			•	NEMO etc. te of Authorization #32455 ristian Street, Unit #13 Oxford, CT 06478 (203) 262-9245
ENGINEER	EVALUATE	TEST	CONSULT	CERTIFY
		EVALUATION REPORT		
DECRA Roofing Systems	, Inc.		Evaluation Re	eport D30800.12.09-R5
1230 Railroad Street,				FL9759-R7
Corona, CA 92882			Date of	f Issuance: 12/17/2009

(951) 272-8180

Date of Issuance: 12/1//2009 Revision 5: 06/05/2018

SCOPE:

This Evaluation Report is issued under Rule 61G20-3 and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the 6th Edition (2017) Florida Building Code sections noted herein.

DESCRIPTION: DECRA Metal Roofing Systems

LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report 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 Evaluation Report consists of pages 1 through 6, plus a 59-page Appendix.

Prepared by:

Robert J.M. Nieminen, P.E. Florida Registration No. 59166, Florida DCA ANE1983

CERTIFICATION OF INDEPENDENCE:

The facsimile seal appearing was authorized by Robert Nieminen. P.E. on 06/05/2018. This does not serve as an electronically signed document.

- 1. NEMO|etc. does not have, nor does it intend to acquire, or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
- 2. NEMO | etc. is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
- Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for 3. which the evaluation reports are being issued.
- 4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
- 5. This is a building code evaluation. Neither NEMO|etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.



ROOFING SYSTEMS EVALUATION:

	.			
1.	SCOPE:			
	Product Category:	Roofing		
	Sub-Category:	Non-Structural Metal Roo	fing	
	• •	DECRA Metal Roofing System	s. as produced by DECRA Roofi	ng Systems, Inc., have demonstrated
	-			e through testing in accordance with
	-	-		Limitations / Conditions of Use set
	forth herein.		instantion nequirements and	
	lortin herein.			
2.	STANDARDS:			
	Section	Property	<u>Standard</u>	Year
	1504.3.1	Wind	UL 1897	2012
	1504.3.1, 1504.3.2	Wind	UL 580	2006
	1504.3.2	Wind	TAS 125	2003
3.	REFERENCES:			
	<u>Entity</u>	Examination	<u>Reference</u>	Date
	ATI (TST 1558)	Wind Uplift	A1395.01-109-44	08/10/2010
	ICC-ES (EVL2369)	IBC/IRC Compliance	ESR-2901	09/01/2017
	QAI (TST9808)	Wind Uplift	RJ5761P-1	11/21/2017
	UL LLC (EVL 11342)	IBC/IRC Compliance	UL ER14710-01	04/30/2015
	UL (TST 9628)	Wind Uplift	01NK28368	09/05/2001
	UL (TST 9628)	Wind Uplift	06NK07480	04/12/2006
	UL (TST 9628)	Wind Uplift	06NK17480	04/13/2006
	UL (TST 9628)	Wind Uplift	07NK09386	06/04/2007
	UL (TST 9628)	Wind Uplift	07NK22905	11/12/2007
	UL (TST 9628)	Wind Uplift	07NK22905	06/18/2008
	UL (TST 9628)	Wind Uplift	07NK22905	06/19/2008
	UL (TST 9628)	Wind Uplift	06NK07480	05/02/2009

4. PRODUCT DESCRIPTION:

Miami-Dade (CER1592)

Wind Uplift

Metal Physicals

HVHZ Compliance

Quality Assurance

UL (TST 9628)

Metal suppliers

The following **DECRA Metal Roofing Systems** are mechanically attached to Approved substrate, as outlined in the Limitations / Conditions of Use herein. Panels are produced from sheet steel complying with ASTM A792, Grade 37 with an AZ50 hot-dip aluminum-zinc alloy coating and a ceramic coated stone granular finish.

4786068523

Mill Certs

14-1224.12

Inspection Report

11/21/2013

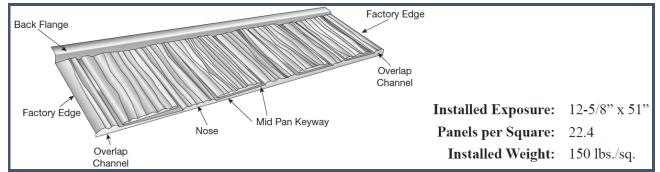
02/28/2018

02/05/2015

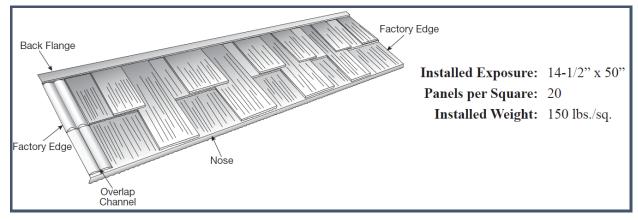
09/05/2017



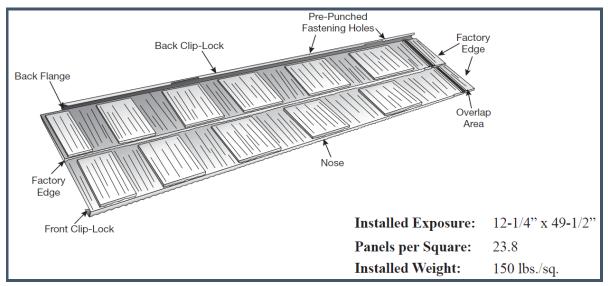
4.1 DECRA Shake are 26-ga. formed steel panels that are mechanically attached to batten systems over approved roof decks. DECRA Shake measures 14-5/8 x 53 inches with installed exposure of 12-5/8 x 51 inches.



4.2 DECRA Shingle Plus are 26-ga. formed steel panels that are mechanically attached to approved decks or to batten systems over approved decks. Shingle Plus measures 16.5 x 52 inches with installed exposure of 14.5 x 50 inches.

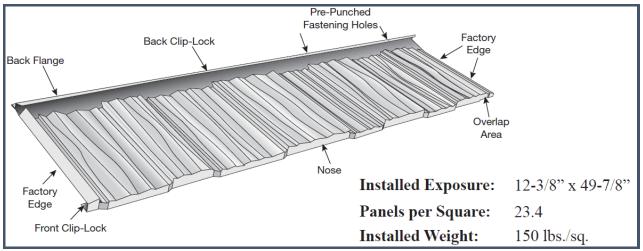


4.3 DECRA Shingle XD are 28-ga. formed steel panels that are mechanically attached to approved decks. Shingle XD measure 14.125 x 52.5 inches with installed exposure of 12.25 x 49.5 inches.

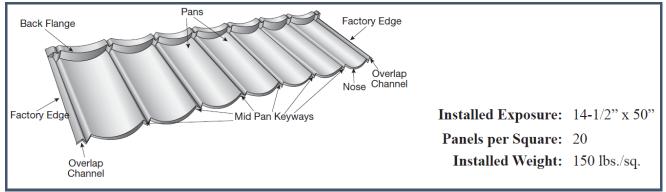




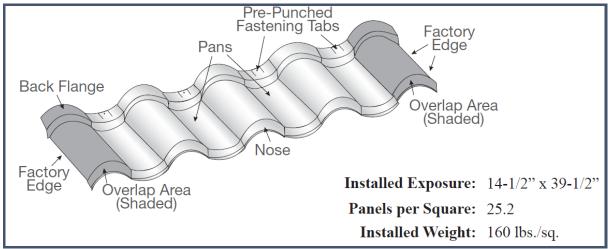
4.4 DECRA Shake XD are 26-ga. formed steel panels that are mechanically attached to approved decks. Shingle XD measure 14.125 x 52.125 inches with installed exposure of 12.375 x 49.875 inches.



4.5 DECRA Tile are 26-ga. formed steel panels that are mechanically attached to batten systems over approved roof decks. DECRA Tile measures 16.5 x 52 inches with installed exposure of 14.5 x 50 inches.



4.6 DECRA Villa Tile are 26-ga. formed steel panels that are mechanically attached to approved decks through pre-punched fastening tabs. Villa Tile measure 17 x 44.25 inches with installed exposure of 14.5 x 39.5 inches.





5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO|etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This evaluation report is not for use in FBC HVHZ jurisdictions.
- 5.3 Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory for fire ratings of this product.
- 5.4 The minimum roof slope per **DECRA Roofing Systems** installation instructions is 3:12. Slope shall not be less than that set forth in **FBC 1507.5.2**.
- 5.4.1 If the roof deck is covered with a Florida Statewide Approved low-slope roof system, meeting all Chapter 15 requirements for use below 3:12 slope, then **DECRA Metal Roofing Systems** may be installed below 3:12 roof slope atop the Approved roof system, provided the applicable attachment requirements for the system in Appendix 1 are maintained. Note: In this case, the attachment analysis set forth in Appendix 1 may not apply, depending on the project roof slope
- 5.5 Sheet materials used to produce the panels shall comply with **FBC 1507.5.5**.
- 5.6 The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
- 5.7 Appendix 1 outlines attachment requirements for design wind pressure resistance. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to **FBC 1609** for determination of design wind pressures. The MDP for the selected assembly shall meet or exceed the design wind pressure requirements for the project for each pressure zone of the roof.
- 5.7.1 Reference to "OK" indicates the system performance exceeds requirements for that pressure zone. Reference to "NO" indicates additional testing or rational analysis by a qualified design professional is required to address that particular pressure zone.
- 5.8 For existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance in accordance with **ANSI/SPRI FX-1** or **Testing Application Standard TAS 105**. A qualified design professional shall review the data for comparison to the minimum requirements for the system.
- 5.9 Perimeter and ridge details shall be designed and installed to resist the wind load requirements of **FBC Chapter 16**.
- 5.10 All products in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**.

6. INSTALLATION:

- 6.1 **DECRA Metal Roofing Systems** shall be installed in accordance with **DECRA Roofing Systems, Inc.** published installation instructions, subject to the Limitations / Conditions of Use noted herein.
- 6.2 System attachment requirements for wind load resistance are set forth in Appendix 1. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied). Refer to **FBC 1609** for determination of design wind loads.



7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

8. MANUFACTURING PLAN	TS:
-----------------------	-----

Corona, CA

9. QUALITY ASSURANCE ENTITY:

UL LLC – QUA9625; (414) 248-6409; karen.buchmann@us.ul.com

- THE 59-PAGES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -



APPENDI)		IT REQUIREMENTS FOR DESIGN	VIND PRESSURE RESISTANCE:			
			APPLICA	TION		
TABLE	SYSTEM	PRODUCT	METHOD	SCREWS PER PANEL	MDP (psf)	PAGE
A-1	1	Shingle Plus	Direct-deck	4	-65.0	3-5
A-2	2	Shingle Plus	Direct-deck	7	-102.5	6-8
A-3	3	Shingle Plus	Direct-deck	8	-37.5	9-11
A-4	4	Shingle Plus	Direct-deck	16	-97.5	12-14
A-5	5	Shake XD	Direct-deck	5	-78.5	15-17
A-6	6	Shake XD	Direct-deck	10	-153.5	18-20
A-7	7	Shingle XD	Direct-deck	5	-45.0	21-23
A-8	8	Shingle XD	Direct-deck	5	-75.0	24-26
A-9	9	Shingle XD	Direct-deck	10	-75.0	27-29
A-10	10	Shingle XD	Direct-deck	10	-97.5	30-32
A-11	11	Villa Tile	Direct-deck	4	-52.5	33-35
A-12	12	Villa Tile	Direct-deck	4	-52.5	36-37
B-1	13	Shake, Tile, Shingle Plus	Wood battens	4	-86.0	39-41
B-2	14	Shake, Tile, Shingle Plus	Wood battens	7	-153.5	42-44
B-3	15	Villa Tile	Wood battens	12	-153.0	45-47
C-1	16	Shake, Tile, Shingle Plus	Steel battens	4	-59.75	48-50
C-2	17	Shake, Tile, Shingle Plus	Steel battens	7	-116.0	51-53
D-1	18	Shake, Tile, Shingle Plus	Wood counter-battens	4	-78.5	54-56
D-2	19	Shake, Tile, Shingle Plus	Wood counter-battens	7	-146.0	57-59

1. The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. Load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.

- 2. Unless otherwise noted herein, fire barrier and/or underlayment materials may be any that meets FBC Table 1507.1.1, DECRA minimum requirements, the QA requirements of F.A.C. Rule 61G20-3 and FBC 1505 when installed with the roof cover.
- 3. "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per FBC 1504.9 has already been applied). Refer to FBC 1609 for determination of design wind pressures.
- 4. Tables are based on roof cladding design wind pressure requirements for gabled/hipped roofs in accordance with ASCE 7-10, multiplied by 0.6 (Pasd) for allowable loads.
- 5. Tables are limited to projects having gable or hip roofs with a mean roof height between 0 and 60 feet, slopes between 7° and 45° (1.5:12 to 12:12 pitch), enclosed buildings (Internal Pressure Coefficient, GCPi = \pm 0.18), no load combinations (K_d = 1) and site conditions and location of the structure do not meet all conditions specified in Section 26.8.1 of ASCE 7-10 (K_{zt} = 1.0). Analysis for buildings falling outside these constraints shall be on a project-by-project basis by a Florida Registered PE.
- 6. Reference to "OK" indicates the system performance exceeds project requirements for that pressure zone. Reference to "NO" indicates additional testing or rational analysis by a Florida Registered PE is required to address that particular pressure zone.
- 7. The dimension of Zones 2 and 3 (perimeters and corners) shall be defined as 10% of the least horizontal plan-view dimension or 40% of the mean roof height, whichever is smaller, but not less than either 4% of the least horizontal plan-view dimension or 3 feet, as outlined in Figures 30.4-2B and 30.4-2C of ASCE 7-10.
- 8. For existing decks, fasteners shall be tested in the existing deck for withdrawal resistance in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105. A qualified design professional shall review the data for comparison to the minimum requirements for the system.



- 9. For installation over a fire barrier and/or existing asphalt shingles, panel fasteners that engage the roof deck shall be of sufficient length to penetrate the underside of the roof deck by not less than 1-inch.
- 10. Panel fasteners shall be corrosion resistant.
- 11. The panel attachment configurations for DECRA Tile, Shake or Shingle Plus noted herein call for either four (4) or seven (7) fasteners per panel. Fastener placement for these configurations are outlined below.

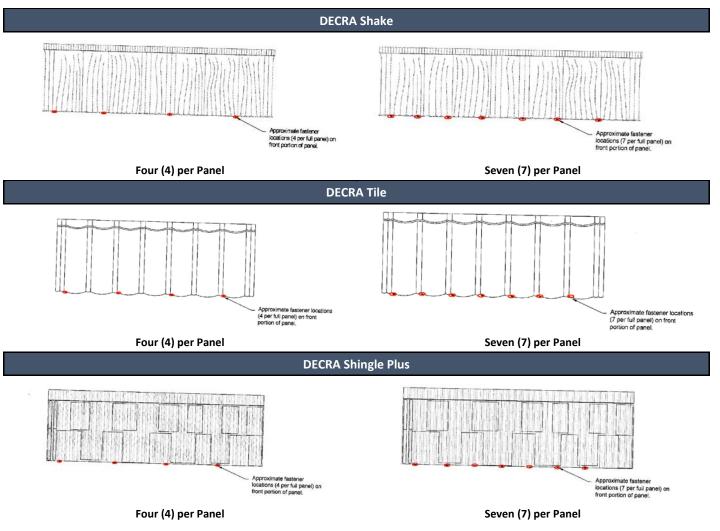




TABLE A-1: DECRA Shingle Plus WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER (OVER EXISTING ASPHALT SHINGLES OR BUR)											
System	Deck	Fire Barrier	Underlay	Panel At	tachment	MDP					
No.	(See Note 1)	File Darrier	Underlay	Fasteners	Attachment	(psf)					
1.	Min. 15/32" APA rated Grade B-C plywood	(Optional) See Note 2	See Note 2	Panels to Deck: No. 8 x min. 1½" long hex head screws at back shelf Panels to Panels: No. 8 x min. 1" long hex head screws through nose of panel	Panels to Deck: Four (4) per panel at back shelf to roof deck Panels to Panels: Four (4) per panel at through nose of panel to attached panels to the next course	-65.0					

			Basic Wind Speed (mph)								
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200	
	1	ОК	OK	ОК	ОК	OK	ОК	OK	OK	OK	
	2	ОК	OK	ОК	ОК	OK	ОК	OK	NO	NC	
0 < h <u><</u> 30	3	ОК	OK	ОК	ОК	OK	NO	NO	NO	NC	
	2 Overhang	ОК	OK	OK	ОК	OK	ОК	OK	NO	NC	
	3 Overhang	ОК	OK	ОК	NO	NO	NO	NO	NO	NC	
	1	ОК	OK	OK	ОК	OK	ОК	OK	OK	01	
	2	ОК	OK	ОК	ОК	OK	OK	OK	NO	N	
30 < h <u><</u> 40	3	OK	OK	OK	ОК	OK	NO	NO	NO	NC	
	2 Overhang	ОК	OK	ОК	ОК	OK	OK	NO	NO	N	
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N	
	1	ОК	ОК	ОК	ОК	OK	ОК	OK	OK	0	
	2	ОК	OK	ОК	ОК	OK	OK	OK	NO	N	
40 < h <u><</u> 50	3	ОК	OK	ОК	ОК	NO	NO	NO	NO	N	
	2 Overhang	ОК	OK	ОК	ОК	OK	OK	NO	NO	N	
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NC	
	1	OK	OK	OK	OK	OK	OK	OK	OK	0	
	2	ОК	OK	OK	OK	OK	ОК	OK	NO	N	
50 < h <u><</u> 60	3	ОК	OK	OK	ОК	NO	NO	NO	NO	N	
-	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N	
	3 Overhang	ОК	OK	NO	NO	NO	NO	NO	NO	NC	

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
weah Kool Height (It)	Koor Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	2 & 3	ОК	ОК	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	NO	NO
	1	ОК	ОК	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	ОК	ОК	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	NO	NO
	1	ОК	ОК	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	ОК	ОК	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	NO	NO
50 < h <u><</u> 60	1	ОК	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3	ОК	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	ОК	ОК	OK	OK	OK	OK	NO	NO	NO



BLE A-1C: SYSTEM NO. 1: DEC										
POSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCH</u>)	1 <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone		-	-	Basic V	Vind Speed	(mph)			
	Noor Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	ОК	ОК	OK	ОК	OK	OK
	2	OK	OK	OK	ОК	ОК	OK	ОК	NO	NO
0 < h <u><</u> 15	3	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	NO	NO	NO
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	ОК	OK	OK
	2	OK	OK	OK	ОК	ОК	OK	NO	NO	NO
15 < h <u><</u> 20	3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	ОК	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO
	2	OK	OK	ОК	ОК	ОК	OK	NO	NO	NO
20 < h <u><</u> 30	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	ОК	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	ОК	ОК	NO
	2	OK	OK	ОК	ОК	ОК	NO	NO	NO	NO
30 < h <u><</u> 40	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	ОК	OK	NO
	2	OK	OK	ОК	ОК	ОК	NO	NO	NO	NO
40 < h <u><</u> 50	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	ОК	NO
	2	OK	OK	OK	ОК	OK	NO	NO	NO	NO
50 < h <u><</u> 60	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
—	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-1D: SYSTEM NO. 1: DECRA SHINGLE PLUS EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Maan Doof Hoight (ft)	Doof Drossure Zono				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO
15 < h <u><</u> 20	2 & 3	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	NO	NO
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO



ABLE A-1E: SYSTEM NO. 1: DEC	RA SHINGLE PLUS									
KPOSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITC</u>	+ <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone		r			Vind Speed			1	1
		110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	NO
	2	OK	OK	ОК	ОК	OK	NO	NO	NO	NO
0 < h <u><</u> 15	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	ОК	ОК	NO
	2	OK	OK	ОК	ОК	OK	NO	NO	NO	NO
15 < h <u><</u> 20	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	ОК	ОК	NO
	2	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
20 < h <u><</u> 30	3	OK	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	ОК	NO	NO
	2	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
30 < h <u><</u> 40	3	OK	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	ОК	NO	NO
	2	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
40 < h < 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
_	2 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	ОК	NO	NO
	2	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-1F: SYSTEM NO. 1: DECRA SHINGLE PLUS EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Moon Doof Unight (ft)	Deef Dressure Zere				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	ОК	OK	OK	OK	OK	OK	OK	NO
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	ОК	OK	OK	OK	NO	NO	NO	NO
	1	OK	ОК	OK	OK	OK	OK	OK	OK	NO
15 < h <u><</u> 20	2 & 3	OK	ОК	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	ОК	OK	OK	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
20 < h <u><</u> 30	2&3	OK	ОК	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	ОК	OK	OK	NO	NO	NO	NO	NO
	1	OK	ОК	OK	OK	OK	OK	OK	NO	NO
30 < h <u><</u> 40	2&3	OK	ОК	OK	OK	OK	OK	NO	NO	NO
	2 & 3 Overhang	OK	ОК	OK	OK	NO	NO	NO	NO	NO
	1	OK	ОК	OK	OK	OK	OK	OK	NO	NO
40 < h <u><</u> 50	2&3	OK	ОК	OK	OK	OK	OK	NO	NO	NO
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
50 < h <u><</u> 60	2&3	OK	ОК	OK	OK	OK	OK	NO	NO	NO
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO



TABLE A-2: DECRA Shingle Plus WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off), or RECOVER (over existing asphalt shingles or BUR)											
System	Deck	Fire Barrier	Underlay	Panel Att	tachment	MDP					
No.	(See Note 1)	File barrier	Underlay	Fasteners	Attachment	(psf)					
2.	Min. 15/32" APA rated Grade B-C plywood	(Optional) See Note 2	See Note 2	Panels to Deck: No. 8 x min. 1½" long hex head screws at back shelf Panels to Panels: No. 8 x min. 1" long hex head screws through nose of panel	Panels to Deck: Seven (7) per panel at back shelf to roof deck Panels to Panels: Seven (7) per panel at through nose of panel to attached panels to the next course	-102.5					

BLE A-2A SYSTEM NO. 2: DEC POSURE B FOR SLOPE RANGE 7	CRA SHINGLE PLUS 1° < SLOPE <u><</u> 27° (1.5:12 < PITC	н <u><</u> 6.1:12)								
Mean Deef Height (ft)	Roof Pressure Zone				Basic \	Wind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	ОК	OK	ОК	OK	OK	OK	OK
	2	ОК	OK	ОК	OK	ОК	OK	OK	OK	Ok
0 < h <u><</u> 30	3	ОК	OK	ОК	OK	ОК	OK	OK	OK	NC
	2 Overhang	ОК	OK	ОК	OK	ОК	OK	OK	OK	Oł
	3 Overhang	ОК	OK	ОК	OK	ОК	OK	OK	NO	NC
	1	ОК	OK	ОК	OK	ОК	OK	OK	OK	01
	2	ОК	OK	ОК	OK	ОК	OK	OK	OK	01
30 < h <u><</u> 40	3	ОК	OK	ОК	OK	ОК	OK	OK	NO	N
30 < h <u><</u> 40	2 Overhang	ОК	ОК	ОК	OK	ОК	OK	OK	OK	N
	3 Overhang	ОК	OK	ОК	OK	ОК	OK	NO	NO	N
	1	ОК	OK	ОК	OK	ОК	OK	OK	OK	0
	2	ОК	ОК	ОК	OK	ОК	OK	OK	OK	0
40 < h <u><</u> 50	3	ОК	OK	ОК	OK	ОК	OK	OK	NO	N
	2 Overhang	ОК	ОК	ОК	OK	ОК	OK	OK	OK	N
	3 Overhang	ОК	OK	ОК	OK	ОК	NO	NO	NO	N
	1	ОК	OK	ОК	OK	OK	OK	OK	OK	0
50 < h <u><</u> 60	2	ОК	OK	ОК	OK	ОК	OK	OK	OK	0
	3	ОК	OK	ОК	OK	OK	OK	OK	NO	N
	2 Overhang	ОК	OK	ОК	OK	ОК	OK	OK	OK	N
	3 Overhang	OK	ОК	ОК	OK	OK	NO	NO	NO	N

TABLE A-2B: SYSTEM NO. 2: DECRA SHINGLE PLUS EXPOSURE B FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure Zone		Basic Wind Speed (mph)										
Wean Root Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200			
	1	ОК	OK	OK	OK	OK	OK	OK	OK	OK			
0 < h <u><</u> 30	2 & 3	ОК	OK	ОК	OK	OK	OK	OK	OK	OK			
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	OK	ОК			
	1	ОК	OK	ОК	OK	OK	OK	OK	OK	OK			
30 < h <u><</u> 40	2 & 3	ОК	OK	OK	ОК	OK	OK	OK	OK	OK			
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	OK	OK			
	1	ОК	OK	ОК	OK	OK	OK	OK	OK	OK			
40 < h <u><</u> 50	2 & 3	ОК	OK	OK	ОК	OK	OK	OK	OK	OK			
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	OK	ОК			
	1	ОК	OK	OK	OK	OK	OK	OK	OK	ОК			
50 < h <u><</u> 60	2 & 3	ОК	OK	OK	OK	OK	OK	OK	OK	OK			
	2 & 3 Overhang	ОК	OK	OK	ОК	OK	OK	OK	OK	NO			



ABLE A-2C: SYSTEM NO. 2: DEC										
(POSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCH</u>)	l <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Weath Noor Height (It)	Noor Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	ОК	ОК	OK	ОК	ОК	OK
	2	OK	OK	ОК	ОК	ОК	OK	ОК	ОК	OK
0 < h <u><</u> 15	3	OK	OK	ОК	ОК	ОК	OK	ОК	NO	NO
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	ОК	OK	NO
	3 Overhang	OK	OK	ОК	ОК	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	ОК	OK	OK
	2	OK	OK	ОК	ОК	ОК	OK	ОК	OK	NO
15 < h <u><</u> 20	3	OK	OK	ОК	ОК	ОК	OK	ОК	NO	NO
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	ОК	OK	NO
	3 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	ОК	OK	ОК
	2	OK	OK	ОК	ОК	ОК	OK	ОК	OK	NO
20 < h <u><</u> 30	3	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	OK	OK	NO	NO
	3 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	OK	OK
	2	OK	OK	ОК	OK	ОК	OK	ОК	OK	NO
30 < h <u><</u> 40	3	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
	3 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	OK	OK
	2	OK	OK	ОК	ОК	ОК	OK	ОК	OK	NO
40 < h <u><</u> 50	3	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	OK	OK	ОК	NO	NO
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	ОК	OK	OK
	2	OK	OK	ОК	ОК	OK	OK	ОК	NO	NO
50 < h <u><</u> 60	3	OK	OK	ОК	ОК	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	ОК	OK	OK	ОК	NO	NO
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO

TABLE A-2D: SYSTEM NO. 2: DECRA SHINGLE PLUS EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deaf Height (ft)	Deef Dressure Zene				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	ОК	ОК	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
15 < h <u><</u> 20	2&3	OK	ОК	ОК	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
50 < h <u><</u> 60	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO



Manu De of Heinhe (fr)	De of Drawner 7				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	OK
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	NC
0 < h <u><</u> 15	3	OK	OK	ОК	OK	OK	OK	NO	NO	NC
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	NO	NC
	3 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	OI
	2	OK	OK	ОК	OK	OK	OK	OK	OK	N
15 < h <u><</u> 20	3	OK	OK	ОК	ОК	OK	NO	NO	NO	NC
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	OK	0
	2	OK	OK	ОК	OK	OK	OK	OK	NO	N
20 < h <u><</u> 30	3	OK	OK	ОК	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	NO	N
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	NO	N
30 < h <u><</u> 40	3	OK	OK	ОК	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	ОК	OK	OK	OK	NO	NO	N
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	OK	0
	2	OK	OK	ОК	OK	OK	OK	OK	NO	N
40 < h <u><</u> 50	3	OK	OK	ОК	ОК	NO	NO	NO	NO	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	NO	NO	N
50 < h <u><</u> 60	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	3	OK	OK	ОК	ОК	NO	NO	NO	NO	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	NO	NO	N
	3 Overhang	ОК	ОК	NO	NO	NO	NO	NO	NO	NC

TABLE A-2F: SYSTEM NO. 2: DECRA SHINGLE PLUS EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)

Mean Deaf Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
15 < h <u><</u> 20	2 & 3	OK	OK	ОК	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	OK	OK	ОК
20 < h <u><</u> 30	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	OK	OK	ОК
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	ОК	ОК	ОК	OK	OK	OK	ОК
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
50 < h <u><</u> 60	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	NO	NO	NO



	8: DECRA Shingle P ECKS - NEW CONST		OOF (Tear-Off)	, OR RECOVER (OVER EXISTING ASPHALT SH	IINGLES OR BUR)	
System	Deck	Fire Barrier	Underlay	Panel At	tachment	MDP
No.	(See Note 1)	File barrier	Underlay	Fasteners	Attachment	(psf)
3.	Min. 15/32" APA rated Grade CDX plywood	(Optional) See Note 2	See Note 2	Panels to Deck: No. 8 x min. 1½" long hex head screws at nose and at back flange	Panels to Deck: Four (4) per panel at nose and four (4) per panel at back flange to roof deck	-37.5

TABLE A-3a: System No. 3: DECRA Shingle Plus Exposure B for Slope Range 7° < slope $\leq 27^{\circ}$ (1.5:12 < pitch $\leq 6.1:12$)

					Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2	OK	OK	OK	OK	NO	NO	NO	NO	NO
0 < h <u><</u> 30	3	OK	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	ОК	OK	OK	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	ОК	OK	OK	OK	OK	OK	OK	NO	NO
	2	ОК	OK	OK	OK	NO	NO	NO	NO	NO
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	ОК	OK	OK	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	ОК	OK	OK	OK	OK	OK	OK	NO	NO
	2	ОК	OK	OK	NO	NO	NO	NO	NO	NO
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	ОК	OK	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	ОК	OK	NO	NO
	2	ОК	OK	OK	NO	NO	NO	NO	NO	NO
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	ОК	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-3B: SYSTEM NO. 3: DECRA SHINGLE PLUS EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

EXPOSORE D FOR SLOPE RANGE 22	(012122 (111	<u></u>								
Mean Deaf Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2 & 3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	NO	NO	NO
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 & 3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	NO	NO	NO
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 & 3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO



BLE A-3C: SYSTEM NO. 3: DEC										
OSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCE</u>	+ <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone					Vind Speed	· · /			
0 ()		110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2	OK	OK	OK	NO	NO	NO	NO	NO	NO
0 < h <u><</u> 15	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2	OK	OK	NO	NO	NO	NO	NO	NO	NO
15 < h <u><</u> 20	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	ОК	OK	OK	NO	NO	NC
	2	OK	ОК	NO	NO	NO	NO	NO	NO	NC
20 < h <u><</u> 30	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2	OK	NO	NO	NO	NO	NO	NO	NO	NC
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	NO	NO	NO	NC
	2	NO	NO	NO	NO	NO	NO	NO	NO	NC
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	ОК	OK	NO	NO	NO	NC
	2	NO	NO	NO	NO	NO	NO	NO	NO	NC
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
-	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC

TABLE A-3D: SYSTEM NO. 3: DECRA SHINGLE PLUS EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deaf Height (ft)	Doof Drossura Zono				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	ОК	OK	NO	NO	NO
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	NO	NO	NO	NO
	2 & 3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	NO	NO	NO
15 < h <u><</u> 20	2 & 3	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	2 & 3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	NO	NO	NO	NO
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 & 3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	NO	NO	NO	NO
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO
40 < h <u><</u> 50	2 & 3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO
50 < h <u><</u> 60	2 & 3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO



BLE A-3E: SYSTEM NO. 3: DEC										
POSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCI</u>)	н <u><</u> 6.1:12)					(
Mean Roof Height (ft)	Roof Pressure Zone		445	420	1	Vind Speed		460	400	200
• • • •		110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2	OK	NO	NO	NO	NO	NO	NO	NO	NO
0 < h <u><</u> 15	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2	NO	NO	NO	NO	NO	NO	NO	NO	NO
15 < h <u><</u> 20	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2	NO	NO	NO	NO	NO	NO	NO	NO	NC
20 < h <u><</u> 30	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2	NO	NO	NO	NO	NO	NO	NO	NO	NC
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	NO	NO	NO	NO	NC
	2	NO	NO	NO	NO	NO	NO	NO	NO	NC
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	NO	NO	NO	NO	NC
	2	NO	NO	NO	NO	NO	NO	NO	NO	NC
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NC
—	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-3F: SYSTEM NO. 3: DECRA SHINGLE PLUS EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Maan Doof Lloight (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	NO	NO	NO	NO
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO
15 < h <u><</u> 20	2 & 3	OK	ОК	ОК	NO	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO
20 < h <u><</u> 30	2 & 3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO
30 < h <u><</u> 40	2 & 3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	NO	NO	NO	NO	NO	NO
40 < h <u><</u> 50	2 & 3	OK	ОК	NO	NO	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	NO	NO	NO	NO	NO	NO
50 < h <u><</u> 60	2 & 3	OK	OK	NO	NO	NO	NO	NO	NO	NO
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO



TABLE A-4: DECRA SHINGLE PLUS WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER (OVER EXISTING ASPHALT SHINGLES OR BUR) Deck **Panel Attachment** MDP System **Fire Barrier** Underlay (psf) No. (See Note 1) Fasteners Attachment Min. 15/32" APA Panels to Deck: No. 10 x min. 11/2" Panels to Deck: Eight (8) per panel at (Optional) 4. rated Grade CDX See Note 2 long needle point hex head screws at nose and eight (8) per panel at back -97.5 See Note 2 plywood nose and at back flange flange to roof deck

TABLE A-4A SYSTEM NO. 4: DECRA SHINGLE PLUS EXPOSURE B FOR SLOPE RANGE 7° < SLOPE < 27° (1.5:12 < pitch < 6.1:12)

Mana Danf Hainha (ft)	De of Decourse Zone				Basic \	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
0 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 Overhang	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	ОК	OK	OK	ОК	OK	ОК	ОК	OK	ОК
	2	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 Overhang	ОК	OK	OK	ОК	ОК	OK	OK	OK	NO
	3 Overhang	ОК	OK	OK	ОК	ОК	NO	NO	NO	NO
	1	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
	2	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
40 < h <u><</u> 50	3	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2	OK	OK	OK	OK	OK	OK	OK	OK	NO
	3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
-	3 Overhang	ОК	OK	OK	ОК	OK	NO	NO	NO	NO

TABLE A-4B: SYSTEM NO. 4: DECRA SHINGLE PLUS EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)

EXTOSORE BIOR SECTEMANCE EN	(012122 411)	Basic Wind Speed (mph)								
Mean Deef Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	ОК	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	ОК	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	ОК	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	ОК	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO



BLE A-4C: SYSTEM NO. 4: DEC POSURE C FOR SLOPE RANGE 7°		(6 1.12)								
		1 <u><</u> 0.1.12j			Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	NO
0 < h <u><</u> 15	3	OK	ОК	ОК	ОК	OK	OK	ОК	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	3 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	NO
	1	OK	OK	OK	ОК	OK	ОК	OK	OK	OK
	2	OK	ОК	ОК	ОК	OK	OK	ОК	ОК	NO
15 < h <u><</u> 20	3	OK	OK	OK	ОК	OK	ОК	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	OK	ОК	OK	NO	NO
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	ОК	OK	OK	ОК	ОК	ОК
	2	OK	ОК	ОК	ОК	OK	OK	ОК	ОК	NO
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	ОК	OK	NO	NC
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	ОК	OK
	2	OK	OK	OK	OK	OK	ОК	OK	NO	NO
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
40 < h <u><</u> 50	3	OK	OK	OK	OK	OK	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NC
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NC
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	NO	NO	NO	NC
<u> </u>	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NC
	3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO

TABLE A-4D: SYSTEM NO. 4: DECRA SHINGLE PLUS EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deaf Llaight (ft)	Deef Dressure Zere				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	ОК	ОК	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
15 < h <u><</u> 20	2 & 3	OK	ОК	ОК	OK	ОК	ОК	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	ОК	OK	OK	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
20 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	ОК	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	OK
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	ОК	ОК	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	OK
40 < h <u><</u> 50	2&3	OK	OK	OK	OK	ОК	ОК	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	ОК	OK	NO	NO



BLE A-4E: SYSTEM NO. 4: DEC POSURE D FOR SLOPE RANGE 7°		H < 6.1:12)								
	_ `				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	NO
0 < h <u><</u> 15	3	OK	OK	OK	OK	ОК	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NC
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2	OK	ОК	OK	OK	ОК	OK	ОК	NO	NC
15 < h <u><</u> 20	3	OK	ОК	OK	OK	ОК	NO	NO	NO	NC
	2 Overhang	OK	ОК	OK	OK	OK	OK	ОК	NO	NC
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	ОК	OK	OK	NO	NC
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NC
	3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NC
30 < h <u><</u> 40	3	OK	OK	OK	OK	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NC
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NC
40 < h <u><</u> 50	3	OK	OK	OK	OK	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NC
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NC
50 < h <u><</u> 60	3	OK	OK	OK	OK	NO	NO	NO	NO	NC
<u> </u>	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NC
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NC

TABLE A-4F: SYSTEM NO. 4: DECRA SHINGLE PLUS EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Manu Danf Hainht (ft)	De of Duccours Zone				Basic V	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
15 < h <u><</u> 20	2 & 3	OK	ОК	ОК	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	ОК	OK	ОК	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
20 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	2&3	OK	ОК	OK	ОК	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	OK	OK	OK	NO	NO
	1	OK	ОК	OK	ОК	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	ОК	OK	ОК	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	NO	NO	NO



WOOD DE		CTION, REROOF (TEAR-OFF), OR RE	COVER (OVER EXISTING ASPHALT SHINGLES OR E	,	
System No.	Deck (See Note 1)	Fire Barrier	Underlay	Fasteners	tachment Attachment	MDP (psf)
5.	Min. 15/32" APA rated Grade B-C plywood	(Optional) See Note 2	See Note 2	No. 8 x min. 1½" long hex head screws with ¼" head diameter	Spaced 10-inch o.c. with one fastener per panel fastening location for a total of five (5) per panel.	-78.5

TABLE A-5A: SYSTEM NO. 5: DECRA SHAKE XD EXPOSURE B FOR SLOPE RANGE 7° < SLOPE $\leq 27^{\circ}$ (1.5:12 < pitch $\leq 6.1:12$)

Many Danf Hainht (ft)	De of December 7 and				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	NO
0 < h <u><</u> 30	3	OK	OK	ОК	ОК	OK	OK	OK	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	OK
	2	OK	OK	OK	ОК	OK	OK	OK	OK	NO
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	OK
	2	OK	OK	OK	ОК	OK	OK	OK	OK	NO
40 < h <u><</u> 50	3	OK	OK	OK	ОК	OK	OK	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	NO
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2	OK	OK	OK	ОК	OK	OK	OK	NO	NO
	3	OK	OK	OK	ОК	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	ОК	OK	ОК	NO	NO	NO	NO	NO	NO

TABLE A-5B: SYSTEM NO. 5: DECRA SHAKE XD EXPOSURE B FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
wean Roof Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	2 & 3	ОК	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	ОК	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	OK	NO
	1	ОК	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	ОК	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	NO	NO
	1	ОК	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	ОК	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	NO	NO



Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	OK	OK	OK	OK	OI
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
0 < h <u><</u> 15	3	OK	OK	OK	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	ОК	NO	N
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	ОК	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
15 < h <u><</u> 20	3	OK	OK	OK	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	ОК	NO	N
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
20 < h <u><</u> 30	2	OK	OK	OK	OK	OK	OK	OK	NO	N
	3	OK	OK	OK	OK	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
30 < h <u><</u> 40	3	OK	OK	OK	ОК	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	NO	NO	N
40 < h <u><</u> 50	3	OK	OK	OK	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
50 < h <u><</u> 60	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	NO	NO	N
	3	OK	OK	OK	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NC

TABLE A-5D: SYSTEM NO. 5: DECRA SHAKE XD EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deef Height (ft)	Doof Drossure Zono				Basic V	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	ОК	OK	OK	ОК	OK	OK	OK	ОК
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	OK	OK	NO	NO
	1	OK	ОК	OK	OK	ОК	OK	OK	OK	ОК
15 < h <u><</u> 20	2&3	OK	ОК	ОК	OK	ОК	ОК	OK	OK	ОК
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	OK	OK	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	ОК
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	OK	ОК	ОК	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	OK	OK	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	ОК
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	OK	ОК	ОК	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	ОК	NO	NO	NO
	1	OK	ОК	ОК	OK	ОК	OK	OK	OK	NO
40 < h <u><</u> 50	2 & 3	OK	ОК	OK	OK	ОК	ОК	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	ОК	NO	NO	NO
	1	OK	ОК	OK	OK	ОК	OK	OK	OK	NO
50 < h <u><</u> 60	2 & 3	OK	ОК	OK	OK	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	OK	NO	NO	NO

TABLE A-5C: SYSTEM NO. 5: DECRA SHAKE XD



ABLE A-5E: SYSTEM NO. 5: DEC	RA SHAKE XD									
EXPOSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCI</u>)	+ <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Koor Height (It)	KOOI Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	OK	ОК	OK	ОК	ОК	OK
	2	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
0 < h <u><</u> 15	3	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	ОК	OK
	2	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
15 < h <u><</u> 20	3	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	ОК	OK
	2	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
20 < h <u><</u> 30	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	ОК	NO
	2	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
30 < h <u><</u> 40	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	ОК	NO
	2	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
40 < h <u><</u> 50	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	NO
	2	OK	OK	ОК	ОК	OK	NO	NO	NO	NO
50 < h <u><</u> 60	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
_	2 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-5F: SYSTEM NO. 5: DECRA SHAKE XD EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deaf Height (ft)	Deef Dressure Zene				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	ОК	ОК	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	NO	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
15 < h <u><</u> 20	2&3	OK	ОК	ОК	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	NO	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	NO	NO	NO	NO
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	NO
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	NO	NO	NO	NO
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	NO
40 < h <u><</u> 50	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO
50 < h ≤ 60	2 & 3 Overhang	OK	OK	OK	ОК	ОК	NO	NO	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	NO	NO	NO	NO	NO



TABLE A-6: DECRA SHAKE XD

WOOD DI	ECKS - NEW CONST	RUCTION, RER	OOF (TEAR-OFF)	, OR RECOVER (OVER EXISTING ASPHALT SH	INGLES OR BUR)	
System	Deck	Fire Barrier	Underlav	Panel Att	tachment	MDP
No.	(See Note 1)	File barrier	Underlay	Fasteners	Attachment	(psf)
6.	Min. 15/32" APA rated Grade B-C plywood	(Optional) See Note 2	See Note 2	No. 8 x min. $1\%''$ long hex head screws with $\%''$ head diameter	Spaced 5-inch o.c. with one fastener per panel fastening location for a total of ten (10) per panel.	-153.5

TABLE A-6A: SYSTEM NO. 6: DECRA SHAKE XD EXPOSURE B FOR SLOPE RANGE 7° < SLOPE < 27° (1.5:12 < PITCH < 6.1:12)

					Basic V	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	OK	ОК	ОК	OK	OK	OK	OK
	2	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
0 < h <u><</u> 30	3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
	3 Overhang	ОК	OK	OK	ОК	ОК	OK	OK	OK	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
30 < h <u><</u> 40	3	ОК	OK	OK	ОК	ОК	OK	OK	OK	OK
-	2 Overhang	ОК	OK	OK	ОК	ОК	OK	OK	OK	OK
	3 Overhang	ОК	ОК	OK	ОК	ОК	OK	OK	OK	NO
	1	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
	2	ОК	OK	OK	ОК	ОК	OK	OK	OK	ОК
40 < h <u><</u> 50	3	ОК	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 Overhang	ОК	OK	OK	ОК	ОК	OK	OK	OK	OK
	3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	NO
	1	ОК	OK	OK	ОК	ОК	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	ОК
50 < h <u><</u> 60	3	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	3 Overhang	ОК	OK	OK	ОК	ОК	OK	OK	NO	NO

TABLE A-6B: SYSTEM NO. 6: DECRA SHAKE XD EXPOSURE B FOR SLOPE RANGE $27^{\circ} < \text{slope} \le 45^{\circ}$ (6.1:12 < pitch $\le 12:12$)

					Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK



Mean Deaf Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
0 < h <u><</u> 15	3	OK	OK	ОК	OK	OK	OK	OK	OK	0
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
15 < h <u><</u> 20	3	OK	OK	ОК	OK	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	OK	OK	OK	OK	OK	0
20 < h <u><</u> 30	3	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
30 < h <u><</u> 40	3	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
40 < h <u><</u> 50	3	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	ОК	OK	OK	NO	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
50 < h <u><</u> 60	3	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	OK	OK	OK	NO	NO	N

TABLE A-6D: SYSTEM NO. 6: DECRA SHAKE XD EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)

Maan Doof Height (ft)	Doof Drossure Zono				Basic V	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
	1	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
15 < h <u><</u> 20	2&3	OK	ОК	ОК	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	ОК
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	OK	ОК
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	ОК
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	OK	ОК
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	ОК
40 < h <u><</u> 50	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	OK	ОК
	1	OK	ОК	OK	ОК	ОК	OK	OK	OK	ОК
50 < h <u><</u> 60	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
<u></u>	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK



Mean Deaf Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	ОК	ОК	OK	OK	OK	OK	OK
	2	OK	OK	ОК	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 15	3	ОК	OK	ОК	ОК	OK	ОК	OK	OK	NO
	2 Overhang	ОК	OK	ОК	ОК	OK	OK	OK	OK	OK
	3 Overhang	ОК	OK	ОК	ОК	OK	OK	OK	NO	NO
	1	ОК	OK	ОК	ОК	OK	ОК	OK	OK	OK
	2	ОК	OK	ОК	OK	OK	OK	OK	OK	OK
15 < h <u><</u> 20	3	ОК	OK	ОК	ОК	OK	OK	OK	OK	NO
	2 Overhang	ОК	OK	ОК	ОК	OK	OK	OK	OK	ОК
	3 Overhang	OK	OK	ОК	OK	OK	OK	NO	NO	NO
	1	ОК	OK	ОК	OK	OK	OK	OK	OK	OK
	2	OK	OK	ОК	OK	OK	OK	OK	OK	OK
20 < h <u><</u> 30	3	OK	OK	ОК	OK	OK	OK	OK	NO	NC
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	OK	NC
	3 Overhang	OK	OK	ОК	OK	OK	OK	NO	NO	NC
	1	OK	OK	ОК	OK	OK	OK	OK	OK	OK
	2	OK	OK	ОК	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	3	ОК	OK	ОК	ОК	OK	OK	OK	NO	NC
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	OK	NC
	3 Overhang	OK	OK	ОК	OK	OK	NO	NO	NO	NC
	1	ОК	OK	ОК	ОК	OK	OK	OK	OK	OK
	2	ОК	OK	ОК	ОК	OK	OK	OK	OK	OK
40 < h <u><</u> 50	3	OK	OK	ОК	OK	OK	OK	OK	NO	NC
40 < 11 ≤ 30	2 Overhang	ОК	OK	ОК	ОК	OK	OK	OK	OK	NC
	3 Overhang	OK	OK	ОК	OK	OK	NO	NO	NO	NC
	1	ОК	OK	ОК	ОК	OK	OK	OK	OK	OK
	2	ОК	OK	ОК	ОК	OK	OK	OK	OK	OK
50 < h <u><</u> 60	3	ОК	OK	ОК	ОК	OK	OK	OK	NO	NC
	2 Overhang	ОК	OK	ОК	ОК	OK	OK	OK	OK	NC
	3 Overhang	ОК	OK	ОК	OK	OK	NO	NO	NO	NO

TABLE A-6F: SYSTEM NO. 6: DECRA SHAKE XD EXPOSURE D FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	1	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
15 < h <u><</u> 20	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	1	OK	ОК	OK	OK	ОК	OK	OK	OK	ОК
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	1	OK	ОК	OK	OK	ОК	OK	OK	OK	ОК
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	1	OK	ОК	OK	OK	ОК	OK	OK	OK	ОК
40 < h <u><</u> 50	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO



TABLE A-7: DECRA SHINGLE XD WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER (OVER EXISTING ASPHALT SHINGLES OR BUR) **Panel Attachment** Deck MDP System Fire Barrier Underlay No. (See Note 1) (psf) Fasteners Attachment Panels to Deck: min. 0.120" diameter Min. 15/32" APA (Optional) x min. 1.25" long ring shank nails (for Panels to Deck: Five (5) per panel, rated Grade B-C 7. See Note 2 -45.0 See Note 2 recover, ensure length for full deck evenly spaced, 10" o.c. plywood penetration)

Mean Deaf Height /ft)	Roof Pressure Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Root Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	OK	OK	OK	OK	NC
	2	OK	OK	ОК	ОК	OK	NO	NO	NO	NO
0 < h <u><</u> 30	3	OK	OK	OK	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2	OK	OK	OK	OK	OK	NO	NO	NO	N
30 < h <u><</u> 40	3	OK	OK	NO	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	NC
	2	OK	OK	OK	OK	NO	NO	NO	NO	NO
40 < h <u><</u> 50	3	OK	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N
50 < h <u><</u> 60	1	OK	OK	OK	OK	OK	OK	OK	NO	NC
	2	OK	OK	OK	OK	NO	NO	NO	NO	N
	3	OK	NO	NO	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
F	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC

TABLE A-7B: SYSTEM NO. 7: DECRA SHINGLE XD

EXPOSURE B FOR SLOPE RANGE 2	7" < SLOPE < 45" (6.1:12 < PIT	сн <u><</u> 12:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Weah Root Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
0 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO



ABLE A-7C: SYSTEM NO. 7: DEC										
POSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCE</u>)	l <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	(mph)			
	Roof Fressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2	OK	OK	OK	OK	NO	NO	NO	NO	NO
0 < h <u><</u> 15	3	OK	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2	OK	OK	OK	ОК	NO	NO	NO	NO	NO
15 < h <u><</u> 20	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	ОК	OK	OK	ОК	NO	NO
	2	OK	OK	OK	NO	NO	NO	NO	NO	NO
20 < h <u><</u> 30	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2	OK	OK	ОК	NO	NO	NO	NO	NO	NO
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2	OK	OK	NO	NO	NO	NO	NO	NO	NO
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2	OK	OK	NO	NO	NO	NO	NO	NO	NO
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-7D: SYSTEM NO. 7: DECRA SHINGLE XD EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Meen Deef Height (ft)	Deef Dressure Zere	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	ОК	OK	OK	OK	OK	NO	NO		
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	OK	OK	NO	NO	NO		
	2 & 3 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO		
15 < h <u><</u> 20	2 & 3	OK	OK	ОК	OK	OK	OK	NO	NO	NO		
	2 & 3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO		
	1	OK	OK	ОК	OK	OK	OK	NO	NO	NO		
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	NO	NO	NO	NO		
	2 & 3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO		
	1	OK	OK	ОК	OK	OK	OK	NO	NO	NO		
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	NO	NO	NO	NO		
	2 & 3 Overhang	OK	OK	NO								
	1	OK	OK	ОК	OK	OK	OK	NO	NO	NO		
40 < h <u><</u> 50	2&3	OK	OK	ОК	OK	NO	NO	NO	NO	NO		
	2 & 3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NC		
	1	OK	OK	OK	OK	OK	NO	NO	NO	NO		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	NO	NO	NO	NO	NO		
	2 & 3 Overhang	OK	NO									



BLE A-7E: SYSTEM NO. 7: DEC										
POSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCE</u>)	н <u><</u> 6.1:12)			.					
Mean Roof Height (ft)	Roof Pressure Zone	110	445	420		Vind Speed	/	460	400	200
	1	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
0 1 15	2	OK	OK	OK	NO	NO	NO	NO	NO	NO
0 < h <u><</u> 15	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2	OK	OK	NO	NO	NO	NO	NO	NO	NO
15 < h <u><</u> 20	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2	OK	OK	NO	NO	NO	NO	NO	NO	NO
20 < h <u><</u> 30	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	ОК	OK	NO	NO	NO	NO
	2	OK	NO	NO	NO	NO	NO	NO	NO	NO
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2	OK	NO	NO	NO	NO	NO	NO	NO	NO
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2	NO	NO	NO	NO	NO	NO	NO	NO	NO
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-7F: SYSTEM NO. 7: DECRA SHINGLE XD EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Moon Doof Usight (ft)	Deef Dressure Zere	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	ОК	OK	NO	NO	NO		
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	ОК	NO	NO	NO	NO		
	2 & 3 Overhang	OK	OK	NO								
	1	OK	OK	OK	OK	ОК	OK	NO	NO	NO		
15 < h <u><</u> 20	2 & 3	OK	OK	OK	OK	NO	NO	NO	NO	NO		
	2 & 3 Overhang	OK	OK	NO								
	1	OK	OK	OK	OK	ОК	NO	NO	NO	NO		
20 < h <u><</u> 30	2&3	OK	OK	OK	OK	NO	NO	NO	NO	NO		
	2 & 3 Overhang	OK	NO									
	1	OK	OK	OK	OK	ОК	NO	NO	NO	NO		
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	NO	NO	NO	NO	NO		
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO		
40 < h <u><</u> 50	2 & 3	OK	OK	OK	NO	NO	NO	NO	NO	NO		
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	NO	NO	NO	NO	NO		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	NO	NO	NO	NO	NO	NO		
	2 & 3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		



TABLE A-8: DECRA SHINGLE XD

WOOD DE	CKS - NEW CONST	RUCTION, RER	OOF (TEAR-OFF)	, OR RECOVER (OVER EXISTING ASPHALT SHING	GLES OR BUR)	
System	Deck	Fire Barrier	Underlav	Panel Attac	hment	MDP
No.	(See Note 1)	File Barrier	Underlay	Fasteners	Attachment	(psf)
8.	Min. 15/32" APA rated Grade B-C plywood	(Optional) See Note 2	See Note 2	Panels to Deck: min. No. 9-14 x min. 1.25" long hex head screws (for recover, ensure length for full deck penetration)	Panels to Deck: Five (5) per panel, evenly spaced, 10" o.c.	-75.0

TABLE A-8A SYSTEM NO. 8: DECRA SHINGLE XD

	D. (D				Basic \	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	OK OK OK DK OK OK OK NO NO NO NO	180	200	
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	ОК	OK	OK	OK	OK	NO
0 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	OK	OK	OK	OK	NO
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	ОК	OK	OK	ОК	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
40 < h <u><</u> 50	3	ОК	OK	OK	ОК	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	ОК	OK	OK	NO	NO	NO	NO	NO	NO

TABLE A-8B: SYSTEM NO. 8: DECRA SHINGLE XD EXPOSURE B FOR SLOPE RANGE $27^{\circ} < \text{slope} \le 45^{\circ}$ (6.1:12 < pitch $\le 12:12$)

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)					
Mean Root Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180 OK OK	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		



BLE A-8C: SYSTEM NO. 8: DEC										
OSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCH</u>	+ <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone					Vind Speed	· · /	1		
		110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
0 < h <u><</u> 15	3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
15 < h <u><</u> 20	3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	3 Overhang	OK	ОК	ОК	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	ОК	ОК	OK
	2	OK	OK	OK	ОК	OK	OK	ОК	NO	NC
20 < h <u><</u> 30	3	OK	OK	OK	OK	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	ОК	ОК	OK	OK	NO	NO	NC
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	NO	NO	NC
30 < h <u><</u> 40	3	OK	OK	OK	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	NC
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	ОК	OK
	2	OK	OK	OK	ОК	OK	OK	NO	NO	NC
40 < h <u><</u> 50	3	OK	OK	OK	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	ОК	OK	ОК	ОК	ОК	NC
	2	OK	OK	OK	OK	OK	OK	NO	NO	NC
50 < h <u><</u> 60	3	OK	OK	OK	NO	NO	NO	NO	NO	NC
-	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-8D: SYSTEM NO. 8: DECRA SHINGLE XD EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mana Danf Hainha (fr)	De of Ducence 7 au o	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
0 < h <u><</u> 15	2&3	OK	OK	OK	ОК	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
15 < h <u><</u> 20	2 & 3	OK	ОК	ОК	ОК	ОК	ОК	OK	OK	NO		
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	NO	NC		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
20 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	NC		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NC		
	1	OK	ОК	ОК	ОК	ОК	ОК	OK	OK	NC		
30 < h <u><</u> 40	2&3	OK	OK	OK	ОК	OK	OK	OK	OK	NC		
	2 & 3 Overhang	OK	ОК	ОК	ОК	ОК	ОК	NO	NO	NC		
	1	OK	ОК	ОК	ОК	ОК	ОК	OK	OK	NC		
40 < h <u><</u> 50	2&3	OK	OK	OK	ОК	OK	OK	OK	OK	NC		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NC		
	1	OK	OK	OK	OK	OK	OK	OK	OK	NC		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NC		
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	NO	NO	NO	NO		



ABLE A-8E: SYSTEM NO. 8: DEC										
(POSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCI</u>)	H <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Weath Noor Height (It)	Noor Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	NO	NO	NO
0 < h <u><</u> 15	3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	ОК	OK	OK	NO	NO	NO
15 < h <u><</u> 20	3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	ОК	ОК	NO
	2	OK	OK	OK	ОК	OK	NO	NO	NO	NO
20 < h <u><</u> 30	3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	ОК	ОК	ОК	ОК	NO
	2	OK	OK	OK	ОК	OK	NO	NO	NO	NO
30 < h <u><</u> 40	3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2	OK	OK	OK	OK	OK	NO	NO	NO	NO
40 < h <u><</u> 50	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2	OK	OK	OK	OK	OK	NO	NO	NO	NO
50 < h <u><</u> 60	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-8F: SYSTEM NO. 8: DECRA SHINGLE XD EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)

Mean Doof Height (ft)	Roof Pressure Zone	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
0 < h <u><</u> 15	2 & 3	ОК	ОК	OK	OK	ОК	OK	OK	OK	NO		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO		
	1	ОК	ОК	OK	OK	ОК	OK	OK	OK	NO		
15 < h <u><</u> 20	2 & 3	ОК	ОК	OK	OK	ОК	OK	OK	OK	NO		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO		
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO		
	1	ОК	ОК	OK	OK	ОК	OK	OK	OK	NO		
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NO		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO		
	1	ОК	ОК	OK	OK	ОК	OK	OK	OK	NO		
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NO		
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	NO	NO		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	2 & 3 Overhang	ОК	OK	OK	OK	NO	NO	NO	NO	NO		



	9: DECRA Shingle ECKS - NEW CONS		EROOF (TEAR-C	DFF), OR RECOVER (OVER EXISTING ASPHALT SHING	GLES OR BUR)	
System	Deck	Fire Barrier	Lindoulou	Panel Attachmer	nt	MDP
No.	(See Note 1)	Fire Barrier	Underlay	Fasteners	Attachment	(psf)
9.	Min. 15/32" APA rated Grade B-C plywood	(Optional) See Note 2	See Note 2	Panels to Deck: min. 0.120" diameter x min. 1.25" long ring shank nails (for recover, ensure length for full deck penetration)	Panels to Deck: Ten (10) per panel, evenly spaced, 5" o.c.	-75.0

TABLE A-9A SYSTEM NO. 9: DECRA SHINGLE XD EXPOSURE B FOR SLOPE RANGE 7° < SLOPE < 27° (1.5:12 < PITCH < 6.1:12)

		1			Basic \	Wind Speed	l (mph)			
Mean Roof Height (ft) 0 < h ≤ 30 30 < h ≤ 40	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	NO
0 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	ОК	OK	OK	ОК	NO	NO	NO	NO	NO
	1	ОК	ОК	OK	ОК	ОК	ОК	OK	OK	ОК
	2	ОК	ОК	OK	ОК	ОК	ОК	OK	OK	NO
30 < h <u><</u> 40	3	ОК	ОК	ОК	ОК	OK	OK	NO	NO	NO
	2 Overhang	ОК	ОК	OK	ОК	ОК	ОК	OK	NO	NO
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	ОК	ОК	ОК	ОК	OK	OK	OK	ОК	ОК
	2	ОК	ОК	ОК	ОК	OK	OK	OK	NO	NO
40 < h <u><</u> 50	3	ОК	ОК	OK	ОК	OK	NO	NO	NO	NO
	2 Overhang	ОК	ОК	ОК	ОК	OK	OK	OK	NO	NO
	3 Overhang	ОК	ОК	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
50 < h <u><</u> 60	3	OK	OK	OK	ОК	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO

TABLE A-9B: SYSTEM NO. 9: DECRA SHINGLE XD EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)

Mana Danf Hainha (ft)	De of Duranum Zone	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160 180 OK OK OK NO OK NO	200			
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO		
30 < h <u><</u> 40	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	1	OK	OK	OK	OK	OK	ОК	OK	OK	OK		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		



BLE A-9C: SYSTEM NO. 9: DEC												
DSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCE</u>	1 <u><</u> 6.1:12)			Basiak		1/					
Mean Roof Height (ft)	Roof Pressure Zone	Basic Wind Speed (mph)										
• • • •		110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO		
0 < h <u><</u> 15	3	OK	OK	OK	OK	OK	NO	NO	NO	NO		
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2	OK	OK	OK	ОК	OK	OK	ОК	NO	NO		
15 < h <u><</u> 20	3	OK	OK	ОК	ОК	NO	NO	NO	NO	NO		
	2 Overhang	OK	OK	ОК	ОК	OK	ОК	NO	NO	NO		
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	ОК	OK	OK	ОК	ОК	OK		
	2	OK	OK	OK	ОК	OK	OK	ОК	NO	NO		
20 < h <u><</u> 30	3	OK	OK	OK	ОК	NO	NO	NO	NO	NO		
	2 Overhang	OK	OK	OK	ОК	OK	OK	NO	NO	NO		
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	ОК	OK	OK	ОК	ОК	OK		
	2	OK	OK	ОК	ОК	OK	OK	NO	NO	NO		
30 < h <u><</u> 40	3	OK	OK	OK	NO	NO	NO	NO	NO	NO		
	2 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	NO		
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	OK		
	2	OK	OK	OK	OK	ОК	OK	NO	NO	NO		
40 < h < 50	3	OK	OK	OK	NO	NO	NO	NO	NO	NO		
_	2 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO		
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO		
	2	OK	OK	OK	OK	OK	OK	NO	NO	NO		
50 < h < 60	3	OK	OK	OK	NO	NO	NO	NO	NO	NO		
—	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO		
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		

TABLE A-9D: SYSTEM NO. 9: DECRA SHINGLE XD EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mana Danf Hainha (fr)	De of Ducence 7 au o	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
15 < h <u><</u> 20	2 & 3	OK	ОК	ОК	ОК	ОК	ОК	ОК	OK	NO		
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	NO	NC		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
20 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	NC		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NC		
	1	OK	ОК	ОК	ОК	ОК	ОК	ОК	OK	NC		
30 < h <u><</u> 40	2&3	OK	OK	OK	ОК	OK	OK	OK	OK	NC		
	2 & 3 Overhang	OK	ОК	ОК	ОК	ОК	ОК	NO	NO	NC		
	1	OK	ОК	ОК	ОК	ОК	ОК	ОК	OK	NC		
40 < h <u><</u> 50	2&3	OK	OK	OK	ОК	OK	OK	OK	OK	NC		
	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NC		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NC		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NC		
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	NO	NO	NO	NO		



BLE A-9E: SYSTEM NO. 9: DEC												
POSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCE</u>)	+ <u><</u> 6.1:12)			.		(
Mean Roof Height (ft)	Roof Pressure Zone	Basic Wind Speed (mph)										
• • • •		110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2	OK	OK	OK	OK	OK	OK	NO	NO	NO		
0 < h <u><</u> 15	3	OK	OK	OK	OK	NO	NO	NO		NO		
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	IO NO IO NO	NO		
	3 Overhang	OK	NO	NO	NO	NO	NO	NO		NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2	OK	OK	OK	OK	OK	OK	NO	NO	NO		
15 < h <u><</u> 20	3	OK	OK	OK	NO	NO	NO	NO	NO	NO		
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO		
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO		
	2	OK	OK	OK	ОК	OK	NO	NO	NO	NO		
20 < h <u><</u> 30	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO		
	2 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO		
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO		
	2	OK	OK	OK	OK	OK	NO	NO	NO	NO		
30 < h <u><</u> 40	3	OK	OK	OK	NO	NO	NO	NO	NO	NO		
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	OK NO NO NO OK NO	NO		
	3 Overhang	NO	NO	NO	NO	NO	NO	NO		NO		
	1	OK	OK	OK	ОК	OK	OK	ОК	OK	NO		
	2	OK	OK	OK	ОК	OK	NO	NO	NO	NO		
40 < h <u><</u> 50	3	OK	OK	NO	NO	NO	NO	NO	NO	NO		
-	2 Overhang	ОК	OK	OK	OK	NO	NO	NO	NO	NO		
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		
	1	OK	ОК	OK	OK	ОК	OK	OK	ОК	NO		
	2	OK	OK	OK	OK	OK	NO	NO	NO	NO		
50 < h <u><</u> 60	3	OK	OK	NO	NO	NO	NO	NO	NO	NO		
-	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO		
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO		

TABLE A-9F: SYSTEM NO. 9: DECRA SHINGLE XD EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deaf Height (ft)	Deef Dressure Zere	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
0 < h <u><</u> 15	2 & 3	OK	OK	ОК	OK	OK	ОК	OK	OK	NO		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO		
15 < h <u><</u> 20	2 & 3	OK	ОК	OK	OK	OK	OK	OK	OK	NO		
	2 & 3 Overhang	OK	OK	ОК	OK	OK	OK	NO	NO	NO		
	1	OK	OK	ОК	OK	OK	ОК	OK	OK	NO		
20 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO		
	1	OK	OK	ОК	OK	OK	ОК	OK	OK	NO		
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO		
40 < h <u><</u> 50	2 & 3	OK	ОК	ОК	OK	OK	OK	OK	NO	NO		
	2 & 3 Overhang	OK	ОК	ОК	OK	NO	NO	NO	NO	NO		
	1	OK	OK	OK	OK	OK	ОК	OK	NO	NO		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	ОК	OK	NO	NO		
	2 & 3 Overhang	OK	ОК	OK	OK	NO	NO	NO	NO	NO		



TABLE A-10: DECRA SHINGLE XD WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER (OVER EXISTING ASPHALT SHINGLES OR BUR) Panel Attachment System Deck MDP **Fire Barrier** Underlay No. (See Note 1) (psf) Fasteners Attachment Min. 15/32" APA Panels to Deck: min. No. 9-14 x min. (Optional) Panels to Deck: Ten (10) per rated Grade B-C 10. See Note 2 1.25" long hex head screws (for recover, -97.5 panel, evenly spaced, 5" o.c. See Note 2 plywood ensure length for full deck penetration)

TABLE A-10A SYSTEM NO. 10: DECRA SHINGLE XD EXPOSURE B FOR SLOPE RANGE 7° < SLOPE < 27° (1.5:12 < PITCH < 6.1:12)

EXPOSURE B FOR SLOPE RANGE 7		<u> </u>			Pacie \	Vind Speed	(mnh)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 Overhang	ОК	ОК	ОК	ОК	ОК	OK	OK	ОК	ОК
	3 Overhang	ОК	ОК	ОК	ОК	ОК	OK	NO	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2	OK	OK	OK	OK	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 Overhang	ОК	ОК	OK	OK	OK	OK	OK	OK	NO
	3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO
	1	ОК	ОК	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
40 < h <u><</u> 50	3	ОК	ОК	OK	OK	OK	OK	OK	NO	NO
	2 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	OK	NO
	3 Overhang	OK	ОК	OK	ОК	ОК	NO	NO	NO	NO
	1	ОК	ОК	OK	OK	OK	OK	OK	OK	OK
	2	ОК	OK	OK	OK	OK	OK	OK	OK	NO
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
	3 Overhang	OK	ОК	ОК	ОК	ОК	NO	NO	NO	NO

TABLE A-10B: SYSTEM NO. 10: DECRA SHINGLE XD EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)

Maan Doof Height (ft)	Roof Pressure Zone	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Root Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	ОК	OK	OK	OK	OK	OK		
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	ОК		
30 < h <u><</u> 40	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	ОК		
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	ОК		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	ОК		
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	ОК	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	NO		



BLE A-10C: SYSTEM NO. 10: D										
OSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCI</u>	+ <u><</u> 6.1:12)			Basic	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	ОК	NO
0 < h < 15	3	OK	OK	OK	OK	OK	OK	OK	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NC
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	ОК	OK	OK	ОК	NC
15 < h <u><</u> 20	3	OK	OK	OK	OK	OK	OK	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	ОК	OK	OK	NO	NC
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	NC
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	ОК	OK	OK	NO	NC
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NC
	1	OK	ОК	ОК	ОК	ОК	ОК	ОК	ОК	OK
	2	OK	OK	OK	ОК	ОК	OK	OK	NO	NC
30 < h <u><</u> 40	3	OK	OK	OK	ОК	ОК	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NC
	3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NC
	1	OK	ОК	ОК	ОК	ОК	ОК	ОК	ОК	OK
	2	OK	OK	OK	ОК	ОК	OK	OK	NO	NC
40 < h <u><</u> 50	3	OK	ОК	OK	ОК	OK	NO	NO	NO	NC
	2 Overhang	OK	ОК	ОК	ОК	ОК	ОК	ОК	NO	NC
	3 Overhang	OK	ОК	ОК	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
2	2	OK	OK	OK	OK	OK	OK	OK	NO	NC
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NC
	3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NC

TABLE A-10D: SYSTEM NO. 10: DECRA SHINGLE XD EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Many Danf Hainha (ft)	De of Duccours Zone	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	ОК	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	ОК	OK	OK	NO		
	1	OK	OK	OK	OK	ОК	ОК	OK	OK	OK		
15 < h <u><</u> 20	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	ОК	OK	OK	NO		
	1	OK	OK	OK	OK	ОК	ОК	OK	OK	OK		
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	ОК	OK	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	ОК		
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	ОК	OK	NO	NO		
	1	OK	OK	OK	OK	ОК	ОК	OK	OK	OK		
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	ОК	OK	NO	NO		



ABLE A-10E: SYSTEM NO. 10: D										
POSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITC</u>	н <u><</u> 6.1:12)			Basial	Mined Care and	((
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	Vind Speed 140	1 (mpn) 150	160	180	200
	1	OK	OK	0K	0K	0K	0K	OK	OK	200 OK
	2	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	OK OK	NO
0 < h < 15	3	OK OK	OK	OK OK	OK	OK OK	NO	NO	NO	NO
0<112	2 Overhang	OK OK	OK OK	OK OK	OK	OK OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK OK	OK OK	OK OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
15 < h <u><</u> 20	3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	2	OK	OK	OK	ОК	OK	ОК	ОК	NO	NO
30 < h <u><</u> 40	3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	ОК	ОК
	2	OK	OK	OK	OK	ОК	OK	OK	NO	NO
40 < h <u><</u> 50	3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	ОК	ОК	OK	NO	NO	NO
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	ОК	OK	OK	OK	ОК	ОК
	2	OK	OK	OK	OK	OK	OK	OK	NO	NO
50 < h <u><</u> 60	3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-10F: SYSTEM No. 10: DECRA SHINGLE XD EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Maan Doof Lloight (ft)	Deef Dressure Zere	Basic Wind Speed (mph)										
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK		
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	OK	ОК	OK	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
15 < h <u><</u> 20	2 & 3	OK	ОК	ОК	OK	ОК	ОК	OK	OK	OK		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	ОК	OK	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
20 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	ОК	OK	OK	NO		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	ОК	OK	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	ОК	ОК	OK	OK	NO		
	2 & 3 Overhang	OK	OK	OK	OK	ОК	ОК	OK	NO	NO		
	1	OK	OK	OK	OK	ОК	ОК	OK	OK	OK		
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO		
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO		
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK		
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO		
	2 & 3 Overhang	OK	ОК	OK	OK	OK	ОК	NO	NO	NO		



TABLE A-11: DECRA VILLA TILE

WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER (OVER EXISTING ASPHALT SHINGLES OR BUR)

System	Deck	Fire Barrier	Underlay	Panel Att	achment	MDP
No.	(See Note 1)	File Dalliel	Underlay	Fasteners	Attachment	(psf)
11.	Min. 15/32" APA rated Grade CDX plywood	(Optional) See Note 2	See Note 2	No. 8 x min. 1½" long hex head screws	Spaced 10-inch apart with one fastener per tab for total of four fasteners per panel length	-52.5

TABLE A-11A: SYSTEM NO. 11: DECRA VILLA TILE

Mean Deef Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	OK	OK	OK	OK	OK	OK	OK
	2	ОК	OK	ОК	OK	OK	OK	OK	NO	NO
0 < h <u><</u> 30	3	ОК	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO
	3 Overhang	ОК	NO	NO	NO	NO	NO	NO	NO	NO
	1	ОК	OK	OK	OK	OK	OK	OK	OK	ОК
	2	OK	OK	OK	OK	OK	OK	NO	NO	NO
30 < h <u><</u> 40	3	ОК	OK	OK	NO	NO	NO	NO	NO	NO
	2 Overhang	ОК	OK	OK	OK	OK	NO	NO	NO	NO
	3 Overhang	ОК	NO	NO	NO	NO	NO	NO	NO	NO
	1	ОК	OK	OK	OK	OK	OK	OK	OK	NO
	2	ОК	OK	OK	OK	OK	NO	NO	NO	NO
40 < h <u><</u> 50	3	ОК	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	ОК	OK	ОК	ОК	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	ОК	OK	ОК	OK	OK	OK	OK	OK	NO
	2	ОК	OK	ОК	OK	OK	NO	NO	NO	NO
50 < h <u><</u> 60	3	ОК	OK	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	ОК	OK	OK	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-11B: SYSTEM NO. 11: DECRA VILLA TILE EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

		Basic Wind Speed (mph)									
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200	
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК	
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	NO	
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO	
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO	
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	OK	OK	OK	OK	NO	
	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO	
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO	
40 < h <u><</u> 50	2&3	OK	OK	OK	OK	OK	OK	OK	NO	NO	
	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO	
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO	
50 < h <u><</u> 60	2&3	OK	OK	OK	OK	OK	OK	OK	NO	NO	
	2 & 3 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	NO	



TABLE A-11C: SYSTEM NO. 11: D	ECRA VILLA TILE									
EXPOSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCE</u>)	+ <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Weall Kool Height (It)	KOOI Pressure zone	110	115	120	130	140	150	160	180	200
	1	OK	ОК	ОК	OK	ОК	ОК	ОК	OK	NO
	2	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
0 < h <u><</u> 15	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	ОК	ОК	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	OK	ОК	OK	ОК	OK	NO
	2	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
15 < h <u><</u> 20	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
	2	OK	OK	ОК	OK	NO	NO	NO	NO	NO
20 < h <u><</u> 30	3	OK	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	OK	ОК	OK	ОК	NO	NO
	2	OK	OK	ОК	OK	NO	NO	NO	NO	NO
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	ОК	ОК	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
	2	OK	ОК	ОК	NO	NO	NO	NO	NO	NO
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	ОК	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	ОК	NO	NO
	2	OK	OK	ОК	NO	NO	NO	NO	NO	NO
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
—	2 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-11D: SYSTEM NO. 11: DECRA VILLA TILE EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Roof Height (ft)	Roof Pressure Zone	Basic Wind Speed (mph)										
Mean Root Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200		
	1	OK	ОК	OK	ОК	ОК	OK	OK	OK	NO		
0 < h <u><</u> 15	2 & 3	OK	ОК	OK	OK	ОК	OK	OK	NO	NO		
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	NO	NO	NO	NO		
	1	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO		
15 < h <u><</u> 20	2&3	OK	ОК	ОК	ОК	ОК	OK	OK	NO	NO		
	2 & 3 Overhang	OK	ОК	OK	ОК	NO	NO	NO	NO	NO		
	1	OK	ОК	ОК	ОК	ОК	OK	OK	NO	NO		
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	ОК	ОК	OK	NO	NO	NO		
	2 & 3 Overhang	OK	ОК	OK	ОК	NO	NO	NO	NO	NO		
	1	OK	ОК	ОК	ОК	ОК	OK	OK	NO	NO		
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	ОК	ОК	OK	NO	NO	NO		
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO		
	1	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO		
40 < h <u><</u> 50	2 & 3	OK	ОК	OK	ОК	ОК	OK	NO	NO	NO		
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO		
	1	OK	ОК	OK	ОК	ОК	OK	NO	NO	NO		
50 < h <u><</u> 60	2 & 3	OK	ОК	OK	ОК	ОК	NO	NO	NO	NO		
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO		



TABLE A-11E: SYSTEM NO. 11: D	ECRA VILLA TILE									
EXPOSURE D FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITC</u>	н <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Weall Kool Height (It)	KOOI Pressure zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	ОК	ОК	OK	ОК	NO	NO
	2	OK	OK	ОК	ОК	NO	NO	NO	NO	NO
0 < h <u><</u> 15	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	ОК	NO	NO
	2	OK	OK	ОК	NO	NO	NO	NO	NO	NO
15 < h <u><</u> 20	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	OK	NO	NO
	2	OK	OK	ОК	NO	NO	NO	NO	NO	NO
20 < h <u><</u> 30	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	ОК	NO	NO
	2	OK	OK	ОК	NO	NO	NO	NO	NO	NO
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	NO	NO	NO
	2	OK	OK	NO	NO	NO	NO	NO	NO	NO
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	ОК	OK	OK	NO	NO	NO
	2	OK	OK	NO	NO	NO	NO	NO	NO	NO
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	NO
-	2 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-11F: SYSTEM NO. 11: DECRA VILLA TILE EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Maan Doof Hoight (ft)	Roof Pressure Zone	Basic Wind Speed (mph)									
Mean Roof Height (ft)	Root Pressure Zone	110	115	120	130	140	150	160	180	200	
	1	OK	ОК	OK	OK	OK	OK	OK	NO	NO	
0 < h <u><</u> 15	2&3	OK	ОК	OK	OK	OK	OK	NO	NO	NO	
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO	
	1	OK	ОК	OK	OK	OK	OK	OK	NO	NO	
15 < h <u><</u> 20	2&3	OK	ОК	OK	OK	OK	OK	NO	NO	NO	
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO	
	1	OK	ОК	OK	OK	OK	OK	NO	NO	NO	
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	OK	OK	NO	NO	NO	NO	
	2 & 3 Overhang	OK	ОК	OK	NO	NO	NO	NO	NO	NO	
	1	OK	ОК	OK	OK	OK	OK	NO	NO	NO	
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	OK	OK	NO	NO	NO	NO	
	2 & 3 Overhang	OK	ОК	NO							
	1	OK	ОК	OK	OK	OK	OK	NO	NO	NO	
40 < h <u><</u> 50	2 & 3	OK	ОК	OK	OK	NO	NO	NO	NO	NO	
	2 & 3 Overhang	OK	ОК	NO							
	1	OK	ОК	OK	OK	OK	NO	NO	NO	NO	
50 < h <u><</u> 60	2 & 3	OK	ОК	OK	OK	NO	NO	NO	NO	NO	
	2 & 3 Overhang	OK	NO								



TABLE A-12: DECRA VILLA TILE

WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER (OVER EXISTING ASPHALT SHINGLES OR BUR)

System	Deck	Fire Barrier	Underlav	Panel Att	achment	MDP
No.	(See Note 1)	File Dalliel	Underlay	Fasteners	Attachment	(psf)
12.	Min. 15/32" APA rated Grade B-C plywood	(Optional) See Note 2	See Note 2	No. 12 x min. 1½" long hex head screws with 5/16" head diameter	Spaced 10-inch apart with one fastener per tab for total of four fasteners per panel length	-76.5

TABLE A-12A: SYSTEM NO. 12: DECRA VILLA TILE

Mean Deef Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	OK	OK	OK	OK	NO
0 < h <u><</u> 30	3	ОК	OK	OK	ОК	OK	OK	NO	NO	NO
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	OK	OK	OK	OK	NO
30 < h <u><</u> 40	3	ОК	OK	OK	ОК	OK	OK	NO	NO	NO
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	ОК	OK	OK	ОК	NO	NO	NO	NO	NO
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	ОК
	2	ОК	OK	OK	ОК	OK	OK	OK	OK	NO
40 < h <u><</u> 50	3	ОК	OK	OK	ОК	ОК	NO	NO	NO	NO
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	ОК	OK	OK	NO	NO	NO	NO	NO	NO
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
50 < h <u><</u> 60	3	ОК	OK	OK	OK	OK	NO	NO	NO	NO
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	NO	NO
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NO

TABLE A-12B: SYSTEM NO. 12: DECRA VILLA TILE EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Maria Des Guistales (G)					Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
0 < h <u><</u> 30	2&3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
50 < h <u><</u> 60	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO



ABLE A-12C: SYSTEM NO. 12: D	ECRA VILLA TILE									
EXPOSURE C FOR SLOPE RANGE 7°	<u>< SLOPE < 27° (1.5:12 < PITCE</u>)	+ <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Nind Speed	l (mph)			
	KOOI Plessule 2011e	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
	2	OK	ОК	ОК	OK	ОК	ОК	OK	NO	NO
0 < h <u><</u> 15	3	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	OK	OK	NO	NO
	3 Overhang	OK	ОК	ОК	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	ОК
	2	OK	ОК	ОК	OK	ОК	ОК	OK	NO	NO
15 < h <u><</u> 20	3	OK	ОК	ОК	OK	ОК	NO	NO	NO	NO
	2 Overhang	OK	ОК	ОК	OK	ОК	ОК	NO	NO	NO
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
	2	OK	ОК	ОК	OK	ОК	ОК	OK	NO	NO
20 < h <u><</u> 30	3	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
	2	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
30 < h <u><</u> 40	3	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	OK
	2	OK	ОК	ОК	OK	ОК	ОК	NO	NO	NO
40 < h <u><</u> 50	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	ОК	ОК	OK	ОК	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
	2	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
50 < h <u><</u> 60	3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-12D: SYSTEM NO. 12: DECRA VILLA TILE EXPOSURE C FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Wean Roof Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
15 < h <u><</u> 20	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO



TABLE A-12E: SYSTEM NO. 12: D	ECRA VILLA TILE									
EXPOSURE D FOR SLOPE RANGE 7°	<pre> <u> < SLOPE < 27° (1.5:12 < PITCI </u></pre>	н <u><</u> 6.1:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Nind Speed	l (mph)			
Weall Kool Height (It)	KOOI Pressure zone	110	115	120	130	140	150	160	180	200
	1	OK	ОК	ОК	OK	ОК	ОК	ОК	OK	OK
	2	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
0 < h <u><</u> 15	3	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	ОК	ОК	OK	ОК	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	ОК
	2	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
15 < h <u><</u> 20	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
	2	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
20 < h <u><</u> 30	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	NO
	2	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
30 < h <u><</u> 40	3	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	ОК	ОК	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	OK	ОК	ОК	OK	OK	NO
	2	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
40 < h <u><</u> 50	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	ОК	ОК	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO
	2	OK	OK	OK	OK	ОК	NO	NO	NO	NO
50 < h <u><</u> 60	3	OK	OK	NO	NO	NO	NO	NO	NO	NO
_	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE A-12F: SYSTEM NO. 12: DECRA VILLA TILE EXPOSURE D FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (It)	KOOI Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
0 < h <u><</u> 15	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO
15 < h <u><</u> 20	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO
20 < h <u><</u> 30	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	NO	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NO
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	NO	NO
50 < h <u><</u> 60	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO



	L: DECRA SHAKE, TIL ECKS - NEW CONST		us <i>(over Wood Battei</i> ROOF (Tear-Off)	ns w/ Four Screw	'S PER PANEL)			
System	Deck	Fire Barrier		Battens		Panel A	Attachment	MDP
No.	(See Note 1)	/ Underlay	Туре	Fasteners	Attachment	Fasteners	Attachment	(psf)
13.	Min. 15/32" APA rated CDX plywood over wood supports spaced max. 24" o.c.	See Note 2	Nominal 2 x 2 inch wood spaced 12- 5/8" o.c. for Shake or 14½-inch o.c. for Tile or Shingle Plus	No. 9 x 3½" long coated all-purpose steel exterior wood screws	One (1) screw at each intersection with joists, max. 24″ o.c.	No. 8 x min. 1½" long hex head screws	Four (4) per panel	-86.0

TABLE B-1a: SYSTEM NO. 13: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE B FOR SLOPE RANGE 7° < SLOPE < 27° (1.5:12 < PITCH < 6.1:12)</th> Mean Roof Height (ft) Roof Pressure Zone Basic Wind Speed (mph) 110 115 120 130 140 150

		110	115	120	130	140	150	160	180	200
	1	OK	ОК	ОК	ОК	OK	OK	OK	OK	OK
	2	ОК	ОК	ОК	ОК	OK	OK	OK	OK	ОК
0 < h <u><</u> 30	3	OK	ОК	ОК	OK	OK	OK	OK	NO	NO
	2 Overhang	OK	ОК	ОК	ОК	OK	OK	OK	OK	NO
	3 Overhang	ОК	ОК	ОК	ОК	OK	NO	NO	NO	NO
	1	OK	ОК	ОК	ОК	OK	OK	OK	OK	OK
	2	OK	ОК	ОК	OK	OK	OK	OK	OK	NO
30 < h <u><</u> 40	3	ОК	ОК	ОК	ОК	OK	OK	OK	NO	NO
	2 Overhang	OK	ОК	ОК	ОК	OK	OK	OK	OK	NO
	3 Overhang	ОК	ОК	ОК	ОК	OK	NO	NO	NO	NO
	1	OK	ОК	ОК	ОК	OK	OK	OK	OK	OK
	2	OK	ОК	ОК	ОК	OK	OK	OK	OK	NO
40 < h <u><</u> 50	3	ОК	ОК	ОК	ОК	OK	OK	NO	NO	NO
	2 Overhang	OK	ОК	ОК	OK	OK	OK	OK	NO	NO
	3 Overhang	OK	ОК	ОК	OK	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	ОК	ОК	OK	OK	OK	OK
	2	OK	ОК	ОК	OK	OK	OK	OK	OK	NO
50 < h <u><</u> 60	3	OK	ОК	ОК	OK	OK	OK	NO	NO	NO
	2 Overhang	OK	NO	NO						
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	NO

TABLE B-18: SYSTEM NO. 13: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

					Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	ОК	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	ОК	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	NO



Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
wean Roof Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	ОК	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	N
0 < h <u><</u> 15	3	OK	OK	OK	ОК	OK	OK	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	N
15 < h <u><</u> 20	3	OK	OK	OK	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	ОК	C
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	NO	NO	NO	N
20 < 11 < 30	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	C
	2	OK	OK	OK	ОК	OK	OK	OK	NO	N
30 < h <u><</u> 40	3	OK	OK	OK	OK	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	NO	NO	N
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	C
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
40 < h <u><</u> 50	3	OK	OK	OK	OK	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	ОК	C
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
50 < h <u><</u> 60	3	OK	OK	OK	OK	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	N
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N

TABLE B-1D: SYSTEM NO. 13: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Meen Deef Height (ft)	Doof Drossura Zono				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
15 < h <u><</u> 20	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NC
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NC
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NC
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO



Many Deef Height (ft)	De of Deserves 7				Basic V	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	Ok
	2	OK	OK	OK	ОК	ОК	OK	OK	NO	NC
0 < h <u><</u> 15	3	OK	OK	OK	ОК	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	ОК	OK	NO	NO	NC
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	Ok
	2	OK	OK	OK	OK	ОК	OK	OK	NO	NC
15 < h <u><</u> 20	3	OK	ОК	OK	ОК	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	ОК	OK	NO	NO	NC
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	Oł
	2	OK	OK	OK	ОК	ОК	OK	OK	NO	NC
20 < h <u><</u> 30	3	OK	OK	OK	ОК	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	ОК	NO	NO	NO	NC
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	Oł
	2	OK	OK	OK	ОК	ОК	OK	NO	NO	NC
30 < h <u><</u> 40	3	OK	OK	OK	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	ОК	NO	NO	NO	NC
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	ОК	OK	OK	OK	Oł
	2	OK	OK	OK	OK	OK	OK	NO	NO	NC
40 < h <u><</u> 50	3	OK	OK	OK	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	OK	OK	OK	OK	NC
	2	OK	OK	OK	OK	ОК	OK	NO	NO	NC
50 < h <u><</u> 60	3	OK	OK	OK	NO	NO	NO	NO	NO	NC
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	NC
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	NO

TABLE B-1F: SYSTEM NO. 13: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE D FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Maan Doof Lloight (ft)	Doof Drossura Zono				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
15 < h <u><</u> 20	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO
<u></u>	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO



System	Deck	Fire Barrier		Battens		Panel Att	achment	MDP
No.	(See Note 1)	/ Underlay	Туре	Fasteners	Attachment	Fasteners	Attach	(psf)
14.	Min. 15/32" APA rated CDX plywood over wood supports spaced max. 24" o.c.	See Note 2	Nominal 2 x 2 inch wood spaced 12-5/8" o.c. for Shake or 14½-inch o.c. for Tile or Shingle Plus	At Joists: No. 9 x 3½" long coated all-purpose steel exterior wood screws <u>Between Joists</u> : No. 8 x 2½" long coated all- purpose steel exterior wood screws	<u>At</u> Joists: Two (2) screws at each intersection with joists, max. 24" o.c. <u>Bytown Joists</u> : One (1) screw between joists.	No. 8 x min. 1½" long hex head screws	Seven (7) per panel	-153.5

TABLE B-2a System No. 14: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH SEVEN SCREWS PER PANEL) EXPOSURE B FOR SLOPE RANGE 7° < slope $\leq 27^{\circ}$ (1.5:12 < pitch $\leq 6.1:12$)

Mean Deef Height (ft)	Doof Drossure Zono				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	2	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
50 < h <u><</u> 60	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	OK	OK	OK
	3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	3 Overhang	OK	OK	OK	ОК	OK	OK	OK	NO	NO

 TABLE B-2B: SYSTEM NO. 14: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH SEVEN SCREWS PER PANEL)

 EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Roof Height (ft)	Roof Pressure				Basic V	Vind Speed	l (mph)			
Wean Root Height (It)	Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
0 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	ОК



Maan Daaf Usiaht (ft)	De of Duranum Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
0 < h <u><</u> 15	3	OK	OK	ОК	OK	OK	OK	OK	ОК	0
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	0
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
15 < h <u><</u> 20	3	OK	OK	ОК	OK	OK	OK	OK	ОК	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	C
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	ОК	C
	2	OK	OK	OK	OK	OK	OK	OK	ОК	C
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	OK	ОК	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	C
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	ОК	C
	2	OK	OK	OK	OK	OK	OK	OK	ОК	C
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	OK	ОК	N
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	ОК	C
	3 Overhang	OK	OK	OK	ОК	OK	OK	ОК	NO	N
	1	OK	OK	OK	OK	OK	OK	ОК	ОК	C
	2	OK	OK	OK	OK	OK	OK	OK	ОК	C
40 < h <u><</u> 50	3	OK	OK	OK	OK	OK	OK	ОК	ОК	N
	2 Overhang	OK	OK	OK	OK	OK	OK	ОК	ОК	0
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	C
	2	OK	OK	OK	OK	OK	OK	ОК	ОК	0
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	ОК	ОК	0
	3 Overhang	OK	OK	ОК	ОК	ОК	OK	NO	NO	N

TABLE B-2D: SYSTEM NO. 14: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH SEVEN SCREWS PER PANEL) EXPOSURE C FOR SLOPE RANGE $27^{\circ} < slope \le 45^{\circ}$ (6.1:12 < pitch $\le 12:12$)

Moon Boof Height (ft)	Boof Brossuro Zono				Basic V	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	OK
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	1	OK	ОК	OK	OK	ОК	OK	OK	ОК	OK
15 < h <u><</u> 20	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	1	OK	ОК	OK	OK	ОК	OK	OK	ОК	OK
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	ОК	OK
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	OK
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	ОК	ОК	OK	ОК	OK	OK	ОК	OK
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
50 < h ≤ 60	2 & 3 Overhang	OK	ОК	ОК	OK	ОК	OK	OK	ОК	OK
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	ОК	ОК	ОК	ОК	OK	OK	ОК	OK



OSURE D FOR SLOPE RANGE 7°					Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	OK	OK	OK	OK	Oł
	2	OK	OK	OK	OK	OK	OK	OK	OK	OI
0 < h <u><</u> 15	3	OK	OK	OK	OK	OK	OK	OK	OK	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	0
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	0
15 < h <u><</u> 20	3	OK	OK	OK	OK	OK	OK	OK	OK	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	0
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
20 < h <u><</u> 30	2	OK	OK	OK	OK	OK	OK	OK	OK	0
	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	N
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	0
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	N
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	0
40 < h <u><</u> 50	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	N
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	0
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NC
	3 Overhang	OK	OK	ОК	OK	OK	NO	NO	NO	NC

TABLE B-2F: SYSTEM NO. 14: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD BATTENS WITH SEVEN SCREWS PER PANEL) EXPOSURE D FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Weall ROOT Height (It)	KOOI Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2 & 3	OK	OK	ОК	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
	1	OK	ОК	ОК	ОК	ОК	OK	ОК	ОК	OK
15 < h <u><</u> 20	2&3	OK	OK	ОК	ОК	ОК	OK	OK	ОК	ОК
	2 & 3 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	ОК
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	ОК
20 < h <u><</u> 30	2 & 3	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
30 < h <u><</u> 40	2&3	OK	ОК	ОК	ОК	ОК	OK	ОК	ОК	OK
	2 & 3 Overhang	OK	ОК	ОК	ОК	ОК	OK	OK	ОК	OK
	1	OK	ОК	ОК	ОК	ОК	OK	ОК	ОК	OK
40 < h <u><</u> 50	2&3	OK	ОК	ОК	ОК	ОК	OK	ОК	ОК	OK
50 < h ≤ 60	2 & 3 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	NO
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
	2 & 3	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	ОК	ОК	ОК	ОК	OK	OK	ОК	NO



TABLE B-3: DECRA VILLA TILE WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF), OR RECOVER (OVER EXISTING ASPHALT SHINGLES OR BUR) Battens **Panel Attachment** System Deck Fire Under-MDP No. (See Note 1) Barrier lay (psf) Type & Fasteners Attach Fasteners Attachment Spacing Panels to Battens: 10" o.c. with Panels to Battens: Min. 15/32" one screw per shingle fastening No. 12 x min. 11/2" APA rated tap and one screw next to each Two (2) Nominal 1 x No. 8 coarse long hex head Grade B-C tab on both sides of the tab for a screws per thread, 2½" 4 wood screws with 5/16" plywood atop (Optional) See Note attachment total of twelve (12) per panel 15. head diameter -153.0 battens long with No. 2 grade See Note 2 2 point spaced length. spaced 14½" 5/16" head Panels to Panels: SPF joists 24" o.c. into Panels to Panels: 4" o.c. at each diameter No. 8 x min. ¾" o.c. spaced 24" joists panel peak to fasten panel course long pan head o.c. seams together for a total of screws eight (8) per panel. TABLE B-3A: SYSTEM NO. 15: DECRA VILLA TILE EXPOSURE B FOR SLOPE RANGE 7° < SLOPE < 27° (1.5:12 < PITCH < 6.1:12)

EXPOSORE B FOR SLOPE RANGE 7		_ · · ·			Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
0 < h <u><</u> 30	3	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	NO
	1	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2	OK	OK	OK	ОК	OK	OK	OK	OK	OK
30 < h <u><</u> 40	3	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	3 Overhang	ОК	OK	OK	ОК	OK	OK	OK	OK	NO
	1	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	2	OK	OK	OK	ОК	OK	OK	OK	OK	OK
40 < h <u><</u> 50	3	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	2 Overhang	ОК	OK	OK	ОК	OK	OK	OK	OK	OK
	3 Overhang	ОК	OK	OK	ОК	OK	OK	OK	OK	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
50 < h <u><</u> 60	2	OK	OK	OK	OK	OK	OK	OK	OK	OK
	3	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	3 Overhang	ОК	OK	OK	ОК	OK	OK	OK	NO	NO

TABLE B-3B: SYSTEM NO. 15: DI EXPOSURE B FOR SLOPE RANGE 2		сн <u><</u> 12:12)								
Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Wean Root Height (It)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
0 < h <u><</u> 30	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	1	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	1	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	ОК
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	2 & 3 Overhang	ОК	OK	OK	OK	OK	OK	OK	OK	ОК



Maan Daaf Uaiaht (ft)	De of Durante Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	ОК	OK	0
0 < h <u><</u> 15	3	OK	OK	ОК	ОК	OK	OK	ОК	OK	0
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	ОК	OK	OK	ОК	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
15 < h <u><</u> 20	3	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	C
20 < h <u><</u> 30	3	OK	OK	ОК	ОК	OK	OK	ОК	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	C
30 < h <u><</u> 40	3	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	ОК	OK	C
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	ОК	OK	C
	2	OK	OK	ОК	ОК	OK	OK	ОК	OK	C
40 < h <u><</u> 50	3	OK	OK	ОК	ОК	OK	OK	ОК	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	3 Overhang	OK	OK	ОК	ОК	OK	OK	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	OK	C
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	C
50 < h <u><</u> 60	3	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	3 Overhang	OK	OK	ОК	ОК	ОК	OK	NO	NO	N

TABLE B-3D: SYSTEM NO. 15: DECRA VILLA TILE EXPOSURE C FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Deaf Lloight (ft)	Deef Dressure Zere				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
15 < h <u><</u> 20	2&3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK



Moon Roof Hoight (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	ОК	ОК	ОК	OK	OK	OK	OI
	2	OK	OK	ОК	ОК	ОК	OK	OK	OK	0
0 < h <u><</u> 15	3	OK	OK	ОК	ОК	ОК	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	OK	0
	3 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	NO	N
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	0
	2	OK	OK	ОК	ОК	ОК	OK	OK	OK	0
15 < h <u><</u> 20	3	OK	OK	ОК	OK	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	0
	3 Overhang	OK	OK	ОК	ОК	ОК	OK	NO	NO	N
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	0
	2	OK	OK	ОК	ОК	ОК	OK	OK	ОК	0
20 < h <u><</u> 30	3	OK	OK	ОК	ОК	ОК	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	N
	3 Overhang	OK	OK	ОК	ОК	ОК	OK	NO	NO	N
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	0
	2	OK	OK	ОК	ОК	ОК	OK	OK	ОК	0
30 < h <u><</u> 40	3	OK	OK	ОК	ОК	ОК	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	N
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	1	ОК	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
40 < h <u><</u> 50	3	OK	OK	ОК	ОК	ОК	OK	OK	NO	N
	2 Overhang	ОК	OK	ОК	ОК	OK	OK	OK	OK	N
	3 Overhang	OK	OK	ОК	ОК	OK	NO	NO	NO	N
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	0
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	0
50 < h <u><</u> 60	3	OK	OK	ОК	ОК	ОК	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	ОК	N
	3 Overhang	OK	OK	ОК	ОК	ОК	NO	NO	NO	N

TABLE B-3F: SYSTEM NO. 15: DECRA VILLA TILE EXPOSURE D FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deaf Height (ft)	Deef Dressure Zene				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
15 < h <u><</u> 20	2&3	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
20 < h <u><</u> 30	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	OK	NO



TABLE C-1: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS W/ FOUR SCREWS PER PANEL) WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) Deck Battens **Panel Attachment** Fire Barrier MDP System No. / Underlay (psf) (See Note 1) Fasteners Attachment Fasteners Attach Туре At Joists: No. 8 x At Joists: Two (2) screws Min. 15/32" APA Min. 2.5" x 7/8" 2½" long hex head at each intersection with steel spaced 12rated CDX No. 8 x min. steel screws Four (4) 5/8" o.c. for joists, max. 24" o.c. 1½" long plywood over 16. See Note 2 -59.75 per Between Joists: wood supports Shake or 141/2-Between Joists: One (1) hex head No. 8 x 1½" long panel spaced max. 24" inch o.c. for Tile screws set of two (2) screws hex head steel or Shingle Plus 0.C. between joists. screws

TABLE C-1A: SYSTEM NO. 16: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE B FOR SLOPE RANGE 7° < SLOPE < 27° (1.5:12 < PITCH < 6.1:12)

Mana Danf Halaht (ft)	De of Decourse Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2	OK	OK	ОК	OK	OK	OK	OK	NO	NO
0 < h <u><</u> 30	3	OK	OK	OK	OK	OK	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	OK	OK	NO	NO	NO
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	ОК	OK	OK	OK	OK	OK
	2	OK	OK	ОК	OK	OK	OK	OK	NO	NO
30 < h <u><</u> 40	3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	OK	OK	NO	NO	NO
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	NO
	1	OK	ОК	ОК	OK	OK	OK	OK	OK	OK
	2	OK	OK	ОК	OK	OK	OK	NO	NO	NO
40 < h <u><</u> 50	3	OK	OK	OK	OK	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO
	1	OK	OK	ОК	OK	OK	OK	OK	OK	OK
	2	OK	OK	OK	OK	OK	OK	NO	NO	NO
50 < h <u><</u> 60	3	OK	OK	OK	NO	NO	NO	NO	NO	NO
	2 Overhang	OK	OK	ОК	OK	OK	NO	NO	NO	NO
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	NO

TABLE C-1B: SYSTEM NO. 16: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE B FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)

Mean Roof Height (ft)	Roof Pressure				Basic V	Vind Speed	l (mph)			
Weall Kool Height (It)	Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
0 < h <u><</u> 30	2&3	OK	OK	OK	OK	OK	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	ОК
30 < h <u><</u> 40	2&3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	ОК	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NO
	1	OK	OK	OK	OK	OK	OK	OK	OK	NO
50 < h <u><</u> 60	2&3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NO



Maan Daaf Uaiaht (ft)	De of Duranum Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	NO	NO	N
0 < h <u><</u> 15	3	OK	OK	ОК	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	N
	2	OK	OK	OK	OK	OK	OK	NO	NO	N
15 < h <u><</u> 20	3	OK	OK	ОК	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	Ν
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	1	OK	OK	ОК	OK	OK	OK	OK	ОК	Ν
20 < h <u><</u> 30	2	OK	OK	OK	OK	OK	NO	NO	NO	Ν
	3	OK	OK	NO	NO	NO	NO	NO	NO	Ν
	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	Ν
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	1	OK	OK	ОК	OK	OK	OK	OK	ОК	Ν
	2	OK	OK	OK	OK	OK	NO	NO	NO	Ν
30 < h <u><</u> 40	3	OK	OK	NO	NO	NO	NO	NO	NO	Ν
	2 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	Ν
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	1	OK	OK	ОК	OK	OK	OK	OK	ОК	N
	2	OK	OK	OK	OK	NO	NO	NO	NO	N
40 < h <u><</u> 50	3	OK	NO	NO	NO	NO	NO	NO	NO	Ν
+0 < 11 <u>-</u> 30	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	NO	Ν
	2	OK	OK	OK	OK	NO	NO	NO	NO	N
50 < h <u><</u> 60	3	OK	NO	NO	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N

TABLE C-1D: SYSTEM NO. 16: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE C FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Weah Kool Height (IL)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	NO
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	NO
15 < h <u><</u> 20	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	NC
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NC
	2 & 3 Overhang	OK	OK	OK	OK	ОК	NO	NO	NO	NC
	1	OK	OK	ОК	OK	ОК	OK	OK	NO	NC
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	ОК	OK	OK	NO	NC
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	ОК	OK	OK	NO	NC
	2 & 3 Overhang	OK	OK	ОК	OK	NO	NO	NO	NO	NC
	1	OK	OK	OK	OK	ОК	OK	OK	NO	NC
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	ОК	OK	NO	NO	NC
	2 & 3 Overhang	OK	ОК	OK	OK	NO	NO	NO	NO	NO



	D. (D				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	N
	2	OK	OK	OK	OK	ОК	NO	NO	NO	N
0 < h <u><</u> 15	3	OK	OK	NO	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	N
	2	OK	OK	OK	ОК	NO	NO	NO	NO	N
15 < h <u><</u> 20	3	OK	NO	NO	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	1	OK	OK	OK	OK	ОК	OK	OK	NO	N
20 < h <u><</u> 30	2	OK	OK	OK	OK	NO	NO	NO	NO	Ν
	3	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	ОК	OK	OK	NO	N
	2	OK	OK	OK	ОК	NO	NO	NO	NO	N
30 < h <u><</u> 40	3	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	2 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	1	OK	OK	OK	OK	ОК	OK	OK	NO	N
	2	OK	OK	OK	NO	NO	NO	NO	NO	N
40 < h <u><</u> 50	3	NO	NO	NO	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	1	OK	OK	OK	OK	ОК	OK	OK	NO	Ν
	2	OK	OK	OK	NO	NO	NO	NO	NO	Ν
50 < h <u><</u> 60	3	NO	NO	NO	NO	NO	NO	NO	NO	Ν
	2 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N

TABLE C-1F: SYSTEM NO. 16: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS WITH FOUR SCREWS PER PANEL) EXPOSURE D FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Moon Roof Hoight (#)	Roof Pressure Zone				Basic V	Nind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	ОК	ОК	OK	OK	NO	NO
0 < h <u><</u> 15	2 & 3	OK	OK	ОК	ОК	ОК	OK	OK	NO	NC
	2 & 3 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NC
	1	OK	OK	ОК	ОК	ОК	OK	OK	NO	NC
15 < h <u><</u> 20	2 & 3	OK	OK	ОК	ОК	ОК	OK	OK	NO	NC
	2 & 3 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NC
	1	OK	OK	ОК	ОК	ОК	OK	OK	NO	NC
20 < h <u><</u> 30	2 & 3	OK	OK	ОК	ОК	ОК	OK	NO	NO	NC
	2 & 3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NC
	1	OK	OK	ОК	ОК	ОК	OK	OK	NO	NC
30 < h <u><</u> 40	2 & 3	OK	OK	ОК	ОК	ОК	OK	NO	NO	NC
	2 & 3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NC
	1	OK	OK	ОК	ОК	ОК	OK	OK	NO	NC
40 < h <u><</u> 50	2 & 3	OK	OK	ОК	ОК	ОК	NO	NO	NO	NC
	2 & 3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NC
	1	OK	OK	ОК	ОК	ОК	OK	NO	NO	NC
50 < h <u><</u> 60	2 & 3	OK	OK	ОК	ОК	ОК	NO	NO	NO	NC
	2 & 3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	NC



System	Deck	Fire Barrier		Battens		Panel Atta	achment	MDP
No.	(See Note 1)	/ Underlay	Туре	Fasteners	Attachment	Fasteners	Attach	(psf)
17.	Min. 15/32" APA rated CDX plywood over wood supports spaced max. 24" o.c.	See Note 2	Min. 2.5" x 7/8" steel spaced 12- 5/8" o.c. for Shake or 14½-inch o.c. for Tile or Shingle Plus	At Joists: No. 8 x 2½" long hex head steel screws Between Joists: No. 8 x 1½" long hex head steel screws	<u>At</u> Joists: Two (2) screws at each intersection with joists, max. 24" o.c. <u>Between Joists</u> : Three (3) sets of two (2) screws equally spaced between joists (6" o.c.)	No. 8 x min. 1½" long hex head screws	Seven (7) per panel	-116.0

Many Deef Height /(1)	De of Durante 7				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	OK	OK	OK	OK	C
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	C
0 < h <u><</u> 30	3	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	C
30 < h <u><</u> 40	3	OK	ОК	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	3 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	C
40 < h <u><</u> 50	3	OK	OK	ОК	ОК	OK	OK	OK	OK	N
	2 Overhang	OK	ОК	ОК	ОК	OK	OK	OK	OK	C
	3 Overhang	OK	OK	ОК	ОК	OK	OK	NO	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	2	OK	OK	ОК	ОК	OK	OK	OK	OK	C
50 < h <u><</u> 60	3	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	OK	C
	3 Overhang	OK	ОК	ОК	OK	ОК	ОК	NO	NO	N

TABLE C-2B: SYSTEM NO. 17: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS WITH SEVEN SCREWS PER PANEL) EXPOSURE B FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Mean Roof Height (ft)	Roof Pressure				Basic V	Vind Speed	l (mph)			
Weah Roof Height (It)	Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	OK	OK	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	OK
	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	OK



Maan Deef Heisht (ft)	De of Deserves Zone				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	ОК	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
0 < h <u><</u> 15	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	0
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
15 < h <u><</u> 20	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	N
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	ОК	N
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	N
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	ОК	N
	3 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	N
40 < h <u><</u> 50	3	OK	OK	OK	ОК	OK	OK	NO	NO	N
40 (11 2 30	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	N
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	OK	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	NC
	3 Overhang	OK	ОК	ОК	ОК	NO	NO	NO	NO	NC

TABLE C-2D: SYSTEM NO. 17: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS WITH SEVEN SCREWS PER PANEL) EXPOSURE C FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Moon Boof Height (ft)	Boof Brossure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	OK
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	OK
15 < h <u><</u> 20	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	OK
20 < h <u><</u> 30	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	ОК	NC
	1	OK	OK	ОК	OK	ОК	OK	OK	ОК	OK
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	ОК	OK	ОК	OK	OK	ОК	NC
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
50 < h ≤ 60	2 & 3 Overhang	OK	OK	ОК	OK	ОК	OK	OK	ОК	NC
	1	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	ОК	NO



Maan Deef Heisht (ft)	De of Deserves Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	ОК	OK	OK	OK	0
	2	OK	OK	OK	ОК	OK	OK	ОК	OK	N
0 < h <u><</u> 15	3	OK	OK	ОК	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	ОК	OK	N
	3 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	1	OK	OK	ОК	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	ОК	OK	OK	ОК	OK	N
15 < h <u><</u> 20	3	OK	OK	ОК	OK	OK	OK	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	N
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	NO	NO	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	OK	NO	NO	NO	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	N
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
40 < h <u><</u> 50	3	OK	OK	OK	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	3 Overhang	OK	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	NO	N
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	ОК	OK	OK	OK	OK	NO	N
	3 Overhang	ОК	ОК	ОК	NO	NO	NO	NO	NO	NC

TABLE C-2F: SYSTEM NO. 17: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER STEEL BATTENS WITH SEVEN SCREWS PER PANEL) EXPOSURE D FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Meen Deef Height (ft)	Do of Drossure Zono				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
0 < h <u><</u> 15	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	ОК	NO
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
15 < h <u><</u> 20	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	ОК	NO
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	OK
20 < h <u><</u> 30	2 & 3	OK	OK	OK	ОК	ОК	OK	ОК	ОК	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	ОК	NO
	1	OK	OK	ОК	ОК	ОК	OK	OK	ОК	ОК
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	ОК	OK	ОК	ОК	OK
	2 & 3 Overhang	OK	OK	ОК	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	ОК	ОК	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	ОК	ОК	OK
50 < h <u><</u> 60	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	NO	NO
	1	OK	OK	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	ОК	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	ОК	NO	NO



			SHINGLE PLUS <i>(OVI</i> CTION, REROOF (ENS W/	Four Screw	S PER P ANEL)				
WOOD L			THON, RENOOT (Battens				Pan	el Atta	chment	
System No.	Deck (See Note 1)	Fire Barrier Underla	/ (Para	unter Batten llel with Sloj			Hori	zontal Batter	15	Faste	ner	Attach	MDP (psf)
			Туре	Fasteners	Attach	Туре		Fasteners	Attach	3			
18.	Min. 15/32" APA rated CDX plywood over wood supports spaced max. 24" o.c.	See Not 2	Nominal 1 x 4 inch wood e centered over joists, max. 24" o.c.	No. 16 x 3¼" smooth shank box nails	12″ o.c.	Nominal 2 inch woo spaced 12 5/8" o.c Shake or inch o.c. f Tile or Sh Plus	d 2- for 14½- [:] or	No. 9 x 3½" long coated all purpose steel exterior wood screws	One (1) screw at each intersectio n with joists, may 24" o.c.	head	1½" hex	Four (4 per panel	-78.5
TABLE D-	1A: SYSTEM NO. 1	8: DECRA	SHAKE, TILE OR SHIN	gle Plus <i>(ovi</i>	R WOOD CO	UNTER- B ATTE	NS & BA	TTENS WITH FO	UR SCREWS P	ER PANEL)			
			DPE < 27° (1.5:12 < F	•		-				,			
Me	an Roof Height (ft)	Roof Pressure Zor	ne		1	1	ic Wind Spee		1			
		,		110	115	120	130		150	160	18		200
		F	1	OK OK	OK OK	OK OK	OK OK	-	ОК	OK OK	0		OK NO
	0 < h <u><</u> 30	F	3	OK	OK	OK	OK		OK	OK	N		NO
	0 · <u>-</u> 00	F	2 Overhang	OK	OK	OK	OK		OK	OK	0		NO
		F	3 Overhang	OK	ОК	OK	OK	ОК	NO	NO	N)	NO
			1	OK	OK	OK	OK	OK	OK	OK	0	<	OK
			2	ОК	ОК	ОК	OK	ОК	ОК	ОК	0	<	NO
	30 < h <u><</u> 40	_	3	OK	OK	OK	OK		ОК	NO	N		NO
		_	2 Overhang	OK	ОК	OK	OK		OK	ОК	N		NO
			3 Overhang	OK	OK	OK	OK		NO	NO	N		NO
		-	<u> </u>	OK OK	OK OK	OK OK	OK OK		OK OK	OK OK	0		OK NO
	40 < h < 50	-	3	ОК	OK	OK	OK		OK	NO	N		NO
	<u>40 (II <u><</u> 50</u>		2 Overhang	OK	OK	OK	OK		OK	OK	N		NO
			3 Overhang	OK	OK	OK	OK		NO	NO	N		NO
			1	OK	ОК	ОК	OK	ОК	ОК	ОК	0	<	OK
			2	OK	ОК	ОК	OK	ОК	ОК	ОК	N)	NO
	50 < h <u><</u> 60		3	OK	ОК	ОК	OK	ОК	NO	NO	N)	NO
		_	2 Overhang	OK	OK	OK	OK		ОК	OK	N		NO
			3 Overhang	OK	OK	OK	NO	NO	NO	NO	N)	NO
			Shake, Tile or Shine LOPE <u><</u> 45° (6.1:12 <	•		UNTER- B ATTE	NS & BA	TTENS WITH F O	UR S CREWS PI	ER PANEL)			
M	ean Roof Height	(ft)	Roof Pressure				1	ic Wind Spee					
		()	Zone	110	115	120	130		150	160	18		200
	0.44.30		1	OK	OK	OK	OK		OK	OK	0		OK
	0 < h <u><</u> 30		2 & 3 2 & 3 Overhan	OK g OK	OK OK	OK OK	OK OK		OK OK	OK OK	0		OK NO
					OK	OK	OK		OK	OK	0		OK
	30 < h <u><</u> 40		2&3	OK	OK	OK	OK		OK	OK	0		OK
	<u>.</u>		2 & 3 Overhan		OK	OK	ОК		OK	OK	0		NO
			1	OK	OK	OK	OK		OK	OK	0		OK
	40 < h <u><</u> 50		2 & 3	ОК	ОК	ОК	OK		ОК	ОК	0	<	ОК
			2 & 3 Overhan	g OK	ОК	OK	OK		OK	ОК	N)	NO
			1	ОК	ОК	OK	OK		ОК	OK	0		ОК
	50 < h <u><</u> 60		2 & 3	OK	OK	OK	OK		OK	OK	0		OK
			2 & 3 Overhan	g OK	OK	OK	OK	ОК	OK	OK	N	נ	NO



Moon Boof Hoight (H)	ECRA SHAKE, TILE OR SHINGLE PLU $^{\circ} \leq$ SLOPE < 27° (1.5:12 < PITCH				Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	ОК	OK	OK	OK	OK	OK	OK	ОК	0
	2	ОК	OK	OK	OK	OK	OK	OK	NO	N
0 < h <u><</u> 15	3	OK	OK	OK	OK	OK	NO	NO	NO	N
	2 Overhang	OK	OK	ОК	ОК	OK	OK	OK	NO	N
	3 Overhang	ОК	OK	OK	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	ОК	ОК	OK	OK	OK	NO	N
15 < h <u><</u> 20	3	OK	OK	ОК	ОК	OK	NO	NO	NO	N
	2 Overhang	ОК	OK	OK	OK	OK	OK	OK	NO	N
	3 Overhang	OK	OK	ОК	NO	NO	NO	NO	NO	N
	1	OK	OK	ОК	ОК	OK	OK	OK	ОК	0
	2	OK	OK	ОК	ОК	OK	OK	ОК	NO	N
20 < h <u><</u> 30	3	OK	OK	ОК	ОК	NO	NO	NO	NO	N
	2 Overhang	ОК	OK	OK	ОК	OK	OK	NO	NO	N
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	ОК	ОК	OK	OK	ОК	ОК	0
	2	ОК	OK	OK	OK	OK	OK	OK	NO	N
30 < h <u><</u> 40	3	ОК	OK	OK	OK	NO	NO	NO	NO	N
	2 Overhang	ОК	OK	OK	OK	OK	NO	NO	NO	N
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	ОК	OK	OK	NO	NO	N
40 < h <u><</u> 50	3	OK	OK	OK	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	NO	NO	N
50 < h <u><</u> 60	3	OK	OK	OK	NO	NO	NO	NO	NO	N
_	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	3 Overhang	ОК	NO	NO	NO	NO	NO	NO	NO	N

 TABLE D-1D: SYSTEM NO. 18: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD COUNTER-BATTENS & BATTENS WITH FOUR SCREWS PER PANEL)

 EXPOSURE C FOR SLOPE RANGE 27° < SLOPE </td>
 45° (6.1:12 < pitch < 12:12)</td>

Moon Roof Hoight (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2&3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
15 < h <u><</u> 20	2&3	OK	ОК	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
20 < h <u><</u> 30	2&3	OK	ОК	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	OK	NO	NC
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	2&3	OK	ОК	OK	ОК	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	ОК	OK	ОК	ОК	OK	NO	NO	NO
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NC
40 < h <u><</u> 50	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	NC
50 < h <u><</u> 60	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	NO	NO	NC
	1	OK	OK	OK	OK	ОК	OK	OK	OK	NC
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	NC
	2 & 3 Overhang	OK	ОК	OK	OK	ОК	OK	NO	NO	NO



Manu Danf Hainht (ft)	De of Duranum Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	ОК	ОК	OK	OK	OK	0
	2	OK	OK	OK	ОК	OK	OK	OK	NO	N
0 < h <u><</u> 15	3	OK	OK	OK	ОК	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	NO	NO	N
	3 Overhang	OK	OK	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	OK	C
	2	OK	OK	OK	ОК	OK	OK	NO	NO	N
15 < h <u><</u> 20	3	OK	OK	OK	ОК	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	N
	3 Overhang	OK	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	C
	2	OK	OK	OK	ОК	OK	OK	NO	NO	N
20 < h <u><</u> 30	3	OK	OK	OK	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	OK	OK	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	N
	2	OK	OK	OK	ОК	OK	NO	NO	NO	N
30 < h <u><</u> 40	3	OK	OK	OK	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	OK	N
	2	OK	OK	OK	ОК	ОК	NO	NO	NO	N
40 < h <u><</u> 50	3	OK	OK	OK	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	OK	N
	2	OK	OK	OK	OK	OK	NO	NO	NO	N
50 < h <u><</u> 60	3	OK	OK	NO	NO	NO	NO	NO	NO	N
	2 Overhang	OK	OK	OK	ОК	NO	NO	NO	NO	N
	3 Overhang	NO	NO	NO	NO	NO	NO	NO	NO	N

 TABLE D-1F: SYSTEM NO. 18: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD COUNTER-BATTENS & BATTENS WITH FOUR SCREWS PER PANEL)

 EXPOSURE D FOR SLOPE RANGE 27° < SLOPE \leq 45° (6.1:12 < PITCH \leq 12:12)

Maan Roof Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2 & 3	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
	2 & 3 Overhang	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
15 < h <u><</u> 20	2 & 3	OK	OK	ОК	OK	ОК	OK	ОК	OK	NO
	2 & 3 Overhang	OK	OK	ОК	OK	ОК	OK	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
20 < h <u><</u> 30	2 & 3	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
	2 & 3 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
30 < h <u><</u> 40	2 & 3	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
	2 & 3 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	ОК	OK	NO
40 < h <u><</u> 50	2 & 3	OK	OK	ОК	OK	ОК	OK	ОК	NO	NO
50 < h <u><</u> 60	2 & 3 Overhang	OK	OK	ОК	OK	ОК	NO	NO	NO	NO
	1	OK	OK	ОК	OK	ОК	OK	OK	OK	NO
	2 & 3	OK	OK	ОК	OK	ОК	OK	OK	NO	NO
	2 & 3 Overhang	OK	OK	ОК	ОК	NO	NO	NO	NO	NO



	2: DECRA SHAR ECKS - NEW CO							ENS U	ITH SEV	EN SCR	EWS PER P ANE	L)			
							Battens					Pane	el Atta	chment	
System No.	Deck (See Note 1)	Fire Ba / Unde			unter Batter allel with Slo			Hor	izontal	Batten	s	Faster	ners	Attach	MDP (psf)
				Туре	Fasteners	Attach	Туре		Faster	ners	Attach				
19.	Min. 15/32" APA rated CDX plywood over wood supports spaced max. 24" o.c.	See No	ote 2	Nominal 1 x 4 inch wood centered over joists, max. 24" o.c.	No. 16 x 3¼" smooth shank box nails	7″ o.c.	Nominal 2 : inch wood spaced 12- 5/8" o.c. fo Shake or 14 inch o.c. fo Tile or Shin Plus	ır 1½- r	No. 9: 3½" lo coated purpo steel exterio wood screws	ong d all se or	Two (2) screws at each intersectio n with joists, max. 24" o.c.	No. 8 x min. 13 long he head screws	½″ ex	Seven (7) per panel	-146.0
	2A SYSTEM NO. 19				•		UNTER-BATTEN	s & B	ATTENS V	NITH SE	VEN SCREWS PE	R PANEL)			
EXPOSURI	E B FOR SLOPE RAN	IGE 7° < SI	LOPE <u><</u> 2	27° (1.5:12 < 1	чтсн <u><</u> 6.1:12	2)					a al (assas la)				
Mea	an Roof Height (ft)	Roof	Pressure Zoi	ne 110	115	120	<u>р</u> 13		140	ed (mph) 150	160	1	80	200
				1	OK	OK	OK		K	OK	OK	OK)K	OK
				2	OK	OK	ОК	С	K	ОК	OK	ОК	C	Ж	ОК
	0 < h <u><</u> 30			3	OK	OK	OK	С	K	ОК	OK	ОК	C	Ж	OK
			2	2 Overhang	ОК	OK	ОК		к	ОК	OK	ОК	-	К	ОК
			3	8 Overhang	OK	OK	OK		К	ОК	ОК	ОК	-	Ж	NO
				1	OK	OK	OK		K	ОК	OK	ОК		Ж	OK
				2	OK	OK	OK		K	ОК	OK	ОК		ОК	OK
	30 < h <u><</u> 40		-	3	OK	OK	OK		K	OK	OK	OK		0K	OK
				Overhang	OK	OK	OK	0		OK	OK	OK		OK	OK
			3	Overhang 1	ОК	OK OK	OK OK		К	OK OK	OK OK	OK OK		ок ОК	NO OK
				2	OK	OK	OK		NK K	OK	OK	OK OK	-)K	OK
	40 < h < 50			3	OK	OK	OK		K K	OK	OK	OK OK		OK I	OK
	<u> </u>		2	2 Overhang	OK	OK	OK		K K	OK	OK	OK		OK	OK
				Overhang	OK	ОК	OK		K	OK	OK	OK		0	NO
				1	OK	OK	OK		K	OK	OK	OK	-	OK I	OK
				2	OK	OK	OK		K	OK	OK	OK)K	OK
	50 < h < 60			3	OK	OK	OK		K	OK	OK	OK	-)K	OK
	_ `		2	2 Overhang	OK	OK	OK		K	OK	OK	OK	-	к	OK
				8 Overhang	OK	OK	ОК	C	K	ОК	OK	ОК	N	0	NO
TABLE D-2	2B: SYSTEM NO. 1	9: DECR/		, TILE OR SHIN	GLE PLUS (OV	R WOOD CO	DUNTER-BATTEN	ıs & E	BATTENS	WITH SI	VEN SCREWS PL	R PANEL)			

TABLE D-2B: System No. 19: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD COUNTER-BATTENS & BATTENS WITH SEVEN SCREWS PER PANEL)EXPOSURE B FOR SLOPE RANGE $27^{\circ} < \text{slope} \le 45^{\circ}$ (6.1:12 < pitch $\le 12:12$)

Mean Roof Height (ft)	Roof Pressure				Basic V	Vind Speed	l (mph)			
Mean Root Height (It)	Zone	110	115	120	130	140	150	160	180	200
	1	OK	ОК	OK	OK	OK	OK	OK	OK	OK
0 < h <u><</u> 30	2 & 3	OK	ОК	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK
	1	OK	ОК	OK	OK	OK	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	ОК	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	ОК	ОК	OK	OK	OK	OK	OK	ОК	OK
	1	OK	ОК	OK	OK	OK	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	ОК	ОК	OK	OK	OK	OK	OK	ОК	OK
	2 & 3 Overhang	ОК	ОК	OK	OK	OK	OK	OK	ОК	OK
	1	OK	ОК	OK	OK	OK	OK	OK	OK	OK
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OK



Mean Deef Height /ft)	Roof Pressure Zone	PLUS (OVER V H ≤ 6.1:12) 110 OK OK OK OK OK OK OK OK OK OK			Basic V	Vind Speed	(mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	20
	1	OK	OK	OK	OK	OK	OK	OK	ОК	Oł
	2	OK	OK	OK	OK	OK	OK	OK	ОК	01
0 < h <u><</u> 15	3	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	0
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	1	OK	OK	OK	OK	OK	OK	ОК	ОК	01
	2	OK	OK	OK	OK	OK	OK	ОК	ОК	01
15 < h <u><</u> 20	3	OK	OK	OK	OK	OK	OK	OK	OK	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	0
	3 Overhang	OK	OK	OK	OK	OK	OK	OK	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
20 < h <u><</u> 30	3	OK	OK	OK	OK	OK	OK	ОК	ОК	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	OI
	3 Overhang	OK	OK	OK	OK	OK	OK	ОК	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	OK	0
	2	OK	OK	OK	OK	OK	OK	OK	OK	0
30 < h <u><</u> 40	3	OK	OK	OK	OK	OK	OK	OK	ОК	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	01
	3 Overhang	OK	OK	OK	ОК	OK	OK	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	OI
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
40 < h <u><</u> 50	3	OK	OK	OK	OK	OK	OK	ОК	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	OK	ОК	N
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	N
	1	OK	OK	OK	OK	OK	OK	OK	ОК	0
	2	OK	OK	OK	OK	OK	OK	OK	ОК	0
50 < h <u><</u> 60	3	OK	OK	OK	OK	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	OK	OK	OK	ОК	ОК	NC
	3 Overhang	OK	OK	OK	OK	OK	OK	NO	NO	NC

 TABLE D-2D: SYSTEM NO. 19: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD COUNTER-BATTENS & BATTENS WITH SEVEN SCREWS PER PANEL)

 EXPOSURE C FOR SLOPE RANGE 27° < SLOPE < 45° (6.1:12 < PITCH < 12:12)</td>

Mean Deaf Height (ft)	Roof Pressure Zone				Basic V	Vind Speed	l (mph)			
Mean Roof Height (ft)	Roof Pressure Zone	110	115	120	130	140	150	160	180	200
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
0 < h <u><</u> 15	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
15 < h <u><</u> 20	2&3	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
20 < h <u><</u> 30	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	Ok
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
40 < h <u><</u> 50	2 & 3	OK	OK	OK	ОК	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	1	OK	OK	OK	OK	ОК	OK	OK	OK	Ok
50 < h <u><</u> 60	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	Ok
	2 & 3 Overhang	OK	OK	OK	ОК	ОК	OK	OK	ОК	OK



BLE D-2E: SYSTEM NO. 19: DE POSURE D FOR SLOPE RANGE 7°		•	W 00D C 0UI	NTER- B ATTEI	NS & B ATTEI	NS WITH SEVE	EN SCREWS P	ER PANEL)		
Mean Roof Height (ft)	Roof Pressure Zone	Basic Wind Speed (mph)								
		110	115	120	130	140	150	160	180	200
0 < h <u><</u> 15	1	OK	OK	OK	ОК	OK	OK	OK	ОК	OK
	2	OK	OK	OK	ОК	OK	OK	OK	OK	OK
	3	OK	OK	OK	ОК	OK	OK	OK	ОК	NC
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	Ok
	3 Overhang	OK	OK	OK	ОК	OK	OK	NO	NO	NC
15 < h <u><</u> 20	1	OK	OK	OK	ОК	OK	OK	OK	ОК	Oł
	2	OK	OK	OK	ОК	OK	OK	OK	OK	Oł
	3	OK	OK	OK	ОК	OK	OK	OK	NO	NC
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	ОК	NC
	3 Overhang	OK	OK	OK	ОК	OK	OK	NO	NO	NC
20 < h <u><</u> 30	1	OK	OK	OK	ОК	OK	OK	OK	ОК	Oł
	2	OK	OK	OK	ОК	OK	OK	OK	ОК	0
	3	OK	OK	OK	ОК	OK	OK	OK	NO	NC
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	ОК	NC
	3 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	N
	1	OK	OK	OK	ОК	OK	OK	OK	ОК	0
	2	OK	OK	OK	ОК	OK	OK	OK	ОК	01
30 < h <u><</u> 40	3	OK	OK	OK	ОК	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	ОК	N
	3 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	N
40 < h <u><</u> 50	1	OK	OK	OK	ОК	OK	OK	OK	ОК	OI
	2	ОК	OK	OK	ОК	OK	OK	OK	ОК	N
	3	OK	OK	OK	ОК	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	ОК	N
	3 Overhang	ОК	OK	OK	ОК	OK	NO	NO	NO	N
50 < h <u><</u> 60	1	OK	OK	OK	ОК	OK	OK	OK	OK	OI
	2	ОК	OK	OK	ОК	OK	OK	OK	ОК	NC
	3	ОК	OK	OK	ОК	OK	OK	OK	NO	N
	2 Overhang	OK	OK	OK	ОК	OK	OK	OK	OK	NC
	3 Overhang	OK	OK	OK	ОК	OK	NO	NO	NO	NC

 TABLE D-2F: SYSTEM NO. 19: DECRA SHAKE, TILE OR SHINGLE PLUS (OVER WOOD COUNTER-BATTENS & BATTENS WITH SEVEN SCREWS PER PANEL)

 EXPOSURE D FOR SLOPE RANGE $27^{\circ} < slope \le 45^{\circ}$ (6.1:12 < pitch $\le 12:12$)

Mean Roof Height (ft)	Roof Pressure Zone	Basic Wind Speed (mph)								
		110	115	120	130	140	150	160	180	200
0 < h <u><</u> 15	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
15 < h <u><</u> 20	1	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
20 < h <u><</u> 30	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	OK
30 < h <u><</u> 40	1	OK	OK	OK	OK	ОК	OK	OK	OK	ОК
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	OK	OK	OK	OK	NO
40 < h <u><</u> 50	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	NO
50 < h <u><</u> 60	1	OK	OK	OK	OK	ОК	OK	OK	OK	OK
	2 & 3	OK	OK	OK	OK	OK	OK	OK	OK	OK
	2 & 3 Overhang	OK	OK	OK	OK	ОК	OK	OK	OK	NO