



### Layers of SPC Vinyl

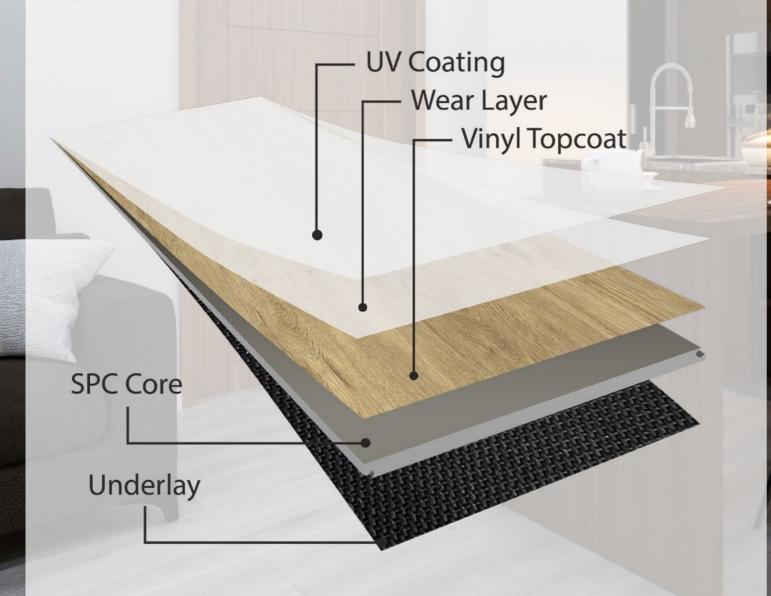
**UV Coating:** Scratch and UV resistance to prevent colour fading.

**Wear Layer:** Is a transparent coating that is added to improve the plank's scratch and stain resistance.

**Vinyl Topcoat:** Every SPC vinyl flooring plank has a topcoat that lies just underneath the wear layer. This topcoat is waterproof and is responsible for the look or style of the planks.

**SPC Core:** This part of the hybrid flooring contains a rigid core and is made by combining limestone powder and other stabilizers. This core is extremely durable and solid, ensuring that the entire vinyl plank is structurally sound.

**Underlay:** The last part of vinyl plank flooring is the attached underlay, to improve acoustic dampening and add softness to the floors.



#### **Locking Systems**

We use a range of locking systems throughout our SPC Vinyl Collection.



4F drop-lock is a patented, tool-free system for fast, secure installation of our 122×23 SPC vinyl panels. It combines 3L TripleLock (drop-lock on the short side) and Click4U (angle lock on the long side) for exceptional strength and stability. The system is water-resistant, meets all performance standards, and is widely used by SPC manufacturers and retailers to boost productivity, cut costs, and improve customer satisfaction.



Unilin Uniclic is a patented glueless locking system used for our 91.5x15.2 SPC Vinyl planks. It works for both the long and short sides of the panel. It can be installed by angling or snapping the panels into each other, without the need for glue or nails.

Uniclic guarantees a strong and seamless joint between the panels, thanks to its flexible lower lip and the contacts and spaces in the joint. Uniclic also ensures long-lasting stability and reduces unwanted creaking sounds. Uniclic is easy to install, as it uses standard tooling.



Our newest Oregon ranges use the Välinge 5G Fold Down and 5G-i Push Down. These are single-action systems for floating floors that deliver fast, durable, user-friendly installs for SPC. Integrated and flexible locking elements snap with a "click" to form strong vertical and horizontal join, often by one person in a single motion.



**Enhanced Durability:** SPC vinyl is exceptionally durable and resistant to impacts, scratches, and dents. Its rigid core layer provides superior strength and stability, making it highly suitable for high-traffic areas and environments with moisture or temperature fluctuations. It can withstand heavy use and maintain its appearance for a long time.

**Better Stability:** The rigid core of SPC vinyl makes it more stable than LVT. It is less prone to expansion or contraction due to temperature changes, making it a reliable choice for areas with varying climate conditions. This stability helps prevent issues like warping or buckling.

**Thicker Construction:** SPC vinyl is generally thicker than LVT. The increased thickness c ontributes to its enhanced durability and overall performance. The extra thickness can also help to provide better insulation and sound absorption.

**Improved Moisture Resistance:** SPC vinyl is highly resistant to moisture, making it an excellent choice for areas prone to spills or high humidity, such as bathrooms, kitchens, and basements. Its water-resistant properties help prevent damage caused by moisture, including warping, mould, or mildew growth.

**Easy Installation:** SPC vinyl often utilizes a click-lock installation system, which allows for straightforward and efficient installation. The planks or tiles can be easily locked together, creating a floating floor that can be installed over various types of subfloors. This simplicity of installation can save time and money during the installation process.

**Versatile Application:** Due to its durability and water resistance, SPC vinyl can be used in a wide range of environments, including both residential and commercial settings. It is suitable for areas with heavy foot traffic, such as retail spaces, offices, and restaurants. Additionally, SPC vinyl can be installed in below-grade areas like basements, where moisture resistance is crucial.

**Low Maintenance:** SPC vinyl is relatively low maintenance and easy to clean. Its wear layer provides protection against stains, spills, and scratches, reducing the need for extensive cleaning or maintenance procedures. Regular sweeping and occasional damp mopping are usually sufficient to keep SPC vinyl looking its best.

It's important to note that while SPC vinyl offers these advantages, LVT also has its own strengths and benefits. Ultimately, the choice between SPC vinyl and LVT depends on your specific needs, preferences, and the requirements of your space.

### **Install Tips**

You must ensure that the sub floor is solid, secure, clean, dry, smooth, and level prior to installing the SPC flooring. New concrete floors must be dry/cured. It may be necessary to use a levelling compound to ensure that the floor is adequately prepared. Reinforcement/over boarding maybe necessary on wooden substrates.

Please always check manufacturer's guides at every step of preparation and installation. We recommend leaving the packs of flooring in the room it is to be laid for a minimum time as specified in the manufacturer's fitting instructions. Packs should be unopened and kept flat – do not lean the packs up against walls or similar as they may warp.

Underlay is pre attached, there is no need for additional underlay. For instances when the underlay is not pre attached, please refer to the manufacturer's guidelines on which underlay to use.

Please ensure that you consider where you are planning to install the SPC and its exposure to sunlight and heat. Take necessary steps to protect the floor in any areas exposed to sunlight and heat and note that the surface temperature must not exceed 27c.

You must allow for an expansion gap, and we recommend 10mm as a guide, but it can be more in larger areas. The expansion gap can be hidden by skirting boards or edging. Expansion gaps are applicable to any fixed units, appliances etc, not just walls at the perimeter of the flooring.

Allow for expansion joints in doorways. Additional expansion joints will be needed in larger areas. SPC Flooring must be handled with care. This means in transit, handling, and fitting. The click system is fragile before it is fixed, however once it is installed correctly, the flooring will be very strong.

All flooring must be checked for acceptability and suitability by the fixer/customer and the proper processes for installation must be followed. Claims cannot be accepted once products have been fixed/used. Fixing of the flooring constitutes acceptance of the quality and suitability.

Always refer to the manufacturer's guide. Our Nasa range has manufactures install guides in every box.





122x18x0.5

122x18x0.5





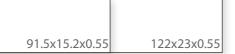


122x18x0.5

122x18x0.5







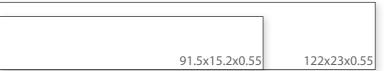


91.5x15.2x0.55 122x23x0.55



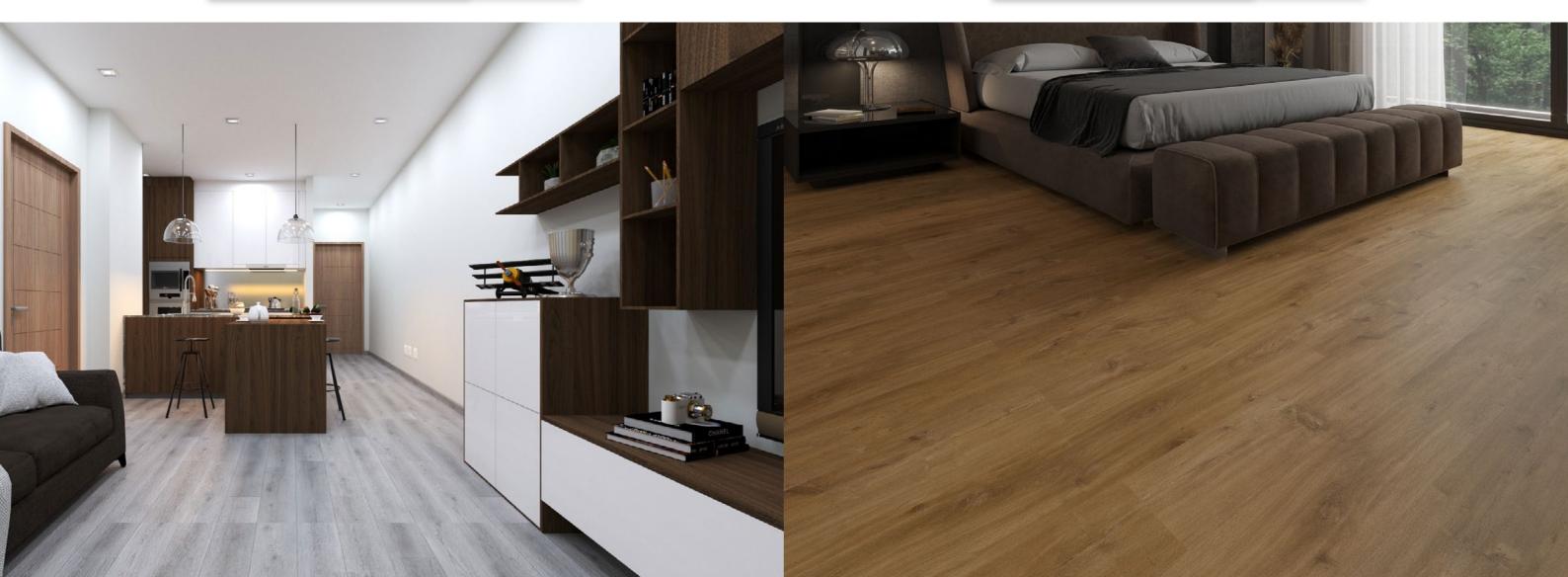


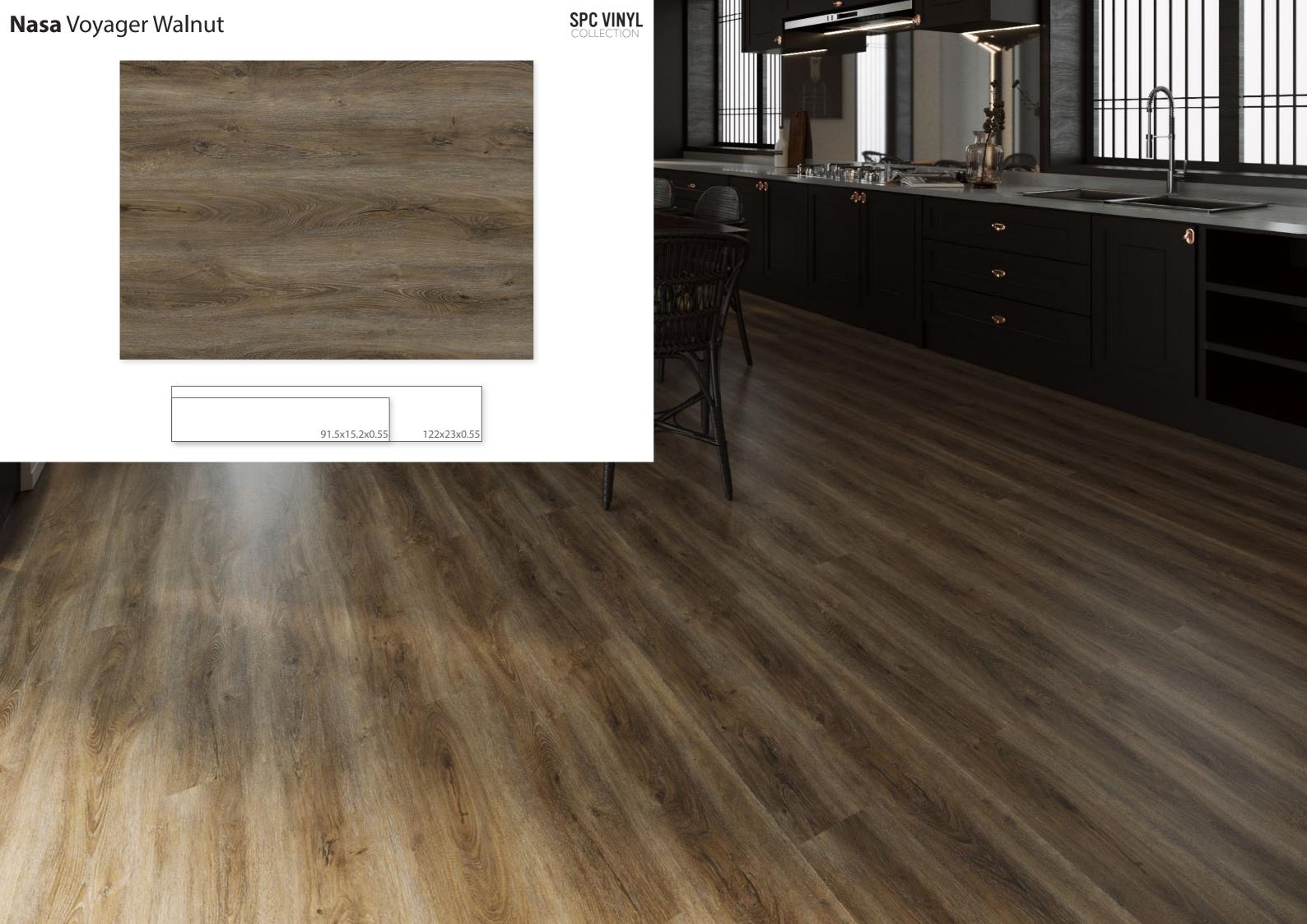






91.5x15.2x0.55 122x23x0.55





## Specification - Nasa

Item	Unit	Standard	Method
Appearance		Damage, chipping, wrinkle, pin hole, delamination, peeling: not allowed.  Impurity, bubble, scratch, glue mark, discolour, dent, stain: not apparent.	
		The shade of bulk production is the same.	1
Width	mm	± 0.1	ASTM F3261
Length	mm	± 0.2	ASTM F3261
Thickness without foam back layer	mm	± 0.13	ASTM F387
Thickness with foam back layer	mm	± 0.2	ASTM F387
Squareness	mm	≤ 0.25	ASTM F2055
Openings	mm	Average ≤ 0.1 Individual values ≤ 0.15	ISO 24337:2006
Height difference	mm	Average ≤ 0.1 Individual values ≤ 0.15	ISO 24337:2006
Residual indentation	mm	≤ 0.18	ASTM F1914
Surface integrity		No puncture through wear layer, décor into rigid core.	ASTM F1914
Dimensional stability (80 oC/6h)	%	≤ 0.1	ISO 23999
Curl	mm	≤ 2	ISO 23999
Suitable for underfloor heating	°C	Max 27	
Resistance to light		AE < 8	ASTM F1515 -15
Formaldehyde emission	Class	E1	EN 717-1:2005
Fire resistance	Class	Bfl sl	EN ISO 9239 -1
Slip resistance	Class	DS	EN 13893 : 2002- 11
Volatile organic compounds	ug/ m3	Not detected	Floor Score
Heavy metal	ppm	Not detected	ASTM F963





### Specification - Oregon

Property	Tolerance	Standard Test Method
	Product Dimension Requirements	
Overall Thickness (mm)	-0.10 +0.13mm	ASTM F387
Wear layer Thickness(mm)	±0.03mm	ASTM F410
Length (mm)	±0.30mm	ISO 24337
Width (mm)	±0.10mm	
Squareness (mm)	AVE≤0.08mm MAX≤0.10mm	ASTM F2055
Straightness (mm)	AVE≤0.10mm MAX≤0.15mm	ISO 24337
Opening (mm)	AVE≤0.05mm MAX≤0.10mm	ISO 24337
Ledging (mm)	AVE≤0.05mm MAX≤0.10mm	ISO 24337
Bevel	Follow with order requirements.	Microscope Projection
Embossing depth	Follow with order requirements.	Depth Gauge
Density (kgs/m3)	The fluctuation within the batch ±10%	EN 436
	Performance Properties	
Peel Strength for both MD & CD - (PLI)	Min. 125N/50mm	ISO 24345
Locking-System Profile Accuracy	±0.05mm	Microscope Projection
Clic Tensile Force(MD & CD)	≥150N/50mm	ISO 24334
Castor chair	Non-underpad product≥25000	ISO 4918
Residual indentation	≤ 0.18mm (0.007 inch)	ASTM1914
UV Coating Adhesion	1	In-house check
Micro-Scratch resistance	All products: ≤ 2 grade	EN16094
Surface Scratch	≥2500g	ISO-1518
	Dimension Stability	
Dimensional Stability (%) (MD / CD)	≤0.08%(80°/6H)	ISO23999
Heat Curling (mm)	≤0.8mm(80°/2H)	ISO23999
Room Temperature Curling (mm)	≤0.5mm(24°/24H)	In-house check

SPC VINYL COLLECTION

# Specification - Oregon

Property	Tolerance	Standard Test Method
	Appearance Properties	11/
Surface Gloss	BP(AVE ±1.5°), EIR(AVE ±1.0°)	In-house check Customer require- ments: 60° gloss instrument
contamination, tracking, surface damage, cut, edge damage, gouges, dents, blisters, bubbles, uneven texture or gloss, etc. Backing layer damage	The determination method for these apparent defects detection will be as follows: based on the total number of sheets in the sample quantity, each similar issue found will be individually recorded and photographed, and the final calculation shall not exceed 5%.	In-house check
Grooving&Slot Debirs	It is required that the inside of the box should be clean and no cutting debris residue.	In-house check
	Others	
Fire classfication	Bf1-s1	EN13501
TVOC	≤10mg/m3(3days) ≤0.5mg/m3(7days) ≤1.0mg/m3(28days)	ISO16000&AgBB
	≤0.5mg/m3	CDPH/EHLB Standard Method v1.2-2017 (Califor- nia Section 01350)
Phthalates	ND(≤60ppm)	In-house testing
Heavy Metals (mg/Kg product)	Total Lead (Pb) $\leq$ 100 SOL. Lead (Pb) $\leq$ 90 SOL. Mercury (Hg) $\leq$ 60 SOL. Chromium (Cr) $\leq$ 60 SOL. Arsenic (As) $\leq$ 25 SOL. Antimony (Sb) $\leq$ 60 SOL. Barium (Ba) $\leq$ 1000 SOL. Selenium (Se) $\leq$ 500 SOL. Cadmium (Cd) $\leq$ 75	EN71- 3:1994+AC:2002





