MIAMI-DADE

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)

Tarco
One Information Way
Suite 225
Little Rock, AR 72202

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 of the Florida Building Code.

DESCRIPTION: 30# ASTM Specification Felt, EasyLay™, Fast90™, PS200

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 NOA revises NOA No. 07-0208.14 and consists of pages 1 through 10.
The submitted documentation was reviewed by Jorge L. Acebo.

ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category: Underlayment
Material: Asphalt, SBS, Polyester

SCOPE:

This acceptance is for **30# ASTM Specification Felt, EasyLay, Fast90** and **PS200** underlayments as manufactured by Tarco, for use with approved prepared roof assemblies as described in this Notice of Acceptance; designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone of the Florida Building Code.

PRODUCTS DESCRIPTION:

Product	Dimensions	Test Specification	Product Description
30# ASTM Specification Felt	3' x 72" rolls	ASTM D 226 Type II	Asphalt saturated felt underlayment
EasyLay	3' x 133' 4" rolls	ASTM D 226 Type II	Sheet material comprising a polyester substrate coated with bituminous coating for use as an underlayment in sloped roof assemblies.
Fast90	3' x 36' rolls	TAS 103 ASTM D 249 ASTM D 6380	Granular surfaced, asphalt-impregnated organic felt reinforced, bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as a tile roofing underlayment.
PS200	3' x 66'8" rolls	ASTM D 1970	Film or fabric surfaced, fiberglass reinforced, SBS modified bituminous sheet material with a self-adhesive bottom layer, for use as an underlayment in sloped roof assemblies. Designed as a metal underlayment.

EVIDENCE SUBMITTED:

Test Agency	Test Identifier	Test Name/Report	Date
Atlantic & Carribean Roof Consulting, LLC	ACRC06-013	TAS 103	06/14/06
PRI Asphalt Technologies	TOT-003-02-01	ASTM D 226 Type II	08/22/02
	TOT-029-02-01	TAS 110, ASTM D 249 ASTM D 6380	07/05/05
	TOT-030-02-01	TAS 110, ASTM D 249 ASTM D 6380	07/05/05
	TOT-041-02-01	TAS 110, ASTM D 226 Type II	05/24/06
Trinity | ERD	T3580.10.06-2	TAS 103	10/26/06
	T3580.10.06	TAS 103, ASTM D 6380	10/12/06
IRT-Arcon	IRT07-0006	ASTM D 1970	07/11/07

GENERAL LIMITATIONS – 30# ASTM SPECIFICATION FELT:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. 30# ASTM Specification Felt may be used with any approved roof covering Notice of Acceptance listing ASTM D 226 Type II felt as a component part of an assembly in the Notice of Acceptance.
4. All products lised herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

INSTALLATION REQUIREMENTS – 30# ASTM SPECIFICATION FELT:

1. 30# ASTM Specification Felt shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing 30# Felt.
3. During installation of 30# Felt, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. 30# ASTM Specification Felt shall be installed with a minimum 4" end lap in a single layer fashion and fastened as required by applicable system assemblies NOA or applicable Building Code.

GENERAL LIMITATIONS - EASYLAY:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. EasyLay shall be applied to a clean and dry surface.
4. EasyLay shall not be torched or hot mopped to. Refer to manufacturer's published literature for additional information.
5. EasyLay shall not be used on slopes less than 2:12, unless the slope is acceptable to the weather resistant covering. In general, on slopes less than 4:12, a double layer of EasyLay is recommended.

   Double layer application is best achieved by using 19" side laps, making sure the side laps are 'shingled in' to shed water.
6. When installing EasyLay, the roof system must include proper ventilation.
7. Refer to prepared roofing system Product Control Notice of Acceptance for listed approval of EasyLay with specific prepared roofing products. EasyLay may be used with any approved roof covering Notice of Acceptance listing ASTM D 226 Type II felt as a component part of an assembly in the Notice of Acceptance.
8. All products lised herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.
9. EasyLay shall not be left exposed for longer than 30 days after application.
10. The manufacturer reserves the right to change product exposure period at any time; not to exceed the preceding maximum time limitations.

APPROVED ASSEMBLIES - EASYLAY:

System E(1):	Anchor sheet mechanically fastened to deck.
Deck Type 1:	Wood, Non-Insulated.
Deck Description:	Minimum 19/32" plywood or wood plank.
Anchor/Base Sheet:	One or more plies of EasyLay underlayment, with a minimum 4" wide side lap and a minimum 8" wide end lap, mechanically fastened to deck.
Fastening:	Approved nails and tin caps 6" o.c. within lap and two equally spaced staggered rows 12" o.c. in the field (for Anchor/Base sheet).
Surfacing:	Approved Roof Assemblies.

INSTALLATION REQUIREMENTS - EASYLAY:

1. EasyLay shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing EasyLay.
3. During installation, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. EasyLay shall be acceptable for use with asphaltic shingles, wood shakes and shingles, quarry slate, and metal roofing assemblies.
5. EasyLay may be applied in cold process or modified bitumen adhesive to an approved mechanically fastened underlayment in compliance with applicable Roofing Application Standard (RAS).
6. Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.
7. Place a full width piece of EasyLay, parallel to the eave (low) edge of the roof.

   Unroll EasyLay 2 to 3 feet, with the lay lines facing up, and position the end of it to the edge of the eave and rake.

   Install a few fasteners at the top, near the rake, and roll out the sheet to a maneagable length.

   Pull, straighten and align the sheet so that any wrinkles are eliminated and the sheet is even with the eave edge.

   EasyLay shall be fastened with 3/8" headed roofing nails or 1" capped (plastic or metal) nails, driven by hand or pneumatically, spaced 6" o.c. at all laps in the center of the seam area, and two staggered rows fastened 12" o.c. in the field of the sheet.

   When using 1" diameter nails, apply so that the head of the nail is flush with the EasyLay surface, without cutting into the EasyLay surface.

   Fastening shall be done from the top to avoid walking or kneeling on unsecured sheet.

   Continue on to the end of the substrate and fasten down.

   Align the next roll over the preceding sheet so as to form a 4" seam.

   Then install the just placed sheet, per instructions above.

   The bottom of the second course of EasyLay shall lay on top of the first course so that any water will

flow over the top of EasyLay.

Apply subsequent sheets in the same manner, with 4" side laps and 8" end laps over the preceding sheets.

When the top course is reached, lap about 6" of EasyLay over the ridge.

Install EasyLay a minimum of 6" up any vertical surfaces.

Stagger the end laps a minimum of 36" (3') from the preceding course.

After installing EasyLay on the field of the roof, install drip edge at the eaves (if used).

When applying EasyLay in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in each direction. Make sure there are no rips or large wrinkles in the EasyLay.

Before applying horizontal sections of EasyLay, install a vertical length of EasyLay down the center of the valley.

Several sections of EasyLay can be used, but be certain to overlap the higher sections several inches so any water will flow over the top of the sheet.

EasyLay underlayment in the valley areas must be covered with metal or other valley lining material.

Apply a thin coat of asphalt plastic cement to waterproof areas of EasyLay where any cuts or tears have occurred.

Seams or joints that require adhesive or sealant can be treated with a high quality plastic cement (asbestos free).

Prime all metal collars, flashing, valleys, liner and drip edge with ASTM D 41 primer.

Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.

GENERAL LIMITATIONS – FAST90:

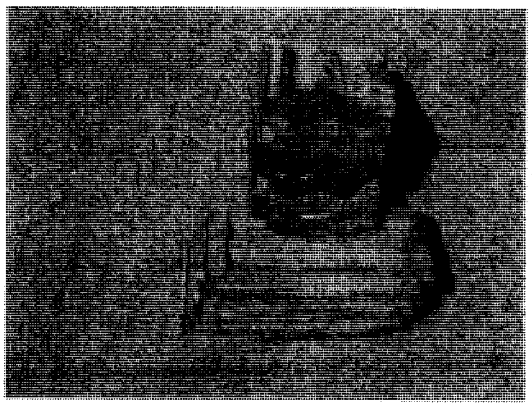
1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. Fast90 shall be applied only when material interface (air, deck, membrane) temperatures are 40^0 F and rising.
4. Fast90 shall not be installed when any form of moisture such as water, dew, rain, etc. is present on the substrate.
5. Fast90 shall be applied to a smooth, clean and dry surface, with the deck free from irregularities.
6. Ensure roof has positive drainage prior to installation of Fast90.
7. Fast90 shall not be applied over an existing roof membrane.
8. After installation of Fast90, wait a minimum of 24 hours before roof loading of tiles.
9. Care should be taken during the loading procedure to keep foot traffic to a minimum and to avoid dropping of tile directly on the underlayment.

10. All tiles shall be staged (four tiles perpendicular to slope, six tiles on top parallel to slope) as per manufacturer's requirements, not to exceed 10-high, to the standard maximum roof pitch of 5:12 for flat tiles and 6:12 for lugged tiles (See Tile Staging Method below).

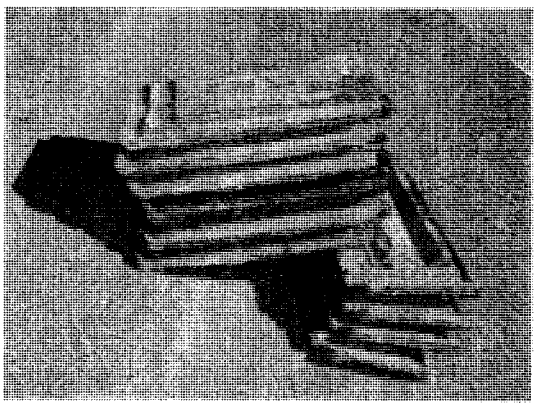
    At roof slopes greater than the above limitations, Fast90 shall be installed behind a nominal 1" x 2" horizontal batten.

Tile Staging Method

Slope ↓



Front View - Staged Tiles



Side View - Staged Tiles

11. If tiles will be left in a staged condition on rooftop for longer than 30 days, tiles must be staged (four tiles perpendicular to slope, two tiles on top parallel to slope), not to exceed 6-high, to the standard maximum roof pitch of 5:12 for flat tiles and 6:12 for lugged tiles. At roof slopes greater than the above limitations, Fast90 shall be installed behind a nominal 1" x 2" horizontal batten.
12. The manufacturer reserves the right to change the number of tiles stacked, at any time; not to exceed 10-high.
13. The manufacturer reserves the right to change the tile staging method at any time.
14. Fast90 shall not be left exposed for longer than 180 days after application.
15. The manufacturer reserves the right to change product exposure period at any time; not to exceed the preceding maximum time limitations.
16. Refer to prepared roofing system Product Control Notice of Acceptance for listed approval of Fast90 with specific prepared roofing products. Fast90 may be used with any approved roof covering Notice of Acceptance listing Fast90 as a component part of an assembly in the Notice of Acceptance.

    If Fast90 is not listed, a request may be made to the Authority Having Jurisdiction (AHJ) or the Miami-Dade County Product Control Department for approval provided that appropriate documentation is provided to detail compatibility of the product, wind uplift resistance, and fire testing results.
17. All products lised herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

APPROVED ASSEMBLIES – FAST90:

System E(1):	Anchor sheet mechanically fastened to deck, membrane adhered.
Deck Type 1:	Wood, Non-Insulated.
Deck Description:	Minimum 19/32" plywood or wood plank.
Anchor/Base Sheet:	One or more plies of ASTM D226 Type II, or ASTM D2626, or EasyLay underlayment, with a minimum 4" wide side lap and a minimum 8" wide end lap, mechanically fastened to deck.
Fastening:	Approved nails and tin caps 6" o.c. within lap and two equally spaced staggered rows 12" o.c. in the field (for Anchor/Base sheet only).
Membrane:	One ply of Fast90 with a minimum 4" wide side lap and a minimum 8" wide end lap, adhered to the base sheet.
Surfacing:	Approved Roof Assemblies.

INSTALLATION REQUIREMENTS – FAST90:

1. Fast90 shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing Fast90.
3. During installation, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. Fast90 shall be acceptable for mechanically fastened roof tile and adhered roof tile applications.
5. Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.
6. For re-roofing applications, all old roofing and other loose materials must be removed. Do not install directly on old roof coverings.
7. Cut the Fast90 roll into 12' to 16' sections for workability and allow to relax prior to application.

   Place a full width piece of Fast90 on the base sheet, parallel to the eave (low) edge of the roof, with the side lap on the up slope side.

   Fold the eave edge up, exposing the release liner.

   Then remove the exposed release liner, taking care not to displace the membrane.

   Working from the center out, unroll Fast90 onto the deck, taking care to avoid wrinkles or creases.

   Repeat the process for the other half.

   Align the next roll over the preceding sheet so as to form a 4" seam, and then fold back the sheet, exposing the side lap of the first sheet.

   Remove any selvage release film, if present, covering the side lap, prior to application.

   Install capped or tin tagged nails 6" o.c. in the center of the seam area according to Building Code.

   Then install the just placed membrane, per instructions above.

   Walk in the field and seam areas to press the sheet in place, as it is applied.

   Apply subsequent sheets in the same manner, with 4" side laps and 8" end laps over the preceding sheets.

   Apply full roll width, a 1/16" thick uniform layer of asphalt plastic cement to the surface of the first course in the 8" end lap area before adhering the next course.

Apply 1/16" thick uniform layer of asphalt plastic cement wherever the self-adhesive compound comes in direct contact with granular surface.

Stagger the end laps a minimum of 36" (3') from the preceding course.

Roll or broom the entire Fast90 surface so as to have 100% contact with the substrate, giving special attention to the overlap areas.

Fast90 shall be applied to protrusions, slope changes, valleys, curbs, and other roof top penetrations before any other sections of the roof.

When applying Fast90 in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in each direction.

For ridge applications, center Fast90 and roll from the center outward in both directions.

Place Fast90 over any metal drip edge in accordance with RAS 111.

Prime all metal collars, flashing, valleys, liner and drip edge with ASTM D 41 primer.

Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.

All protrusions or drains shall be initially taped with a 6" piece of Fast90. The flashing tape shall be pressed in place and formed around the protrusion to ensure a tight fit. A second layer of Fast90 shall be applied over the flashing detail.

8. Vertical strapping of the roof with Fast90 is acceptable.

GENERAL LIMITATIONS – PS200:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. This acceptance is for prepared roofing applications. Minimum deck requirements shall be in compliance with applicable building code.
3. PS200 shall be applied only when material interface (air, deck, membrane) temperatures are 40^0 F and rising.
4. PS200 shall not be installed when any form of moisture such as water, dew, rain, etc. is present on the substrate.
5. PS200 shall be applied to a smooth, clean and dry surface, with the deck free from irregularities.
6. Ensure roof has positive drainage prior to installation of PS200.
7. PS200 shall not be applied over an existing roof membrane.
8. PS200 shall not be left exposed for longer than 30 days after application.
9. The manufacturer reserves the right to change product exposure period at any time; not to exceed the preceding maximum time limitations.
10. Refer to prepared roofing system Product Control Notice of Acceptance for listed approval of PS200 with specific prepared roofing products. PS200 may be used with any approved roof covering Notice of Acceptance listing PS200 as a component part of an assembly in the Notice of Acceptance.

    If PS200 is not listed, a request may be made to the Authority Having Jurisdiction (AHJ) or the Miami-Dade County Product Control Department for approval provided that appropriate documentation is provided to detail compatibility of the product, wind uplift resistance, and fire testing results.
11. All products lised herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 9B-72 of the Florida Administrative Code.

APPROVED ASSEMBLIES – PS200:

System E(1):	Anchor sheet mechanically fastened to deck, membrane adhered.
Deck Type 1:	Wood, Non-Insulated.
Deck Description:	Minimum 19/32" plywood or wood plank.
Anchor/Base Sheet:	One or more plies of ASTM D226 Type II, or ASTM D2626, or EasyLay underlayment, with a minimum 4" wide side lap and a minimum 8" wide end lap, mechanically fastened to deck.
Fastening:	Approved nails and tin caps 6" o.c. within lap and two equally spaced staggered rows 12" o.c. in the field (for Anchor/Base sheet only).
Membrane:	One ply of PS200 with a minimum 4" wide side lap and a minimum 8" wide end lap, adhered to the base sheet.
Surfacing:	Approved Roof Assemblies.

INSTALLATION REQUIREMENTS – PS200:

1. PS200 shall be installed in strict compliance with applicable Building Codes.
2. Observe and comply with roofing practices and guidelines as outlined by the National Roofing Contractors Associations (NRCA) when installing PS200.
3. During installation, comply with Occupational Safety and Health Administration (OSHA) safety standards; use common sense measures and adequate safety precautions to prevent accidents.
4. Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.
5. For re-roofing applications, all old roofing and other loose materials must be removed. Do not install directly on old roof coverings.
6. Cut the PS200 roll to suitable, manageable lengths before installation.

   Place a full width piece of the pre-cut PS200 underlayment on the substrate, with the side lap on the up slope side.

   Align PS200 so that it is parallel to the eave (low) edge of the roof, and extend over the eave and rake approximately 3/8".

   Fold back the sheet, and remove the exposed release film, taking care not to displace the sheet.

   Working from the center out, roll the sheet onto the substrate, taking care to avoid wrinkles and ridges.

   PS200 must be set straight. Repeat this process for the remaining half of the sheet.

   Align the next roll over the preceding sheet so as to form a 4" seam, and then fold back the sheet, exposing the side lap of the first sheet.

   Remove any selvage release film, if present, covering the side lap, prior to application.

   Then install the just placed membrane, per instructions above.

   Apply full roll width, a 1/16" thick uniform layer of asphalt plastic cement to the surface of the first course in the 8" end lap area before adhering the next course.

   Walk in the field and seam areas to press the sheet in place, as it is applied.

   Apply subsequent sheets in the same manner, with 4" side laps and 8" end laps over the preceding sheets.

   Install capped or tin tagged nails 6" o.c. in the center of the seam area according to Building Code.

   Stagger the end laps a minimum of 36" (3') from the preceding course.

   Apply 1/16" thick uniform layer of asphalt plastic cement wherever the self-adhesive compound comes

in direct contact with the fabric surface.

Apply a 1/16" thick layer of asphalt plastic cement over the eave and rake metal drip edges extending 2" to 3" onto the deck surface where the roll will intersect.

At the T-Joint (where an end lap and next overlapping course intersect), apply a bead of asphalt plastic cement before the overlapping course is laid.

Roll or broom the entire PS200 surface so as to have 100% contact with the substrate, giving special attention to the overlap areas.

PS200 shall be applied to protrusions, slope changes, valleys, curbs, and other roof top penetrations before any other sections of the roof.

When applying PS200 in the valley, start at the low point and work to the high point, rolling the membrane from the center outward in each direction.

For ridge applications, center PS200 and roll from the center outward in both directions.

Place PS200 over any metal drip edge in accordance with RAS 111.

Carefully trim the excess material off the eaves and rakes.

Prime all metal collars, flashing, valley liners, and drip edge with ASTM D 41 primer.

Flash vent pipes, stacks, chimneys and penetrations in compliance with Roof Assembly current Product Control Notice of Acceptance and applicable Building Code.

All protrusions require an application of 6 inches fabric and roof cement with a second layer of PS200 being applied over the underlayment. The flashing tape shall be pressed in place and formed around the protrusion to ensure a tight fit. A second layer of PS200 shall be applied over the flashing detail.

Inspect ALL eave edges, rake edges, T-Joints, and end laps to verify that they are securely held in place. Re-cement where necessary to ensure tight bonding.

7. Vertical strapping of the roof with PS200 is acceptable.

LABELING:

All membranes shall bear the imprint or identifiable marking of the manufacturer's name or logo, or a yellow line running the length of the membrane, or the Miami-Dade County logo, or the following statement: "Miami-Dade County Product Control Approved".

BUILDING PERMIT REQUIREMENTS:

Application for building permit shall be accompanied by copies of the following:

1. This Notice of Acceptance.
2. Any other documents required by the Building Official or applicable building code in order to properly evaluate the installation of these materials.

MANUFACTURER'S CONSIDERATIONS:

1. Fast90 and PS200 can be directly adhered to wood decks. Ensure that such application is in compliance with applicable Building Code.
2. For best results when adhering Fast90 and PS200 directly to wood deck, surface may be primed with an ASTM D 41 Primer. When using primer, follow the manufacturer's recommendation for 'cure time' prior to application of Fast90 and PS200.
3. When using Fast90 in tile roofing applications, use of battens on roof slopes 6 ¼:12 and higher is recommended.
4. Code body requirements supersede manufacturer's recommendations and installation guidelines.

END OF THIS ACCEPTANCE