

A scenic view of a modern outdoor deck with composite decking, featuring a lounge area with a sofa and table, and a dining area with chairs. The deck overlooks a lake and mountains.

Whiteriver

decks for living

composite decking

the **essential** guide 2018

Thinking Green



ULTRASHIELD ANTIQUE 138 X 23 X 3600MM

We, at Whiteriver Group, are very conscious about playing our part in protecting our natural environment and in sourcing products to distribute in Ireland and further afield that have come from a sustainable source.

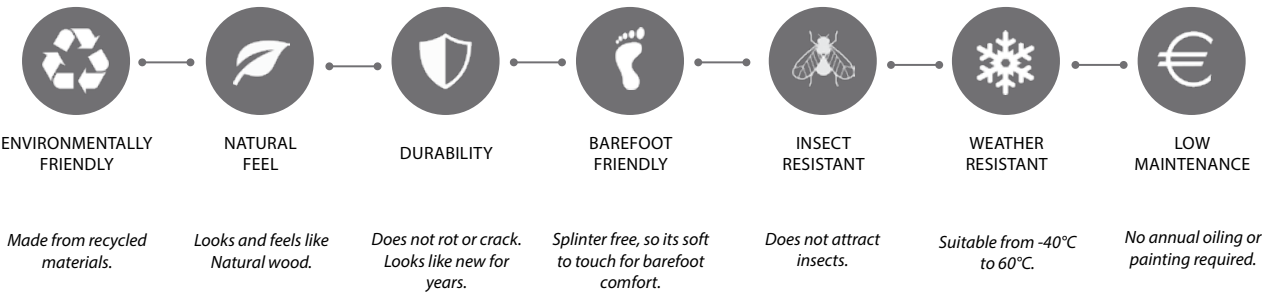
Whiteriver composite decking is one of the most friendly choices that you can make when looking for a quality decking. Our decking is manufactured using mostly recycled wood which ensures very few new trees are cut for its production. The balance of raw materials come from 30% high density polyethylene and 10% additives which create a product that is both durable and long lasting.

By choosing Whiteriver composite decking, you will be helping to preserve our planet for generations to come.



Why Whiteriver Composite

Composite Decking is for the home-owner who wants a decking product with a natural look, uniform colouration and will not need any annual oil treatment like conventional wood decks. Composite Decking has a long lifespan, which saves time and money, now and in the future.



What is composite

Whiteriver Composite Decking products are made using HDPE and wood, creating a revolutionary composite of improved, user-friendly material that outperforms other traditional pure wooden and plastic materials. 60% wood fibre, 30% HDPE and 10% additives / pigments.

Strong and durable, Whiteriver Composite Decking looks and feels just like natural wood. The unique formula provides long lasting composite timber decking that is environmentally friendly, easy to install and requires minimal maintenance compared with traditional timber and comes with a 10 year limited warranty (Ultrashield 15 years).

Whiteriver Composite Decking was developed to meet the exceptional high standard required for ourdoor living today.

Our decking is ideal for the construction of board walks, commercial and domestic decks, marinas and swimming pool surrounds as well as many other uses.

Whiteriver decking is extremely durable, splinter-free and has a pleasant and natural feel to the surface. The deck has high anti-slip properties and is weather proof.

Installation is simple using a handy clip system that creates a smooth even look to the deck. This system means that you do not have to use unsightly screws or nails and the board spacing is already worked out.

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COLOURS

NEVADA ANTHRAZIT 140 X 25 X 3600MM

PEACE OF MIND

PORTLAND COLLECTION - COLOUR|RANGE

WHITERIVER offer you a range of colours and designs which will suit all styles and budgets and will add natural beauty to your home. Our decking will not require finishing when fitted and only minimal ongoing maintenance. Our range of decks are designed to withstand the harshest Irish conditions. As our decks are splinter free and have a low slip potential, this leaves them very safe for children to walk on. There are three colours available in our Portland hollow range and two in our Portland solid range. The Ultrashield collection of wood grain effect decking is available in 5 colours.



FIRED EARTH



ANTHRAZIT



SOFT GREY

ULTRASHIELD COLLECTION - COLOUR|RANGE



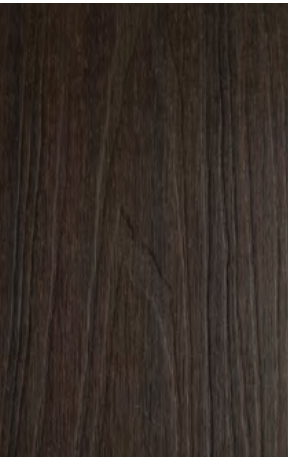
TEAK



SILVER GREY



ANTIQUE



WALNUT



CEDAR

Colours shown are representative only and may differ slightly in the final deck received. Composite decks will fade slightly in the first few months after installation.



MONTANA

MONTANA ANTHRACIT 135 x 25 x 3600mm

CLASSIC & TIMELESS

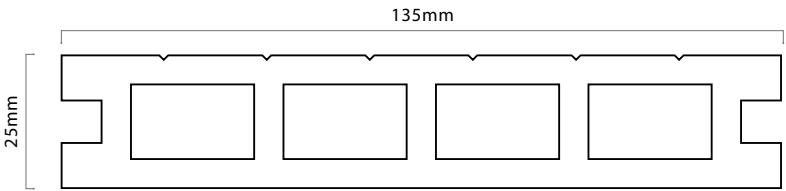
PORTLAND MONTANA



Montana Composite Decking is analogous of the State its named after. “Big Sky Country” or more commonly known as ‘Montana’ . It comes with a hollow construction, or with the option of a smooth or grooved surface. Our most popular design is available in all three colour ranges and comes with matching railings and accessories.



↩ Reversible Boards ↪



F R O N T E L E V A T I O N

Board Dimensions: 135x25x3600mm Board Coverage: 0.508m2 (1m2 = 1.97 boards)

Whiteriver

MONTANA



MONTANA SOFT GREY 135 x 25 x 3600mm

- ✓ Low Slip Potential
- ✓ Hollow Profile
- ✓ End Cap Available
- ✓ Matching Posts & Railings



Fired Earth



Anthrazit



Soft Grey



M O N T A N A

MONTANA FIRED EARTH 135 X 25 X 3600MM

SMOOTH & RELIABLE



MONTANA SOFT GREY 135 X 25 X 3600MM

M O N T A N A

ORIGINAL & IMPRESSIVE



M O N T A N A

MONTANA FIRED EARTH 135 X 25 X 3600MM

ASPIRATIONAL



MONTANA FIRED EARTH 135 X 25 X 3600MM

M O N T A N A

INVITING



ARIZONA

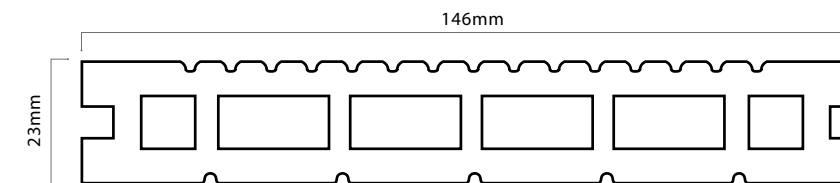
ARIZONA SOFT GREY 146 x 23 x 3600mm

PORTLAND ARIZONA

Arizona inherits its named from the popular American State. Home of the Grand Canyon. Mile deep chasm carved by the Colorado River. Warm sunny weather and mild winters makes this indistinguishable from Arizona Composite Decking. Beautiful, resilient and enduring with double sided grooves, makes this decking quintessential for the connoisseur.



↩ Reversible Boards ↪



FRONT ELEVATION

Board Dimensions: 146x23x3600mm Board Coverage: 0.544m² (1m² = 1.84 boards)

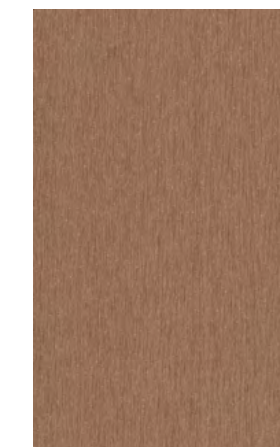
Whiteriver

ARIZONA



ARIZONA ANTHRACIT 146 X 23 X 3600MM

- ✓ Low Slip Potential
- ✓ Hollow Profile
- ✓ End Cap Available
- ✓ Matching Posts & Railings



Fired Earth



Anthracit



Soft Grey

ELEGANCE & STYLE



NEVADA

NEVADA SOLID ANTHRACIT 140 X 25 X 3600MM

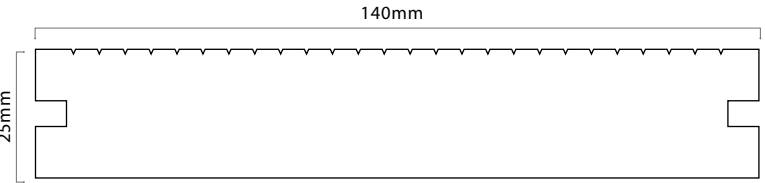
ATTRACTIVE & SLEEK

PORTLAND NEVADA SOLID

Known as the “Battle Born State”, Nevada Composite Decking deservedly gets its name from this beautiful, awe inspiring and diverse State. Tough and durable enough to withstand all types of harsh weather. Alluring texture with a contrasting grooved side or choice of a smooth appetizing side.



↩ Reversible Boards ↩



F R O N T E L E V A T I O N

Board Dimensions: 140x25x3600mm Board Coverage: 0.522m² (1m² = 1.92 boards)

Whiteriver

NEVADA

NEVADA SOLID FIRED EARTH 140 X 25 X 3600MM



- ✓ Low Slip Potential
- ✓ Hollow Profile
- ✓ End Cap Available
- ✓ Matching Posts & Railings



Fired Earth



Anthracit



NEVADA

NEVADA SOLID FIRED EARTH 140 X 25 X 3600MM

ADVANCED DURABILITY



NEVADA ANTHRACIT - STAIR TREAD 140 X 25.5 X 3600MM

NEVADA SOLID ANTHRACIT 140 X 25 X 3600MM

NEVADA

AFFORDABLE BEAUTY

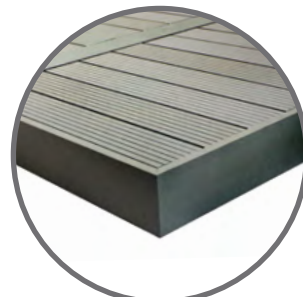
Portland Deck Components



START/END CLIP


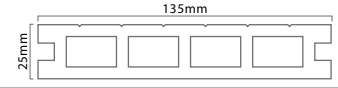

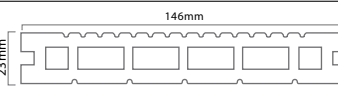
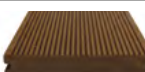
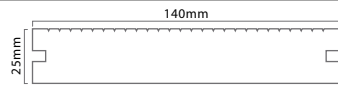


CLIPS & SCREWS










FASCIA BOARD


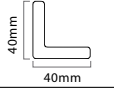



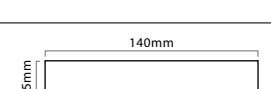

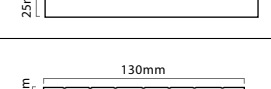

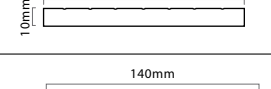
PORTLAND DECK BOARDS

MONTANA			135 x 25 x 3600mm
ARIZONA			146 x 23 x 3600mm
NEVADA			140 X 25 X 3600mm





PORTLAND COMPONENTS

HARDWOOD JOIST			70 x 45 x RL
ALUMINIUM JOIST	 Available from July 2018		38 x 38 x 3000mm
START/END CLIP		25 per pack - For first & last rows	
INSTALLATION KIT FOR TIMBER JOIST		Includes 50 Clips & Screws and 8 Movestop Clips (Covers 2.5m²)	
INSTALLATION KIT FOR STEEL JOIST		Includes 50 Clips & Screws and 8 Movestop Clips (Covers 2.5m²)	





PORTLAND TRIM OPTIONS

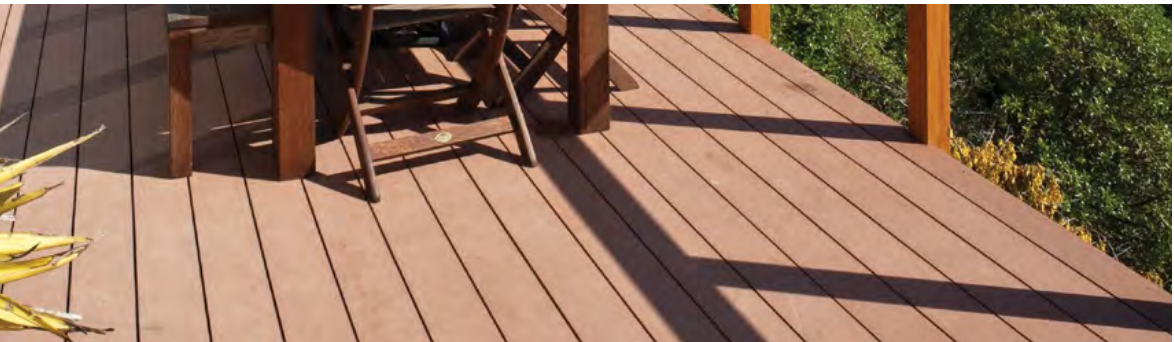
CORNER WRAPPING			40 x 40 x 3600mm
END PIECES			Varies
140 X 25MM FASCIA SOLID PLANK <small>Fired Earth, Anthrazit, Soft Grey</small>			140 x 25 x 3600mm
130 X 10MM FASCIA SOLID PLANK <small>Fired Earth, Anthrazit, Soft Grey</small>			130 x 10 x 3600mm
STAIR TREAD SMOOTH FINISH <small>Montana & Nevada Profiles Only</small>	 Available from July 2018		140 x 25 x 3600mm

PORTLAND RAILING COMPONENTS

BASERAIL/ HANDRAIL		Square Profile 90 x 45 x 1800mm
HANDRAIL		Curved Profile 100 x 50 x 1800mm
HANDRAIL & BRACKET		10 Per Pack
SPINDLES		Including Spigots & Screws 50 x 50 x 900mm

PORTLAND POST COMPONENTS

POST BRACKET		Includes Screws
POST FLANGE		Hides Post Bracket
POST		120 x 120 x 1200/2400mm
POST END CAPS		*Round or Square <small>*Round not Available in Soft Grey</small>

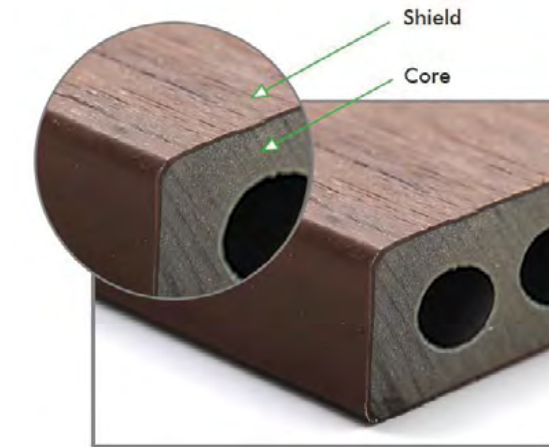


- 1. Handrail
- 2. Baserail
- 3. Spindles
- 4. Post End Caps
- 5. Post
- 6. Post Flange
- 7. Post Bracket

ULTRASHIELD

Whiteriver

INTRODUCING ULTRASHIELD



WHY ULTRASHIELD

Ultrashield is the new generation in composite decking. The decking is a capped wood plastic composite, which means it has an advanced premium shield encasing on all four sides around its inner core. This gives you a deck that has a smooth protective covering, which gives each board an advanced blend of rich colour variation and high definition wood grain details. The shield and core are extruded together under a very high temperature mould simultaneously, so there are no adhesives or chemicals that are harmful to the environment.

The core is made from carefully selected recycled material and highly dense recycled hardwood and soft fibres that allow for greater strength and durability, and best of all its made from 90% recycled material.

The shield uses an advanced engineering polymer to create a formulation which gives the boards ULTRA PROTECTION against Stains, Mildew, Mould, Splitting and Colour Fading.

For more information on Whiteriver Ultrashield please visit www.wrg.ie

*So for the ultimate in a high performance composite deck **Whiteriver Ultrashield is the answer.***



A few **good** reasons
to choose **Whiteriver Ultrashield**

MADE TO
LAST

AFFORDABLE

PROVEN
PERFORMANCE

LOOKS
GREAT

GREEN
IS GOOD



ULTRASHIELD

ANTIQUE 138 X 23 X 3600MM

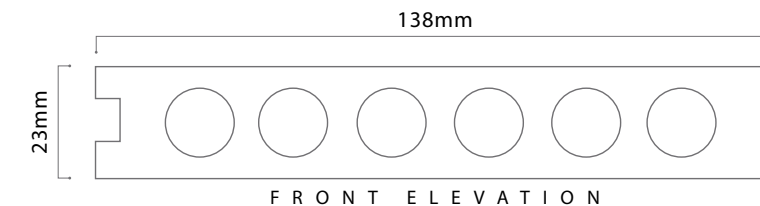
LUXURIOUS & LONGEVITY

ULTRASHIELD

Whiteriver Ultrashield decking is a high performance, eco friendly alternative which offers the warmth and appeal of natural hardwoods in 5 deluxe colours: Silver Grey, Teak, Antique, Walnut and Cedar. Whiteriver Ultrashield will not splinter or crack, due to its protective shield, making your deck safer for bare feet, small children and pets while also protecting against rot, cracking or insect damage.



↶ Reversible Boards ↷



Board Dimensions: 138x23x3600mm Board Coverage: 0.512m² (1m² = 1.95 boards)

Whiteriver Ultrashield, is a true game changer in the composite decking industry.

Whiteriver ULTRASHIELD



ANTIQUE 138 X 23 X 3600MM

✓ Low Slip Potential ✓ Hollow Profile ✓ End Cap Available ✓ 90% Recycled material



Silver Grey

Teak

Antique

Walnut

Cedar



ULTRASHIELD

SILVER GREY 138 X 23 X 3600MM

BRILLIANT & SUPREME



WALNUT 138 X 23 X 3600MM

ULTRASHIELD

EXCEPTIONAL & EFFORTLESS



ULTRASHIELD

WALNUT 138 X 23 X 3600MM

ENDURING & EXQUISITE



CEDAR 138 X 23 X 3600MM

ULTRASHIELD

ORIGINAL & IMPRESSIVE



ULTRASHIELD

ANTIQUÉ 138 X 23 X 3600MM

CONTEMPORARY & FUNKY



WALNUT 138 X 23 X 3600MM

ULTRASHIELD

COSY & TRANQUIL



ULTRASHIELD

WALNUT 138 X 23 X 3600MM

RELAX & INSPIRE



TEAK 138 X 23 X 3600MM

ULTRASHIELD

NATURAL & NOTABLE



ULTRASHIELD

ANTIQUE 138 X 23 X 3600MM

TOUGH & RESILIENT



SILVER GREY 138 X 23 X 3600MM

ULTRASHIELD

CLEAN & CALM



ULTRASHIELD

ANTIQUE 138 X 23 X 3600MM

ENCHANTING



SILVER GREY 138 X 23 X 3600MM

ULTRASHIELD

CAPTIVATING



ULTRASHIELD

ANTIQUE 138 X 23 X 3600MM

ORNATE



WALNUT 138 X 23 X 3600MM

ULTRASHIELD

REFRESHING



ULTRASHIELD

ANTIQUE 138 X 23 X 3600MM

SUMPTUOUS



CEDAR 138 X 23 X 3600MM

ULTRASHIELD

SPLENDID



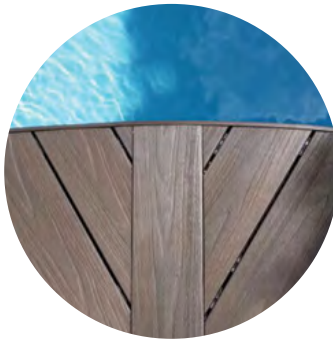
ULTRASHIELD

TEAK 138 X 23 X 3600MM

PRODIGIOUS & WONDERFUL

ULTRASHIELD DECK & COMPONENTS

ULTRASHIELD			138 x 23 x 3600mm
180 X 15MM FASCIA SOLID PLANK			180 x 15 x 3600mm
HARDWOOD JOIST			70 x 45 x RL
ALUMINIUM JOIST			38 x 38 x 3000mm
CORNER WRAP			40 x 40 x 3600mm
SOLID STAIR TREAD			138 x 23 x 3600mm
END CAP		END CAP Matching colour to Ultrashield	23 x 138mm
START/END CLIP		25 Clips per pack	
INSTALLATION KIT FOR TIMBER JOIST		Includes 50 Clips & Screws and 8 Movestop Clips (Covers 2.5m ²)	
INSTALLATION KIT FOR STEEL JOIST		Includes 50 Clips & Screws and 8 Movestop Clips (Covers 2.5m ²)	
STAINLESS STEEL COLOURED SCREW		100 screws per pack Colour coded screws for fixing fascia board Note: Not Available in Cedar	



Deck Preparation

Planning Your Deck

Designing and building a deck can be a fun and rewarding experience. You probably have given some thought as to what you want in a deck, now is the time to really visualise it. What will your deck be used for, relaxing, entertaining, will you put garden seating, BBQ and tables with a parasol on it and how many people might you have on your deck. Will there be children and elderly people using it.

These are the questions you need to look at before starting.

- (1) Where will I install the deck.
- (2) What size do I want the deck.
- (3) Which deck board do I like best
- (4) Decide on what direction you would like the boards to run
- (5) Which substructure will I use: Hardwood, *Steel or Aluminium joists.
**Steel joists > 2mm must be pre drilled and specific Steel Joist Installation Kits must be used.*

Follow the fitting instructions carefully, see full instructions on www.wrg.ie before starting.

Location & Deck Size

When deciding the size of your deck, look around at the space you have, your house, the size of your garden and what proportion of deck will enhance and improve the look of it. Your deck should have a southerly aspect. Is the ground level or falling? How close to the house do I want it? When deciding on the size of deck you need to take into account that the deck boards are 3.6m in length. You can make a deck any length, but you do not want to have a deck with very short end boards.

Tools Required

Whiteriver Decks can be installed using the same tools that you would use for fitting any timber deck. • Tape Measure • Electric Saw • Level • Square • Cordless Drill • Building Line • Safety Goggles

General

Composite decking has a composition of 60% timber, 30% HDPE Plastic and 10% Resins / Pigments etc. While the timber element is very stable (it is kiln dried to very high temperatures to remove the cell structure), the HDPE expands and contracts on the length of the board in line with changes in temperature and humidity. It is necessary to leave a perimeter gap of 10mm around the entire deck and any fixed objects/obstructions and also a 5mm spacing must be left at each short board end to allow for normal seasonal movements.

See full instructions on www.wrg.ie before starting.

DECK
CALCULATOR
PAGE 49

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Design

Once you have made a decision on the above, now you need to decide on the deck design. A deck that is well designed can do amazing things to any home. First decide on the direction you would like the boards to run. Will there be steps? Would you like hand rails around it? What colour will suit your garden and house best?

Ventilation and Site Conditions

The site should be free draining and there should be a fall of at least 5% to let water drain off. The ground/substructure should be properly supported - please consult with an engineer if you are unsure. Whiteriver composite decking products CANNOT be directly installed onto a flat surface. It must be installed onto a substructure, so there is adequate and unobstructed air flow under the decking to prevent excessive water absorption.

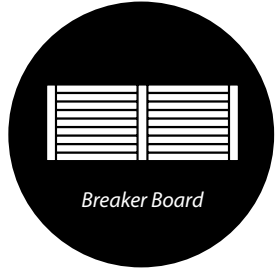
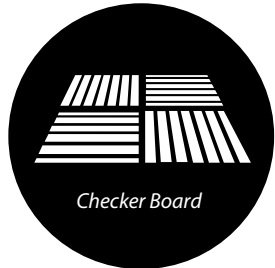
Good ventilation is the key to your deck performing well in the long term.

For non screed surfaces, plan a minimum of 100 mm (4 inches) of continuous net free area under the decking surface. This is required to allow for adequate ventilation on all deck types so air can circulate freely between adjacent joist members to promote drainage and drying. Air must have an entry point and exit point to the subconstruction.

For screed surfaces, we recommend a minimum clearance of 100mm (4 inches) from the ground level. In this case, the joist should be built in two criss cross layers to allow for air movement. For small balcony areas, less than 10m2, it is possible to have a lower clearance provided sufficient drainage and air movement can be provided. For balcony projects, we recommend getting the design reviewed by an engineer.

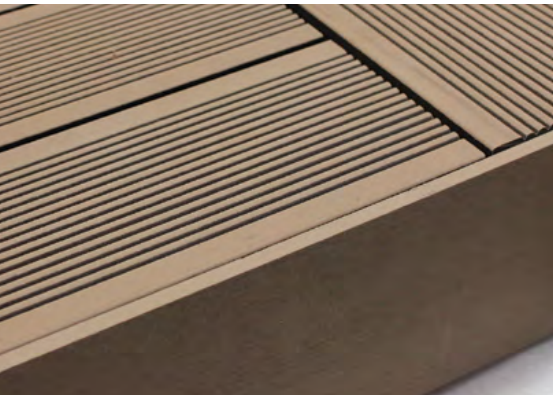
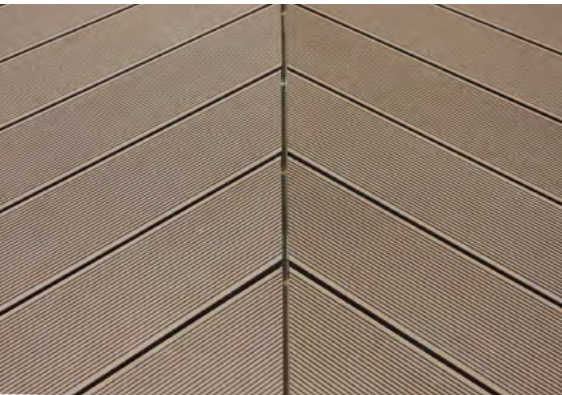
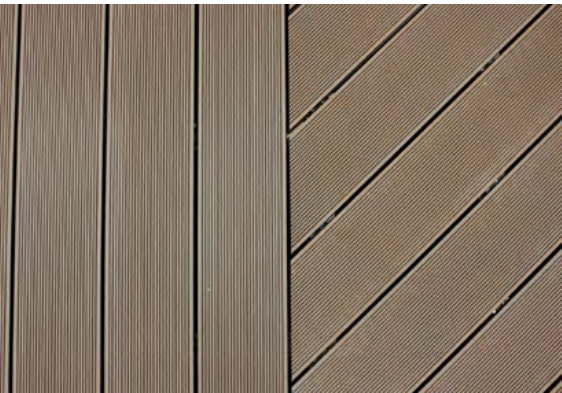
Please note areas that are walled in on all sides are not suitable for deck installation as there will not be enough air movement under the deck. If there is any dampness under the deck, it can lead to mould build up underneath the deck and excessive expansion and contraction in the boards. In summary, it is vital that the area underneath the deck is free draining and per above, adequate ventilation is provided for.

If you require any technical advice, please contact our sales office.



Direction of deck

There is no correct deck direction, it is purely personal preference but whatever you choose dictates the sub-frame design and configuration. Things to consider: Think about where you or your guests will view the deck. Looking along the length of the boards will make the deck look longer, while looking across the boards creates an illusion of width. Would you rather the deck looked longer or wider? Also, most of our deck boards contain grooves which affect both the slip resistance qualities in particular directions and also the aesthetic of the board. Board lengths are 3.6 metres long.



Composite Decking Installation Do's & Dont's

LEAVE A 10MM GAP AROUND WHOLE DECK TO ALLOW FOR MOVEMENT

ENSURE THERE IS GOOD AIR CIRCULATION AROUND AND UNDER THE WHOLE DECK

LEAVE 5MM EXPANSION GAP BETWEEN ALL BOARDS

DOUBLE JOIST WHERE BOARD ENDS MEET. EACH BOARD END SHOULD HAVE ITS OWN CLIP & JOIST.

USE GOOD QUALITY HARDWOOD JOISTS

PRE DRILL FACIA BOARDS BEFORE FIXING

USE RECOMMENDED CLIPS TO SECURE BOARDS TO JOISTS

USE STEEL INSTALLATION KITS FOR FIXING TO STEEL JOISTS

PRE DRILL STEEL JOISTS TO RECEIVE STAINLESS STEEL SCREWS

ACCLIMATISE BOARDS TO THE ENVIRONMENT FOR 3 DAYS PRIOR TO INSTALLATION

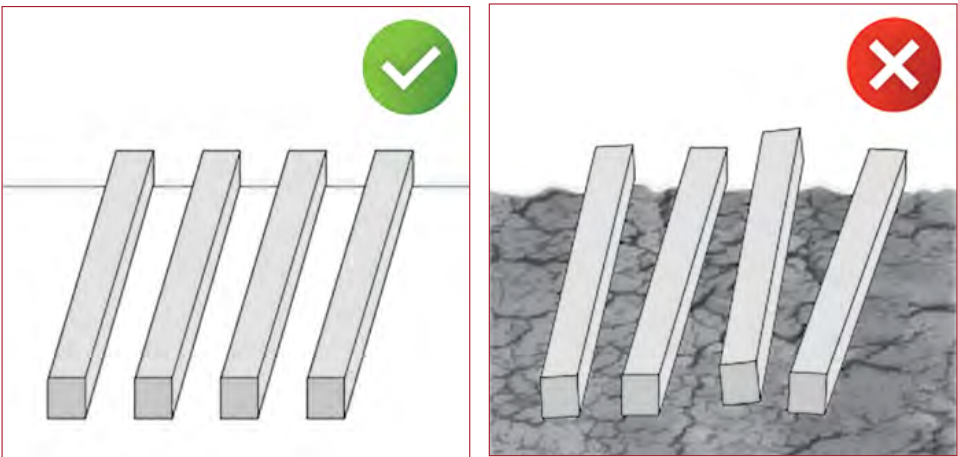
SCREW DIRECTLY THROUGH BOARDS

STORE BOARDS ON SOLID OR UNEVEN SURFACES

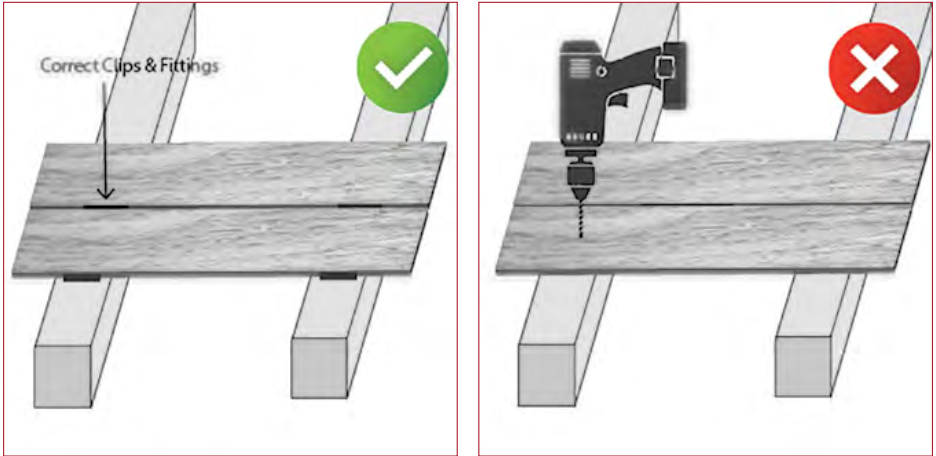
INSTALL IN AREAS THAT HAVE WALL ON ALL SIDES

Please read full instruction before starting installation. Failure to install composite decking correctly will result in the deck becoming structurally unstable.

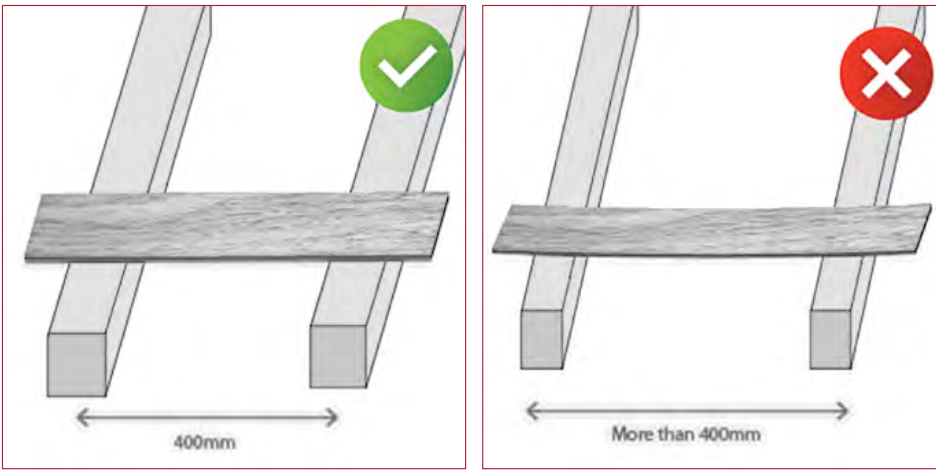
A 10mm gap around the whole deck must be left for expansion and a 5mm gap between board ends.



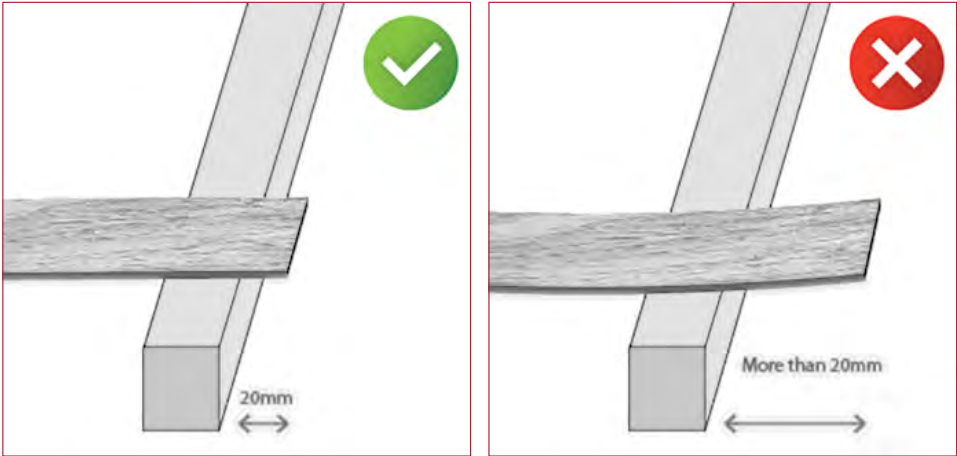
A structurally sound sub frame must be installed ensuring there is no movement prior to fixing boards to the joists. A 5% fall to allow water to drain and a minimum 100mm free air space between the boards and the ground beneath to allow sufficient airflow to prevent the build up of moisture is essential.



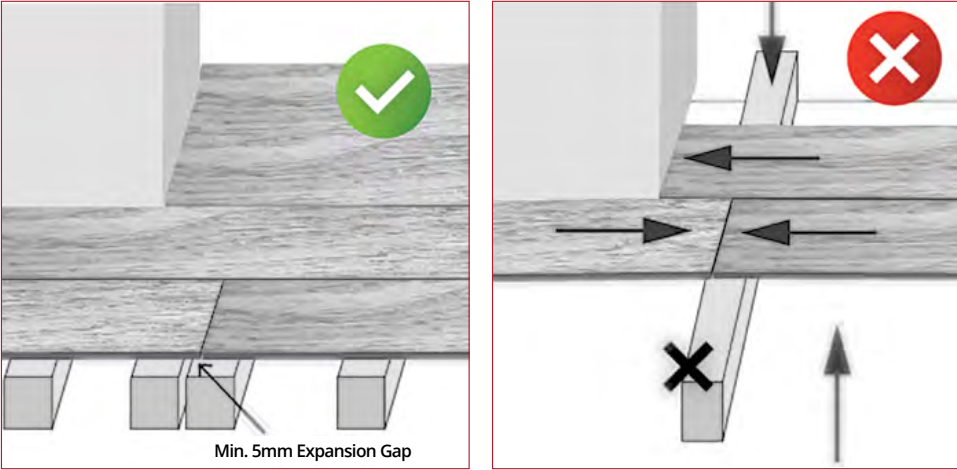
Composite decking should only be installed using correct clips and fixings - failure to do this will effect the structure of the deck as well as warranty. Never screw directly through the boards. Steel joists >2mm must be pre drilled and specific Steel Joist Installation Kits must be used.



Joists must be set to maximum 400mm centres for stability and to avoid warping.



Maximum overhang 20mm

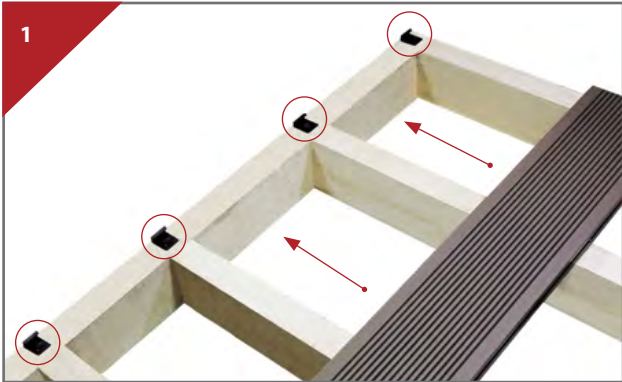


Board ends butted together must be supported by separate joists and have a min 5mm gap for expansion. Failure to do this may result in structural failure and warping.

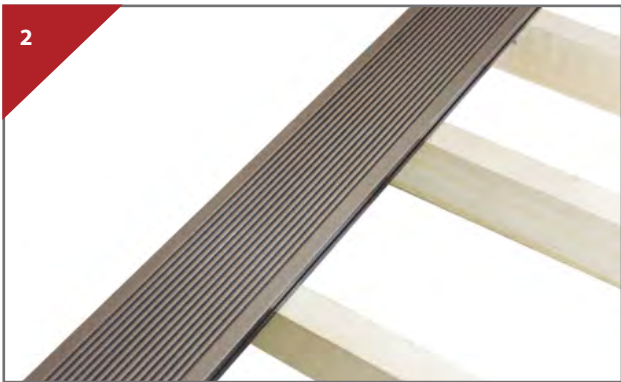
Deck Quick Installation Guide

Before you start here are a few tips:

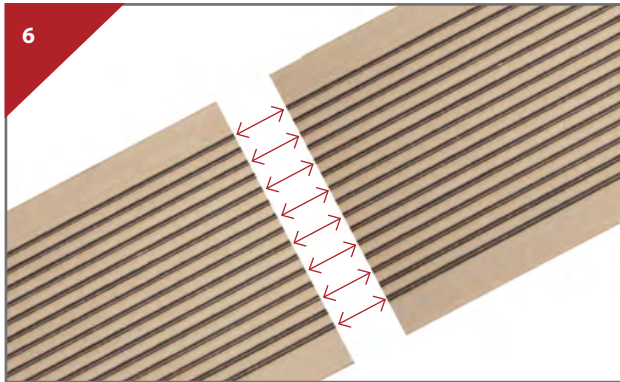
- Make sure you have ordered enough material, so as not to be short. Allow for about 5% waste.
- Store decking on site for at least 3 days, raised off the ground, lying flat and keep it dry.
- Read full set of instructions on www.wrg.ie before starting.
- Ensure there is adequate ventilation under deck. Air should have an entry point and exit point to the subconstruction.
- Make sure you allow for expansion of the decking. Expansion must be allowed on all butt ends including where the deck meets posts and other fixed objects. No objects e.g. post and railing systems etc. should be fixed directly to/through the deck as this will prevent seasonal movement. These should be fixed to the substructure.
- There should be good drainage under deck and there should be a minimum fall of at least 5% to allow for water drainage.
- It is essential to use a movestop clip on the joist nearest the centre of every board. This minimises the amount of expansion that the board can do.
- Whiteriver decking is approved for use over joist centres of maximum 400mm/16" (300mm/12" in commercial use).



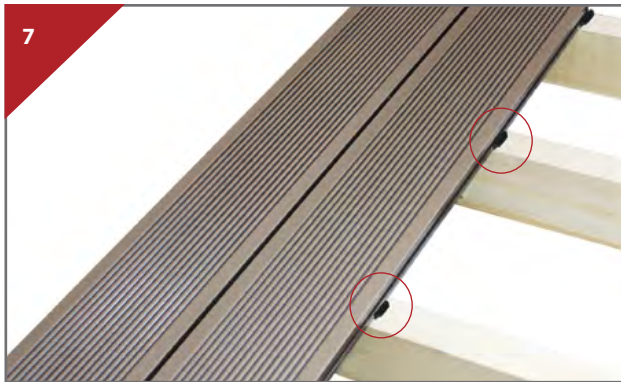
Secure start/end clips in line with each joist ensuring that you have allowed an expansion gap of at least 10mm between the first row of deck boards and wall. If two end boards meet on a joist use a start/end clip on each board. Hollow deck boards are not suitable for face fixing.



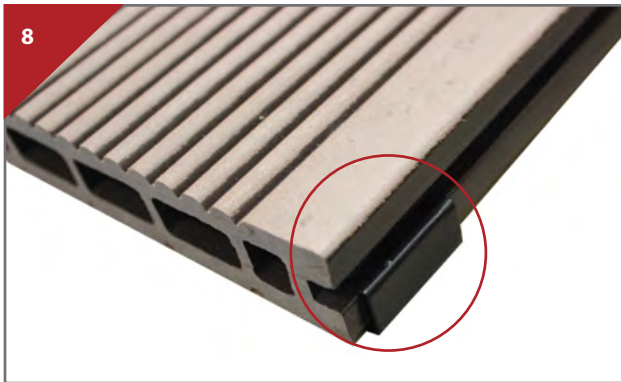
Push the first deck board into the start/end clip. Check that the board is straight and fully inserted into the clip. Please note an expansion gap of 10mm must be placed around any fixed objects within the decking e.g. stair case, post brackets and any permanent fixtures that may prevent the decking expanding and contracting naturally.



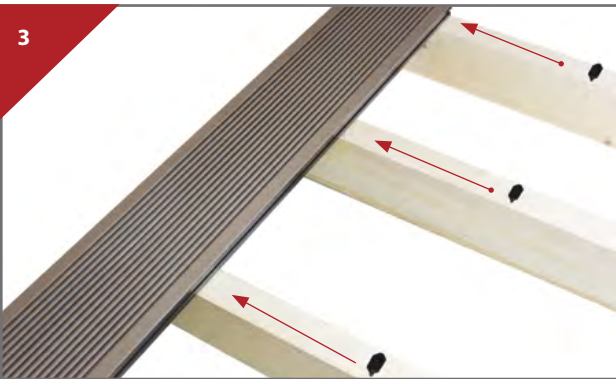
Where the short ends of the deck boards meet, ensure that you leave a gap of 5mm to allow for seasonal expansion and contraction.



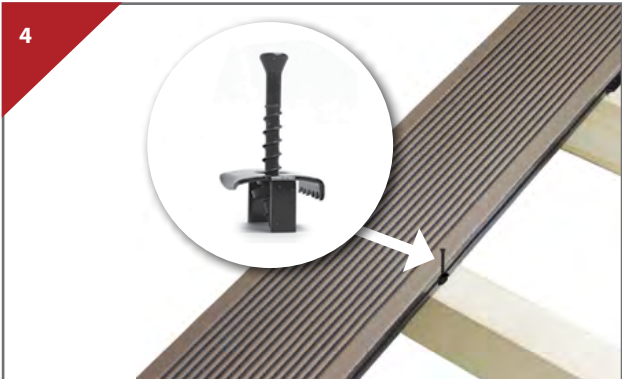
Push the second row of boards into the previous installed row of boards making sure that the deck board grooves are in tight on the clips. Continue to keep inserting clips and boards in this way.



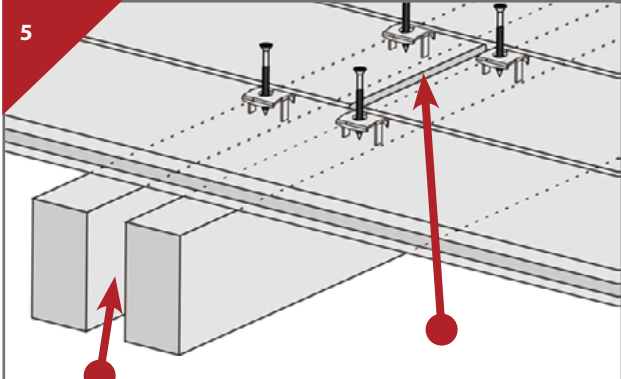
For the last row of boards use a start/end clip in line with each joist. You need to use these clips even if you putting on a fascia board.



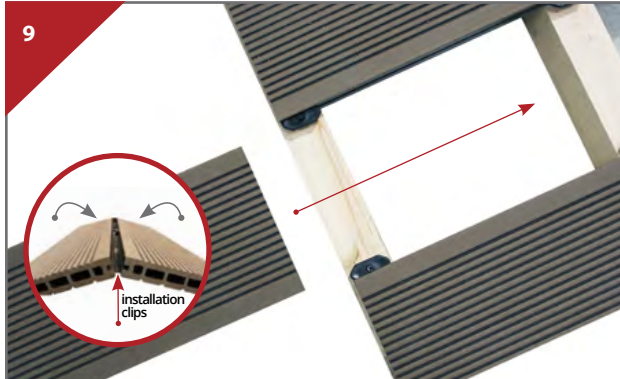
Insert a standard clip into each deck board in line with joist and screw fully but do not overtighten.



It is very important to install one movestop clip per board onto the joist nearest the centre of the board. This helps maintain a consistent expansion gap.



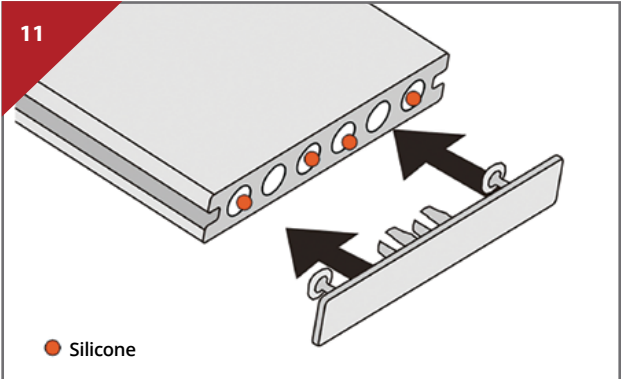
All clips should be on their own independent joists i.e. when two board ends meet each other there must be a sister joist. The end of each board must sit on its own joist with a gap of 5-10mm between joists to allow leaves, dirt and debris etc fall through the deck boards as per image above.



If not framed by wall or building on each side, the second last row of boards can be slid into position after you have fixed the last row and the clips for the second last row have been fixed into position. If a wall or house prevents sliding the board in, fix the last board using the start/end clip. Next insert fixing clips into groove of board and then slide them along with a screwdriver into position. (See Insert)



You can use a solid fascia plank for a great looking finish. It is very important to predrill all composite material prior to fixing with a hole slightly bigger than the screw. Fix in two stainless steel screws into the substructure at intervals of 300mm – the fascia board must be pre drilled and fixed to a solid timber plank in all areas (not directly to the butt ends of exposed joists). You must leave a minimum 40mm gap between the bottom of the fascia and the ground to allow for ventilation.



Alternatively place end caps in front of any exposed hollow boards ends and push in as shown. A mallet could be used as well to push in the end caps. A dab of external silicone sealant should be used on the end cap or inside the holes of the board in order to secure the end caps better.

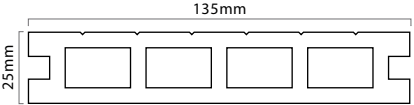


ULTRASHIELD

TEAK 138 X 23 X 3600MM

MONTANA

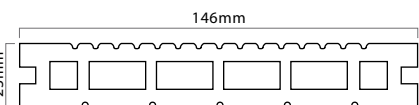
Montana Composite decking. Available in Fired Earth, Anthrazit and Soft Grey.



Test Items	Requirement	Result
Max Load	Mean ≥ 3300 Min ≥ 3000	Mean 4172 N Min 4075 N
Deflections under 500 N	Mean ≤ 2.0mm Min ≤ 2.5mm	Mean 1.11mm Min 1.14mm
Swelling and Water Absorption	Mean Swelling ≤ 4% in thickness ≤ 0.8% in width ≤ 0.4% in length Water Absorption Mean ≤ 7% Max ≤ 9%	Mean Swelling ≤ 0.08% in thickness ≤ 0.02% in width ≤ 0.01% in length Water Absorption Mean ≤ 1.79% Max ≤ 1.98%
Creep Behaviour	Known Span in use Mean ΔS ≤ 10mm Max ΔS ≤ 13mm Mean ΔSr ≤ 5mm	Span: 400mm Mean ΔS ≤ 3.29mm Max ΔS ≤ 3.53mm Mean ΔSr ≤ 0.74mm

ARIZONA

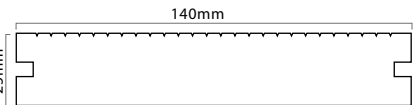
Arizona Composite decking. Available in Fired Earth, Anthrazit and Soft Grey.



Test Items	Requirement	Result
Max Load	Mean ≥ 3300 Min ≥ 3000	Mean 3759 N Min 3595 N
Deflections under 500 N	Mean ≥ 2.0mm Min ≥ 2.5mm	Mean 1.35mm Min 1.44mm
Swelling and Water Absorption	Mean Swelling ≤ 4% in thickness ≤ 0.8% in width ≤ 0.4% in length Water Absorption Mean ≤ 7% Max ≤ 9%	Mean Swelling 0.09% in thickness 0.02% in width 0.01% in length Water Absorption Mean ≤ 1.66% Max ≤ 1.82%
Creep Behaviour	Known Span in use Mean ΔS ≤ 10mm Max ΔS ≤ 13mm Mean ΔSr ≤ 5mm	Span: 400mm Mean ΔS 5.00mm Max ΔS 5.17mm Mean ΔSr 2.33mm

NEVADA

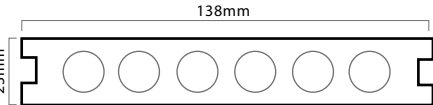
Nevada Composite decking. Available in Fired Earth and Anthrazit.



Test Items	Requirement	Result
Max Load	Mean ≥ 3300 Min ≥ 3000	Mean 7716 N Min 7514 N
Deflections under 500 N	Mean ≥ 2.0mm Min ≥ 2.5mm	Mean 0.72mm Min 0.80mm
Swelling and Water Absorption	Mean Swelling ≤ 4% in thickness ≤ 0.8% in width ≤ 0.4% in length Water Absorption Mean ≤ 7% Max ≤ 9%	Mean Swelling 0.02% in thickness 0.02% in width 0.03% in length Water Absorption Mean 0.1% Max 0.1%
Creep Behaviour	Known Span in use Mean ΔS ≤ 10mm Max ΔS ≤ 13mm Mean ΔSr ≤ 5mm	Span: 350mm Mean ΔS 0.98mm Max ΔS 0.62mm Mean ΔSr 1.06mm

ULTRASHIELD

Ultrashield decking. Available in Teak, Silver Grey, Antique, Walnut and Cedar.



Test Items	Requirement	Result
Max Load	Mean ≥ 3300 Min ≥ 3000	Mean 4090 N Min 3866 N
Deflections under 500 N	Mean ≥ 2.0mm Min ≥ 2.5mm	Mean 1.14mm Min 1.19mm
Swelling and Water Absorption	Mean Swelling ≤ 4% in thickness ≤ 0.7% in width ≤ 0.3% in length Water Absorption Mean ≤ 7% Max ≤ 9%	Mean Swelling 2.4% in thickness 0.06% in width 0.08% in length Water Absorption Mean 1.9% Max 2.0%
Creep Behaviour	Known Span in use Mean ΔS ≤ 10mm Max ΔS ≤ 13mm Mean ΔSr ≤ 5mm	Span: 350mm Mean ΔS 2.0mm Mean ΔSr 1.5mm

All above tests have been carried out by Intertek Testing Services according to European Standards EN 15534-1: 2014

Slip Testing

Smooth Side

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Grooved Side (6 Lines)

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Ribbed Side

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Grooved Side (6 Lines)

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Smooth Side

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Ribbed Side

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Smooth Side

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Wood Grain Side

Slip tests carried out in wet/dry environment according to BS 7976 part II. Results available on request

Decking Calculator (No. of boards required)

Product	10m ²	12m ²	14m ²	16m ²	18m ²	20m ²	22m ²	24m ²	26m ²	28m ²	30m ²	32m ²	34m ²	36m ²	38m ²	40m ²	42m ²	44m ²	46m ²	48m ²	50m ²
Montana	19.7	23.64	27.58	31.52	35.46	39.4	43.34	47.28	51.22	55.16	59.1	63.04	66.98	70.92	74.86	78.8	82.74	86.68	90.62	94.56	98.5
Arizona	18.4	22.08	25.76	29.44	33.12	36.8	40.48	44.16	47.84	51.52	55.2	58.88	62.56	66.24	69.92	73.6	77.28	80.96	84.64	88.32	92
Nevada	19.2	23.04	26.88	30.72	34.56	38.4	42.24	46.08	49.92	53.76	57.6	61.44	65.28	69.12	72.96	76.8	80.64	84.48	88.32	92.16	96
Ultrashield	19.5	23.4	27.3	31.2	35.1	39	42.9	46.8	50.7	54.6	58.5	62.4	66.3	70.2	74.1	78	81.9	85.8	89.7	93.6	97.5

F.A.Q'S

IS WHITERIVER DECKING REALLY LOW MAINTENANCE?

Yes there is no need for any annual treatment but your deck needs to be cleaned regularly. See Care & Maintenance for further information.

DO WHITERIVER DECKS REQUIRE VENTILATION & DRAINING

Yes, it is similar to timber and it needs ventilation to the subconstruction to dry out after getting wet. Air should have an entry point and exit point to the subconstruction. A lack of ventilation can cause the deck to swell over time.

DO WHITERIVER DECKS SPLINTER

No Whiteriver decks do not splinter.

DO WHITERIVER DECK CUT LIKE WOOD

Yes you can use the same tools that you would use for a wood deck.

DOES WHITERIVER DECK COST MORE THAN WOOD

In the short term it does, however when you compound the maintenance you have to do on wood every year the costs really add up. In a short time you will be able to see all the time and money you would have saved by using Whiteriver Decking.

HOW IS IT SECURED

With hidden clips, see fitting instructions.

WHAT JOIST SPACES DO YOU USE

For domestic decks we recommend 400mm centres and for a commercial deck or heavy traffic area we recommend 300mm. For elevated decks above ground level of 400mm, we recommend centres of 300mm.

WILL THE DECK FADE BECAUSE OF SUN EXPOSURE

You can expect that there will be minor fading of up to 20%. The majority of this will happen over the first 10-12 weeks.

IS WHITERIVER DECKING IMPERVIOUS TO MOULD

Whiteriver decking has mould inhibitors that prevent mould growing on the inside of the board. Surface mould can still happen, however it will never penetrate the board itself. Mould and mildew can be washed off.

DOES WHITERIVER DECKING HAVE A WARRANTY

Yes there is a 10 year residential limited warranty on all our decking against rotting, splits, splintering and insects. (Ultrashield 15 years)

WHAT SHOULD I DO WITH THE SCRAP PIECES

We recommend that you can use these in a variety of ways such as making planters, sand boxes, raised flowers beds, shelving etc.

CAN THERE BE STAINING

Staining can occur thus it is important to clean up any spillage as soon as it happens.

CAN I FIX DECK TO STEEL

Yes you can but please bear in mind that steel can expand and contract. Specific Steel Joist installation kits are available and joists must be pre drilled. Please see detailed fitting instructions to find out more on www.wrg.ie.

HOW DO I FIT HANDRAILS

Look at our detailed fitting instructions on www.wrg.ie

IS IT SCRATCH-RESISTANT

Whiteriver deck can present some scuff marks and scratches if negative contact is made. We recommend using castor cups under furniture legs.

STORAGE & HANDLING

Whiteriver decks should be stored on site for at least 3 days before fitting in a dry flat area and under cover.

STATIC

Static electricity is a naturally occurring phenomenon and may occur on composite decks depending on environmental conditions. Static in composite boards will generally decrease as boards age. Dryer vents and heat pumps in the area of the decking may also contribute to the generation of static.



DECK CARE AND MAINTENANCE

General Cleaning: Keep it clean and your Whiteriver composite decking will reward you with years of low maintenance pleasure. Periodic cleaning of Whiteriver Composite decking is suggested, even if it appears clean, as it is important to prevent the build-up of pollen / debris that can cause mould. If unsure about the product being used to clean / remove stains from your deck, it is recommended that you test a small area in an inconspicuous place to determine if the product will cause any unwanted discolouration. Below is a more detailed instruction for taking care of your deck. You will see that there are some different methods for cleaning Ultrashield which has a protective cover .

PORTLAND COLLECTION (MONTANA, ARIZONA, NEVADA)

DIRT & GRIME

Whiteriver recommend cleaning your deck on a regular basis in order to remove debris, pollen, and dirt. Normally all you need is a deck brush, warm water and a mild household cleaner such as liquid soap or Woca Exterior Cleaner. Scrubbing in the direction of the grain is best. Thoroughly rinse off with a garden hose. If there is heavier dirt, you can use a low pressure washer with wide fan tips at a safe distance using a maximum pressure of 1500psi at a minimum distance of 250mm (10")

MOULD & MILDEW

Mould and mildew are very common and will thrive and grow where there is water, dirt, leaves, grass, wood and any decaying debris. By regular washing with Woca Exterior Cleaner, it helps to minimise the growth of mould and mildew and also helps to avoid staining.

WEATHERING

As Composite Decking is a wood based product it can experience a natural process which is called Extractive Bleeding, this can cause a temporary discolouration of the deck which will weather away. It can take 10-12 weeks for this to happen depending on the location etc.

TANNINS (STAINS)

As with all products containing wood, tannin stains can occur. Tannins can form when organic material such as leaves, seeds and other debris get stuck between the gaps in the boards of the deck and water starts to pool under it. You can use a garden hose or a spatula to keep the gaps clean. Keeping the gaps clean will help to keep your deck looking good.

OIL & GREASE

A quick clean-up is best in order to clean grease or oil stains. If this does not work, there are several commercial cleaners available for oil and grease. It is important to follow the manufacturer's instructions, try it first in an inconspicuous place and ensure you are happy before proceeding. After cleaning the deck the colour may have lightened, it will take 8-10 weeks for the sun to match the remaining deck.

PROTECTION

We suggest a mat under your BBQ to protect from grease stains, and plastic protectors under metal furniture or planters to prevent gouging and potential rust stains.

SCRATCHES AND HEAVIER STAINS

Scratches or difficult stains can be removed by using a wire brush or sanding with 80-100 grit sandpaper. When brushing always run with grain. It will take 8-10 weeks for the repaired area to blend in with the rest of the deck.

SNOW & ICE

As with any outdoor surface, Whiteriver decks can become slippery in winter weather. Take extra care when walking on wet, icy and snowy conditions. You can use a shovel or brush to remove snow or ice. Calcium chloride or rock salt will melt ice on decking. Rinse off when first practical.

STATIC

Static electricity can be reduced with the use of Heavy Duty Staticide which is a non-toxic clear treatment that leaves a surface-active residual substance on the deck.

ULTRASHIELD

DIRT AND DEBRIS

Surface debris should be sprayed off with a hose. Use warm water with liquid soap and a soft non-metal scrub brush to remove dirt and debris within the embossing pattern. Scrubbing in the direction of the grain is best. If there is heavier dirt, you can use a low pressure washer with wide fan tips at a safe distance using a maximum pressure of 1500psi at a minimum distance of 300mm (12")

TANNINS

Tannins can form when organic material gets stuck within the gaps of the deck and water starts to pool under it. Therefore, it is best to remove the debris within gaps with a garden hose, spatula, or soft brush. Keeping the gaps clean will reduce the chances of tannins from forming leaving your deck cleaner.

ICE AND SNOW

Use calcium chloride or rock salt to melt the snow and ice. Build up of calcium chloride or rock salt may occur leaving a white residue, which can be easily removed with warm soapy water and a soft non-metal scrub brush.

PROTECTION

We suggest a mat under your BBQ to protect from grease stains, and plastic protectors under metal furniture or planters to prevent gouging and potential rust stains.

OIL / GREASE / FOOD

All oil / grease / food spills must be removed promptly. To clean use warm soapy water and a soft non-metal scrub brush. Grease and oil may require an all purpose cleaner if warm soapy water and soft non-metal brush do not work. Be sure to check with manufacturer's on which cleaners are appropriate to use on your deck.

MOULD AND MILDEW

Mould and mildew occurs periodically in everyday environments. Therefore, surface mould and mildew can appear on the deck if decaying organic materials such as, but are not limited to, wood, leaf decay and pollen are present along with elevated temperatures, air and water. Therefore, we can only minimize the occurrence by removing these decaying organic materials as quick as possible. If mould and mildew are present use warm soapy water and a soft non-metal scrub brush to clean.

IRREGULAR HEAT SOURCES / FIRE

Composite decking has the tendency to retain heat whenever presented directly or indirectly to it. Irregular heat sources, such as, but not limited to fire pits, fire places, and barbecue grills, and fire may damage the surface of the UltraShield decking. Proper caution should be taken with irregular heat sources and fire to ensure no damage occurs to the deck.

MASONRY CONSTRUCTION

During masonry construction renovation or painting the deck must be covered AT ALL TIMES preferably with a sheet or tarpaulin or construction grade plastic film. Mineral deposits, left over from construction, can mix with water and evaporate leaving deposits behind which creates a white/haze on the deck surface. To prevent this problem ensure that masonry/cement construction is set properly before ever installing the decking material. If mineral deposits are left on the deck surface, regular maintenance is required in order to maintain the original look of the deck.

STATIC

Static electricity can be reduced with the use of Heavy Duty Staticide which is a non-toxic clear treatment that leaves a surface-active residual substance on the deck.



www.wrg.ie