



www.raptorunderlayment.com

"RAPTOR Synthetic Underlayment"

Imagine a roofing underlayment you can install with regular roofing nails. That won't tear or blow off the roof. That lies flat and stays flat, with a black or colour of your choice surface that dries off quickly and shows chalk lines clearly. An underlayment with incredible traction, wet & dry. Now imagine all of this for less than the cost of #30 asphalt saturated felt.

Our underlayment is a unique combination of woven polypropylene, binders, tackifiers, and non-woven polymers. Light weight but tough. They have incredible traction, wet or dry and will not tear or blow off the roof.

Roofer Friendly

"RAPTOR Synthetic Underlayment" was designed specifically for roofing contractors. Regular roofing nails provide the best protection from water infiltration, and are preferred fastener for the underlayment. High tensile strength.

They weigh only 25 pounds for a 10 square root. Easier to carry and fewer trips up the ladder. Available in 4', 5' and 10' widths, installs much faster and uses fewer staples than standard felt.

Safety

The first rule of fall prevention is "don't slip" and "RAPTOR Synthetic Underlayment" has been designed to provide the safest walking surface possible for contractors moving around steep sloped roofs. It provides incredible traction wet or dry. It won't tear easily, eliminating the slip hazard created with loose and torn asphalt felt.

Builder Friendly

It can be left exposed for up to six months and will not tear or blow off the roof. It lays flat and stays flat. No more wrinkles telegraphing through today's lighter weight shingles. "RAPTOR" is a suitable underlayment for use under all roofing materials.

Marketing / Advertising

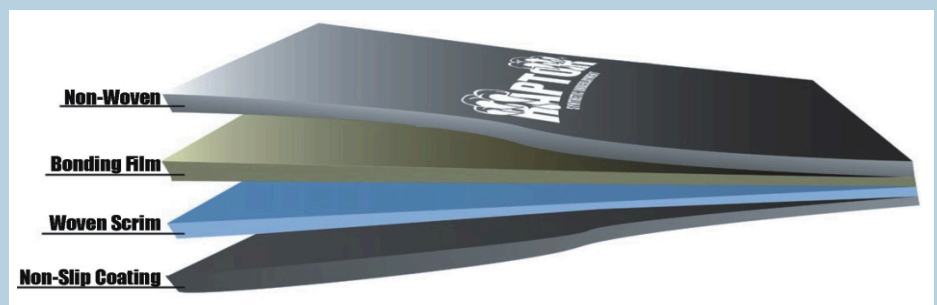
Customized Logo Printing of your company on the underlayment in creating brand awareness for the customer.

We can also customize the roll size as per your specifications.

ICC - AC188 TEST Approved.



Raptor Now Available In 10', 5', & 4' Heights



AC188 TEST RESULTS SUMMARY

Test Description	Standard	Test Requirement	Test Results	Pass/Fail
Pliability	ASTM D146 section 14	No cracking shall occur when bent 90° at a uniform speed over a rounded corner of half inch radius.	No cracking occurred	Pass
Accelerated Aging	AC48 Section 4.7	No visible damage to the specimens such as cracking, chipping or delamination shall occur.	No Visible damage Occurred	Pass
UV Exposure	AC48 Section 4.8	No visible surface or structural changes such as peeling, chipping, cracking, flaking or pitting shall occur when observed under a minimum of five-power magnification	No Visible Changes Occurred	Pass
Tensile Strength	AC48 Sections 4.1, 4.7, 4.8 and ASTM D1970	Control, accelerated-aged, and ultraviolet samples shall have a minimum breaking strength of 25 lbf/in-width for both machine and cross-directions	Control Samples. CD= 40 lbf MD= 71 lbf	Pass
			Aged Samples: CD= 37 lbf, MD= 77 lbf	Pass
			UV Exposed Samples CD= 40 lbf, MD= 80 lbf	Pass
Adhesion In Peel	N/A	This was not a requirement for this product, as it is not an adhered membrane.	N/A	N/A
Liquid Water Transmission	ASTM D4869 Section 8.3.5	Shall meet the "Pass requirements of Section 8.3.5 of ASTM D4869	Pass	Pass
Cycling & Elongation	N/A	This was not a requirement for this product, as it is not an adhered membrane.	N/A	N/A
Unroll-ability	AC188 Section 3.2	The finished product shall not crack or become so sticky as to cause tearing or outer damage upon being unrolled at temperatures between 50°F and 140°F or 10°C and 60°C	No cracking, tearing or other damage was observed upon being unrolled at specified temperatures	Pass
Water-vapor Transmission	As PER ASTM E 96	Water-vapor Transmission (g/m ² /hr)	0.061	N/A

INSTALLATION INSTRUCTIONS

Raptor should be installed with the printed surface facing up. Horizontal seams should be lapped four inches and vertical side seams should be lapped six inches. Fasteners should be concentrated in horizontal seams.

Proper Placement of Metal Drip Edge : Raptor should lap over the drip cap at the bottom (eave edge) of the roof. If the framers install the Raptor before the roofers arrive, they should keep the fasteners at least three inches from the bottom of the roof, so that the roofers can properly slip the drip cap under the Raptor.

Drip cap should lap over the Raptor along the eaves. This will prevent windblown rain from getting under the underlayment, and will help prevent wind damage to the underlayment before the shingles are installed.

Fastening **RAPTOR SYNTHETIC UNDERLAYMENT** to the Deck

- The correct location for fasteners is clearly printed on the surface of the Raptor Synthetic Underlayment. For normal application, place a nail in each of the printed O's and ignore the printed X's.
- Fasteners for Raptor should be concentrated in the horizontal laps. When using regular roofing nails or large headed cap nails, fasteners should be spaced every 12 inches in the seams and staggered every 24 inches along two rows in the field of the underlayment.
- Regular roofing nails with a 3/8" head provide the best protection against water infiltration, and are our preferred fastener for most Raptor applications. One inch cap nails may be used when required by code or if unusually high winds are forecast, but are typically unnecessary.
- Raptor may be left exposed for up to six months using regular roofing nails or cap nails.
- For extended periods of time or extreme weather conditions, twice as many nails may be installed by placing fasteners in both the O's and the X's printed on the Raptor.
- Staples are commonly used to install asphalt saturated felt and will perform just as well with Raptor. Staples should only be used if the roofing material will be installed within a few days.
- A continuous line of staples should be placed, along the seams with only a few staples in field. Raptor's superior tear strength allows you to install Raptor using far fewer staples than you may have used with organic felt.



Mfgd. by :
GULNAR PLASTICS PVT LTD.

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