

#### **MIAMI-DADE COUNTY** PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

#### DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

#### **NOTICE OF ACCEPTANCE (NOA)**

The Hillman Group, Inc. 1590 NW 27th Avenue Pompano Beach, FL 33069

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section 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: Hillman Solid Set<sup>TM</sup> / All-Points Solid Set<sup>TM</sup> / Hillman Power Pro® Carbon Steel & **Stainless-Steel Screws** 

APPROVAL DOCUMENT: Drawing No. 23-69072 (former 22-50606), titled "Hillman Solid Set / All-Points Solid Set Carbon Steel & Stainless-Steel Screws", sheets 1 through 8 of 8, dated 06/23/2023, with latest revision dated FEB 24, 2024, prepared by Engineering Express, signed and sealed by Richard Neet, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and Revision date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: None** 

LABELING: Each box shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or MDCPCA", 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 # 23-0714.03 and consists of page 1, evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by Ishaq I. Chanda, P.E. | Shaq I. Chank

NOA No: 24-0319.05 **Expiration Date: September 22, 2027** 

Approval Date: May 09, 2024

Page 1



#### The Hillman Group, Inc.

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### 1. Evidence submitted under NOA # 22-0606.04 and NOA # 22-1011.03

#### A. DRAWINGS

Drawing No. **22-50606**, titled "Hillman Solid Set / All-Points Solid Set Carbon Steel & Stainless-Steel Screws", sheets 1 through 5 of 5, dated 06/15/2021, with latest revision dated 08/04/2022, prepared by Engineering Express, signed and sealed by Richard Neet, P.E. on 09/22/2022.

#### B. TESTS

	Test Report No.	<b>Standard</b>	<b>Date</b>	Sign & Seal
1.	HETI-20-A5046	ASTM E488-18	$\overline{09/01}/22$ -R	Ram N. Tewari, P.E.
2.	HETI-20-A5047	ASTM E488-18	09/01/22-R	Ram N. Tewari, P.E.
3.	HETI-20-A5048	ASTM E488-18	09/01/22-R	Ram N. Tewari, P.E.
4.	HETI-20-A5050	ASTM E488-18	09/01/22-R	Ram N. Tewari, P.E.
5.	HETI-20-A5052	ASTM E488-18	09/01/22-R	Ram N. Tewari, P.E.
6.	HETI-20-A5055	ASTM E488-18	09/01/22-R	Ram N. Tewari, P.E.
7.	HETI-20-S421	ASTM G85-11 A5	01/19/21	Rafael E. Droz-Seda, P.E.
8.	HETI-21-S800	ASTM G85-11 A5	01/19/21	Rafael E. Droz-Seda, P.E.
9.	HETI-21-S802	ASTM G85-11 A5	01/19/21	Rafael E. Droz-Seda, P.E.
10.	HETI-21-S805	ASTM G85-11 A5	01/19/21	Rafael E. Droz-Seda, P.E.
11.	HETI-21-S806	ASTM G85-11 A5	01/19/21	Rafael E. Droz-Seda, P.E.
12.	HETI-20-C104	ASTM C39-21	03/12/21	Rafael E. Droz-Seda, P.E.

#### C. CALCULATIONS

1. Anchors tension and shear strength calculation, prepared by Engineering Express, dated 05/13/2022, signed and sealed Richard Neet, P.E.

#### D. MATERIAL CERTIFICATIONS

1. None.

#### E. **QUALITY ASSURANCE**

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

#### F. STATEMENTS

- 1. Statement letter of code conformance to the 7<sup>th</sup> edition (2020) of the FBC, issued by Engineering Express, dated 04/15/2022, signed and sealed by Richard Neet, P.E.
- 2. Statement letter of no financial interest issued by Engineering Express, dated 04/15/2022, signed and sealed by Richard Neet, P.E.

Ishaq 1. Chank

#### The Hillman Group, Inc.

#### **NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

#### 2. Evidence submitted under previous approval

#### Α. **DRAWINGS**

1. Drawing No. 22-50606, titled "Hillman Solid Set / All-Points Solid Set Carbon Steel & Stainless-Steel Screws", sheets 1 through 8 of 8, dated 06/15/2021, with latest revision dated 06/22/2023, prepared by Engineering Express, signed and sealed by Richard Neet, P.E.

#### B. **TESTS**

	Test Report No.	<b>Standard</b>	<b>Date</b>	Sign & Seal
1.	HETI-23-A729	ASTM E488-22	04/06/23	Ram N. Tewari, P.E.
2.	HETI-23-A762	ASTM E488-22	06/16/23	Ram N. Tewari, P.E.
3.	HETI-22-T620	ASTM E8-22/F606-21	05/16/23	Ram N. Tewari, P.E.
4.	HETI-22-T621	ASTM E8-22/F606-21	05/16/23	Ram N. Tewari, P.E.
<b>5.</b>	HETI-23-T572	ASTM E8-22/F606-21	05/16/23	Ram N. Tewari, P.E.
6.	HETI-23-T573	ASTM E8-22/F606-21	05/16/23	Ram N. Tewari, P.E.
7.	HETI-23-T771	ASTM E8-22/F606-21	06/16/23	Ram N. Tewari, P.E.
8.	HETI-23-C727	ASTM C39-21	04/07/23	Ram N. Tewari, P.E.
9.	HETI-23-C772	ASTM C39-21	06/16/23	Ram N. Tewari, P.E.

#### C. **CALCULATIONS**

Anchors tension and shear strength calculation, prepared by Engineering Express, dated 1. 08/11/2023, signed and sealed Richard Neet, P.E.

#### D. **MATERIAL CERTIFICATIONS**

None. 1.

#### E. **QUALITY ASSURANCE**

Miami-Dade Department of Regulatory and Economic Resources (RER).

#### F. **STATEMENTS**

- Statement letter of code conformance to the 7<sup>th</sup> edition (2020) of the FBC, issued by 1. Engineering Express, dated 08/11/2023, signed and sealed by Richard Neet, P.E.
- 2. Statement letter of no financial interest issued by Engineering Express, dated 08/11/2023, signed and sealed by Richard Neet, P.E.

Ishaq 1. Chank

#### The Hillman Group, Inc.

#### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### 3. New evidence submitted

#### A. DRAWINGS

1. Drawing No. 23-69072 (former 22-50606), titled "Hillman Solid Set / All-Points Solid Set Carbon Steel & Stainless-Steel Screws", sheets 1 through 8 of 8, dated 06/23/2023, with latest revision dated FEB 24, 2024, prepared by Engineering Express, signed and sealed by Richard Neet, P.E.

#### B. TESTS

1. None.

#### C. CALCULATIONS

1. None.

#### D. MATERIAL CERTIFICATIONS

1. None.

#### E. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

#### F STATEMENTS

1. Statement letter of code conformance to the 8<sup>th</sup> edition (2023) of the FBC, "no financial interest" and compliance statement into DWG dated 03/05/24, issued by Engineering Express, signed and sealed by Richard Neet, P.E.

#### G. OTHER

1. This NOA revises NOA # 23-0714.03, expiring 09/22/27.

Ishaq 1. Chank

THE HILLMAN GROUP, INC.
HILLMAN SOLID SETTM / ALL-POINTS SOLID SETTM / HILLMAN POWER PRO®

CARBON STEEL & STAINLESS STEEL SCREWS (CONCRETE, MASONRY & WOOD SUBSTRATES)

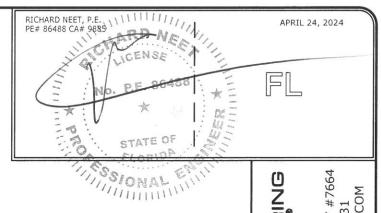
> **PRODUCT REVISED** as complying with the Florida Building Code

NOA-No. <u>24-0319.05</u>

Expiration Date 09/22/2027

Miami-Dade Product Control

NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID SET". "POWER PRO®" IS A REGISTERED TRADEMARK NAME FOR THE HILLMAN GROUP.



NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. THIS PRODUCT EVALUATION IS VALID FOR USE IN FLORIDA ONLY. USE IN FLORIDA OR ANY OTHER STATE SHALL REQUIRE A REVIEW & CERTIFICATION BY A REGISTERED DESIGN PROFESSIONAL LICENSED IN THAT STATE WHO SHALL BE RESPONSIBLE FOR THE CONTENT & PROPER ADAPTATION OF THIS GENERAL PERFORMANCE EVALUATION TO ANY SITE-SPECIFIC PROJECT. CONTACT THIS OFFICE FOR ASSISTANCE WITH YOUR PROJECT NEEDS.

#### **GENERAL NOTES:**

- THIS PRODUCT HAS BEEN DESIGNED & TESTED IN ACCORDANCE WITH THE STRUCTURAL PROVISIONS OF THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, AND THE FOLLOWING STANDARDS: ASTM E488, ACI 355.2, ASTM C39,
- ALL CARBON STEEL SCREW ANCHORS SHALL BE SAE 1022 PER SAE J933. ALL STAINLESS STEEL SCREW ANCHORS SHALL BE SERIES 410 OR SERIES 304 AS SPECIFIED HEREIN. CARBON STEEL SCREWS SHALL HAVE THE FOLLOWING CORROSION-PROTECTIVE COATINGS:
  - BASE COAT: GALVANIZED
  - TOP COAT: ORGANIC COATING (COLOR MAY VARY)
  - SEE NEXT PAGE FOR ANCHOR YIELD/ULTIMATE TENSILE STRENGTH VALUES AS APPLICABLE.
- ANCHOR INSTALLATION SHALL BE MADE IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS NOTICE OF ACCEPTANCE.
- PILOT HOLES FOR ANCHORS SHALL BE PER THE DRILL BIT SCHEDULE HEREIN.
- ALLOWABLE LOADS SHOWN HEREIN HAVE BEEN CALCULATED DIRECTLY FROM THE TEST REPORTS REFERENCED BELOW PER THE FOLLOWING:
- 5.1. ULTIMATE LOAD DIVIDED BY 4.0 FOR SOLID NON-CRACKED CONCRETE SUBSTRATES.
- ULTIMATE LOAD DIVIDED BY 5.0 FOR HOLLOW BLOCK & GROUT FILLED BLOCK SUBSTRATES.
- 5.3. ULTIMATE LOAD DIVIDED BY 3.0 FOR WOOD SUBSTRATES PER THE FOLLOWING PARAMETERS:
  - LOAD DIRECTION = PERPENDICULAR TO WOOD GRAIN
  - LOAD DURATION FACTOR = 1.6
  - TEMPERATURE ≤100° F
  - MOISTURE AT FABRIC ≤19%
  - MOISTURE IN SERVICE ≤19%
  - EXPOSURE SERVICE = DRY CONDITIONS

\*SCREW CAPACITIES TO WOOD FOR CONDITIONS OTHER THAN LISTED ABOVE SHALL BE ADJUSTED AND CERTIFIED SEPARATELY IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) BY A LICENSED PROFESSIONAL ENGINEER

- NO ALLOWABLE STRESS INCREASE HAS BEEN USED IN PREPARATION OF THIS DOCUMENT.
- CONCRETE SHALL CONFORM TO ACI 301 SPECIFICATIONS, WITH STRENGTH PROPERTIES AS SPECIFIED HEREIN. HOLLOW AND GROUT-FILLED CONCRETE BLOCK SHALL CONFORM TO ASTM C-90. WOOD SUBSTRATES SHALL HAVE THE MINIMUM SPECIFIC GRAVITY AS LISTED HEREIN.
- ANCHOR EDGE DISTANCE AND SPACING SHALL BE MEASURED FROM THE CENTERLINE OF EACH
- ANCHOR EDGE DISTANCES, EMBEDMENT, AND SPACING BELOW THOSE SHOWN IN DESIGN TABLES HEREIN ARE NOT ACCEPTABLE.
- ALLOWABLE LOAD CAPACITIES TO SUBSTRATES THAT ARE NOT SHOWN IN THE DESIGN TABLES LISTED HEREIN ARE OUTSIDE THE SCOPE OF THIS CERTIFICATION AND SHALL BE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER.
- ANCHOR VALUES LISTED HEREIN ARE DETERMINED THROUGH TESTING REPORT DATA AND CHECKED FOR CONSISTENCY WITH EACH TEST PERFORMED.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE
- ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- 14. IN ALL CONDITIONS IT IS THE RESPONSIBILITY OF THE PERMIT HOLDER TO ENSURE THE HOST STRUCTURE IS CAPABLE OF RESISTING THE LOAD RATING HEREIN.

#### ANCHOR YIELD/ULTIMATE TENSILE STRENGTH: PER ASTM E8-22 & ASTM F606-21

ANCHOR	YIELD STRENGTH, YS or Fy (ksi)	ULTIMATE TENSILE STRENGTH, UTS or Fu (ksi)
SOLID SET 3/16" SCREW CS	156.8	172.0
SOLID SET #14 MALE ANCHOR CS	168.5	172.5
SOLID SET 1/4" SCREW CS	138.2	149.1
SOLID SET 1/4" SCREW 410 SS	161.1	187.2
SOLID SET 5/16" SCREW CS	150.1	153.4

#### PAGE INDEX:

DESCRIPTION	PAGE #
GENERAL NOTES, ANCHOR YS & UTS VALUES	1
ALLOWABLE SCREW CAPACITIES	2 - 4
ANCHOR DRAWINGS & DIMENSIONS	5 - 8

REMARKS DRWN CHKD DATE PREV. SUBMITTAL (22-50606) ER/MR RWN 06/22/23 0023 FBC UPDATE "		-
DRWN CHKD L (22-50606) ER/MR RVN E  MRT ER/RN		
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REMARKS PREV. SUBMITAL ( 2023 FBC UPDATE .		
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D SET ANCHORS
WOOD SUBSTRATES
E OF ACCEPTANCE (NO. 1590 NW 27TH AVE POMPANO BEACH, FL 330 (954) 984-0116 LMAN GROUP SOLID TE, MASONRY AND DE COUNTY NOTICE

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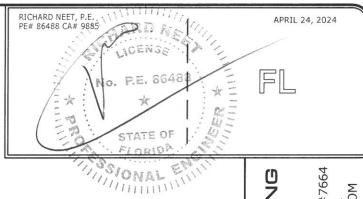
CS = CARBON STEEL SS = STAINLESS STEEL

ANCHOR	SUBSTRATE	EMBEDMENT	MIN. O.C.	LOADING TYPE	MIN. EDGE	ALLOWABLE
ANCHOR	SOBSTITATE	LIVIDEDIVICIVI	SPACING	LOADINGTHE	DISTANCE	LOAD (LB)
				TENSION	3.00"	501
		1.75"	5.00"	TENSION	1.25"	501
		1.73	3.00	SHEAR	3.00"	688
	3KSI CONCRETE				1.25"	260
SOLID SET		2.00"	5.00"	TENSION	3.125"	743
5/16" SCREW				SHEAR TENSION	3.125" 3.00"	780 985
		2.25"	5.00"	SHEAR	3.00"	872
CS				TENSION	3.00"	338
		1.75"	5.00''	SHEAR	3.00"	491
	GROUT FILLED CMU			TENSION	3.00"	654
		2.25"	5.00''	SHEAR	3.00"	707
		4.0=()	= 00!!	TENSION	3.00"	175
	HOLLOW BLOCK	1.25"	5.00''	SHEAR	3.00"	283
					2.50"	253
				TENSION	1.00"	253
		1.375"	4.00''			128
				SHEAR	2.50"	
					1.00"	128
				TENCION	3.00"	484
				TENSION	2.50"	461
	AKCI CONCRETE		3.00''		1.25'' 3.00''	406 463
	3KSI CONCRETE			SHEAR	2.50"	408
		10 Table 2 Table 2 May 2		SILAN	1.25"	274
		1.75"			2.50"	517
				TENSION	1.00"	517
			4.00''		2.50''	461
				SHEAR	1.00''	143
			C 0011	TENSION	1.00''	517
			6.00''	SHEAR	1.00''	143
				TENSION	3.00"	424
SOLID SET	GROUT FILLED CMU	1.75"	3.00''	TENSION	1.25"	368
1/4" SCREW	GIOOT TILLED CIVIO	1.75	3.00	SHEAR	3.00"	336
CS				SILAN	1.25"	213
					3.00"	179
				TENSION	1.25"	150
			3.00"		1.00"	128
				SHEAR	3.00"	294
				SHEAR	1.25"	136 70
					2.50"	181
	HOLLOW BLOCK	1.25"		TENSION	1.00"	181
			4.00''		2.50"	103
				SHEAR	1.00"	103
				TENSION	2.50''	181
	Sh :		C 0011	TENSION	1.00''	181
			6.00''	CUEAD	2.50"	103
				SHEAR	1.00''	103
	WOOD (G-0 EE)	1.50"	3.00"	TENSION	0.75"	404
	WOOD (G=0.55)	0.1	3.00	SHEAR 1	0.75"	221
	WOOD (G=0.42)	1.50"	3.00"	TENSION	0.75"	319
	11000 (0 0.72)	1.50	5.00	SHEAR 1	0.75''	257

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 24-0319.05 Expiration Date 09/22/2027

By Ishaq I. Chands

Miami-Dade Product Control



TENSION - SHEAR SCREW HEAD DIMENSIONS -EDGE DISTANCE & SHAPE MAY VARY, SEE -HOST EDGE DRAWINGS HEREIN. HOST SUBSTRATE. SEE CAPACITY\_ TABLES FOR **OPTIONS** 0.25" MIN. PILOT HOLE DIAMETER SHALL BE PER DRILL BIT SCHEDULE

> TYPICAL SECTION 2 SECTION VIEW

NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID SET" "POWER PRO®" IS A REGISTERED TRADEMARK NAME FOR THE HILLMAN GROUP.

DRILL BIT SCHEDULE

SCREW TYPE	DRILL BIT DIAMETER
ALL 5/16" SCREWS	1/4"
ALL 1/4" SCREWS	3/16"
ALL 3/16" SCREWS	5/32"
ALL #14 MALE & FEMALE SCREWS	7/32"

#### CAPACITY TABLE NOTES:

- INSTALLATION SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS DOCUMENT
- CLEAN HOLES OF DEBRIS AND DUST BEFORE INSTALLATION OF ANCHOR
- ANCHORS SHALL NOT BE INSTALLED BEFORE THE CONCRETE HAS DEVELOPED ITS DESIGN STRENGTH ANCHORS SHALL NOT BE INSTALLED IN CRACKED CONCRETE SUBSTRATES, AS DEFINED IN ACI 355.2
- SEE REMAINING SHEETS HEREIN FOR SCREW LENGTH OPTIONS AND OTHER SPECIFICATIONS
- 6. L = PERPENDICULAR TO WOOD GRAIN

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HILLMAN GROUP SOLID SET A CRETE, MASONRY AND WOOD

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23-69072

SCALE: NTS UNLESS NOTED



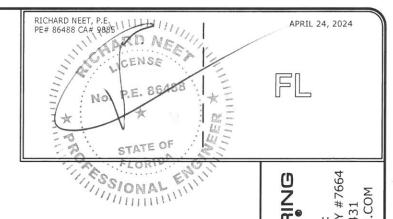
# ALLOWABLE SCREW CAPACITIES (PAGE 2 OF 3):

CS = CARBON STEEL SS = STAINLESS STEEL

ANCHOR	SUBSTRATE	EMBEDMENT	MIN. O.C. SPACING	LOADING TYPE	MIN. EDGE DISTANCE	ALLOWABLE LOAD (LB)
		4 27511	2 0011	TENSION	1.00"	323
	3KSI CONCRETE	1.375"	3.00''	SHEAR	1.00"	121
	JKJI CONCILLE	1.75''	4.00"	TENSION	1.75"	381
		1./5	4.00	SHEAR	1.75"	227
	GROUT FILLED CMU	1.75''	4.00"	TENSION	1.75"	310
	GROOT FILLED CIVIO	1./5	4.00	SHEAR	1.75"	174
SOLID SET					2.50"	178
3/16" SCREW				TENSION	1.75"	172
CS			4.00"		1.00"	167
CJ			4.00		2.50"	214
	HOLLOW BLOCK	1.25''		SHEAR	1.75"	171
	NO LEGIT DEGEN	1,23			1.00"	109
				TENSION	2.50"	178
			6.00''	121101011	1.00"	167
				SHEAR	2.50"	214
					1.00"	109
				TENSION	3.00"	505
	3KSI CONCRETE	1.75''	3.00''		1.25"	392
SOLID SET				SHEAR	3.00" 1.25"	645 172
#14 MALE					3.00"	494
& FEMALE				TENSION	1.25"	320
	GROUT FILLED CMU	1.75''	3.00''		3.00"	448
ANCHOR CS				SHEAR	1.25"	195
					3.00"	145
(VALUES ARE				TENSION	1.25"	139
APPLICABLE TO	HOLLOW BLOCK	1.25"	3.00"	CUEAR	3.00"	309
ВОТН				SHEAR	1.25"	134
ANCHORS)	WOOD (C 0.55)	1 5011	2.0011	TENSION	0.75"	411
ANCHUNS)	WOOD (G=0.55)	1.50''	3.00"	SHEAR 1	0.75"	318
	WOOD (C-0.43)	1 50!!	2 00!!	TENSION	0.75"	373
	WOOD (G=0.42)	1.50''	3.00''	SHEAR 1	0.75"	220

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 24-0319.05 Expiration Date 09/22/2027

By Ishag 1. Chands Miami-Dade Product Control



TENSION - SHEAR SCREW HEAD DIMENSIONS - EDGE DISTANCE & SHAPE MAY VARY, SEE DRAWINGS HEREIN. -HOST EDGE HOST SUBSTRATE, SEE CAPACITY\_ TABLES FOR **OPTIONS** 0.25" MIN. PILOT HOLE DIAMETER SHALL BE PER DRILL BIT **SCHEDULE** 

NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID SET". "POWER PRO®" IS A REGISTERED TRADEMARK

SECTION VIEW

TYPICAL SECTION

#### DRILL BIT SCHEDULE

NAME FOR THE HILLMAN GROUP.

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NTS

D	
SCREW TYPE	DRILL BIT DIAMETER
ALL 5/16" SCREWS	1/4"
ALL 1/4" SCREWS	3/16"
ALL 3/16" SCREWS	5/32"
ALL #14 MALE & FEMALE SCREWS	7/32"

# CAPACITY TABLE NOTES:

- INSTALLATION SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS DOCUMENT
- CLEAN HOLES OF DEBRIS AND DUST BEFORE INSTALLATION OF ANCHOR
- ANCHORS SHALL NOT BE INSTALLED BEFORE THE CONCRETE HAS DEVELOPED ITS DESIGN STRENGTH
- ANCHORS SHALL NOT BE INSTALLED IN CRACKED CONCRETE SUBSTRATES, AS DEFINED IN ACI 355.2
- SEE REMAINING SHEETS HEREIN FOR SCREW LENGTH OPTIONS AND OTHER SPECIFICATIONS

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HILLMAN GROUP SOLID SET ANCHORS
CRETE, MASONRY AND WOOD SUBSTRATES

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GROUP,

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SCALE: NTS UNLESS NOTED





CS = CARBON STEEL SS = STAINLESS STEEL

ANCHOR	SUBSTRATE	EMBEDMENT	MIN. O.C. SPACING	LOADING TYPE	MIN. EDGE DISTANCE	ALLOWABLE LOAD (LB)
					3.00"	460
				TENSION	1.25"	355
			3.00"	011545	3.00"	632
		4 == 11		SHEAR	1.25"	230
	3KSI CONCRETE	1.75''	4.0011	TENSION	1.00"	349
			4.00''	SHEAR	1.00"	173
			C 0011	TENSION	1.00"	349
			6.00"	SHEAR	1.00"	173
					3.00"	429
			2.0011	TENSION	1.25"	361
	CROUT SULED CANA	4 7511	3.00"	CHEAD	3.00"	387
SOLID SET	GROUT FILLED CMU	1.75"		SHEAR	1.25"	234
			4.000	TENSION	2.50"	409
1/4" SCREW			4.00"	SHEAR	2.50"	343
410 SS					3.00"	159
			2.0011	TENSION	1.25"	148
			3.00"	CUEAR	3.00"	271
		4.050		SHEAR	1.25"	137
	HOLLOW BLOCK	1.25"	4.000	TENSION	2.50"	155
			4.00''	SHEAR	2.50"	232
			C 0011	TENSION	2.50"	155
	14		6.00"	SHEAR	2.50"	232
	W000 (C 0 FF)	1.5011	2.0011	TENSION	0.75"	366
	WOOD (G=0.55)	1.50"	3.00"	SHEAR L	0.75"	228
	11/202 (2.2.42)	4.50!!	2 2011	TENSION	0.75"	315
	WOOD (G=0.42)	1.50"	3.00"	SHEAR 1	0.75"	189
					3.00"	391
	OVEL CONCRETE	4.7511	2 0011	TENSION	1.25"	369
	3KSI CONCRETE	1.75"	3.00"	CUEAD	3.00"	501
				SHEAR	1.25"	202
				TENICION	3.00"	271
	CDOLLT FILLED CAME	1 7511	2 0011	TENSION	1.25"	271
SOLID SET	GROUT FILLED CMU	1.75"	3.00"	CLIEAD	3.00"	500
#14 MALE				SHEAR	1.25"	214
ANCHOR				TENICION	3.00"	92
304 SS	HOLLOW BLOCK	1.25!!	2 0011	TENSION	1.25"	92
JU4 JJ	HOLLOW BLOCK	1.25"	3.00"	CHEAD	3.00"	301
				SHEAR	1.25"	139
	WOOD (C-0.55)	1 5011	2 0011	TENSION	0.75"	471
	WOOD (G=0.55)	1.50''	3.00''	SHEAR 1	0.75"	280
	WOOD (C-0.42)	1 500	2 00!!	TENSION	0.75"	389
	WOOD (G=0.42)	1.50"	3.00"	SHEAR L	0.75"	278

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 24-0319.05

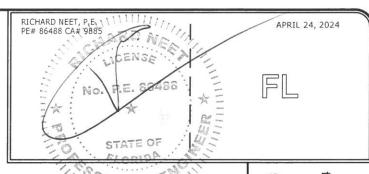
Expiration Date 09/22/2027

By Shag 1. Chands

Miami-Dade Product Control

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 24-0319.05 Expiration Date 09/22/2027

By Ishag 1. Chank Miami-Dade Product Control



TISSIONAL ENTIN SSIONAL EXPRESS.

TENSION - SHEAR SCREW HEAD DIMENSIONS -EDGE DISTANCE & SHAPE MAY VARY, SEE DRAWINGS HEREIN. -HOST EDGE HOST SUBSTRATE, SEE CAPACITY\_ TABLES FOR OPTIONS 0.25" MIN. PILOT HOLE DIAMETER SHALL BE PER DRILL BIT

> TYPICAL SECTION SECTION VIEW

NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID SET" "POWER PRO®" IS A REGISTERED TRADEMARK NAME FOR THE HILLMAN GROUP.

#### DRILL BIT SCHEDULE

SCREW TYPE	DRILL BIT DIAMETER
ALL 5/16" SCREWS	1/4"
ALL 1/4" SCREWS	3/16"
ALL 3/16" SCREWS	5/32"
ALL #14 MALE & FEMALE SCREWS	7/32"

#### CAPACITY TABLE NOTES:

- INSTALLATION SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THIS DOCUMENT
- CLEAN HOLES OF DEBRIS AND DUST BEFORE INSTALLATION OF ANCHOR
- ANCHORS SHALL NOT BE INSTALLED BEFORE THE CONCRETE HAS DEVELOPED ITS DESIGN STRENGTH ANCHORS SHALL NOT BE INSTALLED IN CRACKED CONCRETE SUBSTRATES, AS DEFINED IN ACI 355.2
- SEE REMAINING SHEETS HEREIN FOR SCREW LENGTH OPTIONS AND OTHER SPECIFICATIONS
- 6. ⊥ = PERPENDICULAR TO WOOD GRAIN

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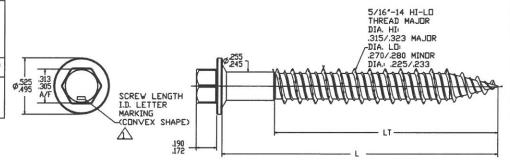
HILLMAN GROUP SO CONCRETE, MIAMI-DADE C

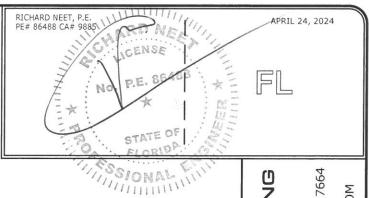
PREV. SUBMITAL (22-50606) ER/MR RWN 06/22/23 2023 FBC UPDATE	REMARKS	DRWN	DRWN CHKD	DATE
MRT	PREV. SUBMITTAL (22-50606)	<b>ER/MR</b>	RWN	06/22/23
	2023 FBC UPDATE	MRT	<b>ER/RN</b>	02/23/24
		,	1	1
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		1	1	1

23-69072

SCALE: NTS UNLESS NOTED



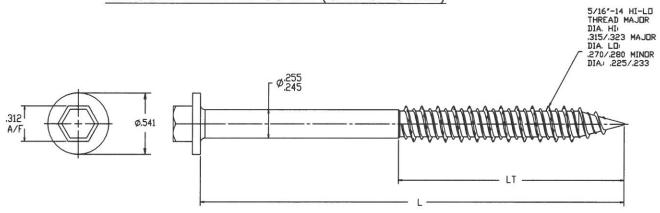




## 5/16" HEX HEAD SCREW DIMENSIONS

NOMINAL LENGTH	L	LT
13/4"	1.70-1.75"	1.70-1.75"
2 1/4"	2.20-2.25"	1.82-1.859
2 3/4"	2.65-2.75"	1.82-1.859
3 1/4"	3.15-3.25"	1.82-1.859
3 3/4"	3.65-3.75"	1.82-1.859
4"	3.90-4.0"	1.82-1.859
5"	4.90-5.0"	1.82-1.859
6"	5.90-6.0"	1.82-1.859

5/16" SOLID SET™ HEX WASHER HEAD REDUCED INDENTED SCREW (CARBON STEEL)



5/16" SOLID SET<sup>TM</sup> HEX HEAD SCREW (CARBON STEEL)

NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID-SET" "POWER PRO®" IS A REGISTERED TRADEMARK NAME FOR THE HILLMAN GROUP.

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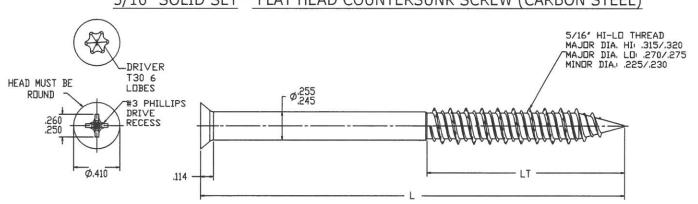
Ishaq 1. Chands Miami-Dade Product Control

# 5/16'-14 HI-LO THREAD MAJOR DIA. HI: .315/.323 MAJOR DIA. LO: .270/.280 MINOR DIA.: .225/.233 #3 PHILLIPS DRIVE RECESS DRIVER T30 6-LOBES SCREW LENGTH I.D. LETTER MARKING (CONVEX SHAPE)

# 5/16" FLAT HEAD SCREW DIMENSIONS

NOMINAL LENGTH	L	LT		
13/4"	1.70-1.75"	1.45-1.50"		
2 1/4"	2.20-2.25"	1.82-1.859		
2 3/4"	2.65-2.75"	1.82-1.859		
3 1/4"	3.15-3.25"	1.82-1.859		
3 3/4"	3.65-3.75"	1.82-1.859		
4"	3.90-4.0"	1.82-1.859		
5"	4.90-5.0"	1.82-1.859		
6"	5.90-6.0"	1.82-1.859		

5/16" SOLID SET<sup>™</sup> FLAT HEAD COUNTERSUNK SCREW (CARBON STEEL)



5/16" SOLID SET<sup>™</sup> REDUCED FLAT HEAD SCREW (CARBON STEEL)

NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES

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GROUP, POMPANO BEACH, FL 3 (954) 984-0116

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THE

HILLMAN GROUP SOLID SET CONCRETE, MASONRY AND WOOI MIAMI-DADE COUNTY NOTICE OF A

WOOD SUBSTRATES OF ACCEPTANCE (NC

OPYRIGHT ENGINEERING EXPRES 23-69072

SCALE: NTS UNLESS NOTE



1/4" HI-LO THREAD MAJOR DIA. HI: .248/.253 MAJOR DIA. LO: .203/ .208 MINOR DIA.: .168/.175

# RICHARD NEET, P.E. PE# 86488 CA# 9885 APRIL 24, 2024

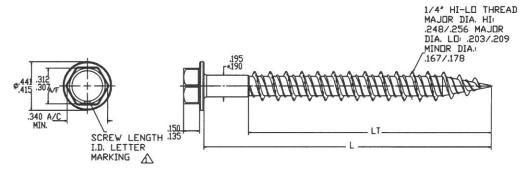
### 1/4" HEX HEAD SCREW DIMENSIONS

NOMINAL		
LENGTH	L	LT
11/4"	1.20-1.25"	1.18-1.22"
1 3/4"	1.70-1.75"	1.70-1.75"
2 1/4"	2.20-2.25"	1.82-1.859
2 3/4"	2.65-2.75"	1.82-1.859
3 1/4"	3.15-3.25"	1.82-1.859
3 3/4"	3.65-3.75"	1.82-1.859
4"	3.90-4.0"	1.82-1.859
5"	4.90-5.0"	1.82-1.859
6"	5.90-6.0"	1.82-1.859

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 24-0319.05

Expiration Date 09/22/2027

Ishaq 1. Chank Miami-Dade Product Control 1/4" SOLID SET<sup>™</sup> LG HEX WASHER HEAD SCREW (CS AND 410 SS)

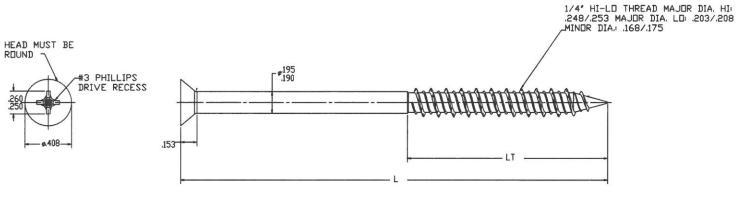


1/4" SOLID SET<sup>™</sup> HEX WASHER HEAD UNIVERSAL DRIVE SCREW (CS AND 410 SS)

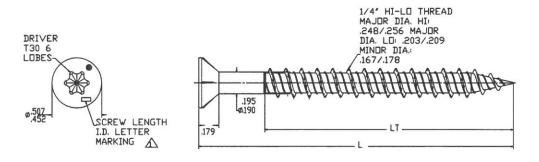
NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID-SET". "POWER PRO®" IS A REGISTERED TRADEMARK NAME FOR THE HILLMAN GROUP.

# 1/4" FLAT HEAD SCREW DIMENSIONS

	74	
NOMINAL		
LENGTH	L	LT
11/4"	1.20-1.25"	1.18-1.22"
1 3/4"	1.70-1.75"	1.70-1.75"
2 1/4"	2.20-2.25"	1.82-1.859
2 3/4"	2.65-2.75"	1.82-1.859
3 1/4"	3.15-3.25"	1.82-1.859
3 3/4"	3.65-3.75"	1.82-1.859
4"	3.90-4.0"	1.82-1.859
5"	4.90-5.0"	1.82-1.859
6"	5.90-6.0"	1.82-1.859



1/4" SOLID SET<sup>TM</sup> FLAT HEAD SCREW (CS AND 410 SS)



1/4" SOLID SET<sup>™</sup> FLAT HEAD-FULL THREAD STAR DRIVE SCREW (CS AND 410 SS)

NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES

GROUP, HILLMAN

POMPANO BEACH, FL 3 (954) 984-0116 HILLMAN GROUP SOLIT CONCRETE, MASONRY AND MIAMI-DADE COUNTY NOTICE

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EXPRESS.

23-69072

SCALE: NTS UNLESS NOTE



LENGTH ID MARKING ON ANCHOR HEAD	#	А	В	С	D	E	F	G	Н	ı	J	К	L	М
FROM	1"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	4 1/2"	5"	5 1/2"	6"	6 1/2"	7"	7 1/2"
UP TO, BUT NOT INCLUDING	1 1/2"	2"	2 1/2"	3	3 1/2"	4"	4 1/2"	5"	5 1/2"	6"	6 1/2"	7"	7 1/2"	8"

#### 3/16" HEX HEAD SCREW DIMENSIONS

NOMINAL		
LENGTH	L	LT
11/4"	1.20-1.25"	1.18-1.22"
13/4"	1.70-1.75"	1.70-1.75"
2 1/4"	2.20-2.25"	1.82-1.859
23/4"	2.65-2.75"	1.82-1.859
3 1/4"	3.15-3.25"	1.82-1.859
3 3/4"	3.65-3.75"	1.82-1.859
4"	3.90-4.0"	1.82-1.859
5"	4.90-5.0"	1.82-1.859
6"	5.90-6.0"	1.82-1.859

NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID-SET". "POWER PRO®" IS A REGISTERED TRADEMARK NAME FOR THE HILLMAN GROUP.

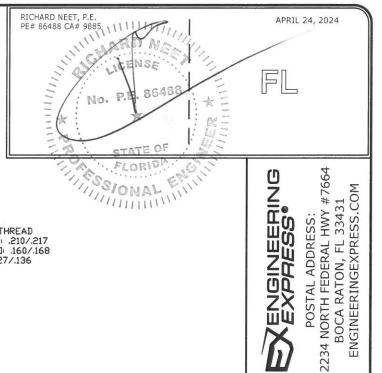
# 3/16" FLAT HEAD SCREW DIMENSIONS

NOMINAL		
LENGTH	L	LT
11/4"	1.20-1.25"	1.18-1.22"
13/4"	1.70-1.75"	1.70-1.75"
2 1/4"	2.20-2.25"	1.82-1.859
2 3/4"	2.65-2.75"	1.82-1.859
3 1/4"	3.15-3.25"	1.82-1.859
3 3/4"	3.65-3.75"	1.82-1.859
4"	3.90-4.0"	1.82-1.859
5"	4.90-5.0"	1.82-1.859

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0319.05

Expiration Date 09/22/2027

By | Shan | Chank
Miami-Dade Product Control



#10-8 HI-LO THREAD
MAJOR DIA. HI .210/.217
MAJOR DIA. LD .160/.168
MINOR DIA. .127/.136

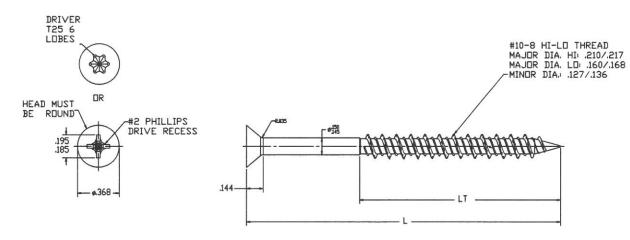
SCREW LENGTH
I.D. LETTER
MARKING
(COINVEX .090
SHAPE) HEAD HEIGHT

3/16" SOLID SET™ RECESS INDENTED HEX WASHER HEAD SCREW (CARBON STEEL)

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0319.05

Expiration Date 09/22/2027

By | Sheq |. Chank
Miami-Dade Product Control



3/16" SOLID SET<sup>TM</sup> FLAT HEAD SCREW (CARBON STEEL)

SCALE: NTS UNLESS NOTE

HILLMAN GROUP,

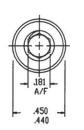
NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES

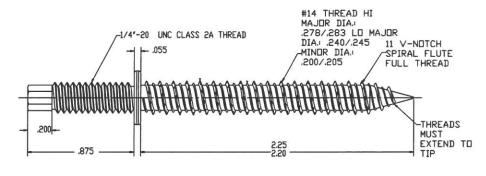
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Expiration Date <u>09</u>/22/2027

Ishaq 1. Chands

Miami-Dade Product Control





#14 MALE SOLID SET<sup>TM</sup> ANCHOR (CS AND 304 SS)

# #14 THREAD HI MAJOR DIA.: .278/.283 LO MAJOR -1/4'-20 UNC CLASS 2A THREAD DIA.: .240/.245 MINOR DIA.: .200/.205 -THREADS .200 MUST EXTEND TO

#14 MALE SOLID SET<sup>TM</sup> ANCHOR 1-1/8" STUD (CARBON STEEL)

# #14 MALE ANCHOR SCREW DIMENSIONS

NOMINAL		
LENGTH	L	LT
2 1/4"	2.20-2.25"	2.20-2.25"
3 1/4"	3.15-3.25"	2.20-2.25"
4 1/2"	3.90-4.0"	3.0-3.10"
5 1/2"	4.90-5.0"	3.0-3.10"
6 1 1/2"	5.90-6.0"	3.0-3.10"
7 3/8"	7.325-7.375"	3.0-3.10"

NOTE: FOR ALL ANCHORS, THE NAME "POWER PRO®" MAY BE USED INSTEAD OF "SOLID-SET". "POWER PRO®" IS A REGISTERED TRADEMARK NAME FOR THE HILLMAN GROUP.

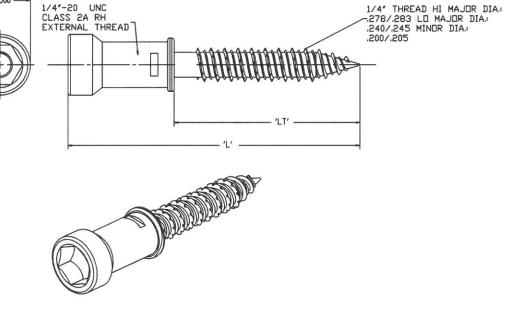
#### #14 FEMALE ANCHOR SCREW DIMENSIONS

NOMINAL		
LENGTH	L	LT
1 3/4"	1.70-1.75"	full thread
2 5/8"	2.575-2.625"	2.0-2.13"
3 1/4"	3.20-3.25"	3.0-3.10"
4 1/2"	3.90-4.0"	3.0-3.10"
5 1/2"	4.90-5.0"	3.0-3.10"
6 5/8"	6.575-6.625"	3.0-3.10"
7 3/8"	7.325-7.375"	3.0-3.10"

**PRODUCT REVISED** as complying with the Florida Building Code NOA-No. 24-0319.05 Expiration Date 09/22/2027

Ishaq I. Chands Miami-Dade Product Control

#14 FEMALE SOLID SET<sup>TM</sup> ANCHOR (CARBON STEEL)



RICHARD NEET, P.E. PE# 86488 CA# 9885 APRIL 24, 2024 SSIONAL ESTA

KENGINEERING EXPRESS.

ANCHORS
DD SUBSTRATES
ACCEPTANCE (NO. HILLMAN GROUP SOLID SET A CONCRETE, MASONRY AND WOOD MIAMI-DADE COUNTY NOTICE OF ACC 1590 NW 27TH AVE POMPANO BEACH, FL 33 (954) 984-0116

GROUP,

HILLMAN

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23-69072

SCALE: NTS UNLESS NOTE

