Whiteriver
composite for living

MONTANA FIRED EARTH

PORTLAND COLLECTION
135 X 25 X 3600MM

COMPOSITE DECKING SPECIFICATION DATASHEET

PRODUCT DESIGN	INFORMATION
Board Size	135 x 25 x 3600MM
Product Code	K1210002
Board Coverage	0.504m^2 (including gap for clip)
Range	Portland Montana
Manutactured Composition	60% wood, 30% HDPE, 10% additives and pigments
Lengths per pallet	160
Guarantee	10 year structural warranty
Installation	As per installation instructions on www.wrg.ie/installation-instructions
Board Length	3600mm (+/- 0.2%)
Board Width	135mm (+/- 0.5%)
Board Thickness	25mm (+/- 0.5%)
Joist spacing	Residential 400mm / Commercial 300mm
CE Certification	CE Tested to fire and slip per standards

TEST ITEMS	REQUIREMENTS / STANDARDS		RESULT
Flexural properties [1]	- F'max: Mean ≥ 3300 N Min. ≥ 3000 N	EN 15534 -1: 2014 Annex A	Bending Strength: 34.4 MPA Modulus of elasitcity: 3479MPA Maximum load: Mean: 4619 N Min.: 4409N
	- Deflection under a load of 500 N Mean ≤ 2,0 mm Max.≤ 2,5 mm	EN 15534 -4: 2014 Section 4.5.2	N Deflection at 500N: Mean: 1.12 mm Max.: 1.16 mm
Density	EN 15534-1: 2014 +A1: 2017 Section 6.2 ISO 1183-1: 2004 Method A		1.39 g/cm3
Reaction fo fire	EN 13501-1		DFL-S1
Slip resistance (Pendulum test)	EN BS 7976:2 For best slip resistance please install smooth side up		Mean: Dry: 45 PTV Smooth side Wet: 36 PTV Mean: Dry: 42 PTV Grooved side Wet: 37 PTV
	EN15534-1:2014 Section 6.4.2 CEN/TS 15676:2008		Smooth side: Mean longitudinal: 80 Mean horizontal: 90 Grooved side: Mean longitudinal: 78 Mean horizontal: 88

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TEST ITEMS	REQUIREMENTS / STANDARDS		RESULT
Impact resistance	EN 15534-1:2014 Section 7.1.1 EN ISO 179-1:2010		3.7 kJ/m2
Creep behaviour [2]	Known span in use Mean ΔS: ≤ 10mm Max. ΔS: ≤ 13mm Mean ΔSr: ≤ 5mm EN 15534 - 1:2014 Section 7.4.1 EN 15534 - 4: 2014 Section 4.5.3		Span: 400 mm Mean ΔS: 3.47 mm Max. ΔS: 4.14 mm Mean ΔSr: 2.69 mm
Resistance to indentation	EN 15534-1: 2014 Section 7.5 EN 15534-4 :2014 Section 4.5.7		Apply 2000N load, Brinell hardness: 92 MPA Rate of elastic recovery: 75%
Nail and Screw withdrawal	EN 15534-1: 2014 +A1: 2017 Section 7.6 EN 13446: 2002		Withdrawal Capacity: 46N/mm^2
Moisture resistance under cyclic test conditions [3]	Decrease of bending strength, Mean≤ 20 % Max.≤ 30 % EN 15534 - 1: 2014 Section 8.3.2 EN 15534 - 4: 2014 Section 4.5.2		Original Bending Strength 34.4 MPA After exposure, Mean Bending Strength 31.8 MPA Mean Decrease: 8% Min Bending Strength 30.5 MPA Max. Decrease: 11%
Boiling Test Swelling and water absorption Flexural properties [4]	Water absorption in weight: Mean ≤ 7% Max. ≤9% EN 15534 - 1: 2014 Section 8.3.3 EN 15534 - 4: 2014 Section 4.5.5		Water absorption in weight: Mean: 1.97% Max.: 2.26% Bending Strength: 32.2 Mpa Modulus of elasitcity: 3203 MPA
Swelling and water absorption (24 hours immersion)	Means swelling: ≤ 4 % in thickness ≤ 0,8 % in width ≤ 0,4 % in length Max. swelling: ≤ 5 % in thickness ≤ 1,2 % in width ≤ 0,6 % in length Water absorption: Mean≤ 7 % Max.≤ 9 %	EN15534 -1: 2014 Section 8.3.1 EN15534 - 4: 2014 Section 4.5.5	Mean Swelling: 0.15 % in thickness 0.04 % in width 0.03 % in length Max. Swelling: 0.16 % in thickness 0.06% in width 0.03% in length Water absorption: Mean: 0.50% Max.: 0.54%
Pb, Cu content	Limit (mg/kg) Copper (Cu): 7700 Lead (Pb): 160		result (mg/kg) < 10 < 10
Linear thermal expansion [5]	ASTM D696: -16		44.9×10^{-6} / °C
Freeze-Thaw three cycles [6]	ASTM D7032-17 Section 4.7 EN 15534-1:2014 Annex A		Bending Strength: 30.3 Mpa Modulus of elasitcity: 3110MPA
Formaldehyde [7]	ASTM D6007:2014		Not detected

NOTE:
1. For the item 1, 2, 3, 4, 6, the test span was 400mm, which was required by applicant
2. For the item 5, the test temperature was from -30°C to 30°C
3. For the item 7,
(1) As per ASTM D6007:2014 small scale chamber method, formaldehyde content was detected by UV-spectrophotometer
Chamber type: 0.225m2 stainless steel chamber

(2) Climatic conditions: 25°C, 50%R.H.
(3) Air exchange rate: 0.5 h-1
(4) Loading factor: 0.43 m2/m3
(5) Detection limit = 0.02 ppm
(6) ppm = parts per million

DECK CARE & MAINTENANCE

Please refer to the deck care and Maintenance guidelines at www.wrg.ie for full care guidelines on caring for your deck correctly.

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 instructions for taking care of your deck.

DIRT, GRIME AND DEBRIS
Whiteriver recommend cleaning your deck on a regular basis in order to remove debris, pollen, and dirt. Surface debris should be sprayed off with a hose. Normally all you need is a soft non-metal 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 to remove dirt and debris. Thoroughly rinse off with a garden hose. If there is heavier dirt, you can use a low bar pressure washer with wide fan tips at a safe distance using a maximum pressure of 1500psi at a minimum distance of 300mm (12"). Always wash in the direction of the grain along the length of the board. We do not recommend power washing Ultrashield decking.

MOULD, MILDEW, ALGAE ETC
Mould and mildew are very common and occurs periodically in everyday environments. Therefore, surface mould and mildew can appear on the deck if decaying organic materials such as, but not limited to, wood, leaf and pollen are present along with elevated temperatures, air and water. Therefore, we can only minimise the occurrence by removing these decaying organic materials as quick as possible. If mould and mildew are present use warm soapy water or WOCA Exterior Cleaner and a soft non-metal scrub brush to clean. It will help avoid staining and minimise the growth of mould and mildew. Installing your decking without the required fall can lead to more frequent appearance of mould/mildew/algae etc as standing water will remain on the deck surface for a longer period of time than normal.

TANNINS / STAINS
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 forming, leaving your deck cleaner.

OIL, GREASE OR FOOD
All oil / grease / food spills must be removed promptly. To clean use warm soapy water and a soft non-metal scrub brush. Oil and grease may require an all-purpose cleaner if warm soapy water and soft non-metal brush do not work.
There are several commercial cleaners available for oil and grease. Try cleaning first in an inconspicuous place and ensure you are happy before proceeding. Be sure to check with manufacturer's on which cleaners are appropriate to use on your 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.

WATER MARKING:
Initially after installation of our Portland Collection, some water marking may occur on the surface. This is due to some tannins rising to the surface as it adjusts to UV exposure when the surface gets wet. This can be cleaned away with a bristle deck brush and hot water. Generally 1 clean (occasionally 2) is sufficient to remove it.

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.

SNOW AND 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. 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.

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

MASONRY CONSTRUCTION
During masonry construction, renovation or painting the deck must be covered AT ALL TIMES preferably with a sheet of tarpaulin or construction grade plastic film. Mineral deposits, left over from construction, can mix with water and evaporate leaving deposits behind which create a white or haze on the deck surface. To prevent this 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.

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

INSTALLATION & WARRANTY

All Whiteriver decks must be installed by a professional approved installer who has the necessary skills and will take each site circumstance into consideration. Our warranty is only valid on decks which have been installed as per our installation instructions. (Available on www.wrg.ie)

wrg whiteriver group

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