urbanedge_deck 242

ultradesign composites™

a specialist division of Le Messurier

urbanedge_deck 242

The Future of Decking

Change is inevitable as worldwide demand for product innovation, whilst optimising resources, continues at a relentless pace. Ultradesign composites are supported by 160 years of experience in timber and building products, providing valuable experience and expertise to evaluate industry and environmental changes, and recognise significant turning points. This era of composites is one such turning point for the timber and building industry as well as the consumer.

New technologies have continued to improve across all frontiers, enabling composite products to be designed to not only match the manufacturing requirements but to also better suit the end use. The future thinking in composites has immediate cost and environmental benefits now and will be truly significant for future generations.

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urbanedge_deck 242® is a contemporary composite of sustainably resourced wood fibres and recycled plastics (polymer). Engineered and manufactured in Germany to a modern design profile, it is environmentally friendly with an outstanding life cycle and warranty.

A leader for outdoor surfaces, the urbanedge_deck 242 material is stable and resistant to saltwater and fungi. With exceptional resistance to oils and UV exposure, urbanedge_deck's outstanding performance is matched with a 10 year warranty.

Offering exceptional benefits over traditional materials, urbanedge_deck 242 will not rot, crack, splinter or rust, and will require no sanding, painting or oiling. Termite resistant and exceptionally durable, urbanedge_deck 242 is a true low maintenance product.

The wide 242mm decking boards are double-sided, offering two design profiles which can be mixed should the highlight suit the project. The urban groove design gives both a fine and coarse pattern profile, both of which are very comfortable to walk on and provide superior slip resistance.

The unique Flexi-Seal System exclusive to urbanedge_deck 242 provides an innovative rubber flexi-seal precisely moulded to fit into the board recess. When combined with a gradient, the flexi-seal system will allow the deck to function like a closed deck. The flexi-seal prevents objects falling through the side gaps and helps alleviate shoe heels from being trapped.

The unique attributes of urbanedge_deck 242 has seen this product used nationally in all sectors, from iconic commercial and education projects to CBD studio apartments.

No Rotting

No Cracking

No Rust

No Sanding

No Oiling

No Splintering

Hidden Fixings

PEFC-Certified

Termite Resistant

Wood Polymer Composite

German Engineered & Manufactured

Easy to Care For & Low-Maintenance

CHOICE of 3 COLOURS

10 YEAR WARRANTY

Flexi-Seal System



Colours



urbanedge_deck 242

Specification Overview

Size
242 mm x 21 mm [solid]

Spans
600 mm [on-centre]

Lengths
5.4 metres

Weight
5.65kg / lineal metre

Composite
75% PEFC certified sustainable wood fibre
25% virgin polymers PE [polyethylene]

Cut & Shaped
use of current carpentry tools

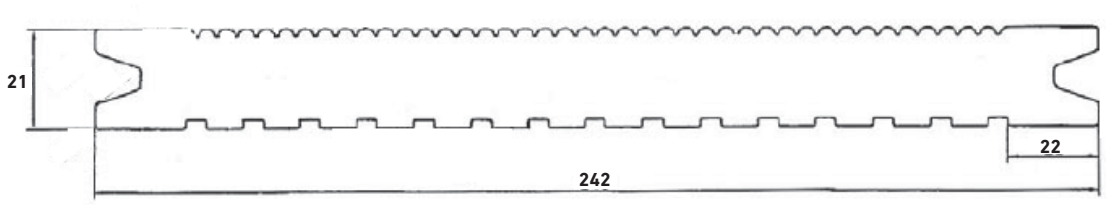
Finish
brushed fine grooves
brushed broad grooves

Colours
ash grey, bahama brown, sand

Slip Resistance
fine grooves R12 [AS/NZS 4586:2004]
broad grooves R13 [AS/NZS 4586:2004]

Storage & Handling
» packs of urbanedge_deck 242 should be stored in a dry flat area, under cover and off the ground
» please note urbanedge_deck 242 is a finished product so please take care when handling

Dimensions



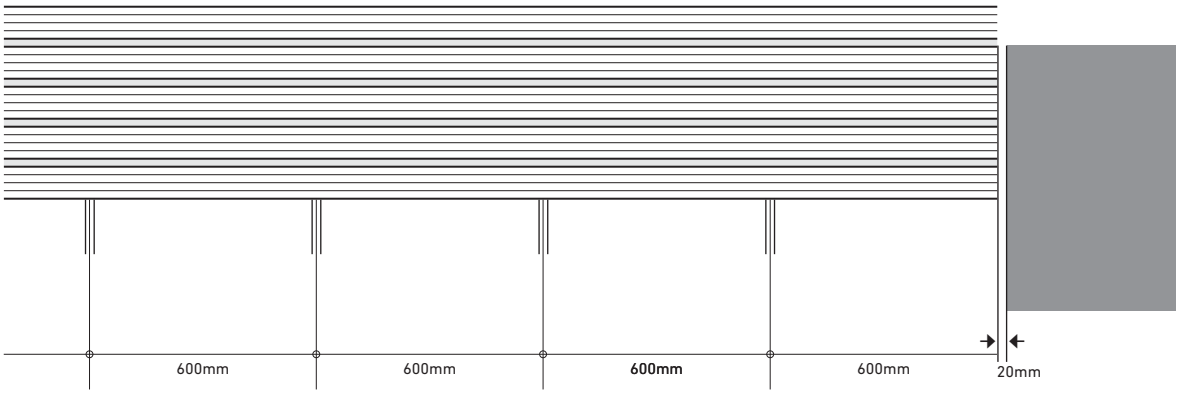
Strength Properties

Span [mm]	MOR [N/mm²]	MOE [N/mm²]	Load @ Break [N]	Extension @ Break [mm]	Extension @ 100kg Load [mm]	Extension @ 200 kg Load [mm]
440	42	4600	8000	24	3.14	5.35
500			6700	34	3.9	6.4
600			5500	51	6.4	12

Moisture Absorption

Moisture Absorption % [full submersion]	
24 hours	0.40
7 days	1.07
3 months	3.43

Fixing Centres



Fixing

urbanedge_deck 242 can be installed using any of the following methods

flexi-seal system

material:	smart clip: stainless steel flexi-trim: plastic
spacing:	6 - 8 mm
pack size:	box of 50 clips [smart clip] 100m roll [flexi-trim]
coverage:	per box of 50 clips: 6 square metres

smart clip:

flexi-trim:

clamp fixings

material:	plastic
spacing:	6 - 8 mm
pack size:	box of 50 clips [clamp] box of 25 clips [edge clamp]
coverage:	per box of 50 clips: 6 square metres

clamp fixing:

edge clamp fixing:

top fixing

All urbanedge_deck products can be traditionally installed via the top-fixing method, however pre-drilling is essential (for both screw and/or nail fixing).

fixing with screws
Stainless steel screws are recommended. Screws should finish 'flush' with the top of the urbanedge_deck board.

fixing with nails
Rust-resistant, hot-dipped galvanized nails are recommended. Nails should finish 'flush' with top of the urbanedge_deck board. The preferred method of fixing with nails is by hand.

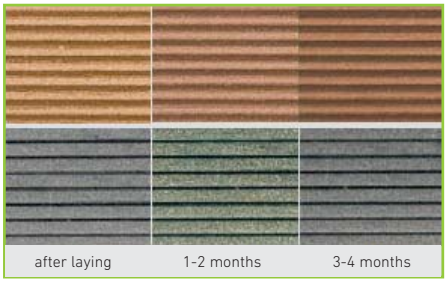
urbanedge_deck 242

For high performance and longevity with this unique and high-quality product, it is recommended you adhere to all of the instructions in this installation guide. Please only use original urbanedge_deck 242 accessories and take all specifications into account in order to achieve an optimal result, as any defects resulting from a deviation of these laying instructions will void the warranty. The urbanedge_deck 242 installation guide outlines the basis for all of the laying versions even if they should not be explicitly included in this guide.

General planning principles

- The deck can either be placed on or be open at ground level and can also take the form of a placed on closed deck.
- Avoid contact between the urbanedge_deck 242 construction elements and the ground.
- Ensure that the subsoil is firm, has a good bearing capacity and is frost-proof. Caution: avoid waterlogging!
- Do not fill cavity spaces between the sub-construction.
- Maximum of 50 mm decking board protrusion over the last sub construction.
- Always predrill all of the holes
- Adhere to the construction beam clearances.
- Adhere to a minimum clearance of 20 mm from fixed components.
- Adhere to minimum clearances of expansion joints so that the construction can expand without force if necessary.
- Observe the laying direction as shown by the arrow which is printed on the packaging label and in the decking board groove.
- Ensure a sufficient amount of ventilation from underneath by adhering to the clearances.
- Production-related dimension tolerances in length, width and thickness are to be taken into account during assembly.
- When dealing with urbanedge_deck boards, do not make any diagonal cuts at an angle exceeding 45°.
- Point/chamfer all of the decking board cutting edges (approximately 2 x 2 mm).

General Information

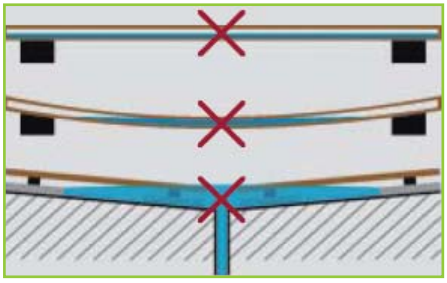


Colour effect

The urbanedge_deck 242 comprises of 75% wood fibre. Slight colour deviations and nuances are therefore inherent and underline the natural wood look. This is not deemed to be a product defect. The colour of the product will change slightly in the initial months but will arrive at its final colour composition after approximately four months, depending on sun exposure.

Laying direction

Lay all of the floorboards in the same direction to obtain a homogenous surface. This is shown by an arrow in each of the floorboard grooves and on the packaging label.



Gradients and drainage

When constructing any type of deck, a gradient of at least 2% must be observed to ensure that all water can flow away from the building.

Sufficiently dimensioned drainage is to be ensured in all circumstances. Avoid backwater and ensure complete drainage, even in the event of heavy rain.

Care Instructions

The advantage of the wood-polymer material surface is that it is low maintenance and therefore very easy to care for. Occasional cleaning however should still take place as the environment and general use can take a toll and can leave marks in some instances. The longer the boards are subjected to weathering, the greater the inclination to absorb visible stains. A natural discolouration can form. In the event of staining, regular cleaning agents should be used. Always remove the staining with a dry broom first. If this should not suffice, wash the stains off with clear water (garden hose) and a brush. You can use a high-pressure cleaner should thorough cleaning be necessary. When doing so, it is imperative that a low pressure setting is selected, a corresponding distance is kept between the nozzle and the terrace and that a moderate temperature is selected. Stains caused by fine dust forms such as soot and metal dust, paint and varnish should be avoided under all circumstances.

Cleaning emulsion for urbanedge_deck

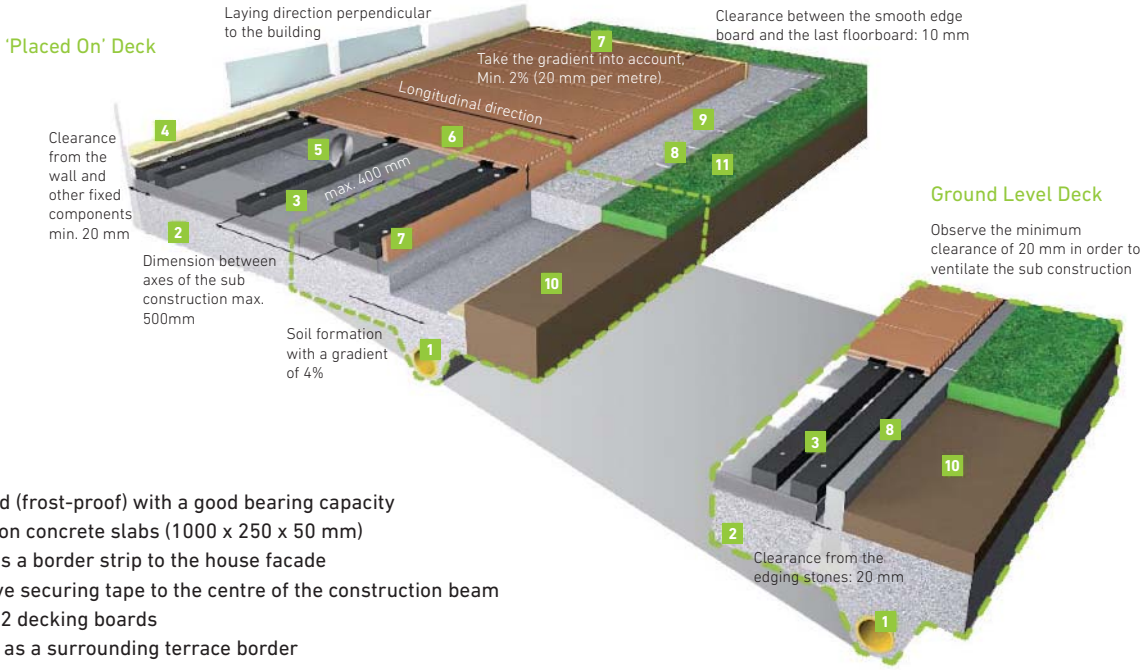
megaclean is a highly effective, biologically degradable concentrate with an emulsion effect. The extremely fast and deep acting water soluble degreasing product removes grease, oil, ink, charcoal, soot and other stubborn stains. megaclean is only to be used at temperatures exceeding 15°C.

Alternatively: stains can also be removed with a wire brush. As the floorboards are completely coloured throughout, the cleaned spot will be a little lighter but the colour returns to that of the remaining surface within a few weeks.

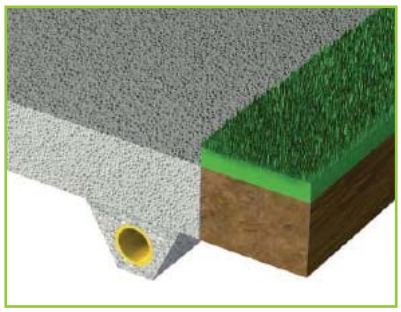
Water stains

Partially covered terraces can be subjected to water stains. Where rainwater hits the deck surface, dust particles become wet and when they dry off they remain and adhere to the surface. This effect occurs only slightly in uncovered areas which are permanently subjected to sun and rain. This does not impair the quality of the deck and is therefore not deemed to be a product defect. Water stains can normally be removed using water and conventional cleaning devices. The water staining effect lessens in time but cannot be entirely avoided.

urbanedge_deck 242



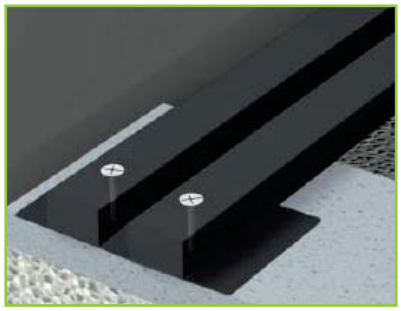
1. Drainage
2. Gravel or ballast bed (frost-proof) with a good bearing capacity
3. Construction beam on concrete slabs (1000 x 250 x 50 mm)
4. Aluminium profile as a border strip to the house facade
5. Adhere self-adhesive securing tape to the centre of the construction beam
6. urbanedge_deck 242 decking boards
7. Smooth edge board as a surrounding terrace border
8. Surrounding edging stone on sand or lean concrete
9. Surrounding gravel bed
10. Topsoil
11. Turf



Step 1

» Create the soil formation with a 4% gradient in the direction of the drainage. Ensure a secure drainage connection with a minimum diameter of 100 mm or ensure an adequate soak away. If in doubt, consult a specialist company.
» Create a foundation comprising of a load-bearing frost-proof and compacted gravel or ballast bed.

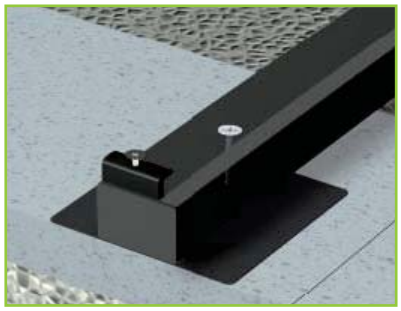
'Placed On' Deck: filling of the gravel trench using rolling gravel without fine gravel content up to 20 mm below the smooth edge board.
Ground Level Deck: Clearance of the surrounding edging stone to the deck: 20 mm.



Step 2

Construction beams are to be laid perpendicular to the concrete slabs and aligned at a uniform height. Lay double construction beams at the start and end respectively. Observe a minimum clearance of 120 mm between the sub construction beams.

» Lay 1000 x 250 x 50 mm concrete slabs for the foundation plate. Observe minimum clearances and gradients.
» **Important:** screw the first two as well as the last and the outer sub construction beams onto concrete slabs as the urbanedge_deck boards otherwise may lift at the ends. Use 7.5 x 92 mm sub construction fastening screws and it is essential to pre-drill using a 6.5 mm drill.



Step 3

» Pay attention to the bracing when laying the sub-construction (see step 5).
» As a general rule of thumb, use compensation plates or rubber pads should there be differences of up to a maximum of 20 mm in height, otherwise adjust the foundation.
» Do not butt-joint the sub-construction. Minimum clearance of the frontal side: 10 mm.
» Do not fill the clearance between the concrete slabs.
» The self-adhesive tape is to be applied in such a manner that it is attached to the construction beam in the centre of the urbanedge_deck board length. This construction beam is to be screwed to the concrete slab. (See overall view)

Step 4

» Distance from the wall and other fixed components min. 20 mm or use a house connection profile.
» Screw in the edge clamp so that it is flush with the construction beam.
» **Important:** Lay the urbanedge_deck boards longitudinal to the floorboard with a minimum gradient of 2%.
» **Note:** Pre-drill all holes belonging to the edge and securing clamps with a 3 mm drill. Do not tighten the clamps firmly – allow some play. Tighten clamps with a medium amount of torque after approx. 5 deck boards have been laid. Repeat the process until the terrace is fully laid.

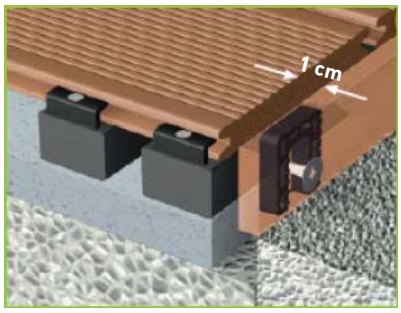
Step 5

Flush laying of the urbanedge_deck boards (see left image, row pattern) and offset laying (see right image, herringbone pattern) on a maximum area of 12 x 12 m

» **Important:** the construction beams are to be laid double at the joints and a minimum clearance of 20 mm is to be maintained between the sub construction beams. Screw both of the sub-construction beams to the concrete slab. The urbanedge_deck board joints are to have a minimum clearance of 7 mm. Tighten the edge clamp firmly. Set the torque correctly in order to prevent shearing and over tightening of the screw. Take production-related dimension tolerances into account.
» **Note:** a complete construction expansion joint of at least 40 mm must be observed when dealing with areas in excess of 12 x 12 m (e.g. gravel trench, flower beds or other suitable possibilities).

Step 6

» Use the black securing clamps for the urbanedge_deck board fastenings, do not forget to pre-drill and then loosely fix them onto the construction beam (see left image), as the following urbanedge_deck board cannot be precisely inserted otherwise. Then push the next urbanedge_deck board against this until the securing clamp is positioned horizontally. Then loosely tighten the screw once again. Do the same with the other urbanedge_deck boards.
» Finally use the edge securing clamp and attach smooth edge boards at the ends of a construction beam (using the 4 x 50 VA* screw, see right image).
» **Important:** do not brace, lash down or clamp urbanedge_decking boards. Tighten fixing clamps after completing the laying. Set the torque correctly to prevent shearing and over tightening of the screw.

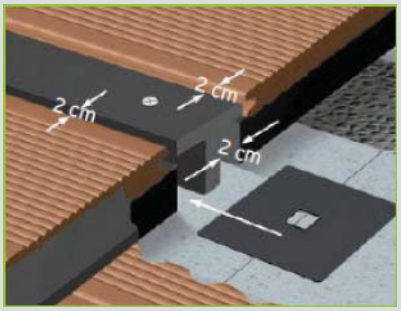


Step 7

Circumferential clearance from the joint to the smooth edge board: 10 mm.

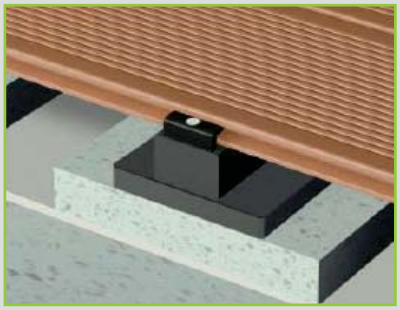
» **Important:** secure a smooth edge board to the construction beam (with 4 x 50 VA* screws) on the frontal side of the floorboard using a spacer in order to ensure that the water can drain off.

Special Use



Terrace sizes in excess of 12 x 12m

» Screw the construction joint profile to the concrete slab in a longitudinal or transverse direction to the urbanedge_deck boards (using 5 x 90 VA* screws, drill hole Ø 8 mm).
» **Important:** maintain a minimum clearance of 20 mm on both sides between the urbanedge_deck boards, sub construction beams and the construction joint section!



Roof terrace

» Screw the construction beam on the existing building protection mat together with the 400 x 400 x 50 mm footpath slab, use 150 x 150 x 15-25 mm bearing plates in order to compensate for height differences and then mount the compensation plate. Fasten the sub construction to footpath slabs using sub construction fixing screws.

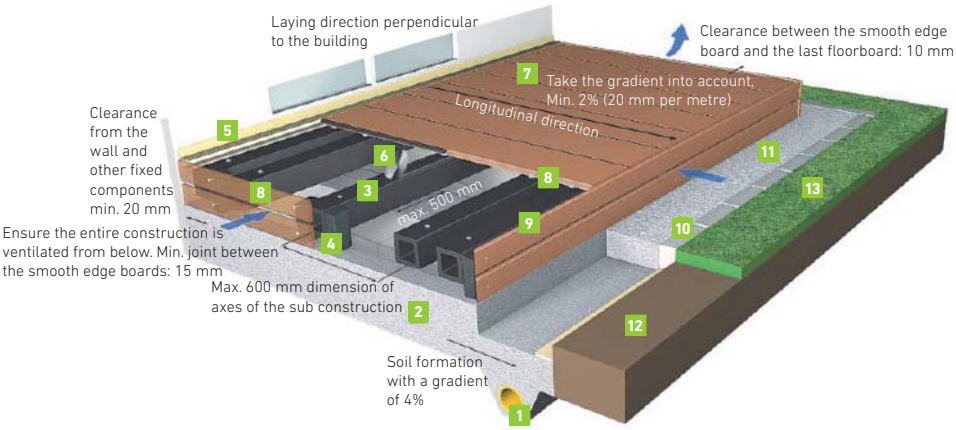
Renovation of existing terrace coverings

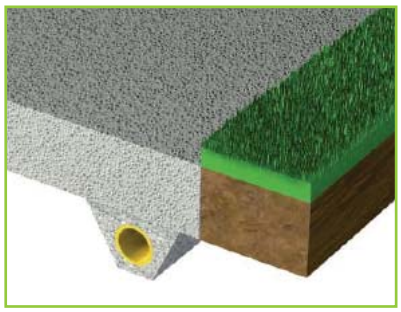
» Important: mount the construction beams with bearing plates and compensation plates or rubber pads. Do not lay them directly on the old surface in order to ensure that water can drain off.
» Fasten sub construction with old covering.
» Construction is only possible provided that there was sufficient drainage of the old covering with a 2% gradient.

urbanedge_deck 242

The closed deck differs from the open deck design in some regards. The main difference is the requirement of a stilt-supported construction which is subjected to circulatory ventilation from below. The urbanedge_deck 242 groove strip fits perfectly into the joint located between your decking boards and absorbs occurring forces in a flexible manner. Should you opt for a sub construction of your own choice (e.g.. Bangkirai) you will place your warranty cover at risk as ultradesign composites are unable to assume any liability for resulting damage. Should you nevertheless decide to use another sub construction, it is essential that the urbanedge_deck 242 screws are replaced by using appropriate wood screws. The foundation and special versions are the same as with the open deck. The general planning principles also apply.

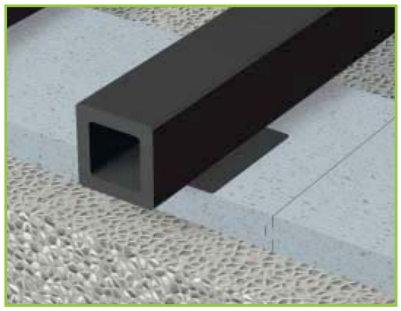
1. Drainage
2. Gravel or ballast bed with a good bearing capacity
3. 90 x 90 mm construction beams on concrete slabs (1000 x 250 x 50 mm)
4. Securing block (construction beams 60 x 40 mm)
5. Aluminium profile as border strip to the house facade
6. Adhere self-adhesive securing tape to the centre of the construction beam
7. urbanedge_deck 242 decking boards with groove strip
8. Stainless steel clamp
9. Smooth edge board as a terrace surround
10. Surrounding edging stone on sand or lean concrete
11. Surrounding gravel bed
12. Topsoil
13. Turf





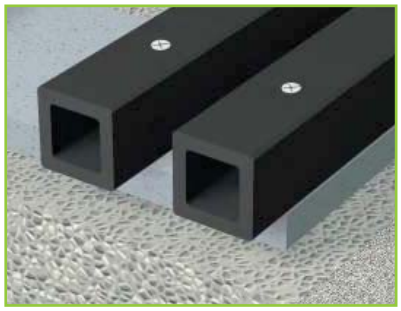
Step 1

» Create the soil formation with a 4% gradient in the direction of the drainage. Ensure a secure connection of the drainage with a minimum diameter of 100 mm or ensure seepage. Consult a specialist company if necessary.
» Create a foundation comprising of a load-bearing frost-proof and compacted gravel or ballast bed.



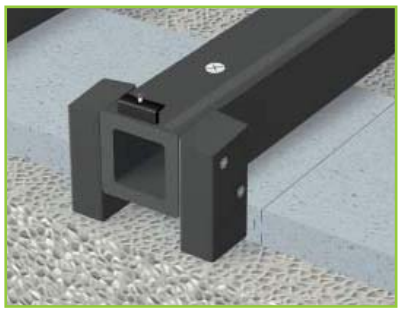
Step 2

» Lay a 1000 x 250 x 50 mm concrete slab as a foundation plate. Observe minimum clearances and gradients (minimum 20 mm per metre).
» Only use 90 x 90 mm construction beam in order to ensure sufficient ventilation from below.
» As a general rule of thumb, use compensation plates or rubber pads in the event of differences in height. Observe a maximum interconnection of 20 mm.
» **Important:** drill holes on the underside of the construction beam between the concrete slabs (20 mm diameter) in order to enable water to drain off.
» Ensure that the construction amounts to a minimum of 161 mm (from the lower edge of the concrete slab to the upper edge of the board). Do not fill the sub construction and the concrete slabs.



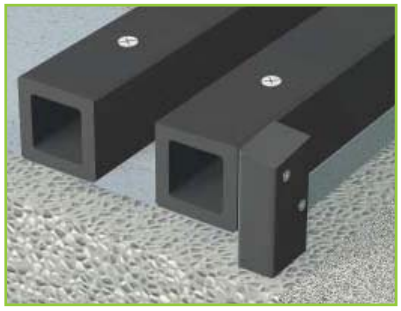
Step 3

» Always lay double 90 x 90 mm sub construction beams at the beginning and end of the terrace in order to avoid an eccentric loading of the concrete slabs.
» The construction beam should always be flush with the concrete slab at the outer edge.
» The construction beam may protrude over the frontal side of the concrete slab by a maximum of 50 mm.
» Do not butt-joint the sub construction. Minimum clearance of the frontal side: 10 mm.
» **Important:** screw the first two as well as the last sub construction beams to the concrete slab.
» Observe a minimum clearance of 20 mm between the construction beams.



Step 4

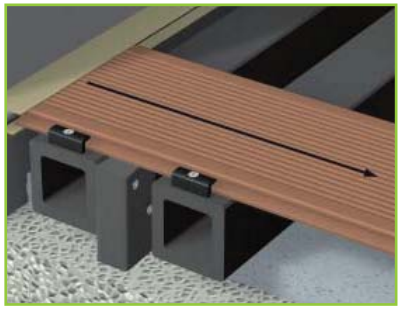
» Screw the securing block (manufacture on-site using 60 x 40 mm construction beam) to the 90 x 90 mm construction beam in a flush manner (5 x 60 VA* screws) in order to ensure the mounting of the smooth edge board (4 x 50 VA* screws).
» Bevel the top side of the securing block in order to enable water to drain off.
» The self-adhesive retaining band is to be applied in such a manner that it is applied on the construction beam in the centre of the urbanedge_deck board length. This construction beam is to be screwed to the concrete slab. (See overall view)
» **Important:** 2 securing blocks are to be screwed on where the smooth edge boards join. Butt joint: minimum 10 mm.



Step 5

Corner solution:

» Only screw one securing block (60 x 40 mm construction beam) on the frontal sides.
» Bevel the top side of the securing block in order to enable water to drain off.
» **Important:** the clearance between the screwed-on securing blocks on the frontal side and longitudinal side may not exceed 500 mm.



Step 6

» Distance from the wall and other fixed components min. 20 mm or use a house connection profile.
» Screw in the edge clamp so that it is flush with the construction beam.
» **Important:** Always observe a 2% gradient when dealing with a closed deck in order to prevent puddles on the surface.
» Pre-drill holes for stainless steel, edge and securing clamps with a 3 mm wood drill.
» Tighten clamps with a medium amount of torque in order to prevent shearing and over-tightening of the screw.

Step 7

» Use stainless steel clamps for the board fastenings and screw tightly to the construction beam using the supplied screws. Set the torque correctly to prevent shearing and over-tightening of the screw.
» Insert a Flexi-Seal groove strip into each board groove without applying any tension (do not pull) and cut it off at each end of the floorboard with a protrusion of approximately 20 mm.
» Flush or offset laying is possible (see step 5 entitled open deck).
» Stainless steel clamps and expansion lead to technically-related swelling of rubber groove strip.
» **Important:** do not brace, lash down or clamp urbanedge_decking boards.
» Do not expose the groove strip to direct sunlight when laying as this can result in increased thermal expansion. Avoid butt joints.

Step 8

» Lay the last board with a 10 mm offset from the construction beam and fix in place using a black edge clamp.
» Use two smooth edge boards as a surrounding terrace border and screw them onto the fixed securing block (60 x 40 mm construction beam) using 4 x 50 VA* screws.
» **Important**: a fully ventilated sub construction from below requires a minimum clearance of 15 mm between the smooth edge boards and a circumferential clearance of 10 mm between the boards and the smooth edge board.

Step 9

» Smooth edge boards can either be mitre cut (see version in the left hand image) or can be butt-jointed (see version in the right hand image).
» The butt joints between the smooth edge boards must have a minimum clearance of 10 mm.

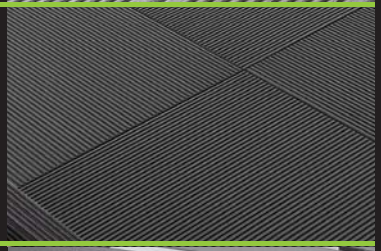
ultradesign composites offer a comprehensive range of innovative, composite building products, comprising of recycled industrial plastics and sustainably resourced wood fibres.

urbanedge_deck is available in two design profiles of urban edge groove or embossed wood grain, and has width options of 90mm, 143mm and 242mm, with four colour options: ash grey, bahama brown, sand and river bank.

urbanedge_deck

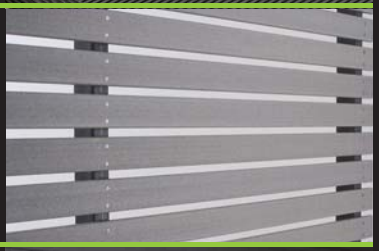
neourban_tile carries the urban groove design profile and is 442mm wide, with three colour options: ash grey, bahama brown, and terracotta.

neourban_tile



urbanedge_screen has a smooth design profile and is 60mm wide, with two colour options: ash grey and bahama brown.

urbanedge screen



urbanedge_cladding is available is available in two design profiles of structura (double sided texture option) or siding, and has up to four colour options.

urbanedge_cladding

urbantable_tops are available in 100+ decors ranging from modern design, rustic rural charm or timeless and classic aesthetics. Available in a of variety of sizes and shapes.

urban

1300 687 343
questions@ultradesigncomposites.com.au
www.ultradesigncomposites.com.au

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