





# **COMPOSITE DECKING SPECIFICATION DATASHEET**

PRODUCT DESIGN	INFORMATION		
Board Size	135 x 25 x 3600MM		
Product Code	K1210080		
Board Coverage	0.504m <sup>2</sup> (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:		Bending Strength: 34.4 MPA Modulus of elasitcity: 3479MPA
	Mean ≥ 3300 N Min. ≥ 3000 N	EN 15534 -1: 2014 Annex A	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		BFL-S1
Slip resistance (Pendulum test)	EN BS 7976:2		Mean: Dry: 45 PTV Smooth side Wet: 36 PTV
	For best slip resistance please install smooth side up		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	<b>REQUIREMENTS / STANDARDS</b>		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		Span: 400 mm
	Mean $\Delta S \le 10$ mm		Mean $\Delta$ S: 3.47 mm
	Max. ΔS: ≤ 13mm		Max. ΔS: 4.14 mm
	Mean $\Delta Sr: \leq 5mm$		Mean $\Delta$ Sr: 2.69 mm
	EN 15534 - 1:2014 Section 7.4.1		
	EN 15534 - 4: 2014 Section 4.5.3		
Resistance to indentation	EN 15534-1: 2014 Section 7.5		Apply 2000N load,
	EN 15534-4 :2014 Section 4.5.7		Brinell hardness: 92 MPA
			Rate of elastic recovery: 75%
Nail and Screw	EN 15534-1: 2014 +A1: 2	2017 Section 7.6	Withdrawal Capacity: 46N/mm <sup>2</sup>
withdrawal	EN 13446: 2002		
Moisture resistance under cyclic test conditions <b>3</b>	Decrease of bending strength,		Original Bending Strength 34.4 MPA
·	Mean≤ 20 %		After exposure,
	Max.≤ 30 %		Mean Bending Strength 31.8 MPA
			Mean Decrease: 8%
	EN 15534 - 1: 2014 Section 8.3.2		Min Bending Strength 30.5 MPA
	EN 15534 - 4: 2014 Section 4.5.2		Max. Decrease: 11%
Boiling Test	Water absorption in weight		Water absorption in weight:
20	Mean $\leq 7\%$		Mean: 1.97%
Swelling and water absorption	Max. ≤9%		Max.: 2.26%
Flexural properties <b>4</b>	EN 15534 - 1: 2014 Section 8.3.3		Bending Strength: 32.2 Mpa
	EN 15534 - 4: 2014 Sectio	on 4.5.5	Modulus of elasitcity: 3203 MPA
Swelling and water absorption	Means swelling:		Mean Swelling:
(24 hours immersion)	≤ 4 % in thickness		0.15 % in thickness
	≤ 0,8 % in width	EN15534 -1: 2014	0.04 % in width
	$\leq$ 0,4 % in length	Section 8.3.1	0.03 % in length
	Max. swelling:		Max. Swelling:
	≤ 5 % in thickness		0.16 % in thickness
	$\leq$ 1,2 % in width	EN15534 - 4: 2014	0.06% in width
	$\leq$ 0,6 % in length	Section 4.5.5	0.03% in length
	Water absorption:		Water absorption:
	Mean≤7%		Mean: 0.50%
	Max.≤9%		Max.: 0.54%
Pb, Cu content	Limit (mg/kg)		result (mg/kg)
	Copper (Cu): 7700		< 10
	Lead (Pb): 160		< 10
Linear thermal expansion 5	ASTM D696: -16		44.9×10 <sup>-6</sup> /°C
Freeze-Thaw three cycles <b>6</b>	ASTM D7032-17 Section 4.7		Bending Strength: 30.3 Mpa
	EN 15534-1:2014 Annex A		Modulus of elasitcity: 3110MPA
Formaldehyde 7	ASTM D6007:2014		Not detected

NOTE:

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

Climatic conditions: 25°C, 50%R.H. Air exchange rate: 0.5 h-1 Loading factor: 0.43 m2/m3 Detection limit = 0.02 ppm

- (2) (3) (4)
- (5)

(6) ppm = parts per million



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# **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 prade 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)



The grading image used in this data sheet is intended only as a guide of what the final product may look like. Norights can be taken from it. This technical data sheet was developed by Whiteriver Group, Cluide, Dunleer, CoLouth, Ireland, v3/22. At the time of issuing this data sheet, all information is correctly stated. The company reserves the right to update or a mendative sheet, all information is correctly stated. The company reserves the right to update or a mendative sheet, and the sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the company reserves the right to update or a mendative sheet of the right to update or a mendative sheet of the right to update or a mendative sheet of the right to update or a mendative sheet of the right to update or a mendative sheet of the right to update or a mendative sheet of the right to update or a mendative shewithout prior notice to third parties.



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