

PAVERDECK

Your Best Deck Investment.

A Lifetime deck without maintenance.
Unlimited design options.
New build or resurface existing decks.
Finish in tile, stone/concrete, PVC, wood etc.
Earth friendly.
Affordable.
Strong galvanized steel unibody.
Contractor and DIY.
Steel Components Made in Canada.

Installation Guide

rev. 10012020

Congratulations on your purchase of the EDECK™ galvanized steel structural system. The EDECK™ system is designed for simple installation by professionals and home owners. No certification is required, as the deck system only assembles one way. The EDECK™ system is the only unibody structural system in the market, modelled after automotive engineering and tested to the strictest standards.

The EDECK™ system provides you freedom from excessive maintenance routines as required with traditional deck systems. Fireproof and insect proof- the EDECK™ system is not susceptible to fire or rot.

If you are interested in a heated deck, ours is the only deck easy to incorporate electric or hydronic snow melt or in-floor heating. Perfect for use with stairs, or heated sunrooms/additions.

Unlimited design options. Design your space the way you want- any shape or configuration. Finish in any pattern with traditional or new materials- natural wood, stone/concrete pavers, capped/plastic decking, porcelain or stone tile, poured or stamped concrete.

Strong. With automotive unibody engineering, our patented structure is made from 50ksi high strength G90 galvanized steel. Tested to over 560 psf without collapse. Good for commercial and residential applications. Backed by the only 30-year residential structural warranty.

North American solution. The EDECK™ structure is manufactured in North America using only certified materials from the U.S. and Canada.

This step-by-step guide will show you how to create your beautiful outdoor living space. From time to time, Evolutiondeck revises its installation instructions. For more technical support please visit paverdeck.com for the most up-to-date information, or contact us directly.

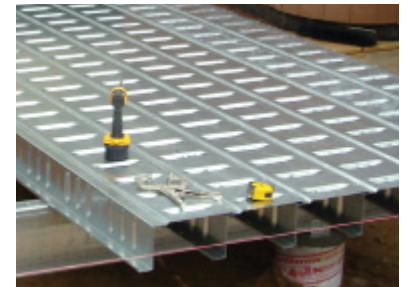
CAUTION. With the purchase of any EDECK™ kit it becomes your responsibility to use the new product properly and safely! Please read this manual completely and carefully before using this product. Failure to follow the instructions and safety precautions in this manual can result in an improper installation and/or serious injury. Steel edges are sharp which may result in serious cuts or other injury. Cutting steel panels is very loud and can emit steel fragments with the risk of serious injury. Always follow tool operating instructions and good safety practices. Always wear appropriate safety gear including sturdy work gloves, face protection such as goggles and mask, pants, long sleeved shirts, and ear protection.



Building with the EDECK™ system is easy, as the product only assembles one way. There are only five components that nest into each other. The EDECK™ structure is assembled using hex head self-drilling screws, and can be configured into any design, and each piece can be cut to fit. Recommended tools include a circular or abrasive cutoff saw, impact driver, drill, and ferrous metal blades.

DESIGN FAQS:

1. The deck pan is 6.25-inches in height.
2. Deck pan panels come in 10, 12, and 14-ft lengths. Design with dimensions of 5, 6, 7, 10, 12, 14 ft to ensures best use of material.
3. The deckpan can span 14-feet from beam to beam (although typical is 12-feet), and can cantilever 39-inches over a beam.
4. You can create curved profiles of the deck within the cantilever portion, or greater if you use another beam supporting the curved portion.
5. The deck can be attached to a steel ledger at the house (typically an L4x4x1/4in you purchase locally).
6. The deck can also be free-floating on independent beams.
7. If you need a deckpan span greater than 14-feet, we can supply you with extra reinforcement to provide for a 16-ft span.
8. Our standard 10-inch galvanized steel beam typically spans 10 feet between posts. For greater spans, you can use a red-iron structural beam (e.g. W8x21) that you would purchase from your local supplier.
9. Footings (not supplied. check with your local building department for local loading conditions). Foundations can be steel helical piles, concrete columns on a footing form, concrete deck pads, or others - check with your local building department for local loading conditions). Footings are normally spaced maximum 10-feet on the beam.
10. The EDECK™ system can support thick pavers up to 3-inches, but note that the thicker the paver, the greater the loading support required by your footings. This would result in larger or more expensive footings. We normally use pavers from 1-inch to 2-inches thick. Other surface finishes include exterior grade porcelain, wood or plastic/composite decking (that do not require an air space underneath).
11. Point Loads. The EDECK™ system can support a hot-tub, although some people add extra footings under the hot-tub. The EDECK™ can support a point loads of 1000 lbs. For concentrated loads, a stiffener should be installed under the point load in the deckpan, and ideally would align with a footing.



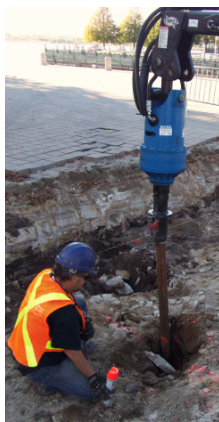
PAVERDECK



A lifetime maintenance-free galvanized steel structure.

Getting Started

CAUTION. Please read this manual completely and carefully before using this product. Failure to follow the instructions and safety precautions in this manual can result in an improper installation and/or serious injury. Steel edges are sharp which may result in serious cuts or other injury. Cutting steel panels is very loud and can emit steel fragments with the risk of serious injury. **Always follow tool operating instructions and good safety practices. Always wear appropriate safety gear including sturdy work gloves, face protection such as goggles and mask, pants, long sleeved shirts, and ear protection.**



HANDLING PANELS. The steel panels may be handled by one or two people.

- Gloves should be worn at all times when moving panels. The metal edges can cut and must be handled carefully.
- Be careful carrying panels in high wind conditions, as the surface of the panel can catch the wind and create a potentially hazardous condition.
- Panels can be stored outside, preferably sheltered from rain and other contaminants.

TOOLS REQUIRED.

- Tape measure
- Level
- Framing square
- Reversible impact screw gun or drill with 5/16th inch hexagon driver
- If making cuts, a skill saw with metal cutting blade and/or an angle grinder with abrasive cutoff wheel
- C-clamps, or clamping pliers may help to hold panels before fastening.

DECK CONFIGURATION.

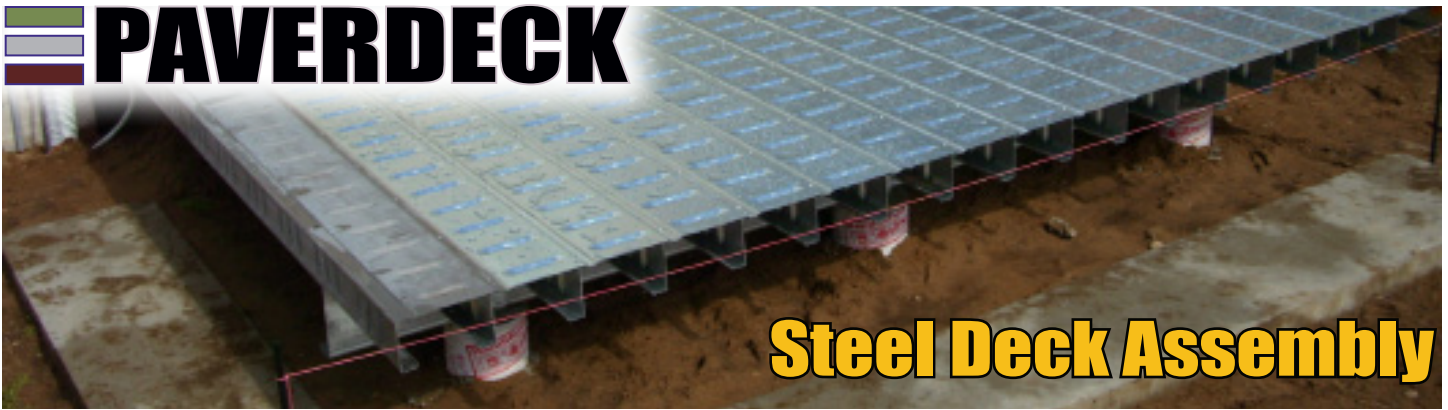
- The EDECK™ system may be assembled as a free-standing deck using traditional frost foundation systems or above-grade using deck blocks.
- Consult with your local building officials for appropriate footing and connection requirements in your area.

MAINTENANCE on EDECK™?

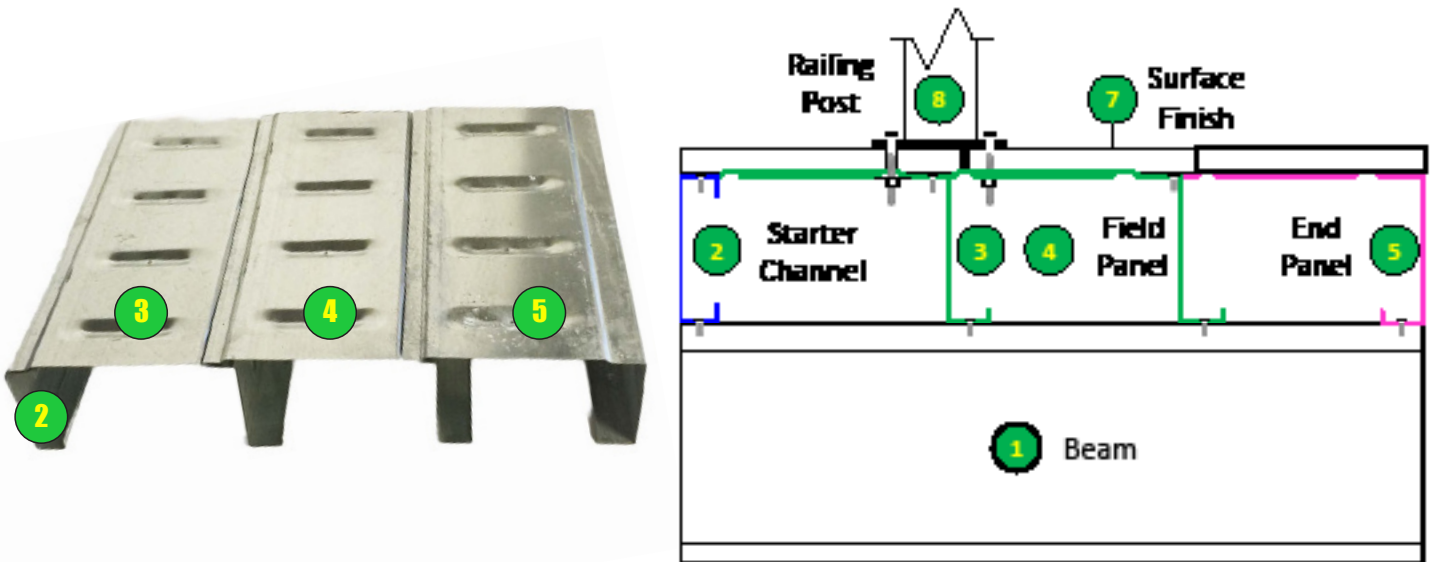
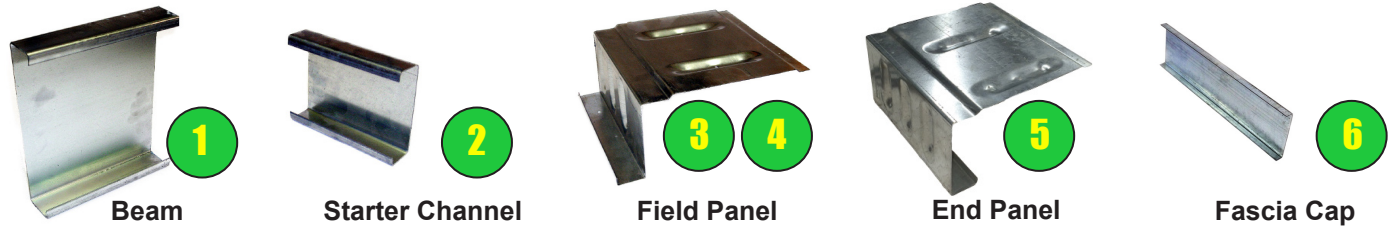
- EDECK™ requires no maintenance to achieve its lifespan. Ours is a galvanized steel finish with 50% more corrosion protection than our competition.
- No edge protection is required after cutting a panel.

COMPLETE DIAPHRAGM.

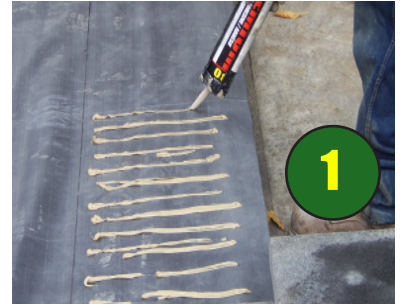
- The EDECK™ system is the only decking system where the surface finish is only aesthetic. Once assembled the metal diaphragm is the complete structure. As a continuous surface, you cannot fall through it, and it cannot fail structurally. We tested it to over 560 pounds per square foot without collapse.



Steel Deck Assembly

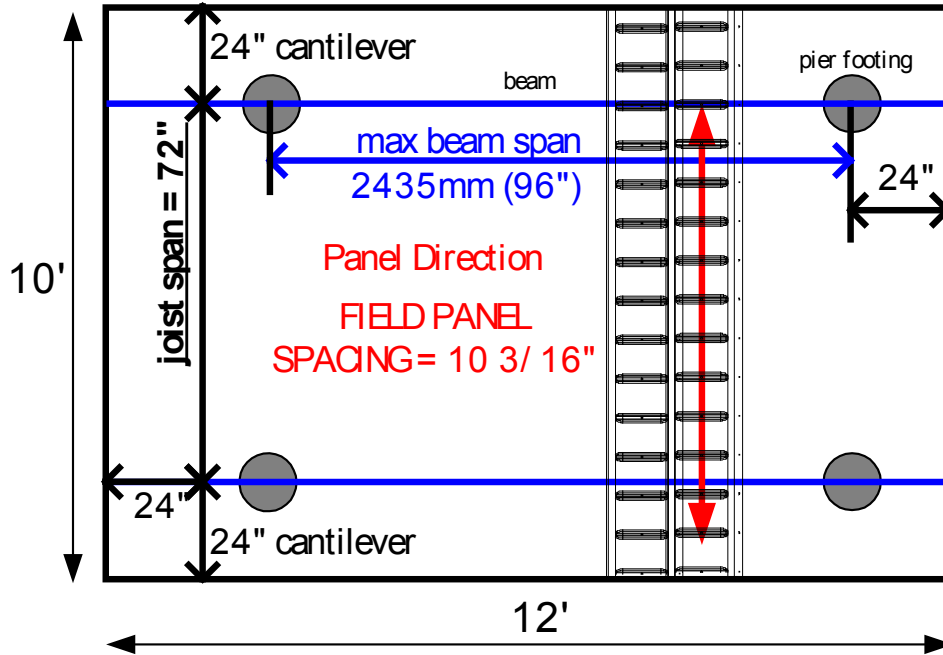


1. At least one screw fastener will be located at all intersections between the structural beam, field and end deck panels, and the starter C-channel. Install the beam onto the foundation columns using standard brackets and fasteners.
2. Install the STARTER C-Channel over top of the BEAMS using the supplied screw fasteners.
3. Then install first FIELD deck panel, seating the leading edge of the section on top of the previously installed STARTER. Secure this joint using the approved screws not more than 3.0 inches from either end and 12.0 inches between screws. Secure the bottom flange onto the structural beam using at least one screw.
4. Continue adding and fastening more FIELD panels along the width of the structure to the desired width. Panels can be spaced from 10-11.0 inches apart. A panel may be cut (ripped) along the diaphragm to a custom width, then screw through the cross rib into the previous panel.
5. Install an End Panel section as the last piece along the width of the deck.
6. The fascia cap is installed to close in the open joist ends. Screw this cap to the top of the deck surface in between the joists (not on the recessed shoulders).
7. Install your surface finish using known techniques suitable to the finish employed. See our later section on surface finishes.
8. A railing post (max. 42-inch high) should be located with the post base flange min. 1" from edge of metal deck, and install 4 bolts through clearance hole in surface finish and through steel deckpan, using min. 1/4" diam. x 3.5" SAE Gr. 2 galvanized steel bolts. Insert galvanized washers between bolts and base flange and nuts and metal deck. Taller guard posts may be installed using an additional stiffener support (such as 1/4" steel plate) beneath the deckpan; contact Evolutiondeck for details.
9. Install optional zinc anode system as bolt through the joist web at a location accessible in the future to inspect and replace the anode.

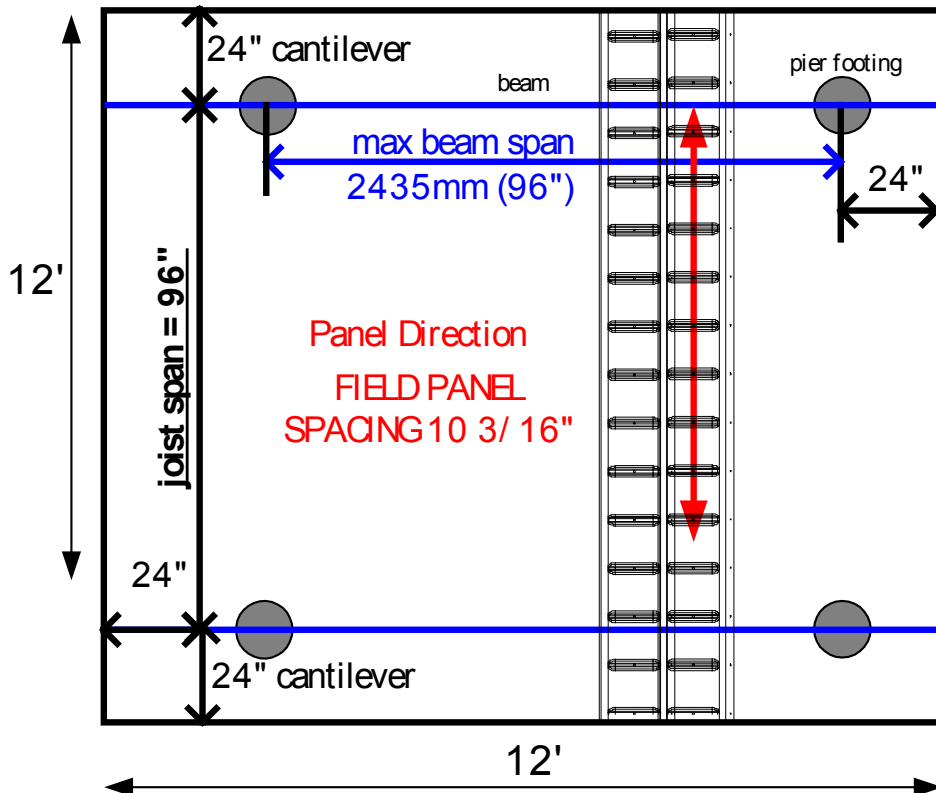


- 1** Install border pavers along the perimeter using a polyurethane or equivalent adhesive that remains flexible after curing, or butyl tape adhesive. We recommend Miracle Brand Lumber Lock.
- 2** Install a geotextile fabric over the steel field panels, or an EPDM rubber membrane if you are interested in dry space beneath the deck. If using a membrane, you may wish to install a fabric above it to protect from abrasion. This will prevent the joining sand from escaping and clogging the drain holes. If pavers are of uneven height, you may screen a thin sand base onto the fabric to accept the uneven paver height.
- 3** Dry lay the field pavers onto the fabric or membrane, with spacing and pattern according to your design or the paver manufacturer's directions.
- 4** Broom in a polymeric sand into the pavers joints following the manufacturer's instructions. Vibrate or tap the deck surface to compact the joining sand.
- 5** Railing posts should have either an aluminum or steel post base which can be fastened to the EDECK™ system using galvanized bolts 0.250 inch x 1.25 inch conforming to SAE J429 or equivalent. Drill through the paver and through the steel deck, then bolt the post through the deck.
- 6** Fascia can be any material, including PVC, Wood Composite, porcelain or stone tile. Fascia may be screwed directly to the End Panel and to the fascia cap.

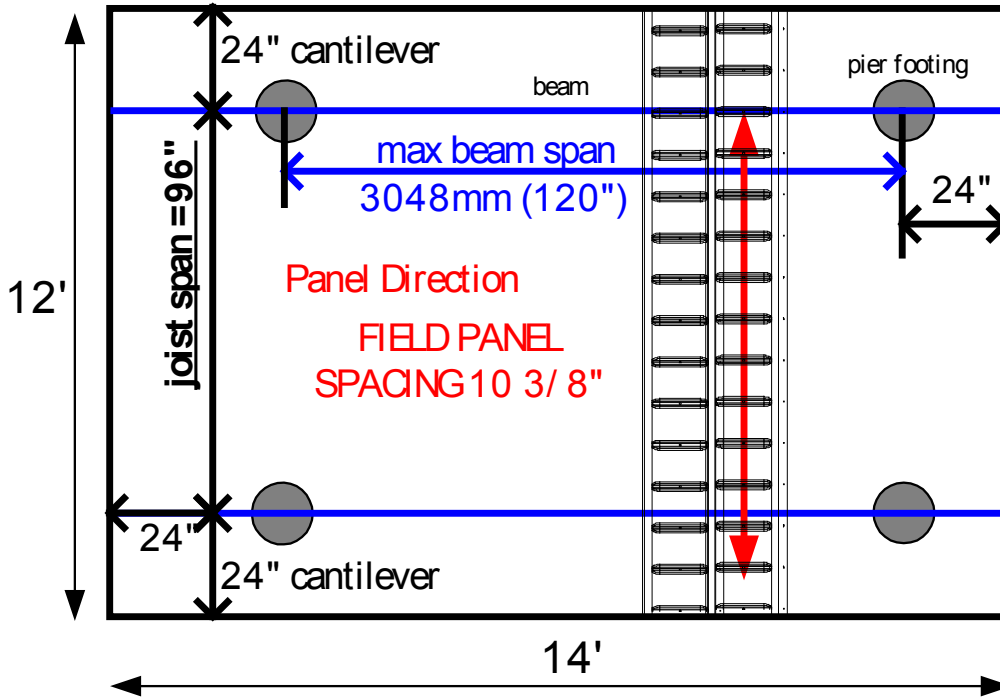
PAVERDECK 10' x 12' DECK KIT



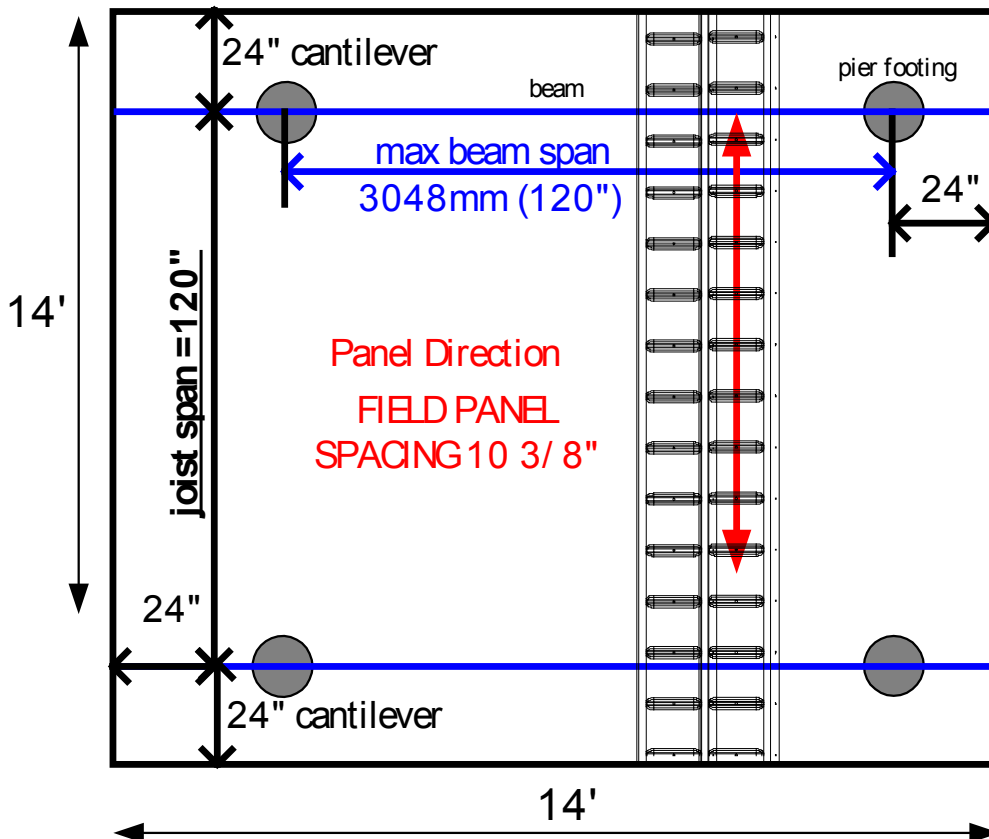
PAVERDECK 12' x 12' DECK KIT



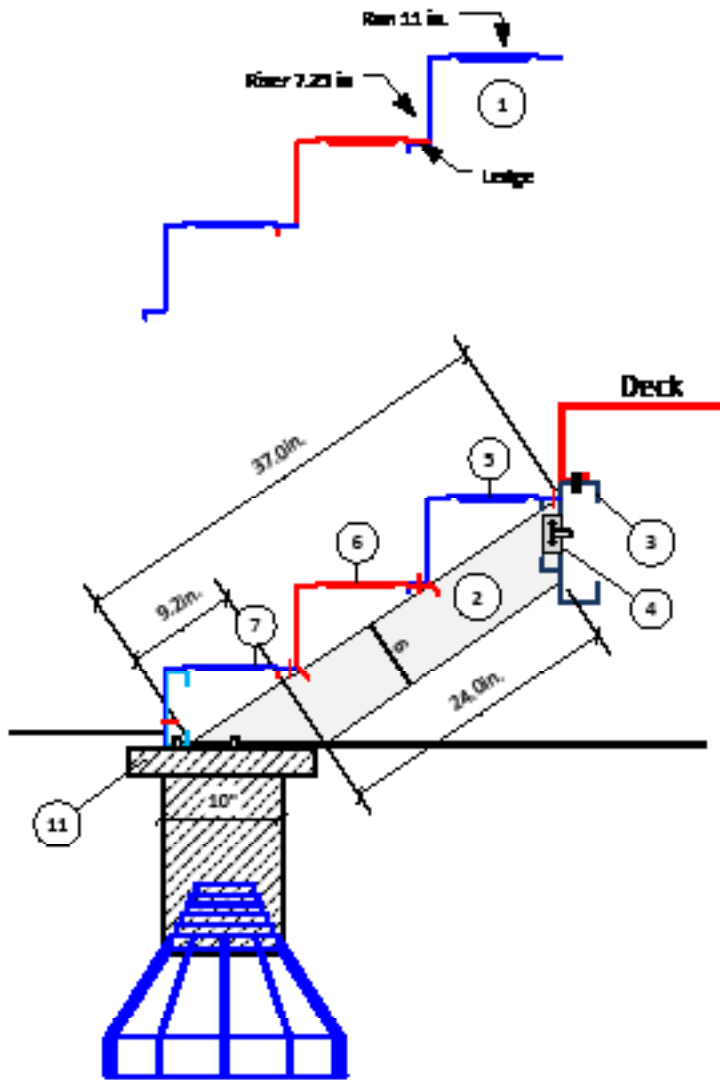
PAVERDECK 12' x 14' DECK KIT



PAVERDECK 14' x 14' DECK KIT



3-Tread 7.25" RISE STAIR KIT with 6.25" Deck Panel



PARTS LIST:

- (a) 1 Hanger with c-channel ledge.
- (b) 2 3x3in brackets.
- (c) 6 3/4 in diam. Bolts with nuts.
- (d) stair treads
- (e) 1x3x3 self-drilling self-tapping screws
- (f) 2 SSMA 6005362-34 galvanized c-channel stringer
- (g) 1 SSMA 6005162-34 galvanized c-channel bottom channel

NOT INCLUDED:

- (a) Brackets or fasteners for mounting to the concrete pad or footing
- (b) Footing or other structures.

(1) **NESTED STAIRS.** PAVERDECK stair systems assemble from the top tread down to grade. Each tread is secured to one above it. The first tread is anchored to the footing concrete pad or first footing (11).

(2) **STAIR STRINGER.** The stair stringer is a 6-inch SSMA 6005162-004 c-channel and to be field-cut to the set dimensions. Minor adjustments can be made on-site, but generally the stringer and grade need to be set accurately. Make the bottom tread will be slightly below grade to accommodate the surface finish thickness. The stringer can be inset from the edge of the stairs to accommodate finish finish material.

(3) **STAIR HANGER.** The stair hanger is a 30-inch galvanized c-channel. Bolt the hanger to the underside of the deck flush with the finish of the deck. A second 6-inch c-channel is attached to the hanger at 7 3/8" below the unfinished surface of the deck, and will serve as the ledge for the first tread. Use 30 self tapping Tek screws to attach the ledge, as well as two (2) 3/4-in diam. Bolts.

(4) **ATTACH STRINGER.** Attach the stringer to each side of the hanger using the 3x3-in brackets. Install with self-drilling Tek screws and 3/4-in bolts. Attach the stringer to the concrete pad using 3/4-inch concrete anchors and angle brackets.

(5) **TOP TREAD.** Install the top tread onto the first ledge. Screw the center of the tread to the ledge. Leave the rest of the tread unscrewed.

(6) **SECOND TREAD.** Install the second tread onto the first tread ledge. Screw the center of the tread to the ledge. Leave the rest of the tread unscrewed.

(7) **BOTTOM TREAD.** Install the bottom tread onto the second tread ledge. Screw the center of the tread to the ledge. Leave the rest of the tread unscrewed. The bottom tread can be cut and fastened to the bottom c-channel, or simply fastened to the concrete pad slightly below grade.

(8) **ADJUSTING TREADS.** The treads can be slightly adjusted for level using a bar clamp to compress the stair treads (you can drive a screw into the tread and use the screw head as a pivot point for the bar clamp). Secure the other end of the bar clamp to the hanger. Once the treads are adjusted, then drive a screw through the top tread into each stringer. Repeat for each tread.

(9) **FINAL SCREWS.** Once satisfied with the layout, finish screwing the treads to the preceding ledges using a 1x1x3 Tek screw every 6 inches. Install the bottom tread to the concrete pad using a 3/4-in Topcon every 12-18 inches (need to drill a 3/8-in clearance hole through the tread).

(10) **SURFACE FINISH.** Surface the stairs using stone or concrete pavers (with all weather construction adhesive). Alternative surface finishes can be installed per manufacturer's directions.

Structural Warranty and Limitation of Liability

1) **STRUCTURAL WARRANTY.** Subject to the limitations set forth below, Evolutiondeck Inc. ("EDECK") warrants to the original purchaser ("CLIENT") for a period of twenty (20) years from the date of purchase that the galvanized steel structure ("Product") supplied by EDECK will be free from structural failure due to corrosion after proper installation and normal use and service conditions (the "Structural Warranty"). This warranty is exclusive to the original purchaser and is not transferable.

2) **THIRD PARTY MANUFACTURER WARRANTIES.** Where transferable, CLIENT shall be entitled to the benefit of and to the extent of any original manufacturer warranties for Products not manufactured by EDECK, subject to the terms and conditions of such warranties.

3) **EXCLUSIONS.** This Limited Warranty does not cover defects, damage to Products or Product failure caused by: (a) a defect or failure in any product not authorized by EDECK; (b) alteration, improper handling, maintenance or repair by others; (c) falling objects (d) abuse, abnormal use or accident; (e) use for a purpose or in a manner for which the Product was not intended; (f) movement, distortion, collapse or settling of the ground or the supporting structure on which Products are installed; (g) any act of God (such as flooding, hurricane, earthquake, lightning, etc.); (h) abnormal corrosive conditions (including from chemicals, salt-spray, areas that come into contact with green or wet, or pressure treated lumber, areas subject to water accumulation or run-off from lead or copper flashings etc.); and (i) failure by CLIENT to duly annually inspect and replace anode systems when required.

4) **WARRANTY VOIDED.** The Limited Warranty is void if: (a) EDECK has not received full payment for the Products from CLIENT or CLIENT's supplier of Product; (b) any materials or other structural products not provided by or authorized by EDECK are used with the warranted Products in the structure; or (c) EDECK does not receive timely written notice of alleged defects and proof of purchase before the earlier of: (i) 10 days of the defect or failure becoming known or ascertainable to the CLIENT and (ii) thirty (30) years from the original date of purchase of Products.

5) **EXCLUSIVE REMEDY:** Subject to compliance with the terms of this Limited Warranty, EDECK will, at its option and in its sole discretion repair the structure or replace any defective Products. The replacement Product is warranted for the remaining balance of the original warranty period. The exclusive remedy under this limited warranty is repair or replacement of defective products at EDECK's option. In no event will warranty compensation or other liability or damages available from EDECK exceed the original purchase price paid by CLIENT for the Products.

6) **LIMITATION OF LIABILITY.** The CLIENT agrees, to the fullest extent permitted by law, to limit the liability of EDECK to the CLIENT for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert witness fees and costs, so that the total aggregate liability of EDECK to the CLIENT shall not exceed the original price paid for purchased Products. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

7) **SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.** Under no circumstances will EDECK be liable for special, incidental or consequential damages, whether such damages are sought in contract, in tort (including but not limited to negligence and strict liability) or otherwise. EDECK's liability with respect to any defective design, Products or installation shall in no event exceed the replacement of such Products. Where, due to operation of law, consequential and incidental damages under this limited warranty, under any other express warranty not negated hereby or under any implied warranty not negated hereby (including the implied warranties of merchantability and fitness for particular purpose) cannot be excluded, such damages are expressly limited in amount to the original purchase price paid for Products.

8) **EXCLUSION OF OTHER WARRANTIES:** This Limited Warranty is in lieu of all other warranties, express or implied. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY DISCLAIMED.

9) **CHOICE OF LAW:** This contract shall be governed by, and construed in accordance with, the internal laws and judicial decisions of the Province of Ontario, without regard for any choice or conflict of laws considerations. All conditions limiting remedies or liability of this Limited Warranty are independent, and any determination that such condition fails of its essential purpose or any other determination that any condition or provision is unenforceable, shall not be construed to make any other provisions unenforceable. In the event any portion of this Limited Warranty shall be determined to be invalid under any applicable law, such provision shall be deemed null and void and the remainder of this Limited Warranty shall continue in full force and effect.

10) **DISPUTES.** Any dispute or difference arising out of or in connection with this Limited Warranty shall be exclusively determined by arbitration in accordance with the *Arbitration Act, 1991* as amended from time to time. Each party shall be solely responsible for their own costs and expenses incurred in the advancing and defending their claim or dispute herein.





Patio Level Decks



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evolution  **DECK**TM

the next step in outdoor living.