



Infinity

Manufactured Exclusively For Fortress Deck By **EVA-LAST**

INFINITY TECHNICAL GUIDE

www.FortressDeck.com

INFINITY TECHNICAL GUIDE

CONTENTS

1.	INFINITY CO-EXTRUDED COMPOSITE DECKING	3
	1.1 An Introduction to Bamboo-Plastic Composite	3
	1.2 What is Infinity Decking and What Are the Benefits?	3
	1.3 Benefits of Infinity vs. Wood	4
2.	TRANSPORTING FORTRESS INFINITY DECK BOARDS	5
	2.1 Stacking	5
	2.2 On-Site	5
3	BASIC COMPONENTS OF A DECK	6
4	TOOLS & MATERIALS	7
	4.1 Tools	7
	4.2 Materials	7
5	JOIST SPACING	8
	5.1 Joist Spacing Table	8
	5.2 Installing Deck Boards At An Angle	8
	5.3 Fortress Infinity Deck Board Specifications	8
6	GENERAL TIPS & BEST PRACTICES	9
7	BEFORE INSTALLATION: TIPS FOR PLANNING AHEAD	10
8	BEFORE INSTALLATION: SITE INSPECTION	10
9	PRE-INSTALLATION CHECKLIST	11
10.	HULK HIDDEN CLIP & FASTENERS	11
	10.1 HULK Screws & Hidden Clip	11
	10.2 HULK Screws Table	12
11.	INSTALLATION	13
	11.1 Expansion Table	13
	11.2 HULK Hidden Clip Installation	14
	11.3 Laying The Deck	15-16
12.	BEST PRACTICES: JOISTS	17
13.	BEST PRACTICES: DECK BOARDS	17
14.	BEST PRACTICES: FASCIA	18
	14.1 Fascia Installation: Fasteners	18
	14.2 Fascia Installation: Joint Connections	19
15.	AFTER INSTALLATION	19
16.	DON'TS	19
17.	EXAMPLES OF DECKING INSTALLED INCORRECTLY	20-23
18.	CLEAN & CARE GUIDE	24

INFINITY TECHNICAL GUIDE

1. INFINITY CO-EXTRUDED COMPOSITE DECKING

1.1 An Introduction to Bamboo-Plastic Composite

Wood-Plastic Composites (WPC) are composite materials made of wood fiber/wood flour and thermoplastic(s). WPC are produced by thoroughly mixing ground wood particles and heated thermoplastic resin. WPC may be produced from either virgin or recycled thermoplastics including HDPE, LDPE, PVC, PP, ABS, PS, and PLA. The most common method of production is to extrude the material into the desired shape. These materials can be molded with or without simulated wood grain details. Extruded WPC are formed into both solid and hollow profiles. Injection molding is also used.

WPC are still fairly new materials in the market, relative to the long history of natural wood as a building material. WPC were first introduced into the decking market in the early 1990's. WPC are one of the fastest growing building product materials.

Bamboo-Plastic Composites (BPC) are a recent advancement to the already successful introduction of WPC. BPC are very similar to WPC with the primary difference being the introduction of Bamboo as a higher performing substitute to that of the original wood component. Early WPC and even current WPC decking products have shown to struggle with moisture absorption into the wood fiber and core of the product. Bamboo is naturally more resistant to moisture absorption than wood and also introduces stronger structural properties. The engineering behind BPC has shown significant improvement in key performance characteristics for longevity and durability.

1.2 What is Infinity Decking and What Are the Benefits?

Over a decade ago a company named Eva-Last® of Johannesburg, South Africa discovered there was a need within the South African market for a more robust and superior outdoor composite product. The introduction of well-known North American manufactured composite decking had led to numerous product failures in the harsh South African environment. Through extensive research and stringent testing methods in some of the most unforgiving conditions in the world, Eva-Last® developed the Infinity range of Bamboo Plastic Composite (BPC) products.

The Infinity range of outdoor BPC products has become the industry leader in Europe, the Middle East and throughout Africa, proving performance in an enormous range of environmental conditions. In 2016, Fortress Deck introduced Infinity to the North American market, finally bringing the globally-proven technology of BPC's to the United States and Canada.

Infinity co-extruded deck products are both ultra-low maintenance and environmentally friendly. Infinity BPC products are made from 55% sustainable bamboo fiber and 35% recycled plastic as the two primary components. The unique combination of bamboo fibers and plastic minimizes the need to seal, stain or in other ways treat Infinity composite products.

All Infinity profiles are created using High-Density-Polyethylene-Plastics (HDPE). Where this differs from Polyvinyl Chloride (PVC) is that PVC has some disadvantages, among them low thermal stability and high brittleness. Though PVC may have a slightly lower flame spread index when compared to HDPE, when PVC burns it releases highly toxic hydrogen-chloride, hence it is commonly considered as one of the most environmentally damaging thermoplastics. At temperatures above 158°F (70°C), PVC (if not stabilized), can start to degrade and release hydrogen-chloride. Furthermore, photodegradation (damage caused to the board by sunlight) of PVC has been known to take place naturally in the outer layer of the product when exposed to the elements.

Infinity is currently used in over 50 countries around the world with global demand and access expanding exponentially. Fortress Deck will provide the United States and Canada with Infinity products for all types of applications, from residential backyard entertainment areas, to massive commercial developments, mountain lodges and highly specialized ocean marinas. The application and possibilities of Infinity are endless. Some of the biggest and most recognized brands in the world already trust Infinity for its superior performance, making it one of the most requested decking products in the world.

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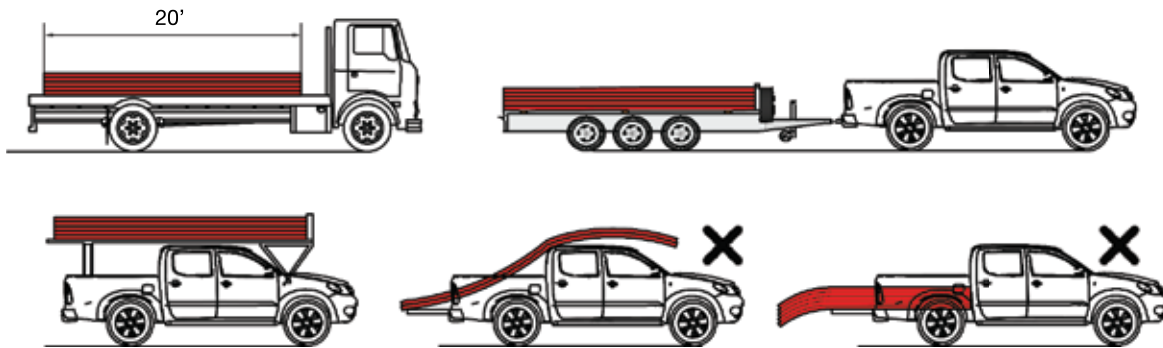
Designed and formulated in the harsh environments of South Africa, Infinity is superior in quality and performance and has become a trusted outdoor building product. The proven global performance allows Fortress Deck to have an industry leading warranty coverage on all Infinity products. Infinity offers the latest in innovation and design and is a superior, eco-friendly, hassle-free alternative to traditional wood products, exotic hardwoods or wood-plastic composites.

1.3 Benefits of Infinity vs. Wood

- Ultra-low maintenance
- Environmentally friendly
- Mold & moisture resistant
- UV resistant
- Rot, warp, and crack resistant
- Decreases deforestation
- Slip resistant
- Barefoot friendly
- Simple installation
- Various color & finish options
- Utilizes recycled plastics

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2. TRANSPORTING FORTRESS INFINITY DECK BOARDS



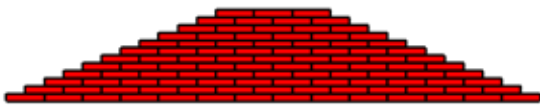
2.1 Stacking

The best method of stacking is the pyramid method or brick layers method. By shifting the layers of boards halfway across a board's length, the chances of the boards sliding apart are lower and therefore safer.

Though the pyramid method is safer for storage purposes, it is not always the most practical. If it is necessary to stack boards, be sure not to stack them too high. Make certain that the height of the stack does not exceed the width of the stack.

When stacking boards for transportation, please make sure that the boards are secure, and that there is an even distribution of load.

Pyramid method or brick layers method



Vertical stacking



2.2 On-site

Ensure Infinity Decking has acclimated to the environment before installing. It is important to understand that when installing in colder weather that the composite boards will expand more than when installing in hotter weather and gapping should be adjusted accordingly.

Once the boards have reached the building site, ensure that they are stored on level ground. It is recommended that the boards not be stored directly on the ground and that the boards are covered.

If the boards need to be stored for long periods, pack the boards on top of pallets.

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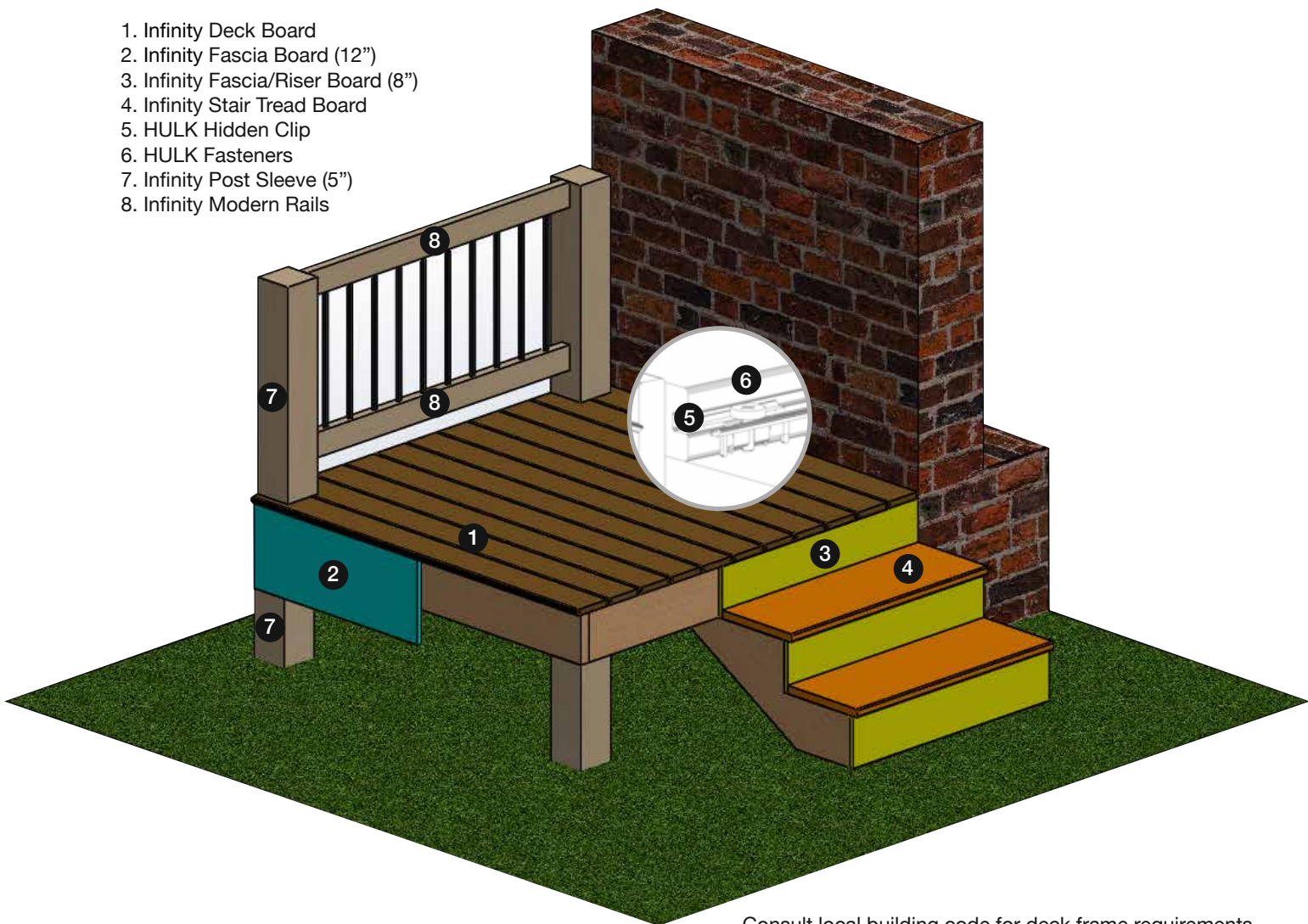
Thank you for choosing Infinity Decking. You can be assured that you are using and installing a product that is one of the most durable, highest performing and long lasting in its class.

This guide was developed to help installers limit installation faults and workmanship, increase productivity and complete installations that last and conform to warranty specifications. Through support, training and the hands on use of this manual, Fortress Deck aims to give you a better understanding of Infinity Decking and its capabilities. This in turn will give you the tools to advise clients with confidence and good, sound knowledge.

Fortress Deck strives to set the standard for composite installers in North America. We aim to lay out good practice guidelines for all installers and manufacturers of composite products so that the industry can be recognized as one that delivers high-quality products through high-quality installations.

3. BASIC COMPONENTS OF A DECK

1. Infinity Deck Board
2. Infinity Fascia Board (12")
3. Infinity Fascia/Riser Board (8")
4. Infinity Stair Tread Board
5. HULK Hidden Clip
6. HULK Fasteners
7. Infinity Post Sleeve (5")
8. Infinity Modern Rails



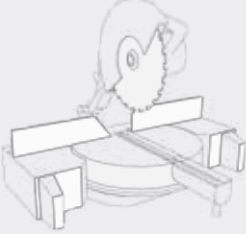
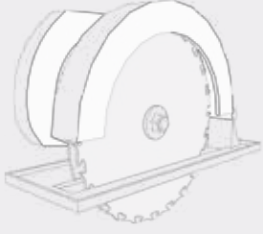


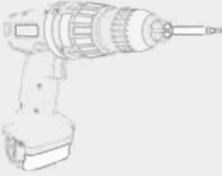
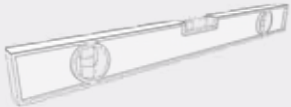
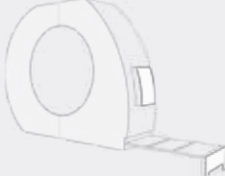
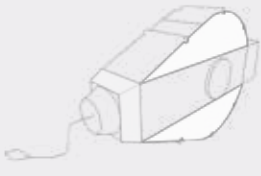




Consult local building code for deck frame requirements

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4. TOOLS & MATERIALS

4.1 Tools

Infinity Decking require the same tools as those used for the installation of traditional wood decks. In order to properly install an Infinity Deck you will need the following tools:

			
MITER SAW with properly sharpened carbide tipped composite cutting blades	CIRCULAR SAW with properly sharpened carbide tipped composite cutting blades	HAND TOOLS	SQUARES Combination squares set squares
			
CORDLESS DRILL (with clutch and screw driver HULK bits provided in every pack of HULK screws)	LEVELS Spirit level, laser level and pipe levels	MEASURING TAPE	CHALK LINER
			
PEN AND PAPER	AUGER	SHOVEL	SAFETY EQUIPMENT

4.2 Materials

In order to properly install a Fortress Infinity Deck, you will need the following materials:

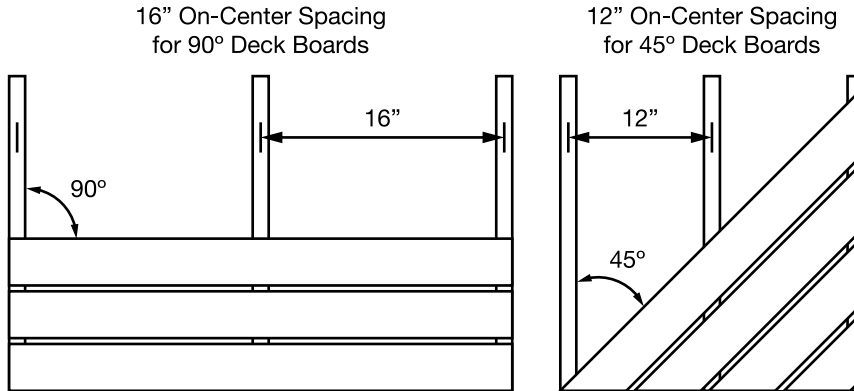
- Infinity Deck Boards
- Infinity Fascia Boards
- Clips
- Clip Screws
- Surface Mount Composite Screws
- Carriage Bolts
- Lag Screws
- Joists
- Posts
- Cement/Concrete
- String/Line
- Marker Boards
- Gravel
- Frame Screws
- Truss Clips
- Truss/Joist Hangers
- Hurricane Clips
- HULK Screws

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5. JOIST SPACING

Please consult the chart below to ensure sufficient material and proper spacing of substructure joists for your deck before beginning installation.

5.1 Joist Spacing Table



Joist Spacing For Grooved & Square Boards At An Angle			
90°	60°	45°	30°
16"	14"	12"	8"

5.2 Installing Deck Boards At An Angle

Installing decking at an angle can help delineate different areas of the deck, and add variety to your deck designs.

When installing decking at an angle, the distance the boards must span increases beyond the recommended limit. The solution is simple, however, by reducing the joist spacing.

As the angle of the decking becomes more acute, the joist spacing must decrease to provide proper support. Please refer to 5.1 Joist Spacing Table for common deck board angles.

5.3 Fortress Infinity Deck Board Specifications

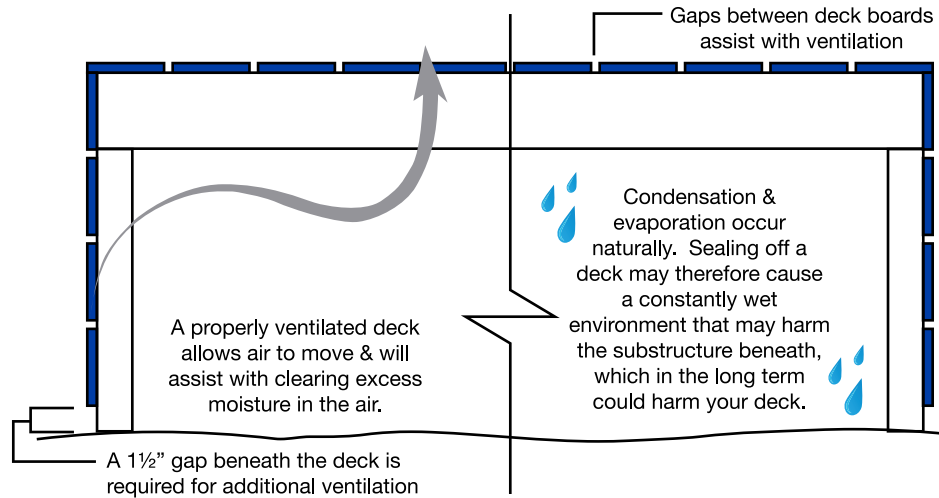
Please make sure you refer to the table below when installing your deck boards

Fortress Infinity Deck Boards	Board Dimensions	Number Of Lf In A Sq. Ft	Plank Weight Per Lf
Grooved	7/8" x 5 1/2"	2.1	2.59 lb
Square	7/8" x 5 1/2"	2.1	2.72 lb

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6. GENERAL TIPS & BEST PRACTICES

1. Please follow the instructions when installing Infinity Decking, paying close attention to gapping, spacing and fastener requirements.
2. Before beginning construction, check all areas local building codes and regulations.
3. Infinity products require proper ventilation and drainage to ensure longevity. Adequate drainage is needed to prevent water from pooling under the deck.
4. The more ventilation provided underneath the deck, the better. Don't close the sides and make sure air moves in all directions. This allows moisture to evaporate, ensuring your deck has the longest life span possible.



5. Always use sharp blades.
6. Check your miter saw, against a steel square at the beginning of each day.
7. Recommend that your client not let mulch, leaves, debris, pollen or organic material build up on their deck.
8. A deck should be cleaned with a high pressure hose seasonally and kept free of debris. A deck that collects more debris will need to be cleaned more frequently. Do not let debris accumulate between boards.
9. Always give good and honest advice to clients. If you are unsure of anything, please request assistance from Fortress Deck or contact a specialist in the required field.
10. Be sure to use corrosion-resistant fasteners and connectors.
11. Avoid any deck designs that facilitate the trapping of moisture. Untreated and unsealed timber framing that is continually exposed to moisture will eventually warp and/or splinter.
12. Bracing is recommended for free-standing decks as well as elevated decks requiring long support columns.
13. If you are building a deck that is attached to your house, make sure the framing is strong enough to bear the additional loads the deck will provide, include people, furniture, grill, toys, bikes, and other items.

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7. BEFORE INSTALLATION: TIPS FOR PLANNING AHEAD

Important! Please make sure that before you begin construction, you are aware of building requirements, codes and restrictions.

The installation of any Fortress Deck product is a big investment and should be viewed as a serious building project. Installation plays a huge role in the longevity and lifetime of the product and will have a direct influence on performance as well as warranty.

If at any stage of the installation you need advice or assistance, please get in touch with Fortress Deck. We are here to help make each and every step of the installation process a success.

It is important that you have a solid understanding of the planning and installation process to guarantee that Infinity products are installed correctly. Attention to detail and careful planning are necessary throughout the entire installation process. Make sure you familiarize yourself with the Infinity Technical Guide before beginning construction. Warranty claims will be subject to compliance with specifications outlined in the Infinity Technical Guide.

Decide on which boards to use based on:

1. Your client's personal preferences and lifestyle
2. Moisture and drainage conditions
3. Direct sunlight (if the projects site is an area that receives a lot of light you may want to suggest a lighter color that will absorb less heat)
4. Exposure to excessive heat sources including reflected sunlight from low-emissivity (Low-E) glass

Good time management of your build can ensure you save money and avoid the hassle and stress of a rushed job. If you can, start planning months in advance to avoid any surprises.

Keep in mind the standard length of Infinity materials. If the project allows, try work with standard sizes of 12', 16' and 20' pieces in order to keep costs down and reduce waste.

When calculating the amount of Infinity product you require, remember to take waste into account. 10% waste is a good average to work with for a square decks, and round/curved decks will have approximately 15-20% waste. However, please keep in mind that you will still need to calculate this as it can vary depending on the shape and design of the deck.

When planning a deck, consider it as an extension to the outdoor living area rather than just an outdoor floor. Decks can incorporate comfort, fun and interesting elements. You may want to suggest a fire pit, grill, pergola, sitting area, dining area etc. to your client. There are no limits to what is possible.

Combinations of colors, particularly on a border around the deck or on the fascia will highlight and accent a deck. Experiment, explore and try something that will give the project that WOW factor.

You could suggest adding lighting such as FortressAccents, either leading to and/or on the deck. Down lights, spotlights, stair lights, anything is possible. Lighting adds life, looks impressive and brings a wonderful ambience to the deck.

8. BEFORE INSTALLATION: SITE INSPECTION

Important! Please make sure that before you begin construction, you are aware of building requirements, codes and restrictions.

Inspect and assess the ground and/or surface below your project site before installing Infinity. This should be a dry flat area. For uneven surfaces allow for substructure alterations to create an even base for Infinity Decking. The ground should be well compacted.

Ensure the building site allows sufficient deck ventilation and drainage. For non-sleeper system, plan a minimum of 2" elevation space between the ground and the bottom of your lowest joist or beams.

For sleeper systems, decking must be elevated a minimum of 1¼" above the ground.

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9. PRE-INSTALLATION CHECKLIST!

- Assessment of the site and area
- Ground conditions
- Soil type
- Drainage
- Flood test/drainage
- Storm water drains
- Where do all the gutters flow to?
- How is the roof pitched?
- Has the ground been compacted? (Consult with engineer)
- Will the ground wash away or subside? (Consult with engineer)
- Exposure to sunlight
- Plants/trees near the site that may spill sap or residue onto the deck

Bring any issues, no matter how big or small, to your client's attention. If you do not discuss issues with them they may not be aware of them. It is your responsibility to let them know what you are not happy with as an installer.

Note: Make sure you discuss with your client whether or not they have had or need to have a civil engineer or architect check the site, especially on new building sites, in order to assess whether the ground has been compacted correctly or not and is suitable for decking or light construction. Have it checked for various elements such as storm water drains etc. Check local building codes to ensure all conformance with railing requirements.

We highly recommend you insist on your client getting an expert in to check the site before construction begins.

Please note: There are many ways to build and install substructures and decks. For the purpose of demonstrating good practices, procedures and skills, we are going to use a single type of material in this guide. These guidelines are not applicable to all applications. Each and every application needs to be assessed accordingly before beginning any installation. Building codes need to be adhered to and all Infinity installation guidelines need to be followed.

If you have any questions at any stage of your installation, please get in touch with Fortress Deck regarding your inquiries.

10. HULK HIDDEN CLIP & FASTENERS

Eva-Last® has developed a range of complete and durable specialized systems that work together to ensure the longevity and stability of the deck.

10.1 HULK Screws

HULK screws were developed using state of the art technology and manufacturing methods. They work in perfect synergy with Infinity boards and were designed to do just that. For the best performance and longest lifespan of our products, we recommended HULK screws are used for all Infinity installations.

HULK screws are an extremely durable and hard wearing choice for outdoor, corrosion-risk, or long term applications. HULK screws use an advanced bit lock system which maximizes torque transfer and extends the life of bits and screws. It also quickens assembly time.



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Clip Screw For Wood

500 units per box

- M 4.2 x 40mm stainless steel, nano coated clip screw
- M 4.2 x 40mm black, nano coated clip screw

Torpedo clip screws are specially designed for quick and easy installation into wood.



Clip Screw for Steel

500 units per box

- M 4.2 x 40mm stainless steel, black, nano coated clip screw, SS410 KX - Z-tip
- M 4.2 x 40mm black, nano coated clip screw, Z-tip

Z-Tip clip screws are specially designed for quick and easy installation into steel and galvanized steel systems.

Hidden Clip

500 units per box

304 stainless steel, coated

Designed for Infinity Grooved Boards as well as many other grooved boards on the market.



Fastening bits

* Every HULK box contains a fastening bit.



HULK screws can be used for: deck construction, outdoor furniture assembly, garden applications, cladding, outdoor frames and pergolas.

Please refer to the table below for more information on HULK screws and how they should be used.

10.2 HULK Screws Table

TYPE	CLIP SCREW	SURFACE MOUNT SCREW	FRAME SCREW	HI STRENGTH CARBON STEEL	HCTO (Ceramic Treated)	STAINLESS STEEL	UNITS PER BOX	SCREW	NOTES
HULK Torpedo Tip Nano Black Stainless Steel Screw	●					●	500	HULK  Clip screw	Clip screw used for wood applications
HULK Z-Tip Nano Black Stainless Steel Screw	●					●	500	HULK  Clip screw	Clip screw specifically designed for steel applications
HULK Torpedo Surface Mount Screw		●						HULK  Surface mount screw	Surface mount screw used for wood applications

COMING SOON

Note: Every HULK box contains a fastening bit.

*Remember it is good practice to pre-drill when surface mounting deck boards.

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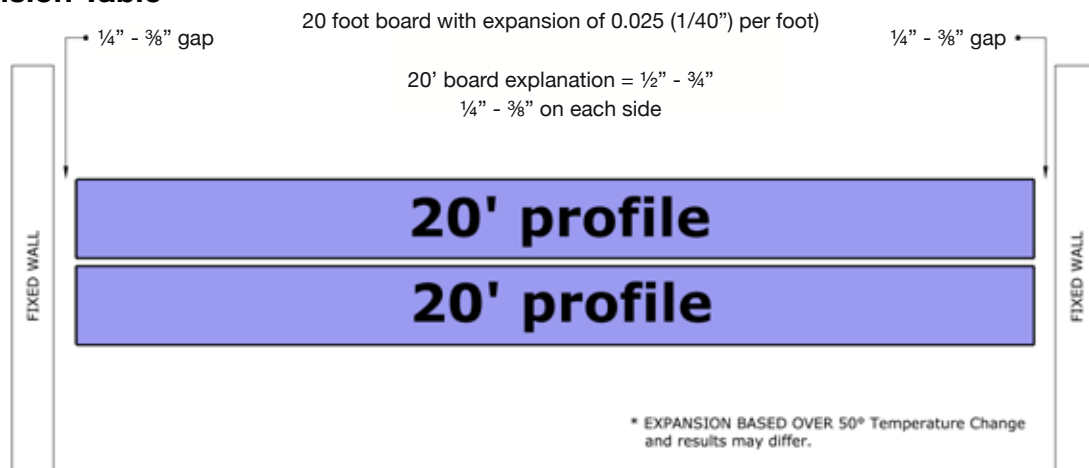
11. INSTALLATION

Important! Please make sure that before you begin construction, you consult building requirements, codes and restrictions regarding spacing and load requirements for rails. All supporting structures and framing must comply with applicable building codes. All local building codes will supercede any recommendations, measurements or techniques in the following installation instructions.

If you have any questions or uncertainties, please contact Fortress Deck before beginning installation.

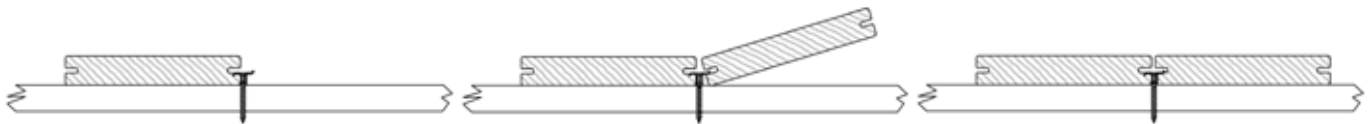
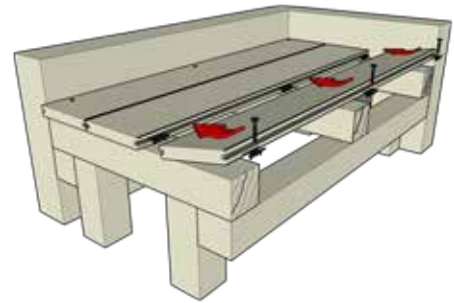
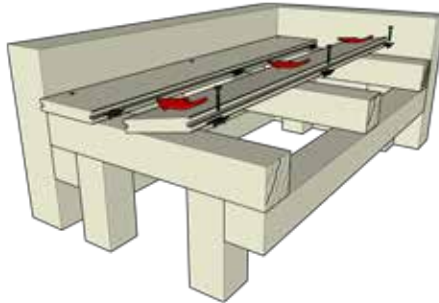
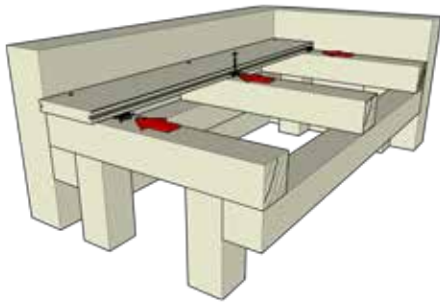
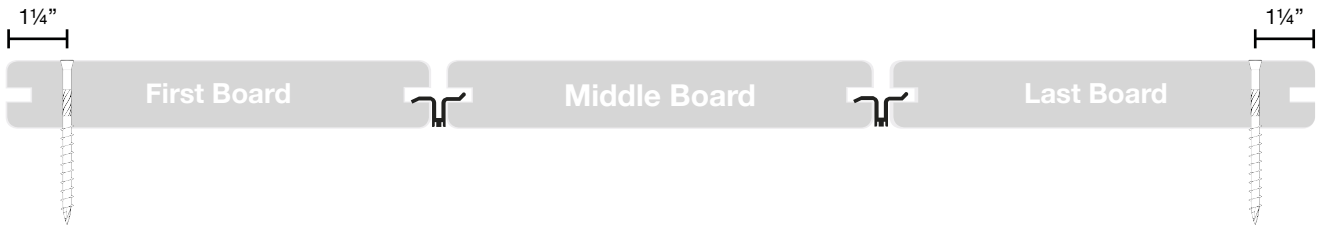
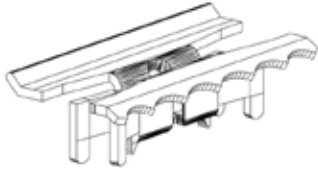
- Make sure you pre-drill slightly smaller holes than the screw shaft diameter for trim screws and ensure all screws are secure, but not over tightened during installation. This will help prevent pressure cracks and mushrooming.
- Infinity profiles contain plastic and will expand and contract more so than wood. The expansion and contraction of these profiles must be considered when installing. Sufficient expansion gaps must be left at butt joints as well as where the profiles meet fixed objects. Consider temperatures at time of installation for contraction/expansion purposes. The rate of expansion of Infinity profiles is calculated at 0.025" or 1/40" per foot ($\frac{1}{4}$ " - $\frac{3}{8}$ " on both sides of a 20' board) over a 50°F swing in temperature.
- Ensure Infinity has acclimated to the environment before installing. It is important to understand that when installing in colder weather that the composite boards will expand more than when installing in hotter weather and gapping should be adjusted accordingly.
- Avoid pre-cutting Infinity boards, as not every construction wall is straight and cut all Fortress Infinity products slowly using a sharp fine tooth blade to avoid chipping.
- The first board is key in the laying process! If it is a fixed deck, place the first plank flush with the rim joist - make sure it is square or parallel with the existing structure or with your frame.
- Make sure your starting profile is square on the frame and laid perfectly straight, as all subsequent planks will follow its line. Make sure of this by measuring edges and diagonals.
- Surface mount the board to the rim joist with the preferred overhang. Depending on the design, you can have a bigger overhang, but remember you cannot ever overhang by more than 2". Aesthetically, it often looks better when you overhang about $\frac{1}{4}$ "- $\frac{1}{2}$ " over the fascia.
- HULK Hidden Clip can be used when you end flush with the frame and there is no overhang.
- Fortress Infinity Post Sleeves and Modern Rails are manufactured for on-center post spacing to accommodate 6' and 8' rail sections. Modern Rails are designed in slightly longer spans to account for slight variation in post placement and cut ends during angled rail applications. **NOTE: IT IS IMPORTANT TO MEASURE POST SPACING PRIOR TO MAKING ANY CUTS.**

11.1 Expansion Table



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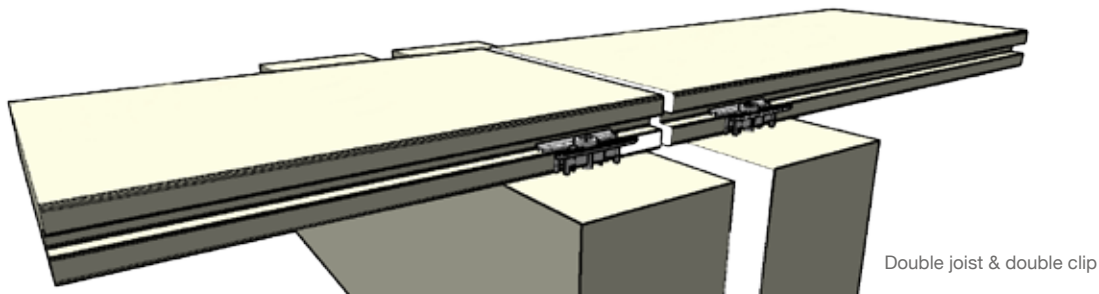
11.2 HULK Hidden Clip Installation



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11.3 Installation: Laying The Deck

- Lay boards perpendicular to joists or at a preferred angle.
- Pre-load clips with HULK screw.
- Attach subsequent boards to joists with Hulk Hidden Clips.
- Tighten clip, do not over tighten as this may deform the clip. (Impact driver drill recommended)
- Move the next profile into position and tap into place with a rubber mallet, then sufficiently tighten clips.
- Continue to next board.
- If you are pre-loading clips, try to have someone assist you in placing the clips in position on each board.
- Install a clip on every joist and fasten with HULK screws. You cannot miss one!
- Push the next board into place, do not force or push too hard. The clips will keep a gap naturally if installed correctly. If you over tighten, the clip will deform and increase the gap.
- When installing with a screw, don't over tighten either.
- It is always a good idea to use a cordless drill with a clutch. Set the clutch relatively light to ensure you don't over tighten.
- Install last/end profile with surface mount screw as seen in 11.2 HULK Hidden Clip Installation. Please remember to always pre-drill holes to avoid cracking or mushrooming.
- Surface mount screws should be no closer than 1¼" from the edge of the profile.
- Install a second support joist as shown below for proper attachment of the hidden clip. Hidden clips should be used on butt joints. Once the support joist is in place, the clips can be secured next to one another.
- Don't install closer than 1½" from the edge (cut edge).
- Butt joints require double joists and 2 rows of clips. Leave a minimum of 1¼" between butt joints to allow for debris to fall through.



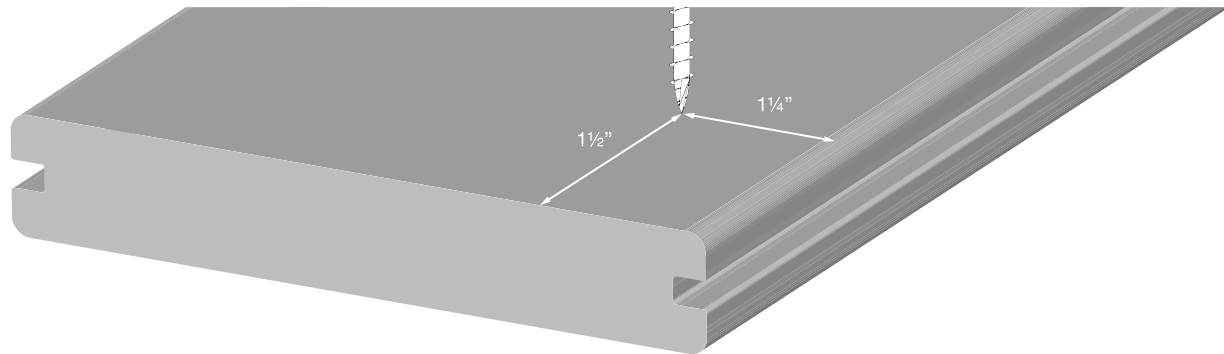
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11.3 Installation: Laying The Deck Cont.

- Hulk Hidden clips fit easily, into the board grooves, do not force them in the groove (for expansion & contraction reasons).
- Use a clip and screw on every joist. Boards must not ever share clips or joist! Screw clip into joist, ensuring that the screw goes down straight and into the center of the joist.
- Screws must go in at 90 degrees so as not to damage the next board.



- At board ends on the deck's edge, you can install screws placed perpendicularly at the recommended distance, at minimum of 1¼" from the edge and a minimum of 1½" from board end to prevent splitting the board.

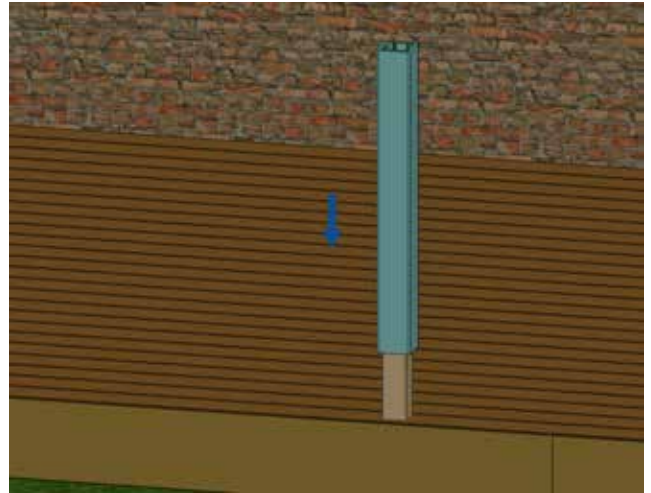


- Pre-drilling with a sharp drill bit will always provide optimal results. Pre-drilling is recommended to prevent cracking and mushrooming.
- Drive fasteners perpendicular to the deck surface. Angling fasteners can result in mushrooming on the leading edge.
- Allow a minimum of 1¼" from the side of the board and 1½" from the end of the board when installing face fasteners. Drive fasteners flush with the deck surface. Do not drive fasteners deeper than ⅛" below the deck surface for best appearance.
- Do NOT use Flat, Bugle, or Trim Head deck screws, as they will likely result in mushrooming.

INFINITY TECHNICAL GUIDE

11.4 Installation: Post

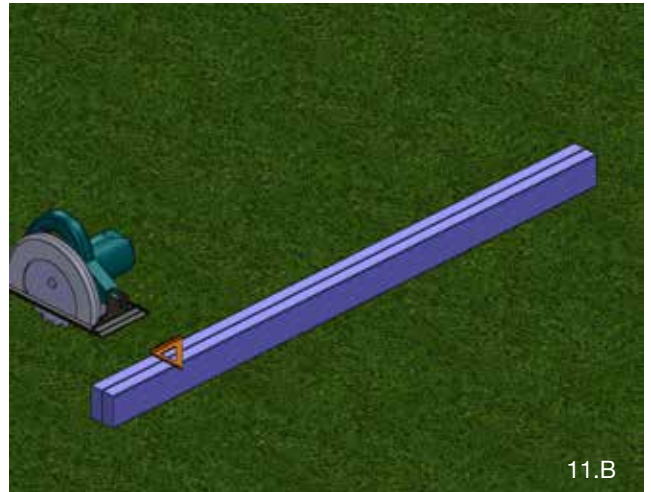
- Fortress Infinity Post Sleeves are manufactured to work with treated 4"x4" post. (Actual dimension 3.5" x 3.5")
- **CONSULT LOCAL BUILDING CODES REGARDING PROPER POST INSTALLATION PRACTICES AND MINIMUM RAILING HEIGHTS IN YOUR AREA.**
- Cut Fortress Infinity Post Sleeves to the desired height.
- Slide post sleeves over treated 4"x4" posts down to the decking surface.
- Posts should be square and plumb in both directions.
- Once post sleeves are installed, verify spacing between posts before proceeding to railing installation.



11.5 Installation: Modern Rail Straight and Miter/Angle



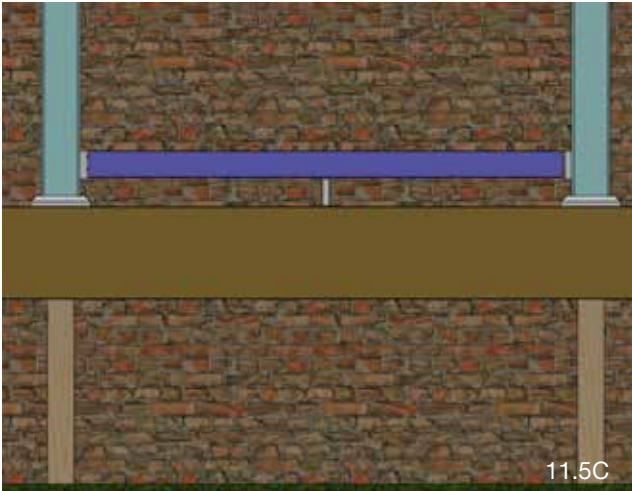
11.5A



11.5B

- Measure the opening from inside of post to inside of post and determine desired angle and lengths. (11.5A)
- Transfer the angle and measurements to the Infinity Modern Rails, place top and bottom rails side by side to ensure uniform spacing between posts. Mark rails and cut to desired length and angle. (11.5B)

INFINITY TECHNICAL GUIDE

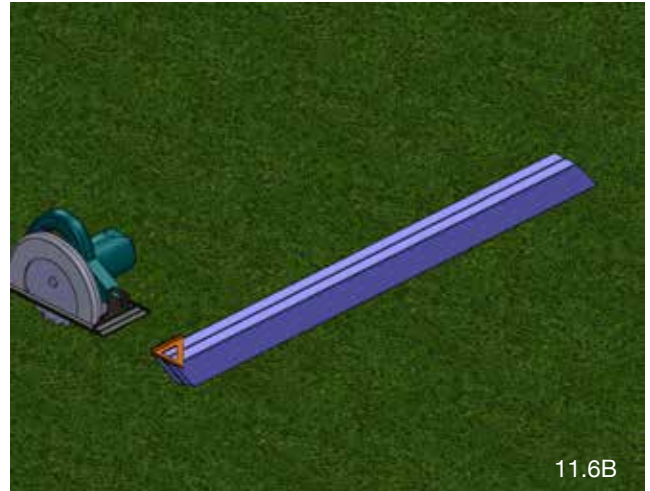
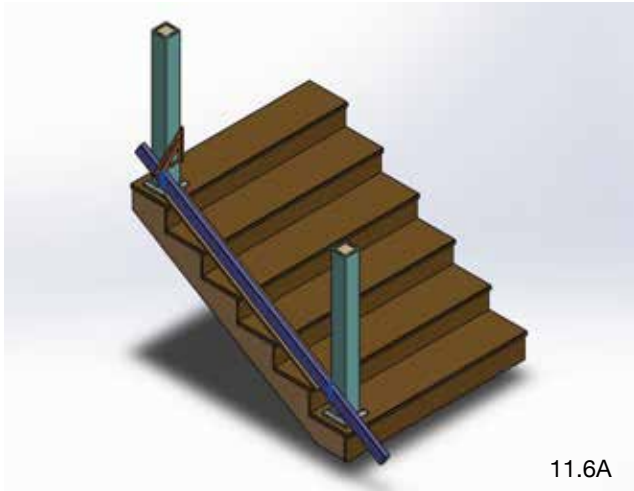


- If needed, attach I-support or crush block to the bottom of the bottom rail. Use one support at the center of a 6' rail section and 2 supports at $\frac{1}{3}$ and $\frac{2}{3}$ of an 8' rail section. (11.5C)

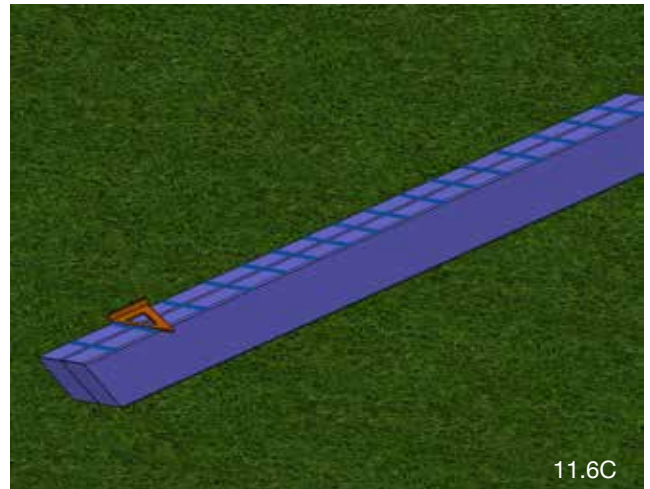
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11.6 Installation: Modern Rail Stair

- Building codes are very specific on the allowable angles and widths of openings between posts for stair applications. **Always consult your local building codes prior to installation.**
- Posts should be installed prior to installing the Infinity Modern Rails.

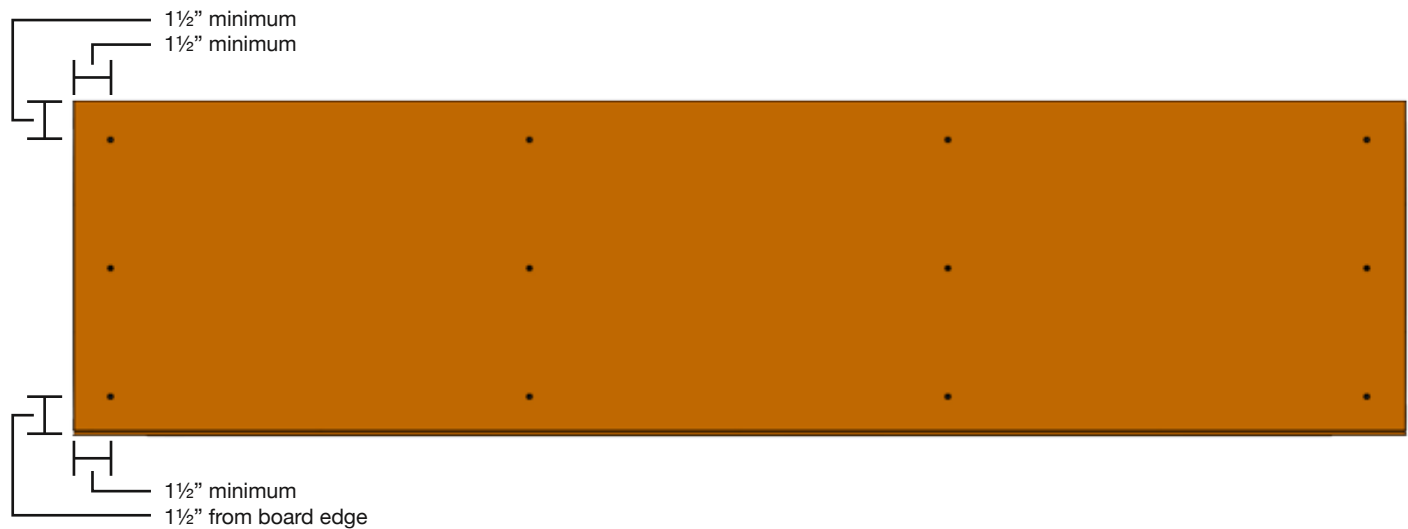
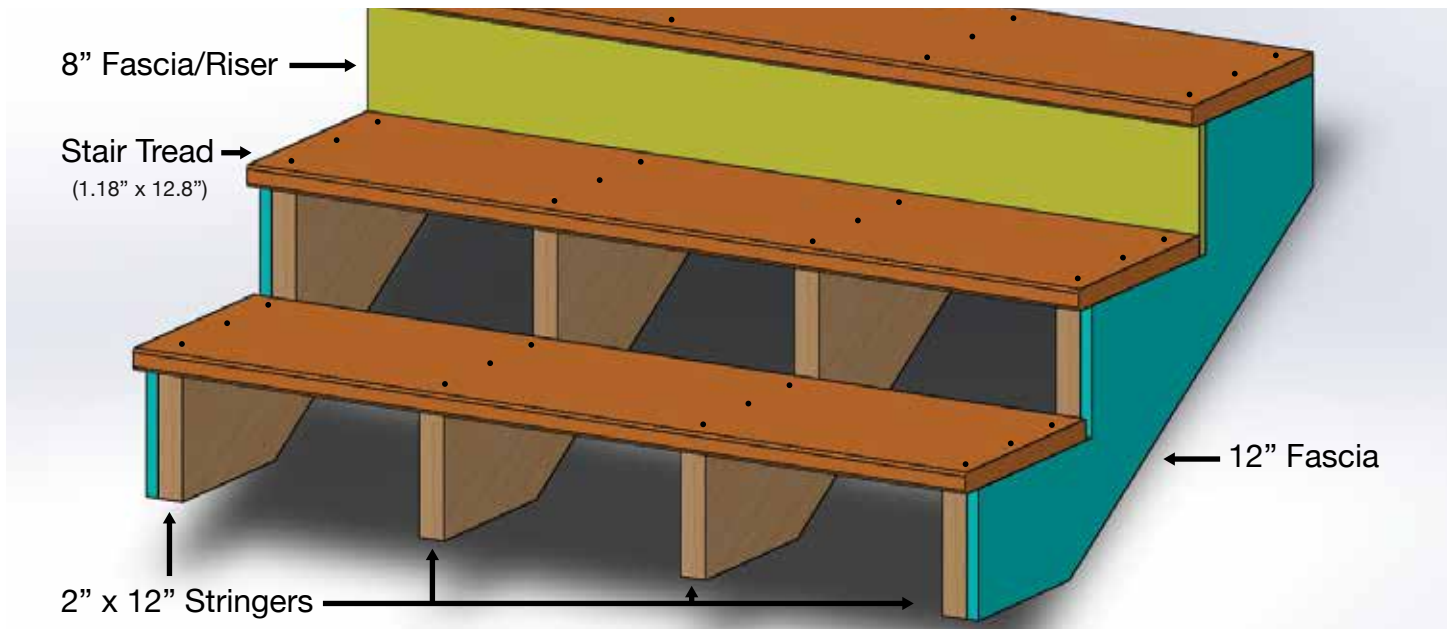


- Place the Infinity Modern Rails on the stairs between the two posts, spanning a minimum of three stairs to determine the desired angle. (11.6A)
- Mark the Infinity Modern Rails with the correct dimensions and cut to the desired length. (11.6B)
- **Note: Test the Infinity Modern Rails between posts for accuracy of fit prior to marking the baluster positions.**
- Once rails have been cut to the desired length, place top and bottom rails side by side and mark for accurate baluster placement. **NOTE: Baluster spacing must be less than 4".** (11.6C)
- Once baluster spacing has been properly marked, pre-drill holes for fasteners using a bit slightly smaller than the fastener to ensure a secure connection.



INFINITY TECHNICAL GUIDE

11.8 Installation: Stair Tread



- Take measurement of the width of the stairs.
- Cut Stair Tread board to the desired lengths.
- Use a minimum of three fasteners at every stringer, no more than 1 1/2" from the edge of the board. See diagram above for fastener spacing.
- Stair Tread overhang varies from state to state, Consult local building codes before installation
- **NOTE: It is important to pre-drill at a 90 degree angle to prevent mushrooming or cracking.**

INFINITY TECHNICAL GUIDE

12. BEST PRACTICES: JOISTS

- Rim joists - mark spacing and lay out your joists with rim joist in mind. For complex designs you may need to curve the rim joist.
- You will always need perimeter joists (rim joists) for installing fascia.
- Always remember to leave 1" - 1¼" gaps between the double joists to allow debris to fall through the gap.

13. BEST PRACTICES: DECK BOARDS

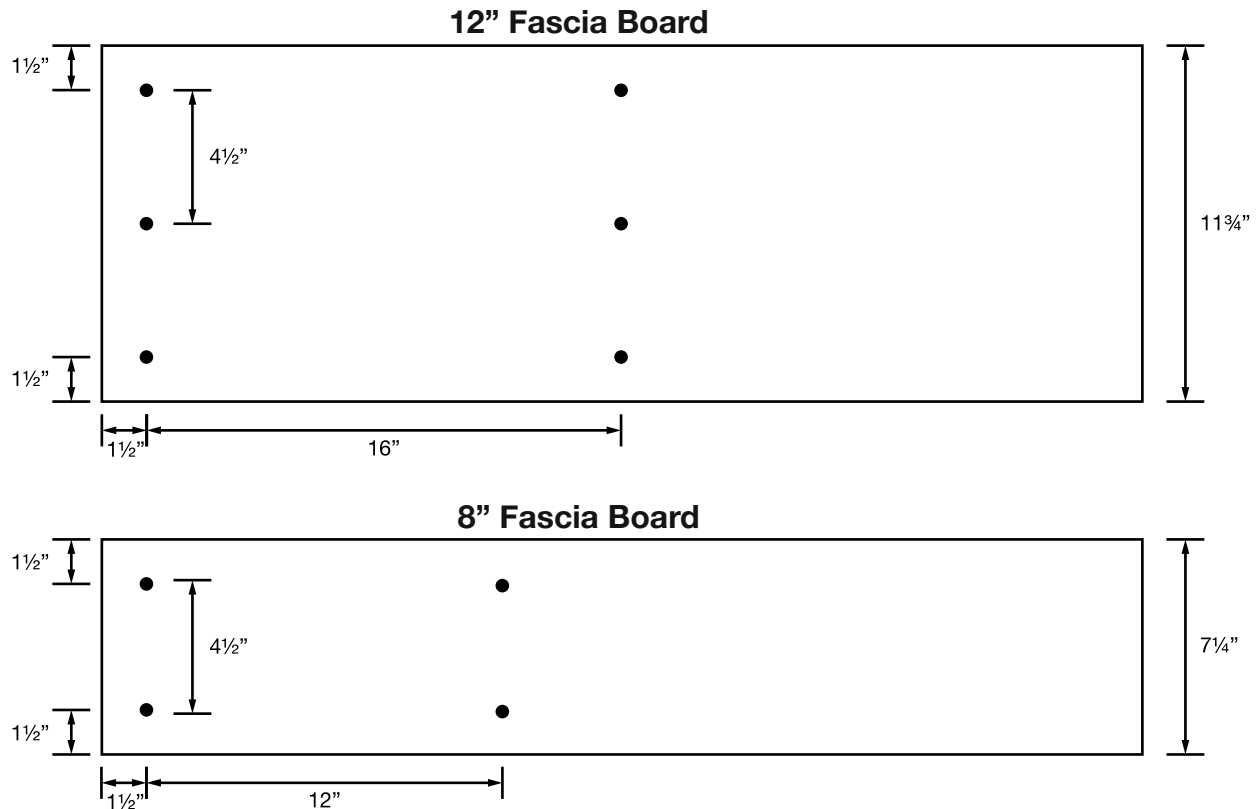
- If you are working between set lines, check that they are parallel. This will help with wastage and help disguise lines that are not straight.
- Use a one or two board perimeter around a deck and then lay the boards perpendicularly inside. Make sure there is an area for water and leaves to fall through.
- Think about allowing your deck boards to overhang (max 1") as opposed to using trim around the edges of the deck boards.
- Always crossover. Use the length of the profiles in the direction of the shorter side of the deck.
- Build in boxes. Building a border of two profiles (breaker board) around each profile length area will prevent profiles impacting each other head to toe and will control expansion.
- When installing fascia, pre-drill holes that are slightly bigger than the screws in the fascia only but not the frame to ensure proper connection to the deck structure.
- When surface mounting deck boards, pre-drill holes that are slightly smaller than the diameter of the screw shaft
- When surface mounting boards, fasten to every joist.

Important! Always make sure you are working with the correct joist spacing for your profile. Please refer to 5.1 Joist Spacing Table for the correct spacings for your application.

INFINITY TECHNICAL GUIDE

14. BEST PRACTICES: FASCIA

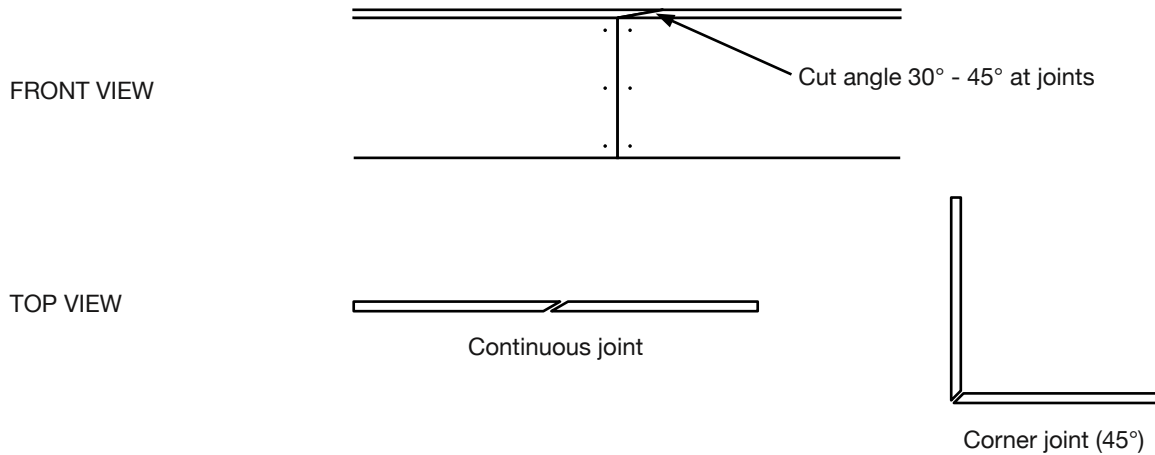
14.1 Fascia Installation: Fasteners



- Fascia boards should be screwed to the frame (end joist or rim joist) and not to the decking boards.
- 8" Fascia: Use two screws fixed rigidly every 12" along the profile, and no more than 1 1/2" from the start/finish edge.
- 12" Fascia: Use two screws fixed rigidly every 16" along the profile, and no more than 1 1/2" from the start/finish edge.
- Allow a ventilation gap of 1 1/2" between the bottom of the fascia board and the ground.
- Fascia should sit underneath the deck boards.
- It is recommended to overhang the fascia to prevent impacting the trim unless the correct gap spacing is taken into consideration to compensate for contraction and expansion.
- Cut fascia at an angle of 30° - 45° at joints (see 14.2 Fascia Installation: Joint Connections)

INFINITY TECHNICAL GUIDE

14.2 Fascia Installation: Joint Connections



15. AFTER INSTALLATION

- Dispose leftover composite material per local regulations.
- Minor spills and stains on your deck can be dealt with by cleaning.
- Please familiarize yourself with the Infinity Cleaning & Care Instructions available at the end of this guide and separately, insist your client does too.

Important! Do not sand Infinity Deck Boards

Please insist that your client understand Infinity cleaning and care instructions. A deck should be cleaned with a high pressure hose seasonally and kept free of debris. A deck that collects more debris will need to be cleaned more frequently. Do not let debris accumulate between boards. For optimum cleaning and longevity, a high pressure hose should be used. Use at pressures under 1500psi and at a distance of at least 1¼" away from the surface when spraying.

16. DON'TS

- Do not span over a beam's loading capacity when building a deck, it is unsafe.
- Do not rush a job.
- Do not use inferior products.
- Do not trap moisture.
- Do not ever use cracked boards.

INFINITY TECHNICAL GUIDE

17. EXAMPLES OF DECKING INSTALLED INCORRECTLY



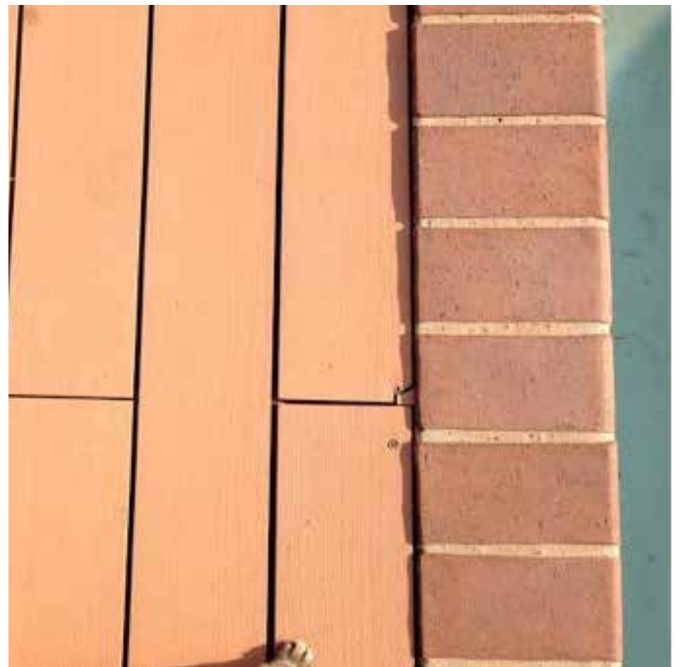
No double joist and no double clip at the butt joint.



Counter sink is too deep and too big for the size of the screw.



Sloping away, either the earth has dropped or the frame has dropped. There is also insufficient drainage.



Screws are too close to the edge of the board, minimum distance from the side of the board should be 1 1/4".

INFINITY TECHNICAL GUIDE



Deck is not sloping away, this deck is sloping to the center.



Deck is not sloping correctly. Water is collecting in the center of the boards.



No double joist and no double clip.



Missing piece of decking. Fascia not cut correctly.

INFINITY TECHNICAL GUIDE



Unfinished cutting left. Nobody checked the deck after completion.



Poorly planned installation.



Improper blocking. No support under the decking.



Tree has grown more than allowable cut out. Leave sufficient gaps for the plants and trees to grow.

INFINITY TECHNICAL GUIDE



The railing post is only supported by the decking. Proper blocking should be installed to support the railing post.



Improper fascia installation.



Cracked deck board installed. Cracked deck board installed.



Deck sloping away, frame is giving in.