



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Greenstone Slate
Upper Road P.O. Box 134
Poultney, VT 05764**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Greenstone Slate nu-lok™ Roofing System

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This new NOA and consists of pages 1 through 5.

The submitted documentation was reviewed by Mark A. Zehnal, CPRC.



**NOA No. 04-0730.01
Expiration Date: 08/17/10
Approval Date: 08/17/05
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ROOFING ASSEMBLY APPROVAL

Category: Roofing
Sub-Category: 07310 Roofing Slate
Materials: Slate
Deck Type: Wood

SCOPE:

This approves Greenstone Nu-Lock Slate roofing System as described in this Notice of Acceptance, which is designed to comply with the Florida Building Code. For the locations where mean roof height, as determined by applicable building code, does not exceed 33 feet.

PRODUCT DESCRIPTION:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
Greenstone Slate	Various	ASTM C 406	Dense sound rock, quarried for roofing stock. Thickness from 1/4" to 3/8" and various width and lengths.
nu-lok™ Galvalume™ Link Channel	Thickness: 0.031 in. Yield: min. 50 ksi Weight: 0.30 pounds per part	N/A	Structural grade AZ-55 Galvalume™ coated metal link channel. Finished in a minimum 2-mil black automotive e-coat using PPG process after stamping
nu-lok™ Galvalume™ battens	Thickness: 0.051 in. Yield: min. 30 ksi Weight: 0.41 pounds per linear foot	N/A	Commercial Grade AZ-55 Galvalume™ coated metal batten
Wire Clip	Min dia: 0.063 in. Weight: approximately 40 pounds per thousand parts	N/A	316 Stainless Steel Full Hard Rod Black Oxide finished.

EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
PRI Asphalt Technologies, Inc.	TAS 100	Wind Driven Rain	04/14/04
PRI Asphalt Technologies, Inc.	ASTM C 406	Physical Properties	07/153/04



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APPROVED SYSTEMS:

Deck Type: Wood, Non-insulated

Deck Description: $1\frac{9}{32}$ " or greater plywood or wood plank.

Slope Range: 3- $\frac{1}{2}$:12" or greater

Underlayment: A single layer of ASTM D 226 type II or ASTM D 4869 type IV asphalt-saturated base sheet. Underlayment shall be fastened with corrosion resistant tin-caps and 12 gauge 1- $\frac{1}{4}$ " annular ring-shank nails, spaced 6" o.c. at all laps and two staggered rows 12" o.c. in the field of the roll. Or, any Miami-Dade County Product Control approved underlayment having a current NOA.

Followed by a Miami-Dade County approved self-adhered underlayment solidly adhered to the above referenced base sheet.

Eave Metal: All metal profiles shall be constructed and installed in accordance with the Florida Building Code High Velocity Hurricane Zone installed in compliance with RAS 111.

Valleys: Valley metal shall be a minimum 24" wide preformed W-shape metal with returns. If the slope is greater than 12": 12", valley metal may be reduced to 16" wide. Valley metal shall be set over a minimum 36" wide sweat sheet of minimum ASTM D 226 type II embedded in roofing cement, or an approved self-adhered membrane. Valley metal shall be secure with clips fabricated from similar or compatible material. Clips shall be spaced a maximum 12" o.c, and secured with a minimum of 2 approved 1- $\frac{1}{4}$ " roofing nails set in roofing cement. Trim metal at all valley/ridge junctions, ensuring water-shedding capabilities onto the valley. Install metal soaker at all valley junctions. Turn soaker up on sides a minimum of 1" to create a water diverter, ensuring ample water-shedding capabilities. Valley detail shall be in accordance with Greenstone nu-lock™ current published installation instructions and details.

Ridges: Ridges shall be covered with slate having a width that is approximately the same as the field slate exposure. The exposure of the ridge slate shall be approximately the same as the width of the field slates. Pre-manufactured hip and ridge units are acceptable. In all cases the ridge slate cover the last course of the field slate by a minimum of 3". Ridge slate shall be installed in a saddle or combing method and shall be attached with an alternating overlap. All ridge slate shall be set in an 8" bed of ASTM D 4586 mastic. Ridge detail shall be in accordance with Greenstone nu-lock™ current published installation instructions and details.



Application:

Counter Batten: Pressure treated 1 x 2 counter battens shall be installed parallel to the slope of the roof. Counter battens shall be spaced 24 inches o.c over the underlayment to coincide with the wood joist or trusses. Counter battens shall be fastened through the sheathing to the joist or trusses with 10 gauge 2-½ inch annular ring shank nails spaced a minimum of 2 inches for each end and 24 inches o.c in the remainder of the counter batten.

nu-lock™ battens: nu-lock™ battens shall be placed 12-¹/₈ inches on center. nu-lock™ battens shall be fastened through the counter batten to the sheathing with minimum 10 gauge 2-½ inch annular ring shank nails at each counter batten intersection, but at spacing not to exceed 24 inches o.c.

Slate: Install Greenstone slate using nu-lock™ link channel with wire clip. Link channels shall be insert into nu-lock™ battens. Slate shall be laid on top of two-link channel and secured with the wire clip. Slate shall be placed in the center of link channel allowing a minimum ¹/₁₆ gap between slates. See Detail 'B' herein.

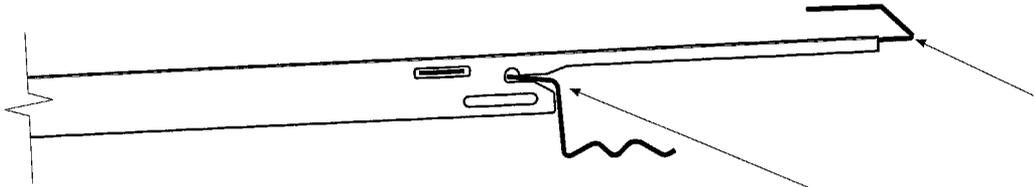
Link channel installation shall be in accordance with Greenstone nu-lock™ current published installation instructions and details.

GENERAL LIMITATIONS

1. Fire classification is not part of this acceptance
2. This acceptance is for wood deck applications. Minimum deck requirements shall be in compliance with applicable building code.
3. All Slates and components shall bear the imprint or identifiable marking of the manufacturer, name or logo, or following statement: "Miami-Dade County Product Control Approved".
4. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

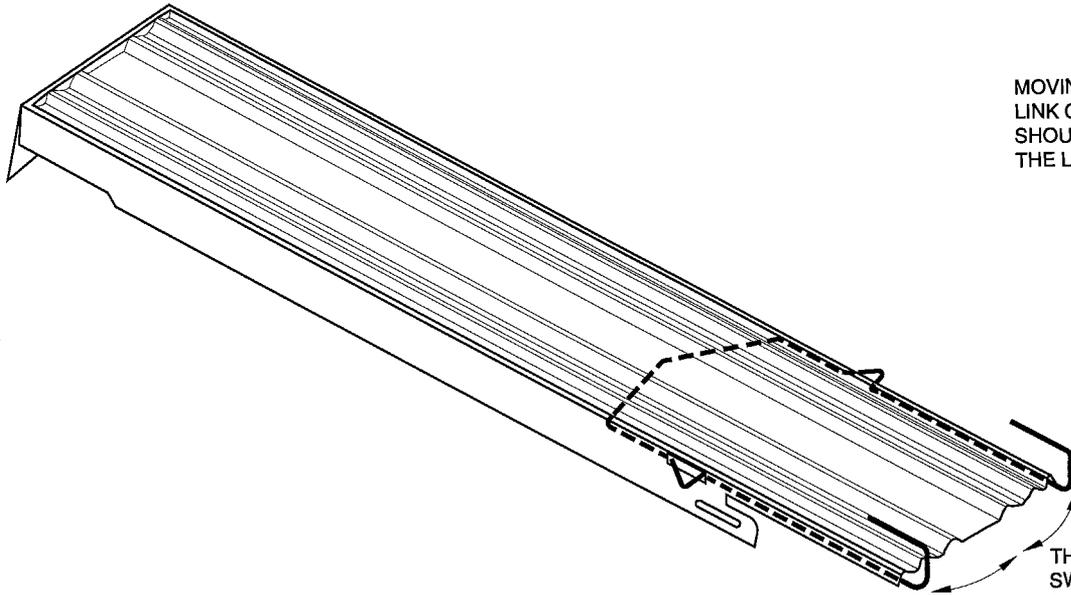


Detail Drawing "A"
Link Channel



THE CLIP EXTENDS APPROXIMATELY 1/4" FROM THE END OF THE nu-lok LINK CHANNEL SO IT CAN BE SWUNG TOWARD THE MIDDLE OF THE CHANNEL TO RELEASE THE EDGE OF THE SLATE, ALLOWING THE SLATE TO BE EASILY REMOVED.

NOTE: THE FLANGE ON THE BATTEN ACTS AS A LOCATION GUIDE WHEN PLACING THE LINK CHANNELS

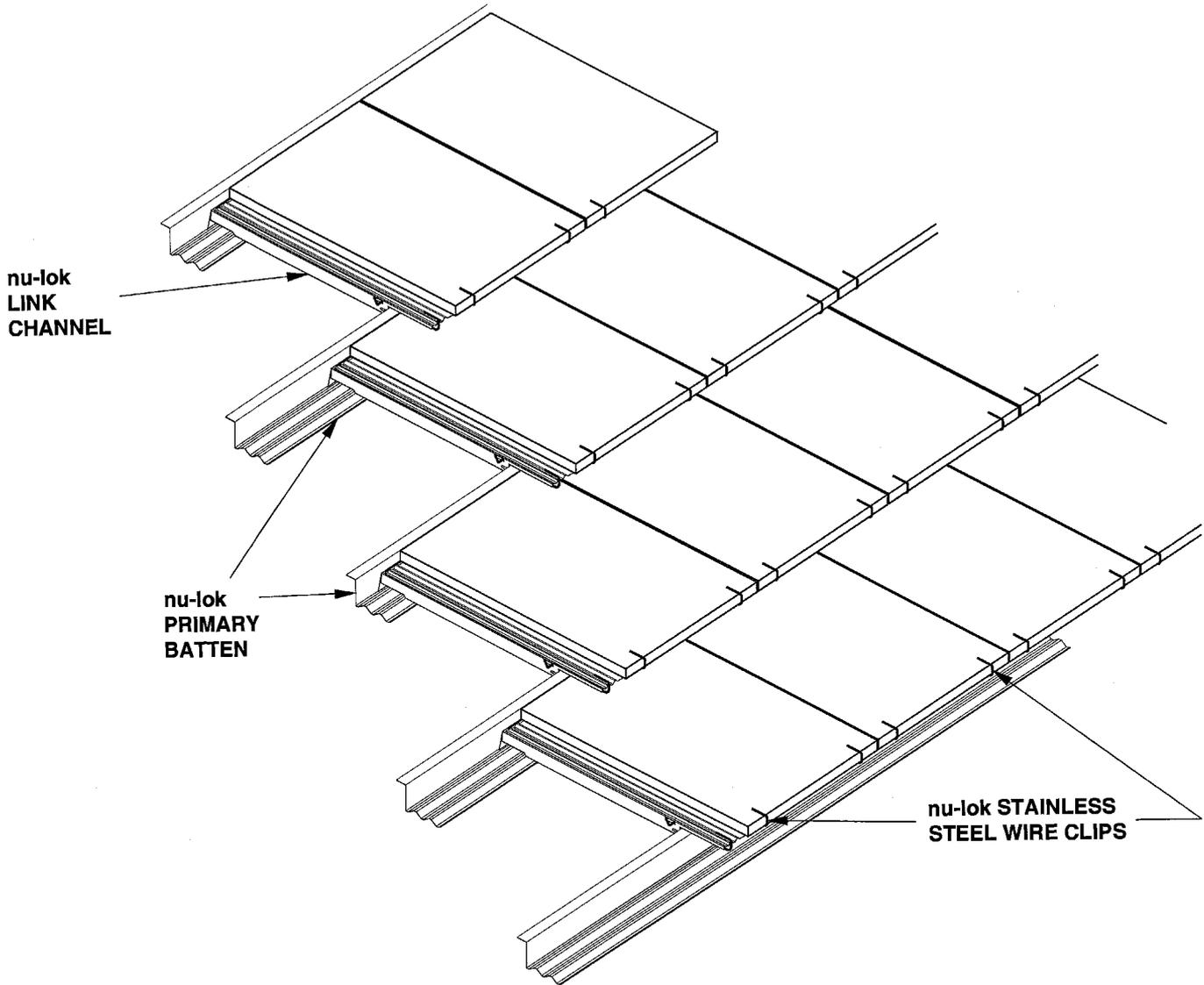


MOVING THE CLIP TO THE CENTER OF THE LINK CHANNEL TO REMOVE A SLATE SHOULD NOT DISENGAGE THE CLIP FROM THE LINK CHANNEL

THE CLIP END IS SWUNG TO THE CENTER TO RELEASE THE SLATE



Detail Drawing "B"
Slate Installation



END OF THIS ACCEPTANCE



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