

USE THESE INSTRUCTIONS FOR ASPHALT SHINGLES, WOOD, TILE AND SLATE ROOFING PRODUCTS ONLY.

For instructions on other types of roofing, consult the product manufacturer.

- 1. Please ensure the roof deck is swept clean, smooth and dry prior to beginning installation.
- 2. STINGER EXO Synthetic Underlayment is laid out horizontally (parallel) to the eave with the printed side up, with 3 in. (7.6cm) horizontal laps and 6 in. (15.2cm) vertical laps. On roof slopes less than 4:12, STINGER EXO should be lapped at 24 in. (61cm) or to center line as printed, over the underlying course. The minimum roof slope shall be 2:12 or the minimum roof slope required for the roof covering in accordance with the applicable code, whichever is greater.
- 3. STINGER EXO shall be attached to the roof using 1" long x 0.083" electro-galvanized (EG) No. 14 gauge collated nails having 1 in. (2.5cm) diameter plastic caps (STINGER NailPac®), or 7/8", 1-1/4", or 1-1/2" galvanized 7/16" crown No. 18 gauge collated staples having 1 in. (2.5cm) diameter plastic caps (STINGER StaplePac®), or 1" long x 0.105 electro-galvanized (EG) No. 12 gauge nails having 1 in. (2.5cm) diameter plastic caps (STINGER HandDrive). Spacing shall be at 8 in. (20cm) on center at both horizontal and vertical laps for normal wind zones. In high wind zones and coastal areas, STINGER EXO shall be fastened at 4 in. (10.1cm) at both horizontal and vertical laps. In all cases, fasten at 24 in. (61cm) on center along the center of the roll in the field of the roof. The pre-printed nail pattern spacing described above applies to normal as well as high wind conditions. Underlayment application and attachment must be in accordance with the applicable code.
- 4. Where seams and joints require the use of sealants or adhesives, use a high quality, low solvent, asbestos-free, plastic roofing cement meeting ASTM D-4586 Type I, Federal Spec SS-153 Type I and consult manufacturer's installation instructions.
- 5. Depending on roof pitch and surface conditions, it is recommended that roof jacks, toe-boards or a storage platform be secured to support roofing materials placed on the roof.
- 6. STINGER EXO is not designed for indefinite outdoor exposure, and it is recommended that installation of the final roof covering take place within 6 months.
- 7. As with any roofing product, always be careful to observe safe roofing codes and practices as by OSHA Regulation Standard-29 CFR, Fall Protection Systems Criteria and Practices 1926.502

In accordance with 2015 ICC Building Codes



STITER.EXO LIMITED WARRANTY

National Nail Corp. (Seller) warranties to the purchaser (Buyer), STINGER® EXO50 Synthetic Roofing Underlayment (Product) that, if installed precisely as stated in Seller's Installation Instructions, Product will retain its ability to shed water, except as noted, for a period of fifty (50) years from the sales invoice date (Warranty Period). The warranty is null and void if: 1) any part of the Product is exposed to UV after roof cladding installation, or 2) the Product has been installed and left uncovered without roof cladding for more than 180 days. Seller makes no other warranties of any kind, expressed or implied, as to the warranty of merchantability or use other than the intended purpose.

Buyer must give Seller written notice of any defects via U.S. certified mail within 30 days from the date that the defect was discovered, along with field samples illustrating production codes, application details, and digital pictures. Seller reserves the right to reserve warranty claim judgment pending full field sample evaluation. Such notice shall be sent to National Nail Corp., c/o STINGER Product Manager, 2964 Clydon S.W., Grand Rapids MI 49519.

Seller shall, at its sole option and as Buyers sole remedy, repair and/or replace product or refund the purchase price for that portion of the product that has proven defective, within the written warranty conditions. Buyer hall be responsible for all handling and transportation charges.

Failure of Buyer to give Seller proper notice of a defect, and/or authorized repairs or alterations, and/or misuse or misapplication of product will void this warranty completely.

Seller, at its discretion, retains the right to modify this warranty.

This warranty does not cover leaks and/or damage caused by any penetrations (including penetrations by fasteners), or by animals, vandalism, abusive conditions, structural design and defects, alterations, natural forces and acts of nature, or by improper installation, or by any other causes beyond Seller's control.

This warranty is the Seller's sole and exclusive warranty. The Seller's liability for any claim of any kind and of any loss or damage arising in connection with, or resulting from the manufacture, sale, and/or resale of product shall not exceed the purchase price paid for the product, prorated from the date of purchase to the date of discovery of the defect. In no event shall the Seller be held liable for damages, and/or for special incidental, punitive or consequential damages. Some states do not allow the exclusion or limitation of damages, or limitations on how long an implied warranty lasts, so the above limitation may not apply.

No part of this warranty shall be changed or cancelled except in writing as signed by the Seller and Buyer. Buyer may not assign or transfer this warranty without Seller's written consent.

The warranty shall be covered by the laws of Michigan without regard to its conflicts of laws, provisions, and exclusive jurisdiction for any dispute arising from this warranty shall be in state or federal courts located in Kent County, Michigan. Parties waive all objections to venue in these courts.