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SYNSTEP 100 Synthetic Roofing Underlayment

SYNSTEP 100 is an advanced roof underlayment that provides effective air, water, and vapor barrier properties. Product designed specifically for steep slope roofs application. Perfect for use under synthetic shingles, primed cedar, asphalt, stands out for its exceptional strength, long-lasting durability, and ease of use, surpassing latest industry norms. Underlayment boasts a four-layer design, incorporating a Circular loom woven scrim and a Spunbonded PP non-woven laminate as its top layer. Each layer receives UV protection, and the underside is treated with an elastomer for anti-slip safety.



Compliance and Building codes:

- [Intertek Code Compliance Research Report \(CCRR – 0549\)](#)
- [Florida Building Code Approved - #FL46899](#)
- [TDI Listed](#)
- Performance characteristics meet or exceed ASTM D8257
- Meets the requirements of ICC-ES AC188.
- Building Codes: 2021 IBC, 2021 IRC, 2023 FBC for use in HVHZ.

Features and Benefits:

- **Tensile Strength & Tear Resistance:** High resistance to mechanical stresses and tearing, maintaining integrity under pressure.
- **Lightweight & Easy Handling:** Lightweight rolls facilitate quick and effortless handling.
- **Preprinted Guides:** Preprinted nailing patterns and overlap lines optimize installation speed, reducing labor hours.
- **Weather Protection:** Low-temperature flexibility. Tested for UV retention up to 6 months. Backed by a 30-year limited warranty.
- **Water & Moisture Barrier:** The product's design resists water absorption, safeguarding against warping, wrinkling, and mold growth.
- **Low WVTR:** Low water vapor transmission rate ensures a superior moisture barrier.
- **Cool Grey Surface:** The high-traction grey top layer reduces heat absorption, providing a cooler and more comfortable surface for workers.
- **Anti-Slip Coating:** A polymer anti-slip coating on the bottom surface ensures excellent skid resistance, minimizing workplace hazards.
- **Sustainable Materials:** Crafted from 100% recyclable inorganic polymers, making it rot and mold-resistant, free from harmful chemicals.
- **Wide Temperature Range:** Operates effectively in temperatures ranging from 40°F to 240°F.
- **Consistent Reliability:** No buckling, warping, mold growth, rot, or cracking, ensuring consistent performance across various conditions.

Specification:

Sr. No	Test Parameter	Test Standard	Unit	Typical Value	Test Value
1	Width	-	inch	48	48.1
2	Mesh	-	Picks per inch	8x8	8x8
3	Thickness	ASTM D 1777	mils	Minimum 8	8.1
4	Fabric GSM	ASTM D 3776	g/m ²	100	99.8
5	Tensile Strength MD	ASTM D 5035	lbs	90	114.75
6	MD Elongation	ASTM D 5035	%	>16	18.45
7	Tensile Strength CD	ASTM D 5035	lbs	90	105.36
8	CD Elongation	ASTM D 5035	%	>16	18.26
9	COF MD (Kinetic Friction)	ASTM D 1894	μk	>0.6	1.05
10	COF MD (Static Friction)	ASTM D 1894	μs	>0.6	1.09
11	COF CD (Kinetic Friction)	ASTM D 1894	μk	>0.6	1.05
12	COF CD (Static Friction)	ASTM D 1894	μs	>0.6	1.08
13	Liquid Water Transmission	ASTM D 4869	P/F	Pass	Pass
14	Tear Strength MD	ASTM D 4533	lbs	>20	22.76
15	Tear Strength TD	ASTM D 4533	lbs	>20	21.35
16	UV Retention	ASTM G 154	P/F	180 Days	Pass
17	Shrinkage at 85°C after 30 mins MD	ASTM D 1204	%	<1	0.9
18	Shrinkage at 85°C after 30 mins TD	ASTM D 1204	%	<1	0.9
19	Bonding	As per order	P/F	Pass	Pass



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STORAGE/HANDLING

Completed rolls are wound onto paper cores and then placed on wooden crate pallets for transportation. For outdoor storage, it's essential to protect SYNSTEP100 from the sun with proper UV cover, especially if stored under open air.

The product must be kept away from open flames or other potential ignition sources during all phases-storage, shipment, and installation. Proper handling & installation are paramount to maintain product integrity. For more detailed information on storage and installation, refer to the separate instruction manual.

Availability:

- Roll: 48" x 250' | 10 sq. roll. (93 m²)
- Packaging: 56 rolls per pallet.
- Weight per Roll: 21.5 lbs/ 9.6 kg.
- Standard Top Surface & Color: Cool Grey or Black.
- Printing: 2 color high-quality printing.
- Note: Private label with custom sizes and colors is available.
- Bottom Surface: Synthetic skid resistant structure

Disclaimer: The test data reflects average measurements taken during manufacturing and is subject to variations due to handling, external factors, or permissible variances under national standards. UV results are based on historical samples with the same formulation. All stated values are nominal averages derived from multiple production runs and are not guaranteed as minimum or maximum values. The provided data is for reference only and does not constitute a contractual commitment or obligation from the supplier.