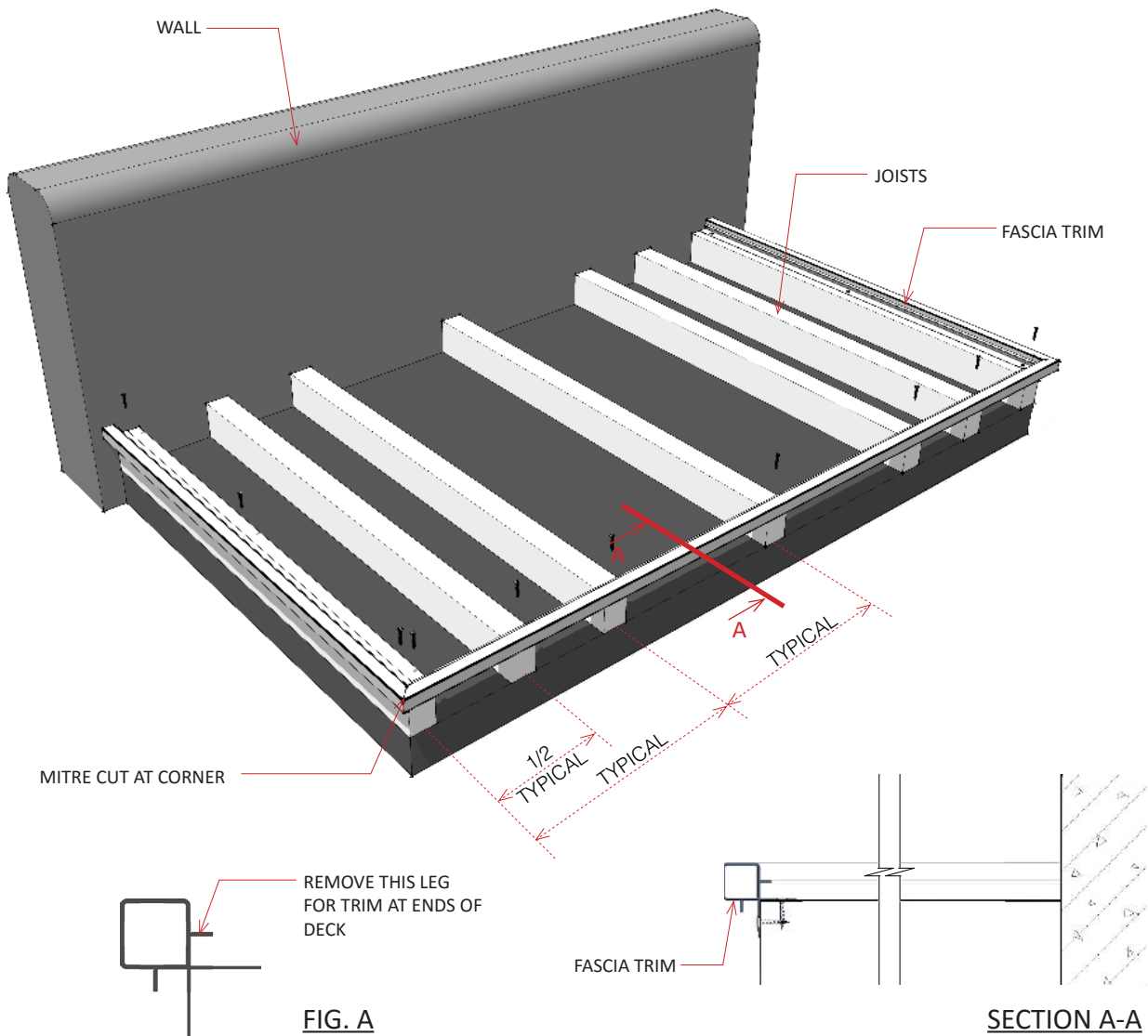


# INSTALLATION PROCEDURE

Note: - The example show is a 3 sided deck which finishes up against a wall

## STEP 2

### INSTALLING FASCIA TRIM



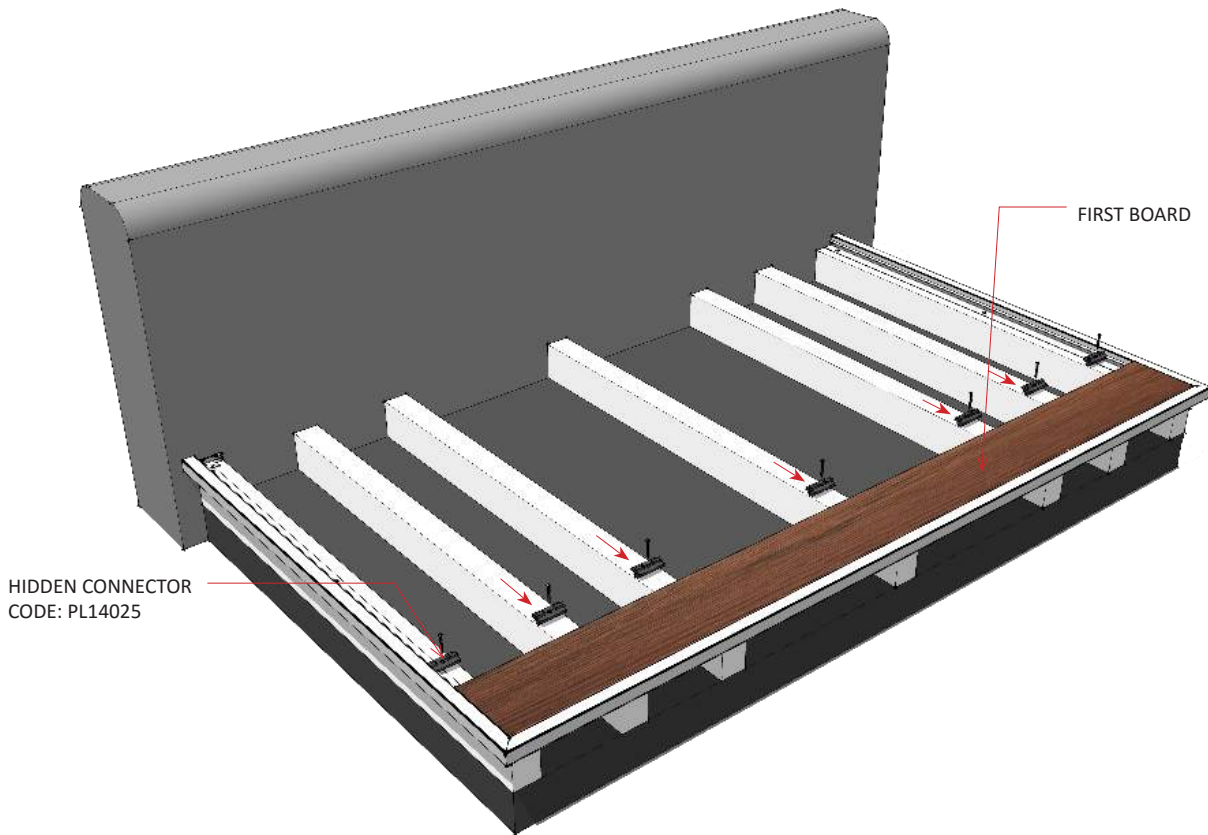
1. Cut fascia trim to form a frame around 3 sides of deck using mitre cuts at corners.
2. For fascia trims at ends of deck only remove short horizontal leg of fascia trim by holding with vice grips & tearing away as shown in Fig A .
3. Pre-drill & countersink trims at maximum 400mm centres to suit structure & screw down taking care to sink screws as flush as possible.

#### **NOTE:**

Ensure all butt joints are blocked with 190 x 45mm timber as indicated under " framing design requirements." Butt joints must be positioned in centre of block as indicated under "butt joint requirements" .

STEP **3**

**INSTALLING FIRST BOARD**



**SCREW TYPES REQUIRED:**

Joist Type	Continuous Alum Trim & Starter Clip Screw	Hidden Connector Screw	Face Fix Screw
Metal	#8 x 20mm CSK Self-drilling Screw	#7 Screws as supplied by INNOWOOD	#10 x 40mm Self-drilling CSK Wing Tip Screw
Seasoned Timber	8g x25mm CSK Timber Screw	#7 Screws as supplied by INNOWOOD	#10 x 50mm CSK Type 17 Screw

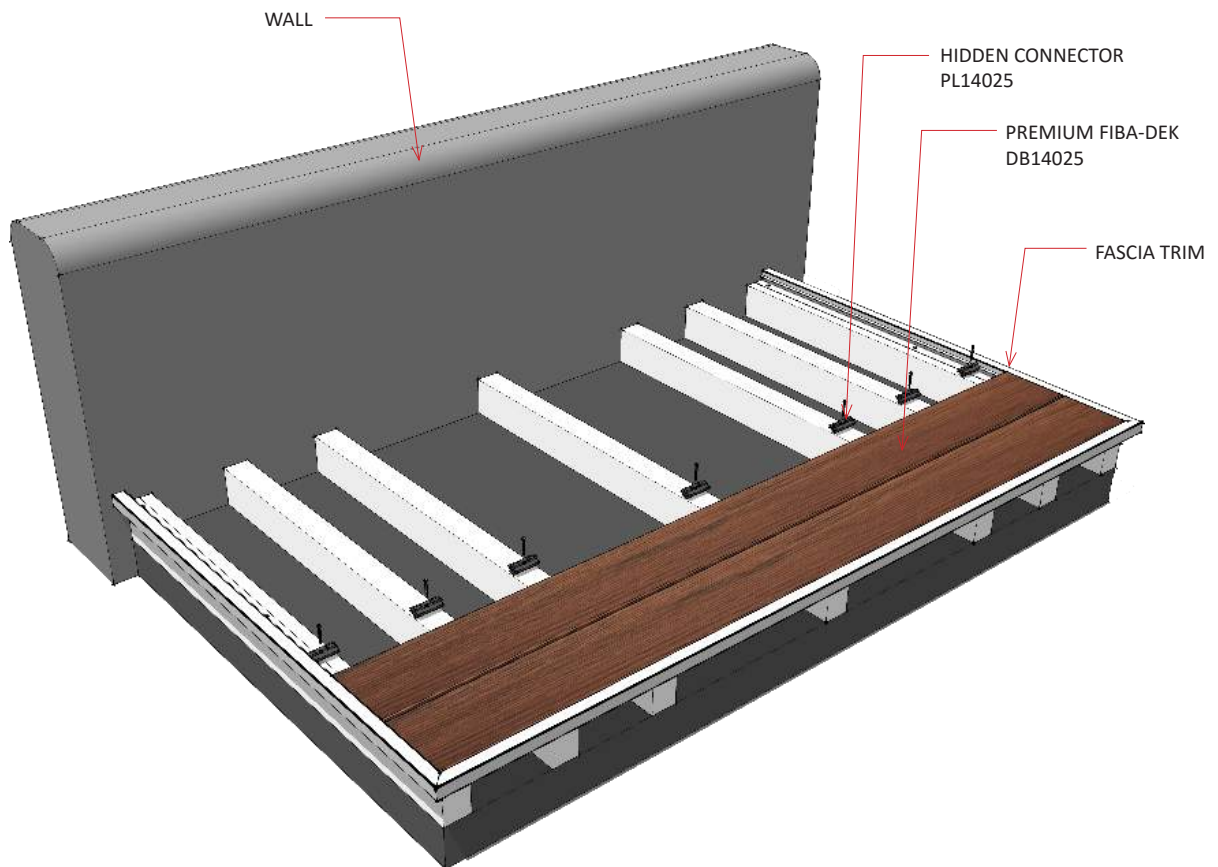
4. Cut first board to required length using dropsaw observing required clearances as show on Page 7.
5. Set board on joists an push hard up against outside fascia trim.
6. Align hidden connectors with each joist and press into board groove until fully engaged.
7. Insert screws into connectors however do not fully tighten at this stage.

**NOTE:**

Connectors must always be used at all joist and butt joint locations.

STEP 4

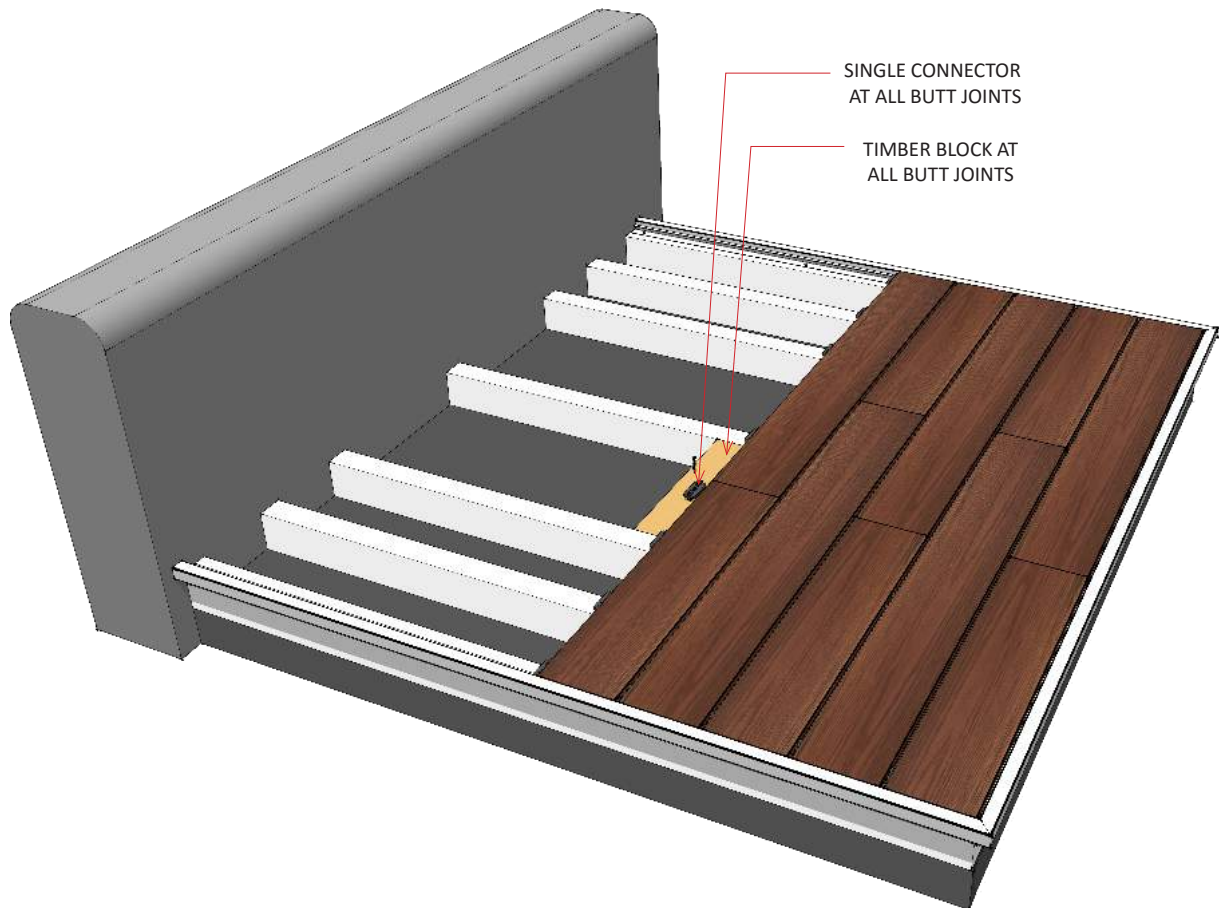
**INSTALLING SECOND BOARD**



8. Cut & sit 2nd board in position & then press into hidden connectors until fully engaged.
9. Align the next row of hidden connectors with joists & press into board groove until fully engaged.
10. Insert screws into hidden connectors however do not tighten.
11. Now tighten hidden connectors between 1st & 2nd board.

STEP 5

**INSTALLING REMAINING BOARDS**



12. Repeat step ④ until only last board is to be installed.

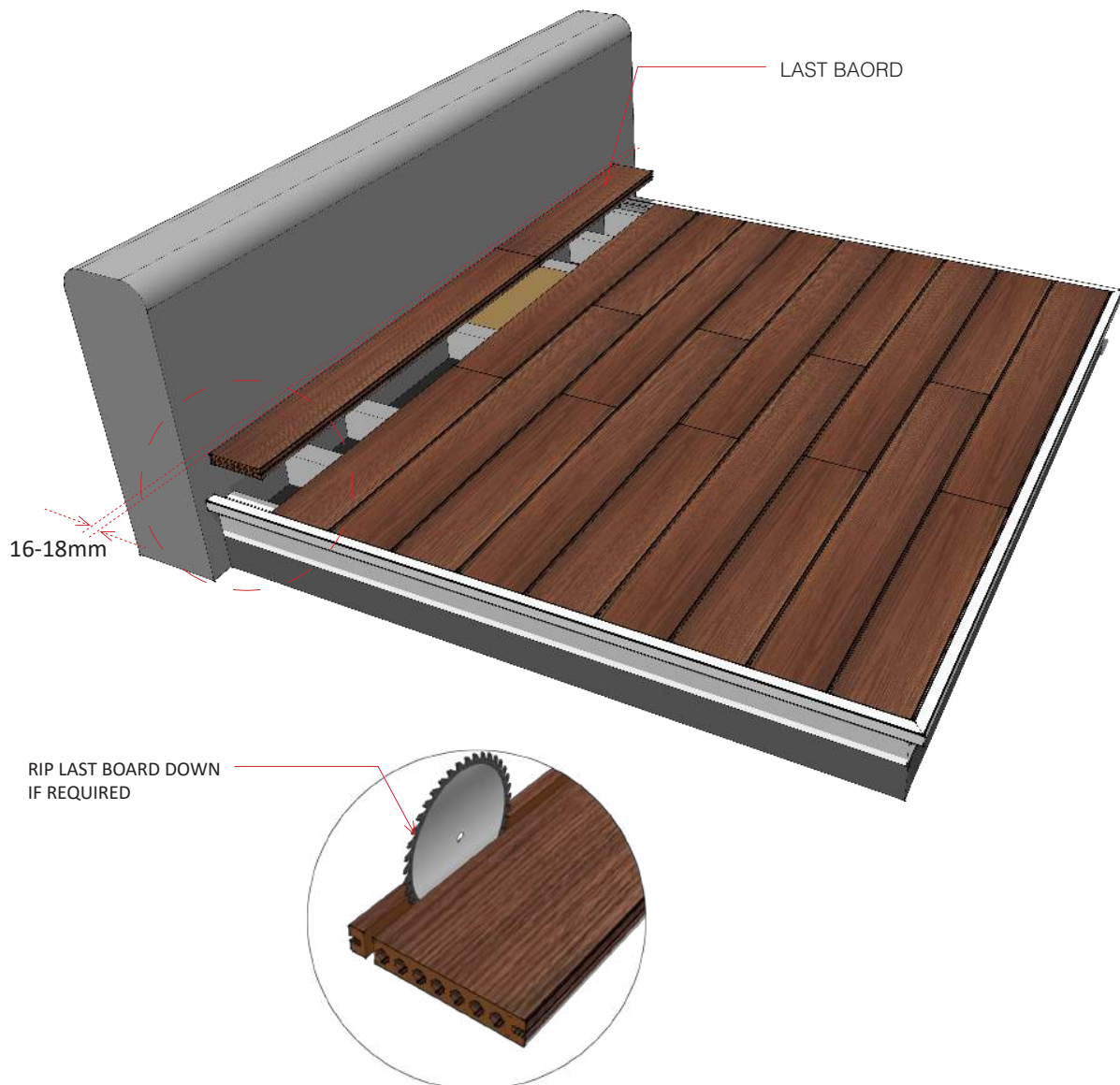
**NOTE:**

Ensure all butt joints are blocked with 190 x 45mm timber as indicated under “ framing design requirements.” Butt joints must be positioned in centre of block as indicated under “butt joint requirements” .



STEP **6**

**INSTALLING LAST BOARD**



- 13.** Cut last board to length and rip down in width if required leaving a 16-18mm gap between board edge & wall.
- 14.** Sit last board in position & press into last row of hidden connectors until fully engaged.

**STEP 7**

**INSTALL FINISHING TRIM AGAINST WALL**

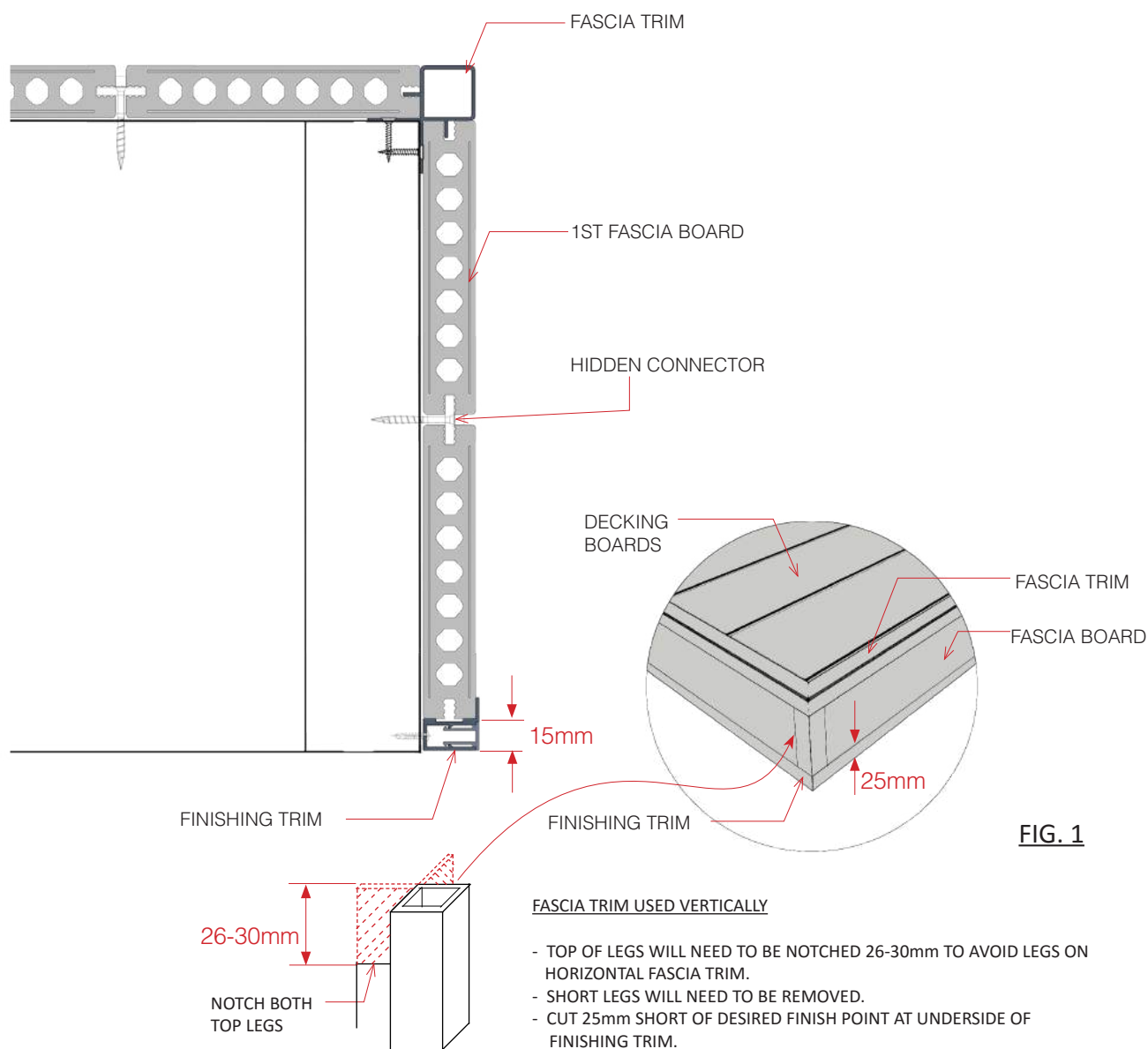


- 15.** Cut both sections of finishing trim to length to fit neatly between end fascia trims.
- 16.** Pre-drill and screw ( at max 400mm CTRS ) base of finishing trim to joists with horizontal leg sitting on top of final board.
- 17.** Press cover strip of finishing trim into base until it clicks in & is fully engaged.



STEP **8a**

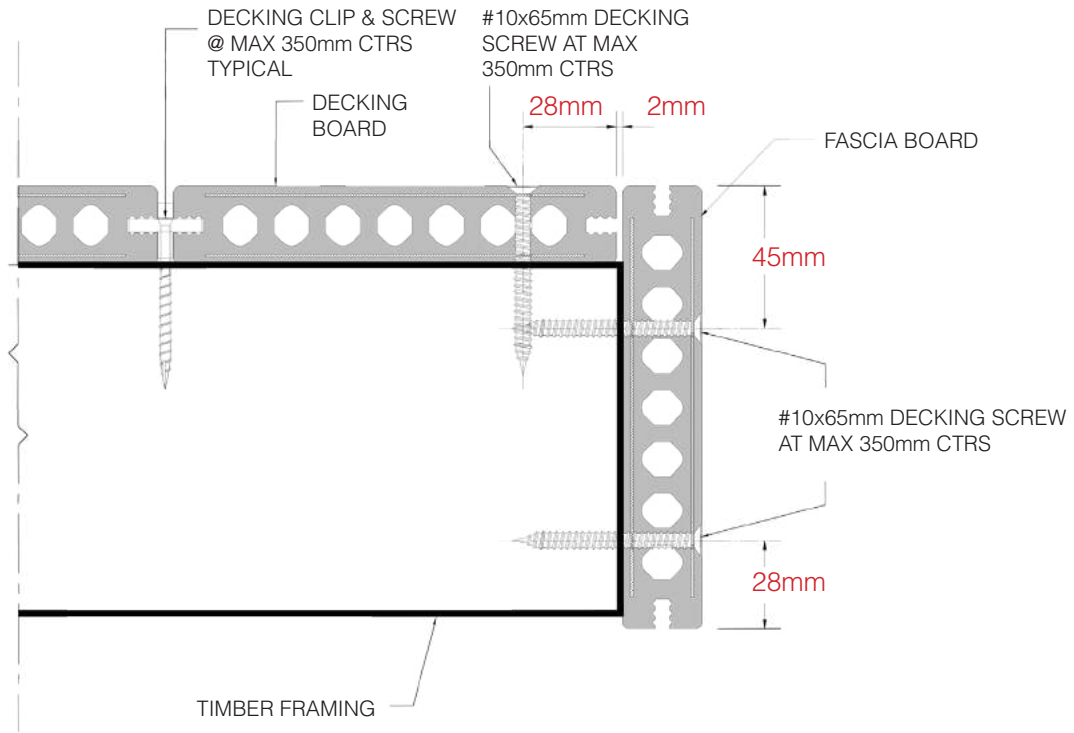
**INSTALL FASCIA BOARDS - OPTION 1** With aluminium fascia trim & finishing trim



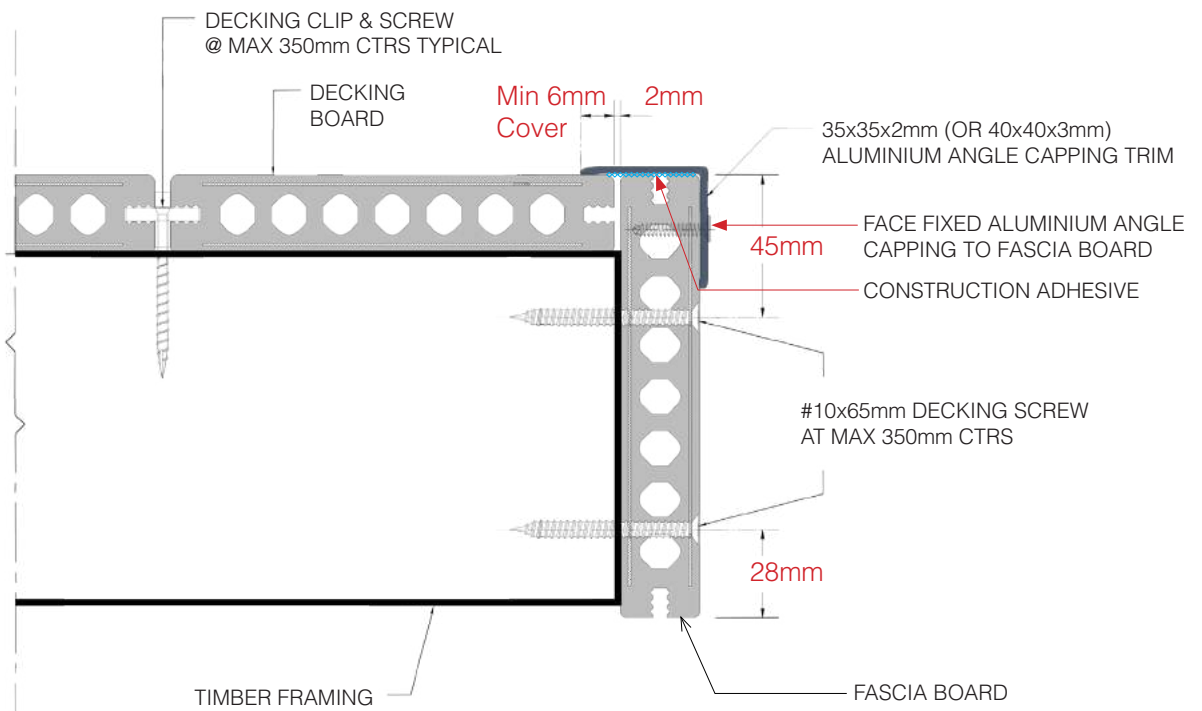
- 18.** For any 90° fascia corners it is best to use the fascia trim vertically as shown in Fig 1. Be sure to fix these vertical fascia trims prior to fascia boards.
- 19.** To install 1st fascia board cut to length & press upwards until hard up against fascia trim.
- 20.** Now insert & screw off hidden connectors to bottom edge of fascia board ( do not tighten ).
- 21.** Add each subsequent fascia board in this same sequence until complete leaving 15mm clearance below bottom edge of final fascia board to allow clearance for finishing trim.
- 22.** Install finishing trim as per step ⑦ below final fascia board mitre cutting around any corners.

STEP **8b**

**INSTALL FASCIA BOARDS-OPTION 2** Tradition face fixed fascia



**INSTALL FASCIA BOARDS-OPTION 3** With aluminium angle capping trim



## STEP 9

### PROTECTION & PRECAUTIONS

As the FIBA-DEK decking is a finished product, it must be protected from scratches and marks during and after installation and from any other site construction activity.

We recommend the following during construction where possible:

- All foot traffic is avoided or limited to only clean footwear that is free from abrasive objects such as dirt, sand, rocks, glass etc.
- If foot traffic cannot be avoided, then the deck should be swept clean to remove dirt and other abrasive material and a breathable membrane cover be placed over the deck but there must be adequate ventilation between the covering and decking. Do not completely seal the covering to the deck and if possible, the covering should be removed daily.
- Do not drag or place heavy items or construction materials on the deck.

We recommend the following during use:

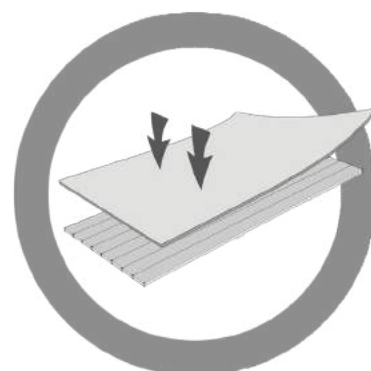
- Always protect the deck from furniture legs etc by using protective pads such as self-adhesive pads.
- Sweep regularly to remove dirt, sand and other abrasive materials.
- Beware of rocks or glass that can be lodged in the soles of shoes that can cause significant scratches.
- Never drag objects across the surface, always lift and set them back down.
- Hard plastic wheels on furniture or appliances can scratch if they are not pushed in the correct direction.



LIMIT FOOT TRAFFIC



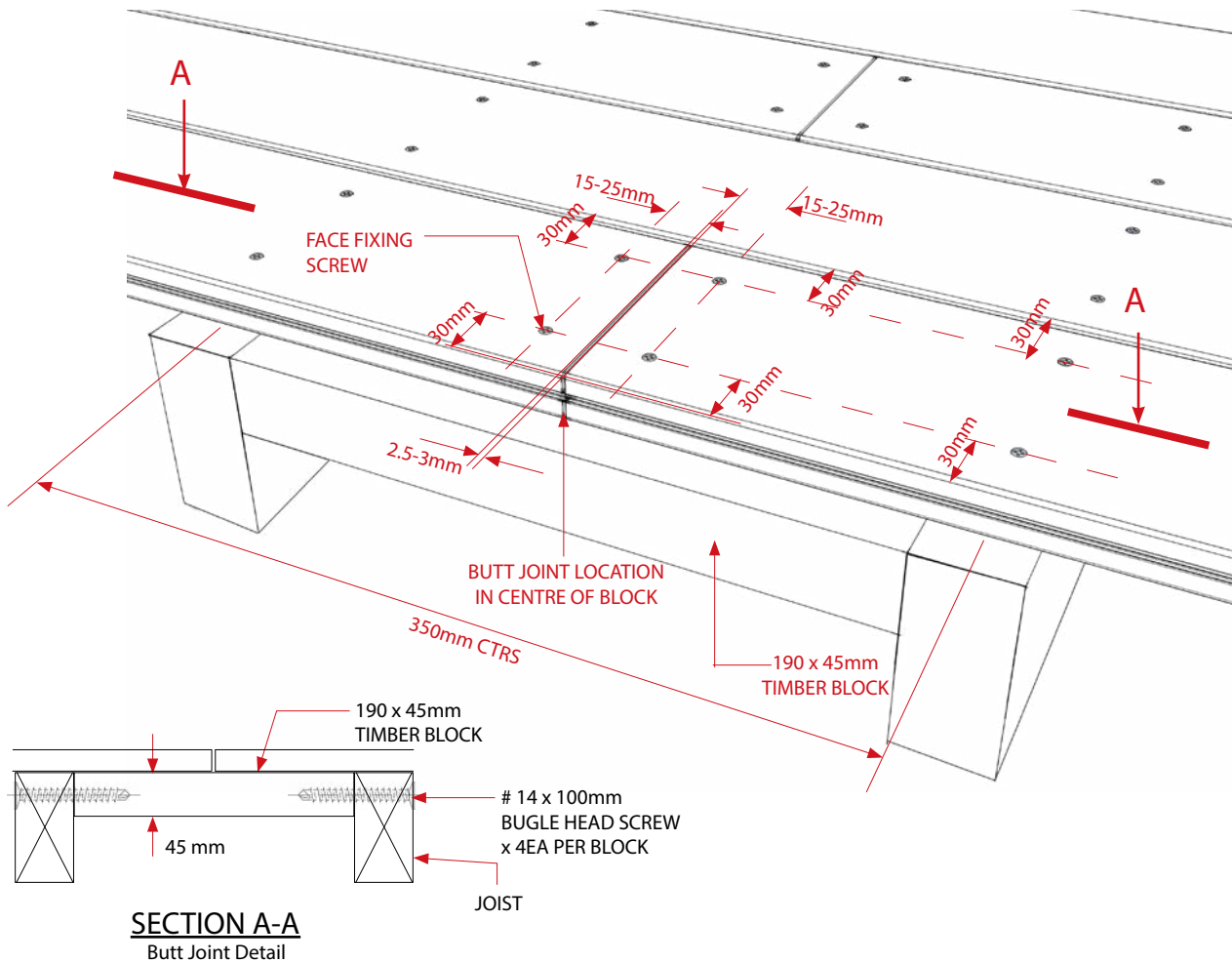
ENSURE CLEAN FOOTWEAR ONLY



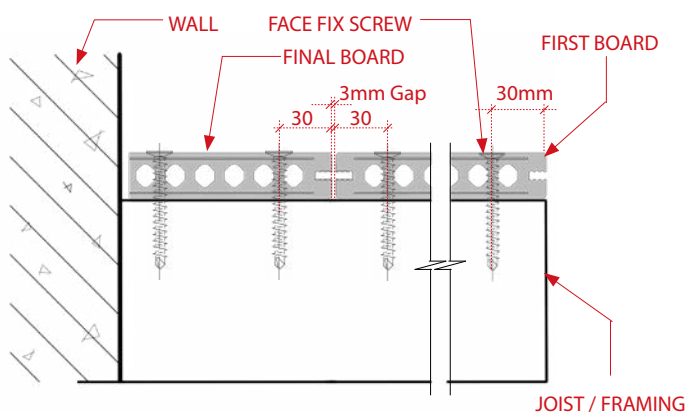
PROTECT BUT ALLOW TO BREATHE

## **INNOWOOD PREMIUM FIBRE DECK - Face Fix Install**

### **Butt Joint Requirements**



- All butt joints must be set as indicated in the fig. above.
- Butt joints must always be blocked out underneath with a 190 x 45mm timber block and be fixed of with connectors as shown.
- Failure to follow the above may result in excessive movement and/or board distortion.



**NOTE:**  
All screws must be pre-drilled and countersunk.

### **FIXING DETAIL AT WALL**

## NOTES

[illegible]



SUSTAINABLE TIMBER ALTERNATIVE

FOR MORE INFORMATION, PLEASE VISIT INNOWOOD AT

**WWW.INNOWOOD.COM**

OR CALL 1300 787 717