MIAMI-DADE COUNTY

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)

GAF Materials Corporation
1361 Alps Road
Wayne, NJ 07470

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 and the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Drill-Tec™ Roof Fastening Systems

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 consists of pages 1 through 11.
The submitted documentation was reviewed by Jorge L. Acebo.

MIAMI-DADE COUNTY APPROVED

NOA No.: 10-0125.04
Expiration Date: 09/27/12
Approval Date: 06/02/10

ROOFING COMPONENT APPROVAL

Category: Roofing
Sub-Category Roofing Fasteners
Material: Steel

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

FASTENERS:

Product	Dimensions	Test Specifications	Product Description
Drill-Tec™ #12 Fastener *Manuf. Location:1 & 2*	#12 x 8" max. Length, #3 Phillips head.	TAS 114 TAS 117	Phillips head, modified buttress thread, pinch point, carbon steel fastener for use in steel or wood decks. With CR-10 coating.
Drill-Tec™ #14 Fastener *Manuf. Location:1*	#14- x 24" max. Length, #3 Phillips head.	TAS 114 TAS 117	Phillips head, standard thread, pinch point, carbon steel fastener for use in metal, wood or concrete decks. With CR-10 coating.
Drill-Tec™ XHD Fastener *Manuf. Location:1& 2*	#15 x 14" max. Length, #3 Phillips head.	TAS 114 TAS 117	Phillips head, modified buttress thread, pinch point, carbon steel fastener for use in steel, wood, or concrete decks. With CR-10 coating.
Drill-Tec™ #12 Hex Head *Manuf. Location:2*	#12 x 8" max. Length, 1/4" hex washer head.	TAS 114 TAS 117	Hex washer head, modified buttress thread pinch point, carbon steel fastener for use in steel or wood decks. With CR-10 coating.
Drill-Tec™ #12 Stainless *Manuf. Location:1*	#12 x 8" max. Length, #3 Phillips head.	TAS 114 TAS 117	Phillips head, modified buttress thread, pinch point, stainless steel fastener for use in steel or wood decks.
Drill-Tec™ Base Sheet Fastener & Plate (1.2 in.) *Manuf. Location:3*	1.125" head x 1.2" length.	TAS 114	G-90 galvanized fastener for base sheet attachment to gypsum decks and on lightweight insulating concrete decks less than 2" thick. With Olympic CR-10 coating.
Drill-Tec™ Base Sheet Fastener & Plate (1.7 in.) *Manuf. Location:3*	1.125" head x 1.75" length.	TAS 114	G-90 galvanized fastener for base sheet attachment to gypsum decks and lightweight insulating concrete decks. With Olympic CR-10 coating.
Drill-Tec™ CD-10 *Manuf. Location:1*	0.214" min. dia. x 12" max. length; wafer head	TAS 114	Carbon steel expansion fastener for use in structural concrete decks. CR-10 coated
Drill-Tec™ Fluted Nail *Manuf. Location:1*	0.212" to 0.225" dia. x 12" max. length; octagonal head	TAS 114	Spiral shanked nail, for use in structural concrete decks. CR-10 coated
Drill-Tec™ Lite-Deck Fastener *Manuf. Location:1*	0.240" to 0.375" x 12" max. length; #3 Phillips flat head	TAS 114	Carbon steel fastener for insulation attachment in gypsum and cementitious wood fiber decks. CR-10 coated
Drill-Tec™ Polymer Gyptec Fastener *Manuf. Location:4*	0.675" Thread dia. X 1" dia. Head x 12" max. length	TAS 114	One piece, glass reinforced nylon fastener for use in gypsum and cementitious wood fiber decks.
Drill-Tec™ SXHD *Manuf. Location:1*	#21 x 16" max. length; #3 Phillips head	TAS 114	Truss head, self-drilling, pinch point, high thread fastener for steel use in wood, steel or concrete decks.
Drill-Tec™ Purlin *Manuf. Location:1*	#12 x max. 8¾"	TAS 114	Hex head carbon steel screw, drill point, for use into min 18ga steel purlin.

PLATES:

Product	Dimensions	Test Specifications	Product Description
Drill-Tec™ 3 in Standard Steel Plate *Manuf. Location:1*	3" round	TAS 114	Round Galvalume plated steel stress plate with reinforcing ribs for use with Drill-Tec™ fasteners
Drill-Tec™ 3 in. Steel Plate *Manuf. Location:1*	3" round	TAS 114	Round Galvalume steel stress plate for use with Drill-Tec™ fasteners.
Drill-Tec™ AccuTrac Recessed Plate *Manuf. Location:5*	3" square; .018"-.021" thick.	TAS 114 TAS 117	Galvalume steel plate for use with Drill-Tec™ fasteners.
Drill-Tec™ AccuTrac Flat Plate *Manuf. Location:5*	3" square; .018" - .021" thick	TAS 114 TAS 117	A2-SS aluminized steel plate for use with Drill-Tec™ #12, #14 and XHD fasteners.
Drill-Tec™ Lite-Deck Plate *Manuf. Location:1*	3" round	TAS 114	Round, Galvalume plate for use with Drill-Tec™ Lite-Deck Fasteners.
Drill-Tec™ Plastic Plate *Manuf. Location:4*	3" round	TAS 114	Round high density polypropylene stress plate for use with Drill-Tec™ fasteners.
Drill-Tec™ 2 in. Barbed Steel Plate *Manuf. Location:1*	2" round	TAS 114	Round galvanized steel stress plates for use with Drill-Tec™ fasteners.
Drill-Tec™ 2-¾" Barbed SXHD Plate *Manuf. Location:1*	2-¾" round	TAS 114	Round galvanized steel stress plates for use with Drill-Tec™ fasteners.
Drill-Tec™ RHINOBOND Insulation Plate (TPO) *Manuf. Location:3*	3" round	TAS 114	Primer coated plate for use with heat welded TPO membranes.

MANUFACTURING LOCATION FOR FASTENERS AND PLATES:

1. Agawam, MA
2. Itasca, IL
3. Thomaston, CT
4. Pittsfield, MA
5. Elk Grove Village, IL

PRE-ASSEMBLED SYSTEMS:

Product	Dimensions	Test Specifications	Product Description
Drill-Tec™ AccuTrac Fastening System	See components above	TAS 114	AccuTrac Galvalume plates with approved fasteners
Drill-Tec™ Base Sheet Fastener & Plate (1.2 in.)	1.125" head x 1.2" length.	TAS 114	G-90 galvanized fastener for base sheet attachment to gypsum decks and on lightweight insulating concrete decks less than 2" thick. With CR-10 fluorocarbon coating. With Galvalume plate.
Drill-Tec™ Base Sheet Fastener & Plate (1.7 in.)	1.125" head x 1.75" length.	TAS 114	G-90 galvanized fastener for base sheet attachment to gypsum decks and lightweight insulating concrete decks. With CR-10 fluorocarbon coating. With Galvalume plate.
Drill-Tec™ XHD ASAP	See components above	TAS 114	Drill-Tec™ #15 fastener with a Drill Tec 2-3/8 barbed galvalume plate.
Drill-Tec™ #12 STD ASAP 3P	See components above	TAS 114	Drill-Tec™ #12 fasteners with 3" plastic plate.
Drill-Tec™ #14 STD ASAP 2S	See components above	TAS 114	Drill-Tec™ #14 fastener with 2" galvalume barbed plate.
Drill-Tec™ #12 STD ASAP 3S	See components above	TAS 114	Drill-Tec™ #12 fastener with 3" galvalume plate

EVIDENCE SUBMITTED

Test Agency	Name	Report / Identifier	Date
Factory Mutual Research Corporation	FM 4470	J.I. 3Z5A4.AM	02/23/96
	FM 4470	J.I. 1R0A4.AM	04/03/90
	FM 4470	J.I. 1N5A6.AM	06/22/87
	FM 4470	J.I. 1T3A3.AM	11/26/91
	FM 4470	J.I. 1V9A5.AM	09/16/92
	FM 4470	J.I. 0E6A9.AM	01/22/80
	FM 4470	J.I. 0G1A9.AM	10/19/82
	Wind Uplift	J.I. 0T0A5.AM	06/01/91
	Pull Out/Sheer Data	J.I. 0M3A6.AM	07/31/85
	Pull Out/Shear Data	J.I. 1T2A6.AM	02/22/93
	FMRC 4450	J.I. 1Y5A4.AM	07/19/94
	Tensile/Sheer Data	No. MA 4907 Lab # 2386	01/13/83
	Pull Out	No. MA 4907 Lab # 9098	04/24/85
	Wind Uplift	J.I. 0W7A2.AM	09/01/93
	Wind Uplift	J.I. 1X2A6.AM	08/01/93
	Wind Uplift	J.I. 2V0A5.AM	02/01/92
	FM 4470	3031546	03/25/08
	FM 4470	3026774	01/21/08
	FM 4450	3032397	02/28/08
	FM Letter	3036723	06/03/09
	FM Small Scale Testing	3035599	04/01/09
Trinity | ERD	TAS 117(A), (B) & (C)	Base Sheet Testing	07/12/94
	PA 117(A), (B) & (C)	#4251.08.96-1	08/01/96
	TAS 117(A), (B) & (C)	O8050.04.08-2	04/04/08

TYPICAL PHYSICAL PROPERTIES:

Concrete Deck

Product	Min. psi	Property Tested	Test	Min. Embedment/ Penetration	Typical Results (lbf)
Drill-Tec™ #14 Fastener	N/A	Shear Test	ASTM E 488	N/A	1019
		Pull Out Test	TAS 117(A)		783.3
		Pulsating Load			480
Drill-Tec™ #14 Fastener	3,000	Pull Out Test	TAS 117(A)	1"	798.0
		Pulsating Load			578.0
Drill-Tec™ CD-10	3,000	Pulsating Load	TAS 117(A)	1"	410.0
Drill-Tec™ Fluted Nail	3,000	Pulsating Load	TAS 117(A)	1"	466.5

Steel Deck

Product	Deck Thickness	Property Tested	Test	Min. Embedment/ Penetration	Typical Results (lbf)
Drill-Tec™ #12 Fastener	22 ga.	Pull Out Test	ASTM E 488	N/A	519.0
		Pulsating Load	TAS 117(A)		213.0
Drill-Tec™ #12 Fastener Hex Head	22 ga.	Pull Out Test	ASTM E 488	N/A	519.0
		Pulsating Load	TAS 117(A)		213.0
Drill-Tec™ #12 Stainless	22 ga.	Pull Out Test	ASTM E 488	N/A	519.0
		Pulsating Load	TAS 117(A)		213.0
Drill-Tec™ #14 Fastener	22 ga.	Pull Out Test	ASTM E 488	N/A	415.0
		Pulsating Load	TAS 117(A)		220.0
Drill-Tec™ XHD Fastener	22 ga.	Pull Out Test	ASTM E 488	N/A	550.0
		Pulsating Load	TAS 117(A)		248.0
Drill-Tec™ SXHD	22 ga.	Pull Out Test	ASTM E 488	N/A	550.0
		Pulsating Load			248.0

Plywood Deck

Product	Deck Thickness	Property Tested	Test	Min. Embedment/ Penetration	Typical Results (lbf)
Drill-Tec™ #12 Fastener	Min. $^{19}/_{32}$"	Pull Out Test	TAS 117(A)	N/A	535.2
		Pulsating Load			238.0
Drill-Tec™ #12 Fastener Hex Head	Min. $^{19}/_{32}$"	Pull Out Test	TAS 117(A)	N/A	535.2
		Pulsating Load			238.0
Drill-Tec™ #12 Stainless	Min. $^{19}/_{32}$"	Pull Out Test	TAS 117(A)	N/A	535.2
		Pulsating Load			238.0
Drill-Tec™ #14 Fastener	Min. $^{19}/_{32}$"	Pull Out Test	TAS 117(A)	N/A	613.6
		Pulsating Load			282.0
		Pulsating Load			282.0
Drill-Tec™ XHD Fastener	Min. $^{19}/_{32}$"	Pull Out Test	TAS 117(A)	N/A	581.7
		Pulsating Load			300.0
Drill-Tec™ SXHD	Min. $^{19}/_{32}$"	Pull Out Test	TAS 117(A)	N/A	581.7
		Pulsating Load			300.0

TYPICAL PHYSICAL PROPERTIES (CONTINUED):

Cementitious Wood Fiber Decks

Product	Deck	Property Tested	Test	Min. Embedment/ Penetration	Typical Results (lbf)
Drill-Tec™ Polymer Gyptec Fastener	Any	Pulsating Load	TAS 117(A)	1.5"	106.0
Drill-Tec™ Lite Deck Fastener	Any	Pulsating Load	TAS 117(A)	2"	115.5

Gypsum Decks

Product	Deck	Property Tested	Test	Min. Embedment/ Penetration	Typical Results (lbf)
Drill-Tec™ Base Sheet Fastener & Plate	Poured	Pulsating Load	TAS 117(A)	N/A	65.0
		Static Load			68.0
Drill-Tec™ Polymer Gyptec Fastener	Poured	Pulsating Load	TAS 117(A)	1.5"	257.0
Drill-Tec™ Lite Deck Fastener	Poured	Pulsating Load	TAS 117(A)	2"	300.0

Lightweight Concrete Deck

Product	Min. psi	Property Tested	Test	Min. Embedment/ Penetration	Typical Results (lbf)
Drill-Tec™ Base Sheet Fastener & Plate	200	Pulsating Load	TAS 117(A)	N/A	28 day cure, 48.0
		Static Load			3 day cure, 45.5
					28 day cure, 59.5
Drill-Tec™ Base Sheet Fastener & Plate (1.2 in.)	200	Pulsating Load	TAS 117(A)	N/A	28 day cure, 38.5
		Static Load			3 day cure, 29.5
					28 day cure, 48.5

Single Ply Lap Rupture Performance – TAS 117(B)

Product	Manufacturer	Base Sheet	Typical Results (lbf)
Drill-Tec™ 2" Barbed Steel Plate	Seaman	FiberTite	189.5
	JPS	Hi-Tuff	186.5
	BondCote	350 Series	106.5
	Sarnafil	S327	204.5
	GenFlex	GenFlex RM	205.0
	Durolast	Durolast 35 mil	149.5

Note: The physical properties listed above are presented at typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation.

Base Sheet Rupture Performance – TAS 117(B)			
Product	**Manufacturer**	**Base Sheet**	**Typical Results (lbf)***
Drill-Tec™ AccuTrac Recessed Plate	Tamko	TamGlas	136.0
	Schuller	Glasbase	120.0
	Intec	Ultrabase	134.0
	Malarkey	Malarkey 501	107.0
		Malarkey 601	129.0
		Black Warrior	126.0
	GAF	GAF # 75	137.0
	Celotex	Vaporbar GB	117.0
		Vaporbar	113.0
		GS GlasBase	115.0
	Any	ASTM # 30	106.0
		ASTM # 43	106.0
Drill-Tec™ Lite Deck Plate, Drill-Tec™ 3" Standard Steel Plate and Drill-Tec™ Polymer Gyptec Plate	Honeywell	Glass Fiber Base Sheet	63.0
		Premium Glass Fiber Felt	89.0
		Vented Base Sheet	66.0
	Celotex	Channel Vent GB	59.0
		Vaporbar GB	65.0
	GAF	GAFGLAS #75	70.5
		Stratavent	67.0
		GAFGLAS Ply 4	62.0
		Ruberoid Base	90.0
	Johns Manville	PermaPly 28	71.0
		PermaPly-R	131.5
		Dynabase	84.0
		Glasbase	65.0
		Ventsulation	65.5
		GlasPly Premier	97.5
	Soprema	Sopra-G	64.0
		Modified Sopra-G	60.0
		Sopraglass 100	98.0
		Sopravent	61.5
	GS Roofing	Flex-I-Glas Base	62.5
		PolySMS	125.0
	Siplast	Parabase	93.5
		Parabase Plus	77.5
	Malarkey	#501	53.5
		#601	72.0
	Tamko	Glass-Base	86.5
		Vapor-Chan	73.5
	Tremco	BURMastic Glass Ply	53.5
		BURMastic Composite Ply	112.0
	US Intec	Ultrabase	55.0

* A 2 to 1 margin of safety has been applied to test results providing the above noted design values.

Base Sheet Rupture Performance – TAS 117(B)			
Product	**Manufacturer**	**Base Sheet**	**Typical Results (lbf)***
Drill-Tec™ 2-¾" Base Sheet Plate	Honeywell	Glass Fiber Base Sheet	81.0
		Premium Glass Fiber Felt	95.5
		Vented Base Sheet	70.0
	Celotex	Channel Vent GB	82.0
		Vaporbar GB	83.0
		Hydrostop	81.0
	GAF	GAFGLAS #75	74.5
		Stratavent	80.0
		GAFGLAS Ply 4	65.5
		Ruberoid Base	90.0
	Johns Manville	PermaPly 28	72.5
		PermaPly-R	91.5
		Dynabase	85.0
		Glasbase	63.5
		Ventsulation	74.0
		GlasPly Premier	102.0
	GS Roofing	Flex-I-Glas Base	58.5
		PolySMS	107.5
	Siplast	Parabase	82.5
		Parabase Plus	93.5
	Soprema	Sopra-G	76.5
		Modified Sopra-G	64.0
		Sopraglass 100	87.0
		Sopravent	88.0
	Tamko	Glass-Base	65.0
		Vapor-Chan	76.5
	Tremco	BURMastic Glass Ply	87.0
		BURMastic Composite Ply	109.0
Drill-Tec™ Accutrac Flat Bottom Plate	GAF	GAFglas 75	176.9
		Stratavent Eliminator	197.5
		#80 Ultima Base Sheet	212.1
		Liberty MA base	275.4
	JM	Permaply #28	200.9
		Ventsulation	190.2
		Glastite flexible Base	326.1
		Dynabase	322.9
		APP Base	204.9
	Tamko	Glass base	198.9
		Versa Base	257.9
		Tam-Glas Premium	189.6
		Vapor Chan	212.9
		Base-n-Ply	207.1

* A 2 to 1 margin of safety has been applied to test results providing the above noted design values.

Base Sheet Rupture Performance – TAS 117(B)			
Product	**Manufacturer**	**Base Sheet**	**Typical Results (lbf)***
Drill-Tec™ 3" Steel Plate	GAF	GAFglas 75	173.1
		Stratavent Eliminator	178.6
		#80 Ultima Base Sheet	185.3
		Liberty MA base	236.3
	JM	Permaply #28	146.2
		Ventsulation	151.4
		Glastite flexible Base	314.5
		Dynabase	296.6
		APP Base	262.1
	Tamko	Glass base	138.1
		Versa Base	234.9
		Tam-Glas Premium	179.9
		Vapor Chan	199.6
		Base-n-Ply	173.5

* A 2 to 1 margin of safety has been applied to test results providing the above noted design values.

APPROVED APPLICATIONS:

Tradename: **Drill-Tec™ #12 Fastener, Drill-Tec™ #12 Stainless**

Compatible Plate(s): 3" Locking Plastic Plate, Standard plastic and 3" square metal plates; and proprietary seam and fastening assembly plates listed in the specific Roof Assembly, Product Control Approval (NOA).

Insulation Types: Polyisocyanurate, Perlite, Fesco board, High Density Wood Fiber, Fiberglass, Perlite/ Urethane Composite, with current NOA.

Application: Mechanical attachment of roof insulation and membrane fastening assemblies. See specific Roof Assembly, Product Control Approval (NOA) for fastener density and approved attachment patterns.

Deck: 18-22 Ga. steel, wood, min. 19/32" plywood or wood plank

Tradename: **Drill-Tec™ #14 Fastener, Drill-Tec™ XHD Fastener**

Compatible Plate(s): 3" Locking Plastic Plate, Standard 3" plastic and 3" square metal plates; and proprietary seam and fastening assembly plates listed in the specific Roof System Assembly, Product Control Approval (NOA).

Insulation Types: Polyisocyanurate, Perlite, Fesco board, High Density Wood Fiber, Fiberglass, Perlite/ Urethane Composite, with current NOA.

Application: Mechanical attachment of roof insulation. See specific Roof Assembly, Product Control Approval (NOA) for fastener density and approved attachment patterns.

Deck: 18-22 Ga. steel, wood, min. 19/32" plywood or wood plank, 2500psi concrete or concrete plank

APPROVED APPLICATIONS: (CONTINUED)

Tradename:	**Drill-Tec™ #12 Fastener Hex Head**
Compatible Plate(s):	3" Locking Plastic Plate round metal plate, and 3" square metal plates; and proprietary seam and fastening assembly plates listed in the specific Roof Assembly, Product Control Approval (NOA).
Insulation Types:	Polyisocyanurate, Perlite, Fesco board, High Density Wood Fiber, Fiberglass, Perlite/ Urethane Composite, with current NOA.
Application:	Mechanical attachment of roof insulation and membrane fastening assemblies. See specific Roof Assembly, Product Control Approval (NOA) for fastener density and approved attachment patterns.
Deck:	16-22 Ga. steel, wood, min. 19/32" plywood or wood plank
Tradename:	**Drill-Tec™ XHD or Drill-Tec™ SXHD**
Compatible Plate(s):	3" metal or plastic plate, and proprietary seam and fastening assembly plates listed in the specific Roof Assembly Notice of Acceptance.
Application:	Mechanical attachment of roof insulation and membrane. See specific Roof Assembly Notice of Acceptance for fastener density and approved attachment patterns.
Deck:	18-22 ga. steel, wood, min. 19/32" plywood or wood plank, 2500 psi concrete or concrete plank
Tradename:	**Drill-Tec™ CD-10 or Drill-Tec™ Fluted Nail**
Compatible Plate(s):	3" metal or plastic plate, and proprietary seam and fastening assembly plates listed in the specific Roof Assembly Notice of Acceptance.
Application:	Mechanical attachment of roof insulation and membrane. See specific Roof Assembly Notice of Acceptance for fastener density and approved attachment patterns.
Deck:	2500 psi concrete or concrete plank
Tradename:	**Drill-Tec™ Lite-Deck Fastener**
Compatible Plate(s):	3" Lite-Deck Plate.
Application:	Mechanical attachment of roof insulation. See specific Roof Assembly Notice of Acceptance for fastener density and approved attachment patterns.
Deck:	Cementitious wood fiber or gypsum
Tradename:	**Drill-Tec™ Polymer Gyptec Fastener**
Compatible Plate(s):	Drill-Tec™ Polymer Gyptec Plastic Plate.
Application:	Mechanical attachment of roof insulation. See specific Roof Assembly Notice of Acceptance for fastener density and approved attachment patterns.
Deck:	Cementitious wood fiber or gypsum
Tradename:	**Drill-Tec™ Purlin Fastener**
Compatible Plate(s):	2" Barbed Plates, ASAP, Drill-Tec™ Plastic, Standard and proprietary seam and fastening assembly plates listed in the specific Roof Assembly Notice of Acceptance.
Application:	Mechanical attachment of roof insulation. See specific Roof Assembly Notice of Acceptance for fastener density and approved attachment patterns.
Deck:	18-22 ga. steel, wood, min. 19/32" plywood or wood plank, gypsum

APPROVED APPLICATIONS: (CONTINUED)

Tradename:	**Drill-Tec™ Base Sheet Fastener (1.2 in.)**
Compatible Plate(s):	Drill-Tec™ Base Sheet Plate.
Application:	See specific Roof Assembly Notice of Acceptance for base sheets and fastener densities.
Decks:	Gypsum, NVS or Hybrid lightweight insulating concrete.

Tradename:	**Drill-Tec™ Base Sheet Fastener (1.7 in.)**
Compatible Plate(s):	Drill-Tec™ Base Sheet Plate.
Application:	See specific Roof Assembly Notice of Acceptance for base sheets and fastener densities. Drill-Tec™ CR 1.75" Base Sheet Fastener may be used in any approved Roof Assembly NOA where the FM-90 Base Ply Fastener or the ITW Buildex Lite Weight Concrete Fastener is referenced. Approved fastening patterns and densities listed in any approved Roof Assembly NOA containing the FM-90 Base Ply Fastener or the ITW Buildex Lite Weight Concrete Fastener shall be acceptable when using Drill-Tec™ CR 1.75" Base Sheet Fastener.
Decks:	Aggregate or Cellular lightweight insulating concrete.

GENERAL LIMITATIONS:

1. Drill-Tec™ fasteners are a component part of a Miami-Dade Approved Roof Assembly. These products are approved for use only with those roof assemblies listing these products as an approved component. Refer to an approved Roof Assemblies Notices of Acceptance for use, density and attachment patterns.
2. Only those specific fasteners listed in this approval shall be utilized in Approved Roof Assemblies Notice of Acceptance.
3. Fasteners shall be installed in strict compliance with manufacturer's installation instructions, and in compliance with the requirements set forth in Roofing Application Standard RAS 111, 117 & 137.
4. Care shall be taken not to puncture or tear the base sheet or insulation facer during fastener installation. Application recommendations are noted in Roofing Application Standard RAS 117.
5. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117 and/or RAS 137.
6. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
7. 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.
8. All approved products listed herein shall be labeled and shall bear the imprint or identifiable marking of the manufacturer's name or logo and following statement: "Miami-Dade County Product Control Approved" or the Miami-Dade County Product Control Seal as shown below.

MIAMI-DADE COUNTY APPROVED

END OF THIS ACCEPTANCE