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EVALUATION REPORT**Firestone Building Products Company, LLC.**250 West 96th Street

Indianapolis, IN 46260

Evaluation Report F47310.12.13-2-R3**FL16723-R2****Date of Issuance: 12/12/2013****Revision 3: 04/09/2015****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 5th Edition (2014) Florida Building Code, High Velocity Hurricane Zone (HVHZ) sections noted herein.

DESCRIPTION: Firestone UltraPly TPO Single Ply Roof Systems

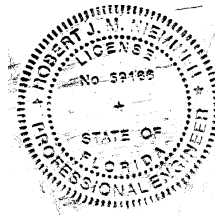
LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as 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. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD 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 "Engineer Evaluated, FBC (HVHZ)" 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 4, plus a 57-page Appendix.

Prepared by:**Robert J.M. Nieminen, P.E.***Florida Registration No. 59166, Florida DCA ANE1983*

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 04/09/2015. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

CERTIFICATION OF INDEPENDENCE:

1. Exterior Research & Design, LLC. d/b/a Trinity | ERD 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. Exterior Research & Design, LLC. d/b/a Trinity | ERD is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for 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 Trinity|ERD 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: Single Ply Roof Systems

Compliance Statement: Firestone UltraPly TPO and UltraPly TPO XR Single Ply Roof Systems, as produced by Firestone Building Products, have demonstrated compliance with the following sections of the Florida Building Code, HVHZ through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1523.6.2	Testing Requirements	TAS 110	2000
TAS 110	System Performance	TAS 114	2011
TAS 110	Physical Properties	TAS 131	1995

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
ACRC, LLC (TST4671)	TAS 114	ACRC 05-001	01/18/2005
ACRC, LLC (TST4671)	TAS 114	ACRC 05-002	01/18/2005
ACRC, LLC (TST4671)	TAS 114	ACRC 02-002	01/07/2003
ACRC, LLC (TST4671)	TAS 114	ACRC 06-030	08/21/2006
ERD (TST 6049)	Physical Properties	F8300.11.08-R4	09/24/2012
ERD (TST 6049)	Physical Properties	F40090.10.12-1	10/02/2012
ERD (TST 6049)	Physical Properties	F45600.09.13	09/13/2013
FM Approvals (TST1867)	FM 4470/TAS 114	3001925	05/24/1999
FM Approvals (TST1867)	FM 4470/TAS 114	3003830	05/26/1999
FM Approvals (TST1867)	FM 4470/TAS 114	3004249	11/03/1999
FM Approvals (TST1867)	FM 4470/TAS 114	3006983	02/08/2000
FM Approvals (TST1867)	FM 4470/TAS 114	3014031	07/22/2002
FM Approvals (TST1867)	FM 4470/TAS 114	3014692	08/05/2003
FM Approvals (TST1867)	FM 4470/TAS 114	3014918	12/17/2003
FM Approvals (TST1867)	FM 4470/TAS 114	3012931	04/30/2004
FM Approvals (TST1867)	FM 4470/TAS 114	3016670	04/29/2004
FM Approvals (TST1867)	FM 4470/TAS 114	3017120	04/30/2004
FM Approvals (TST1867)	FM 4470/TAS 114	3009473	04/30/2004
FM Approvals (TST1867)	FM 4470/TAS 114	3020394	09/03/2004
FM Approvals (TST1867)	FM 4470/TAS 114	3022988	01/28/2005
FM Approvals (TST1867)	FM 4470/TAS 114	3019991	09/20/2005
FM Approvals (TST1867)	FM 4470/TAS 114	3026519	12/14/2006
FM Approvals (TST1867)	FM 4470/TAS 114	3026520	12/14/2006
FM Approvals (TST1867)	FM 4470/TAS 114	3027508	02/07/2007
FM Approvals (TST1867)	FM 4470/4474	797-02812-267	05/22/2007
FM Approvals (TST1867)	FM 4470/TAS 114	3030227	06/18/2007
FM Approvals (TST1867)	FM 4470/TAS 114	3028164	11/02/2007
FM Approvals (TST1867)	FM 4470/TAS 114	3029384	02/28/2008
FM Approvals (TST1867)	FM 4470/TAS 114	3030650	05/16/2008
FM Approvals (TST1867)	FM 4470/TAS 114	3033218	08/12/2008
FM Approvals (TST1867)	FM 4470/TAS 114	3033921	01/12/2009
FM Approvals (TST1867)	FM 4470/TAS 114	3035017	04/15/2009
FM Approvals (TST1867)	FM 4470/TAS 114	3032272	05/22/2009
FM Approvals (TST1867)	FM 4470/TAS 114	3033947	05/29/2009
FM Approvals (TST1867)	FM 4470/TAS 114	3036642	10/09/2009
FM Approvals (TST1867)	FM 4470/TAS 114	3036747	10/09/2009
FM Approvals (TST1867)	FM 4470/TAS 114	3035560	01/11/2010
FM Approvals (TST1867)	FM 4470/TAS 114	3036747	02/12/2010
FM Approvals (TST1867)	FM 4470/TAS 114	797-05444-267	04/07/2010
FM Approvals (TST1867)	FM 4470/4474	797-05830-267	05/30/2010
FM Approvals (TST1867)	FM 4470/TAS 114	797-05604-267	06/02/2010
FM Approvals (TST1867)	FM 4470/TAS 114	797-05627-267	06/14/2010
FM Approvals (TST1867)	FM 4470/TAS 114	797-05639-267	06/16/2010
FM Approvals (TST1867)	FM 4470/TAS 114	797-05829-267	08/30/2010
FM Approvals (TST1867)	FM 4470/TAS 114	3040535	10/05/2010
FM Approvals (TST1867)	FM 4470/TAS 114	3037109	11/18/2010
FM Approvals (TST1867)	FM 4470/TAS 114	3038546	12/17/2010

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
FM Approvals (TST1867)	FM 4470/TAS 114	3041939	01/04/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3041694	01/14/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3041939	02/01/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3041939	03/02/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3039133	04/07/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3041535	06/08/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3041949	06/10/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3042909	08/03/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3038191	08/04/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3038770	08/04/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3041939	08/16/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3036639	11/22/2011
FM Approvals (TST1867)	FM 4470/TAS 114	3044812	01/05/2012
FM Approvals (TST1867)	FM 4470/4474	797-07314-267	04/05/2012
FM Approvals (TST1867)	FM 4470/TAS 114	3046333	08/10/2012
FM Approvals (TST1867)	FM 4470/TAS 114	3041939	08/14/2012
FM Approvals (TST1867)	FM 4470/TAS 114	3042666	08/14/2012
FM Approvals (TST1867)	FM 4470/TAS 114	797-07680-267	09/14/2012
FM Approvals (TST1867)	FM 4470/4474	797-07729-267	10/30/2012
FM Approvals (TST1867)	FM 4470/4474	797-07855-267	01/29/2013
FM Approvals (TST1867)	FM 4470/TAS 114	3046870	03/22/2013
FM Approvals (TST1867)	FM 4470/TAS 114	797-08294-267	04/26/2013
FM Approvals (TST1867)	FM 4470/TAS 114	3049316	05/30/2013
FM Approvals (TST1867)	FM 4470/TAS 114	797-08513-267	07/15/2013
FM Approvals (TST1867)	FM 4470/TAS 114	3047398	08/15/2013
FM Approvals (TST1867)	FM 4470/TAS 114	3047700	08/16/2013
PRI (TST5878)	FM 4474/TAS 114	FBP-085-02-01	09/26/2012
PRI (TST5878)	FM 4474/TAS 114	FBP-086-02-01	10/04/2012
PRI (TST5878)	FM 4474/TAS 114	FBP-044-02-01	06/25/2013
PRI (TST5878)	FM 4474/TAS 114	FBP-119-02-01	07/22/2013
PRI (TST5878)	FM 4474/TAS 114	FBP-122-02-01	07/23/2013
PRI (TST5878)	FM 4474/TAS 114	FBP-149-02-01	12/18/2013
PRI (TST5878)	FM 4474/TAS 114	FBP-153-02-01	12/18/2013
PRI (TST5878)	FM 4474/TAS 114	FBP-154-02-02	12/18/2013
PRI (TST5878)	FM 4474/TAS 114	FBP-158-02-01	04/28/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-165-02-01	04/28/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-165-02-01A	04/28/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-175-02-01	04/28/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-178-02-01	04/28/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-177-02-01	07/15/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-184-02-01	07/27/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-185-02-02	07/31/2014
PRI (TST5878)	FM 4474/TAS 114	FBP-190-02-01	07/31/2014
UL (TST1740)	UL 1897/TAS 114	10NK13003	06/13/2011
UL, LLC (QUA9625)	Quality Control	Service Confirmation	Exp. 02/26/2017

4. PRODUCT DESCRIPTION:

The following roof covers are mechanically attached or fully adhered to Approved substrates using fasteners, stress plates and adhesives, as outlined in the Limitations / Conditions of Use herein.

- 4.1 **UltraPly TPO** is a nominal 45-mil (1.1 mm), 60-mil (1.5 mm) or 80-mil (2.0 mm) thick, polyester scrim reinforced single-ply roof membrane.
- 4.2 **UltraPly TPO XR 100, UltraPly TPO XR 115 and UltraPly TPO XR 135** are nominal 45-mil (1.1 mm) (XR 100), 60-mil (1.5 mm) (XR 115) or 80-mil (2.0 mm) (XR 135) thick, polyester reinforced, single-ply roof membrane produced with an 8-oz polyester backing.

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither Trinity|ERD 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 Fire classification is not part of this Evaluation Report; refer to a current Approved Roofing Materials Directory for fire ratings of this product.

- 5.3 For steel deck installations, foam plastic insulation shall be separated from the building interior in accordance with FBC 2603.4 unless the exceptions stated in FBC 2603.4.1 and 2603.6 apply.
- 5.4 The evaluation herein pertains to above-deck roof components; deck-attachment details pertain to 'as-tested' conditions under TAS 114, Appendix J. Roof decks shall be in accordance with FBC (HVHZ) requirements to the satisfaction of the AHJ.
- 5.5 Fastener spacing for mechanical attachment of insulation, anchor/base sheet or membrane is based on a minimum fastener resistance value in conjunction with the maximum design pressure (MDP) listed for a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing – prepared, signed and sealed by a qualified design professional – may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standard TAS 105 and calculations in compliance with Roofing Application Standard RAS 117 or RAS 137.
- 5.5.1 If mechanical attachment to the structural deck through lightweight insulating concrete is proposed, field withdrawal resistance testing shall be performed to confirm equivalent or determine enhanced fastening patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137. Calculations shall be prepared, signed and sealed by a qualified design professional.
- 5.6 For systems where specific lightweight insulating concrete is referenced, consult the current HVHZ product approval documentation for specific deck construction and limitations. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be for minimum 300 psi cellular material.
- 5.7 For recover installations, the existing roof shall be examined in accordance with FBC 1521.
- 5.8 Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased, as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137 by a qualified design professional. ***This extrapolation is not permitted for systems marked with an asterisk*.***
- 5.9 All attachment and sizing of perimeter nailers, metal profile and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
- 5.10 For assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation listed shall be applicable to all roof pressure zones (i.e., field, perimeters and corners). Neither rational analysis, nor extrapolation is permitted for enhanced attachment at enhanced pressure zones (i.e., perimeters, corners and extended corners).
- 5.11 For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the AHJ, as documented through field uplift testing in accordance with TAS 124.
- 5.12 All products listed herein shall have quality assurance audit in accordance with the Florida Building Code and Florida Administrative Code Rule 61G20-3.

6. INSTALLATION:

- 6.1 Firestone UltraPly TPO and UltraPly TPO XR shall be installed in accordance with Firestone Building Products 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 TAS 114 has already been applied). Refer to FBC 1620 and RAS 128 for determination of design wind loads.
- 6.3 For mechanically fastened membrane systems (Type D) over profiled steel deck, membrane shall be installed running perpendicular to steel deck flutes.
- 6.4 For InvisiWeld installations, care shall be taken to ensure that the InvisiWeld Plates do not line-up with seams in the TPO membrane. This condition precludes proper induction welding of the membrane to the InvisiWeld Plates.

7. QUALITY ASSURANCE ENTITY:

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

- THE 57-PAGES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

Table	Deck	Application	Type	Description	Page
1A-1	Wood	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	4
1A-2	Wood	New, Reroof (Tear-Off), Recover	C-2	Plate-Bonded Roof Cover	4
1B	Wood	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover	5
1C	Wood	New, Reroof (Tear-Off), Recover	E	Non-Insulated, Mechanically Attached Roof Cover	5
2A-1	Steel or Conc.	New, Reroof (Tear-Off), Recover	B-1	Mech. Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover	6-9
2A-2	Steel or Conc.	New, Reroof (Tear-Off), Recover	B-2	Mech. Attached Base Insulation, Bonded Temp Roof, Bonded Top Insulation, Bonded Roof Cover	10
2B-1	Steel or Conc.	New, Reroof (Tear-Off), Recover	C-1	Mechanically Attached Insulation, Bonded Roof Cover	11-14
2B-2	Steel or Conc.	New, Reroof (Tear-Off), Recover	C-2	Plate-Bonded Roof Cover	15-16
2C-1	Steel or Conc.	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover (Stress Plates)	17-18
2C-2	Steel or Conc.	New, Reroof (Tear-Off), Recover	D-1	Insulated, Mechanically Attached Roof Cover (Battens)	19-20
3A-1	Concrete	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	21-27
3A-2	Concrete	New, Reroof (Tear-Off)	A-1B	Bonded Temp Roof, Bonded Insulation, Bonded Roof Cover	28-35
3B	Concrete	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	35
4A	LWIC	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	36-43
4B	LWIC	New, Reroof (Tear-Off) or Recover	D-1	Insulated, Mechanically Attached Roof Cover	43
4C	LWIC	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	44-45
5A	CWF	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	46
5B	CWF	New, Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	46
6A	Gypsum	Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	47
6B	Gypsum	Reroof (Tear-Off)	A-2	Mech. Attached Anchor Sheet, Bonded Insulation, Bonded Roof Cover	48
7A	Various	Recover	A-1A	Bonded Insulation, Bonded Roof Cover	49-55
7B	Steel	Recover	C-2	Plate-Bonded Roof Cover	56
7C	Steel	Recover	D-1	Insulated, Mechanically Attached Roof Cover	56
7D	Steel	Recover	D-2	Insulated, Mechanically Attached Roof Cover (RMA Strips)	56
7E	Steel	Recover	E	Non-Insulated, Mechanically Attached Roof Cover	57
7F	Various	Recover	F	Non-Insulated, Bonded Roof Cover	57

The following notes apply to the systems outlined herein:

1. The evaluation herein pertains to above-deck roof components; deck-attachment details pertain to 'as-tested' conditions under TAS 114, Appendix J. Roof decks shall be in accordance with FBC (HVHZ) requirements to the satisfaction of the AHJ.
2. Unless otherwise noted, fasteners and stress plates for insulation attachment shall be as follows. Fasteners shall be of sufficient length for the following engagements:
 - Wood Deck: Firestone All-Purpose or Heavy-Duty Fasteners with Firestone Insulation Fastening Plates. Minimum 1-inch plywood penetration or wood plank embedment.
 - Steel Deck: Firestone All-Purpose or Heavy-Duty Fasteners with Firestone Insulation Fastening Plates. Minimum ¾-inch steel penetration, engage the top flute of the steel deck.
 - Concrete Deck: Firestone Heavy-Duty or Concrete Drive Fasteners with Firestone Insulation Fastening Plates. Minimum 1.25-inch embedment. Fasteners installed with a pilot hole in accordance with the fastener manufacturer's published installation instructions.
3. Unless otherwise noted, insulation may be any one layer or combination of polyisocyanurate, polystyrene, wood fiberboard, perlite or gypsum-based roof board that meets the QA requirements of F.A.C. Rule 61G20-3 and is documented as meeting FBC (HVHZ) 1516 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
4. If mechanical attachment to the structural deck through lightweight insulating concrete is proposed, field withdrawal resistance testing shall be performed to confirm equivalent or determine enhanced fastening patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137. Calculations shall be prepared, signed and sealed by a qualified design professional.
5. Preliminary insulation attachment for System Types C-2 and D = Minimum four fasteners per 4 x 8 ft board or minimum two fasteners per 4 x 4 ft board.
6. Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions:
 - Firestone I.S.O. Twin Pack: Continuous ½ to ¾-inch beads, 12-inch o.c.
 - Firestone I.S.O. Stick: Continuous ¾ to 1-inch wide ribbons, 12-inch o.c.
 - Firestone I.S.O. Spray S: Continuous ¾ to 1-inch wide ribbons, 12-inch o.c.
 - Firestone I.S.O. FIX II: Continuous ¾ to 1-inch wide ribbons, 12-inch o.c.
 - 3M CR-20: Continuous 2½ to 3½-inch ribbons, 12-inch o.c.
 - *Note: When multiple layer(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, adhesive ribbons shall be staggered from layer-to-layer a distance of one-half the ribbon spacing.*
 - *Note: The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing.*
7. Unless otherwise noted, all insulations are flat stock or taper board of the minimum thickness noted. Tapered ISO 95+ GL or Tapered RESISTA at the following thickness limitations may be substituted with the following Maximum Design Pressure (MDP) limitations. In no case shall these values be used to 'increase' the MDP listings in the tables; rather if MDP listing below meets or exceeds that listed for a particular system in the tables, then the thinner board listed below may be used as a drop-in for the equivalent thicker material listed in the table.

➤ Firestone I.S.O. Twin Pack:	MDP	-157.5 psf	(Min. 0.5-inch thick)
➤ Firestone I.S.O. Stick:	MDP	-187.5 psf	(Min. 0.5-inch thick)
➤ Firestone I.S.O. Spray S:	MDP	-172.5 psf	(Min. 0.5-inch thick)
➤ Firestone I.S.O. FIX II:	MDP	-172.5 psf	(Min. 0.5-inch thick)
➤ 3M CR-20:	MDP	-117.5 psf	(Min. 1.0-inch thick Tapered ISO 95+ GL only)
8. Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.
9. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased, as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137 by a qualified design professional. ****This extrapolation is not permitted for systems marked with an asterisk*.***

10. For assemblies marked with an asterisk*, the maximum design pressure (MDP) limitation listed shall be applicable to all roof pressure zones (i.e., field, perimeters and corners). Neither rational analysis, nor extrapolation is permitted for enhanced attachment at enhanced pressure zones (i.e., perimeters, corners and extended corners).
11. Fastener spacing for mechanical attachment is based on a minimum fastener resistance value in conjunction with the maximum design pressure (MDP) listed for a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing – prepared, signed and sealed by a qualified design professional – may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standard TAS 105 and calculations in compliance with Roofing Application Standard RAS 117 or RAS 137.
12. For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the AHJ, as documented through field uplift testing in accordance with TAS 124.
13. For System Type D, steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes.
14. For recover installations, the existing roof shall be examined in accordance with FBC 1521. For Recover Applications using System Type C-2 or D, the insulation is optional. Alternatively, ISOGARD HD, ISO 95+ GL, RESISTA, other polyisocyanurate, Dens Deck, Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board, SECUROCK Glass-Mat Roof Board, GreenGuard Roofing Insulation Boards, Insulfoam EPS with necessary slip sheet or wood fiberboard may be used as a separator board, preliminarily attached prior to roof cover installation. The separator component shall be documented as meeting FBC (HVHZ) 1516 and, for foam plastic, FBC Chapter 26, when installed with the roof cover in Recover applications.
15. For membrane attachment using batten-strips, batten-strip end laps shall be spliced with sufficient dimension to allow for minimum 2-fasteners at each batten-strip lap.
16. For adhered membrane systems, side laps shall be minimum 3-inch wide sealed with min. 1.5-inch heat weld. Membrane adhesive application rates are as follows:

<u>Membrane</u>	<u>Adhesive</u>	<u>Method</u>	<u>Rate</u>
UltraPly TPO	UltraPly Bonding Adhesive (UP-BA)	Contact Application	45 to 60 ft ² /gal
UltraPly TPO	Water Based Bonding Adhesive-S (WBBA-S)	Contact Application	100 to 120 ft ² /gal.
UltraPly TPO	Water Based Bonding Adhesive-P (WBBA-P)	Contact Application	100 to 120 ft ² /gal.
UltraPly TPO	Single-Ply LVOC Bonding Adhesive (LVOC-BA)	Contact Application	45 to 60 ft ² /gal
UltraPly TPO	Single-Ply LVOC Bonding Adhesive 1168 (LVOC-BA-1168)	Contact Application	45 to 60 ft ² /gal
UltraPly TPO XR	XR Bonding Adhesive (XR-BA)	Substrate Application	70 to 90 ft ² /gal
UltraPly TPO XR	Water Based Bonding Adhesive-P (WBBA-P)	Substrate Application	100 to 120 ft ² /gal.
UltraPly TPO XR	XR Stick Membrane Adhesive	Substrate Application	Continuous ¾ to 1-inch wide ribbons
UltraPly TPO XR	I.S.O. Spray S	Substrate Application	Continuous ¾ to 1-inch wide ribbons
17. For InvisiWeld installations, care shall be taken to ensure that the InvisiWeld Plates do not line-up with seams in the TPO membrane. This condition precludes proper induction welding of the membrane to the InvisiWeld Plates.
18. “Asphaltic” Vapor Barrier / Temp Roof noted herein consists of 1 or 2 plies Type IV (4) M or Type VI (6) M or 1 ply MB Base, SBS Base, SBS PolyBase or SBS Premium Base in hot asphalt.
19. An optional air/vapor barrier of V-Force Vapor Barrier Membrane, self-adhered, may be installed atop steel roof decks (Tables 2A through 2C) prior to installation of any steel deck roof assembly noted herein.
20. “MDP” = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC (HVHZ) 1620 and RAS 128 for determination of design wind pressures.

TABLE 1A-1: WOOD DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive	MDP (psf)
			Type	Fasten	Attach		
ULTRAPLY TPO SYSTEMS							
W-1.	Min. 19/32-inch plywood or wood plank; 24" span; 8d nails 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1.78 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, WBBA-S, WBBA-P	-45.0
W-2.	Min. 19/32-inch plywood or wood plank; 24" span; 0.113" x 2-3/8" ring shank nails 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 1-inch RESISTA	See Note 2	1 per 1.6 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0
W-3.	Min. 19/32-inch plywood or wood plank; 24" span; 8d nails 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board, Dens Deck or Dens Deck Prime	See Note 2	1 per 1.6 ft ²	UltraPly TPO / UP-BA, WBBA-S, WBBA-P	-45.0
W-4.	Min. 19/32-inch plywood or wood plank; 24" span; 8d nails 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board or Dens Deck Prime	See Note 2	1 per 1.6 ft ²	UltraPly TPO / LVOC-BA-1168	-45.0
W-5.	Min. 19/32-inch plywood or wood plank; 24" span; 0.113" x 2-3/8" ring shank nails 6" o.c.	(Optional) One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-67.5

TABLE 1A-2: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER

System No.	Deck (See Note 1)	Insulation Layer	Attach		Roof Cover	MDP (psf)
			Fasten	Density / Pattern		
W-6.	Min. 19/32-inch plywood or wood plank; 24" span; 8d nails 6" o.c.	(Optional) One or more layers, any combination, preliminarily attached	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	Max. 6-inch o.c. in rows max. 72-inch o.c.	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-52.5
W-7.	Min. 19/32-inch plywood or wood plank; 24" span; 8d nails 6" o.c.	(Optional) One or more layers, any combination, preliminarily attached	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	12 parts per 4 x 8 ft board 1 per 2.67 ft ²	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-52.5
W-8.	Min. 19/32-inch plywood or wood plank; 24" span; #8 screws 6" o.c.	(Optional) One or more layers, any combination, preliminarily attached	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	Max. 6-inch o.c. in rows max. 60-inch o.c.	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-82.5

TABLE 1B: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER

SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasten	Attach	
W-9.	Min. 19/32-inch plywood or wood plank; 24" span; 8d nails 6" o.c.	Optional min. 1-inch ISO 95+ GL or RESISTA followed by min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board, min. 0.5-inch ISOGARD HD, min. 1-inch RESISTA or min. 1.5-inch ISOGARD HD Composite	Prelim. attached	UltraPly TPO (min. 60-mil)	Firestone HD Fasteners with Firestone HD Seam Plates	5-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
W-10.	Min. 19/32-inch plywood or wood plank; 24" span; 10d nails 4" o.c. at perimeter; 8d nails 6" o.c. in field	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners with Firestone HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90.5-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-60.0

TABLE 1C: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER

SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED ROOF COVER

System No.	Deck (See Note 1)	Roof Cover			MDP (psf)
		Membrane	Fasten	Attach	
W-11.	Min. 19/32-inch plywood or wood plank; 24" span; 8d nails 6" o.c.	UltraPly TPO	Firestone HD Fasteners with Firestone HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0

TABLE 2A-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY FASTENED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Fastener	Attach	Type	Attach		
ULTRAPLY TPO SYSTEMS								
SC-1.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Optional min. 1.5-inch ISO 95+ GL followed by min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-2.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch RESISTA	See Note 2	1 per 2.7 ft ²	Optional min. 1.5-inch RESISTA followed by min. 0.5-inch Tapered RESISTA	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*
SC-3.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 2-inch RESISTA	See Note 2	1 per 4 ft ²	Optional min. 1.5-inch RESISTA followed by min. 0.5-inch Tapered RESISTA	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*
SC-4.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 4 ft ²	Min. 1.5-inch ISOGARD HD Composite	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*
SC-5.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2.7 ft ²	Min. 1.5-inch ISOGARD HD Composite	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*
SC-6.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168 , LVOC-BA	-45.0*
SC-7.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168 , LVOC-BA	-45.0*
SC-8.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P-S	-45.0
SC-9.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack, I.S.O. Stick or 3M CR-20	UltraPly TPO / UP-BA	-45.0*
SC-10.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack, I.S.O. Stick or 3M CR-20	UltraPly TPO / LVOC-BA-1168	-45.0*
SC-11.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Optional min. 1.5-inch ISO 95+ GL or min. 0.5-inch Tapered ISO 95+ GL followed by min. 0.5-inch ISOGARD HD	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-12.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4 ft ²	Optional min. 1.5-inch RESISTA followed by min. 0.5-inch Tapered RESISTA	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*

TABLE 2A-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY FASTENED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Fastener	Attach	Type	Attach		
SC-13.	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2 ft ²	Min. 1.5-inch ISO 95+ GL followed by min. 0.5-inch FiberTop C or S	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*
SC-14.	Min. 22 ga., type B, Grade 33 steel or structural concrete	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2 ft ²	Min. 1.5-inch ISO 95+ GL followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P-S	-45.0*
SC-15.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 1.6 ft ²	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-60.0
SC-16.	Min. 22 ga., type B, 50 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c. or structural concrete	Min. 1.5-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.78 ft ²	Min. 1.5-inch ISOGARD HD Composite	I.S.O. Stick, 12-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-60.0
SC-17.	Min. 22 ga., type B, 50 ksi steel; 6' spans; 5/8" puddle welds 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1.78 ft ²	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-67.5
SC-18.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 1.5-inch ISO 95+ GL or RESISTA	See Note 2	1 per 1.6 ft ²	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-75.0
SC-19.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1.6 ft ²	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-82.5
SC-20.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-90.0
SC-21.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 1-inch ISO 95+ GL	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-105.0
SC-22.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-105.0
SC-23.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 1.5-inch ISO 95+ GL	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-105.0
SC-24.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 1.5-inch ISO 95+ GL followed by min. 0.5-inch ISOGARD HD or min. 19/32-inch plywood	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-105.0

TABLE 2A-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY FASTENED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Fastener	Attach	Type	Attach		
SC-25.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 1-inch ISO 95+ GL	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-112.5
SC-26.	Min. 22 ga., type B, Grade 33 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or strutural concrete	Min. 1.5-inch RESISTA	See Note 2	1 per 1 ft ²	Min. 1.5-inch RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-120.0
SC-27.	Min. 22 ga., type B, Grade 80 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or strutural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 1-inch ISO 95+ GL	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-127.5
SC-28.	Min. 22 ga., type B, Grade 80 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or strutural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-135.0
ULTRAPLY TPO XR SYSTEMS:								
SC-29.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum- Fiber Roof Board	See Note 2	1 per 2 ft ²	Min. 1.5-inch ISO 95+ GL followed by min. 0.5- inch FiberTop C or S or Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-45.0*
SC-30.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 2.25-inch ISO 95+ GL	See Note 2	1 per 4 ft ²	Min. 1.5-inch ISO 95+ GL	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-31.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 0.5-inch Dens Deck or SECUROCK Gypsum- Fiber Roof Board	See Note 2	1 per 2 ft ²	Min. 1.5-inch ISO 95+ GL followed by optional min. 0.5-inch FiberTop C or S wood fiber, Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board or min. 19/32-inch plywood	I.S.O. Spray S	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-32.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 0.5-inch Dens Deck or SECUROCK Gypsum- Fiber Roof Board	See Note 2	1 per 2 ft ²	Min. 1.5-inch ISO 95+ GL followed by min. 0.5- inch ISOGARD HD	I.S.O. Spray S	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-45.0*
SC-33.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Min. 1-inch ISO 95+ GL followed by min. 0.5- inch FiberTop C or S wood fiber or Min. 0.25- inch Dens Deck Prime or SECUROCK Gypsum- Fiber Roof Board	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-34.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	Optional min. 1-inch ISO 95+ GL followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-35.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutural concrete	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 1.6 ft ²	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack, 6-inch o.c.	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 6-inch o.c.	-60.0

TABLE 2A-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-1: MECHANICALLY FASTENED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer			Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Fastener	Attach	Type	Attach		
SC-36.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1.6 ft ²	Min. 1-inch ISO 95+ GL	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack, 6-inch o.c.	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 6-inch o.c.	-82.5
SC-37.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1.6 ft ²	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack, 6-inch o.c.	UltraPly TPO XR / I.S.O. Spray S; XR Stick, 6-inch o.c.	-82.5
SC-38.	Min. 22 ga., type B, Grade 33 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or structural concrete	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-127.5

TABLE 2A-2: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE B-2: MECHANICALLY FASTENED BASE INSULATION, BONDED TEMP ROOF, BONDED TOP INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer			Temp Roof	Insulation		Roof Cover / Adhesive	MDP (psf)
		Type	Fasten	Attach		Type	Attach		
ULTRAPLY TPO SYSTEMS									
SC-39.	Min. 22 ga., type B, Grade 33 steel or struct. conc.	Min. 0.75-inch FM Approved perlite	See Note 2	1 per 2 ft ²	Two plies Firestone Type IV or Type VI in hot asphalt	Min. 1.5-inch ISO 95+ GL followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot asphalt or I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-40.	Min. 22 ga., type B, Grade 33 steel or struct. conc.	Min. 0.25-inch Dens Deck or min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4 ft ²	V-Force SB Primer; V-Force Vapor Barrier Membrane, self-adhered	One or more layers min. 1.5-inch ISO 95+ GL, optional min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-41.	Min. 22 ga., type B, Grade 33 steel or struct. conc.	Min. 0.25-inch Dens Deck or min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4 ft ²	V-Force SB Primer; V-Force Vapor Barrier Membrane, self-adhered	One or more layers min. 1.5-inch ISO 95+ GL, optional min. 0.5-inch Tapered ISO 95+ GL; Min. 0.5-inch FiberTop C or S or ISOGARD HD or Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board; or Min. 19/32-inch plywood	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-42.	Min. 22 ga., type B, Grade 33 steel or struct. conc.	Min. 0.25-inch Dens Deck or min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4 ft ²	V-Force SB Primer; V-Force Vapor Barrier Membrane, self-adhered	One or more layers min. 1.5-inch ISO 95+ GL, optional min. 0.5-inch Tapered ISO 95+ GL; Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA, WBBA-S, WBBA-P	-45.0*
ULTRAPLY TPO XR SYSTEMS									
SC-43.	Min. 22 ga., type B, Grade 33 steel or struct. conc.	Min. 0.25-inch Dens Deck or min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 4 ft ²	V-Force SB Primer; V-Force Vapor Barrier Membrane, self-adhered	One or more layers min. 1.5-inch ISO 95+ GL, optional min. 0.5-inch Tapered ISO 95+ GL; Min. 0.5-inch FiberTop C or S or Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / XR-BA	-45.0*

TABLE 2B-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive	MDP (psf)
			Type	Fasten	Attach		
ULTRAPLY TPO SYSTEMS							
SC-44.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 4 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*
SC-45.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.25-inch ISO 95+ GL	See Note 2	1 per 2.67 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-46.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0*
SC-47.	Min. 22 ga., type B, 50 ksi steel; 6' spans; 5/8" puddle welds 6" o.c. or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 2.67 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0
SC-48.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 2.67 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0
SC-49.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch RESISTA	See Note 2	1 per 2.67 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-50.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1-inch RESISTA	See Note 2	1 per 2 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-51.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISOGARD HD Composite	See Note 2	1 per 4 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-52.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISOGARD HD Composite	See Note 2	1 per 1.33 ft ²	UltraPly TPO / WBBA-S, WBBA-P	-45.0
SC-53.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch ISOGARD HD	See Note 2	1 per 2.67 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-45.0*
SC-54.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch ISOGARD HD	See Note 2	1 per 1.33 ft ²	UltraPly TPO / WBBA-S, WBBA-P	-45.0
SC-55.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	(Optional for Recover) Min. 0.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch Dens Deck Prime	See Note 2	1 per 2.67 ft ²	UltraPly TPO / UP-BA, LVOC-BA, WBBA-S	-45.0*
SC-56.	Min. 22 ga., type B, Grade 33 steel or strutural concrete	One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-45.0*
SC-57.	Min. 22 ga., type B, 50 ksi steel; 6' spans; 5/8" puddle welds 6" o.c. or strutural concrete	One or more layers, any combination, loose laid	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-45.0

TABLE 2B-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive	MDP (psf)
			Type	Fasten	Attach		
SC-58.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 19/32-inch plywood	Firestone HD HailGard Fastener	1 per 2.67 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-45.0
SC-59.	Min. 22 ga., type B, 50 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c. or strutral concrete	(Optional) One or more layers, any combination, loose laid	Min. 1-inch RESISTA	See Note 2	1 per 1.6 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-52.5
SC-60.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 19/32-inch plywood	Firestone HD HailGard Fastener	1 per 1.6 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-52.5
SC-61.	Min. 22 ga., type B, Grade 33 steel; 6' spans; 5/8" puddle weld 6" o.c. or strutral concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 1.78 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-60.0
SC-62.	Min. 22 ga., type B, 50 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c. or strutral concrete	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-60.0
SC-63.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutral concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch ISOGARD HD	See Note 2	1 per 1.33 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-60.0
SC-64.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutral concrete	(Optional) One or more layers, any combination, loose laid	Min. 1-inch ISOGARD HD Composite	See Note 2	1 per 1.33 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-60.0
SC-65.	Min. 22 ga., type B, Grade 33; 6' spans; Traxx/5 screw 6" o.c. steel or strutral concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.33 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-75.0
SC-66.	Min. 22 ga., type B, Grade 33; 6' spans; Traxx/5 screw 6" o.c. steel or strutral concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 19/32-inch plywood	Firestone Insulation Fastening Plates Firestone HD Fasteners or Firestone Concrete Drive (concrete only)	1 per 2 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-75.0
SC-67.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutral concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1.6 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-75.0
SC-68.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutral concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch RESISTA	See Note 2	1 per 1.6 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-75.0
SC-69.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or strutral concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch RESISTA	See Note 2	1 per 1 ft ²	UltraPly TPO / WBBA-S, WBBA-P	-75.0

TABLE 2B-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive	MDP (psf)
			Type	Fasten	Attach		
SC-70.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch RESISTA	See Note 2	1 per 1.6 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-82.5
SC-71.	Min. 22 ga., type B, 60 ksi steel; 6' spans; 5/8" puddle welds 6" o.c. or structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1.78 ft ²	UltraPly TPO / UP-BA	-82.5
SC-72.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 1.33 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-90.0
SC-73.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch RESISTA	See Note 2	1 per 1.33 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-105.0
SC-74.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-105.0
SC-75.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	UltraPly TPO / UP-BA	-112.5
SC-76.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch RESISTA	See Note 2	1 per 1 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-112.5
SC-77.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISOGARD HD Composite	See Note 2	1 per 1.33 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-112.5
SC-78.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 1 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-112.5
SC-79.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISOGARD HD Composite	See Note 2	1 per 1.33 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-120.0
SC-80.	Min. 22 ga., type B, Grade 80 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	UltraPly TPO / UP-BA	-150.0
SC-81.	Min. 22 ga., type B, Grade 80 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch RESISTA	See Note 2	1 per 1 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-150.0

TABLE 2B-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover / Adhesive	MDP (psf)
			Type	Fasten	Attach		
SC-82.	Min. 22 ga., type B, Grade 33 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or structural concrete	Min. 1.5-inch thick, one or more layers, any combination, loose laid	Min. 19/32-inch plywood	Firestone Insulation Fastening Plates Firestone HD Fasteners or Firestone Concrete Drive (concrete only)	1 per 1 ft ²	UltraPly TPO / UP-BA, LVOC-BA-1168	-150.0
ULTRAPLY TPO XR SYSTEMS							
SC-83.	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, any combination, loose laid	Min. 0.25-inch Dens Deck Prime or min. 0.5-inch SECUROCK Gypsum-Fiber Roof Board	See Note 2	1 per 2.67 ft ²	UltraPly TPO XR / XR-BA	-45.0*
SC-84.	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch FiberTop C or S wood fiber	See Note 2	1 per 2 ft ²	UltraPly TPO XR / XR-BA	-45.0*
SC-85.	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 1.5-inch ISO 95+ GL	See Note 2	1 per 2 ft ²	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-86.	Min. 22 ga., type B, Grade 33 steel or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2.25-inch ISO 95+ GL	See Note 2	1 per 4 ft ²	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-87.	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, any combination, loose laid	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board or min. 19/32-inch plywood	See Note 2	1 per 2 ft ²	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-88.	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, any combination, loose laid (optional for recover)	Min. 0.5-inch ISOGARD HD	See Note 2	1 per 2.1 ft ²	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
SC-89.	Min. 22 ga., type B, Grade 33 steel or structural concrete	One or more layers, any combination, loose laid	Min. 0.5-inch ISOGARD HD	See Note 2	1 per 2 ft ²	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-45.0*
SC-90.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1.6 ft ²	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 6-inch o.c.	-82.5
SC-91.	Min. 22 ga., type B, Grade 33 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or structural concrete	(Optional) One or more layers, any combination, loose laid	Min. 2-inch ISO 95+ GL	See Note 2	1 per 1 ft ²	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-142.5

TABLE 2B-2: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER

System No.	Deck (See Note 1)	Vapor & Air Barrier	Insulation	Attach		Roof Cover	MDP (psf)
				Fasten	Density / Pattern		
SC-92.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or min. 2,500 psi concrete	(Optional) See Note 19	One or more layers, any combination, preliminarily attached	Firestone Heavy Duty Fasteners or Firestone Concrete Drive (concrete only) and UltraPly TPO InvisiWeld Plates	Max. 12-inch o.c. in rows max. 60-inch o.c.	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-45.0
SC-93.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or min. 2,500 psi concrete	(Optional) See Note 19	One or more layers, any combination, preliminarily attached	Firestone Heavy Duty Fasteners or Firestone Concrete Drive (concrete only) and UltraPly TPO InvisiWeld Plates	Max. 6-inch o.c. in rows max. 60-inch o.c.	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-82.5
SC-94.	Min. 22 ga., type B, Grade 33 steel or min. 2,500 psi concrete	(Optional) See Note 19	One or more layers, any combination	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	1 per 5.33 ft ² (6 parts per 4x8 ft board) Per FM LPDS 1-29 / RAS 117	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-45.0*
SC-95.	Min. 22 ga., type B, 50 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c. or min. 2,500 psi concrete	V-Force with min. 3-inch side laps self-adhered to top flanges of steel deck	Min. 2.5-inch ISO 95+ GL, RESISTA or ISOGARD HD Composite	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	1 per 4 ft ² (8 parts per 4x8 ft board) in a 24 x 24-inch grid	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-52.5
SC-96.	Min. 22 ga., type B, 50 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c. or min. 2,500 psi concrete	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board followed by V-Force with min. 3-inch side laps self-adhered	Min. 2.5-inch ISO 95+ GL, RESISTA or ISOGARD HD Composite	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	1 per 4 ft ² (8 parts per 4x8 ft board) in a 24 x 24-inch grid	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-52.5
SC-97.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or min. 2,500 psi concrete	(Optional) See Note 19	One or more layers, any combination	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	1 per 4 ft ² (8 parts per 4x8 ft board) Per FM LPDS 1-29 / RAS 117	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-60.0
SC-98.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or min. 2,500 psi concrete	(Optional) See Note 19	One or more layers, any combination	Firestone Heavy Duty Fasteners with alternating Rows of: 1.) Firestone UltraPly TPO InvisiWeld Plates 2.) Firestone Insulation Fastening Plates	1 per 2 ft ² (16 parts per 4x8 ft board) in a 12 x 24-inch grid	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-67.5

TABLE 2B-2: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER

System No.	Deck (See Note 1)	Vapor & Air Barrier	Insulation	Attach		Roof Cover	MDP (psf)
				Fasten	Density / Pattern		
SC-99.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screws 6" o.c., or Min. 22 ga., type B, 60 ksi steel; 6' spans; 5/8" puddle welds 6" o.c. or min. 2,500 psi concrete	(Optional) See Note 19	One or more layers, any combination	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	1 per 2.7 ft ² (12 parts per 4x8 ft board) Per FM LPDS 1-29 / RAS 117	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-75.0
SC-100.	Min. 22 ga., type B, Grade 33 steel; 6' spans; two (2) Traxx/5 screws 6" o.c. or min. 2,500 psi concrete	(Optional) See Note 19	One or more layers, any combination	Firestone Heavy Duty Fasteners and UltraPly TPO InvisiWeld Plates	1 per 2 ft ² (16 parts per 4x8 ft board) Per FM LPDS 1-29 / RAS 117	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-105.0

TABLE 2C-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)

System No.	Deck (See Note 1)	Vapor & Air Barrier	Insulation		Roof Cover			MDP (psf)
			Type	Attach	Membrane	Fasten	Attach	
SC-101.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates or UltraPly TPO Barbed Seam Plates	12-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
SC-102.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO or TPO XR	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone HD Plus Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
SC-103.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone HD Plus Seam Plates or UltraPly TPO Wide Weld Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-45.0
SC-104.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
SC-105.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or Min. 22 ga., type B, 60 ksi steel; 6' spans; 5/8" puddle welds 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone HD Plus Seam Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
SC-106.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates or UltraPly TPO Wide Weld Seam Plates	12-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-45.0
SC-107.	Min. 22 ga., type B, 60 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c.	V-Force with min. 3-inch side laps self-adhered to top flanges of steel deck	Min. 0.5-inch ISO 95+ GL, RESISTA or ISOGARD HD	See Note 2 (HD only) 1 per 8 ft ² 24x72-inch grid	UltraPly TPO	Firestone HD Fasteners with Firestone HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
SC-108.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates or UltraPly TPO Barbed Seam Plates	6-inch o.c. within 6-inch wide laps spaced 72-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5
SC-109.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO or TPO XR	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5
SC-110.	Min. 22 ga., type B, 50 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c.	Min. 0.25-inch SECUROCK Gypsum-Fiber Roof Board followed by V-Force with min. 3-inch side laps self-adhered	Min. 3-inch ISO 95+ GL or RESISTA	See Note 2 (HD only) 1 per 4 ft ² 24x24-inch grid	UltraPly TPO	Firestone HD Fasteners with Firestone HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5

TABLE 2C-1: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER (STRESS PLATES)

System No.	Deck (See Note 1)	Vapor & Air Barrier	Insulation		Roof Cover			MDP (psf)
			Type	Attach	Membrane	Fasten	Attach	
SC-111.	Min. 22 ga., type B, 60 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c.	V-Force with min. 3-inch side laps self-adhered to top flanges of steel deck	Min. 0.5-inch ISO 95+ GL , RESISTA or ISO GARD HD	See Note 2 (HD only) 1 per 5.3 ft ² 24x36-inch grid, 12-inch from board edges	UltraPly TPO	Firestone HD Fasteners with Firestone HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5
SC-112.	Min. 22 ga., type B, Grade 80 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Loose Laid	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-52.5
SC-113.	Min. 22 ga., type B, 50 ksi steel; 6' spans; 5/8" puddle welds 6" o.c.	(Optional) See Note 19	Min. 0.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners with Firestone HD Seam Plates	6-inch o.c. within 7-inch wide laps spaced 89-inch o.c. Laps sealed with 1.5-inch heat weld.	-60.0
SC-114.	Min. 22 ga., type B, Grade 33 steel; 6' spans; 5/8" puddle weld 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO (min. 60-mil)	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-60.0
SC-115.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone HD Plus Seam Plates	6-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-60.0
SC-116.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or Min. 22 ga., type B, 60 ksi steel; 6' spans; 5/8" puddle welds 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO or TPO XR	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone HD Plus Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-67.5
SC-117.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone HD Plus Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-82.5
SC-118.	Min. 22 ga., type B, 60 ksi steel; 6' spans; #12-24 x 1-1/4" HWH screw 6" o.c.	Two (2) layers, V-Force with min. 3-inch side laps self-adhered	Min. 3-inch ISO 95+ GL , RESISTA or ISO GARD HD Composite	See Note 2 (HD only) 1 per 5.3 ft ² 24x36-inch grid, 12-inch from board edges	UltraPly TPO	Firestone HD Fasteners with Firestone HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 1.5-inch heat weld.	-82.5
SC-119.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	(Optional) See Note 19	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone HD Plus Seam Plates	6-inch o.c. within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates plates.	-90.0

TABLE 2C-2: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasten	Attach	
SC-120.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone Polymer Batten Strip	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-45.0
SC-121.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone Coiled Metal Batten Strip	Fasteners 12-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-45.0
SC-122.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	UltraPly QuickSeam R.M.A. Strips with Firestone HD Fasteners with Firestone Coiled Metal Batten Strip	UltraPly QuickSeam R.M.A. Strips are applied over the insulation spaced 120-inch o.c. The batten is centered over each strip and fastened 6-inch o.c. Roof cover adhered to each strip by first priming with UltraPly TPO QuickPrime at the strip location, then rolling into place with a hand roller.	-45.0
SC-123.	Min. 22 ga., type B, Grade 80 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Loose Laid	UltraPly TPO	Firestone HD Fasteners with Firestone Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-52.5
SC-124.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone Batten Strip or Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten in field of the roof spaced 144-inch o.c. Battens sealed with 5-inch wide cover strip, with 1.5-inch heat weld on each side of the strip or by applying Firestone TPO QuickSeam Flashing atop batten.	-60.0
SC-125.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone Polymer Batten Strips	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-60.0
SC-126.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) with Firestone Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-60.0
SC-127.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone Coiled Metal Batten Strip or Firestone Polymer Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-67.5
SC-128.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) with Firestone Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-67.5
SC-129.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone Batten Strip or Coiled Metal Batten Strip or Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone Polymer Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-75.0

TABLE 2C-2: STEEL OR CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER (BATTENS)

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasten	Attach	
SC-130.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone Batten Strip or Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-82.5
SC-131.	Min. 22 ga., type B, Grade 80 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 1.5-inch thick, one or more layers, any combination	Loose Laid	UltraPly TPO	Firestone HD Plus Fasteners (steel only) with Firestone ¾" Polymer Batten Strips	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 68-inch o.c. Laps sealed with 5-inch heat weld that encapsulates battens.	-82.5
SC-132.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Fasteners with Firestone Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-90.0
SC-133.	Min. 22 ga., type B, Grade 80 steel or min. 20 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone Batten Strip or Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 90-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-97.5
SC-134.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c. or struct. conc.	Min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) or Firestone Concrete Drive (concrete only) with Firestone Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 54-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-112.5
SC-135.	Min. 22 ga., type B, Grade 33 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 0.5-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board loose laid over min. 1.5-inch thick, one or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone HD Plus Fasteners (steel only) with Firestone Coiled Metal Batten Strip	Fasteners 6-inch o.c. through batten within 6-inch wide laps spaced 54-inch o.c. Laps sealed with 5-inch heat weld that encapsulates batten.	-112.5
SC-136.	Min. 22 ga., type B, Grade 80 steel; 6' spans; Traxx/5 screw 6" o.c.	Min. 1.5-inch thick, one or more layers, any combination	Loose Laid	UltraPly TPO	Firestone HD Plus Fasteners (steel only) with Firestone ¾" Polymer Batten Strips	Lap Row: Fasteners 6-inch o.c. through battens within 6-inch wide laps spaced 142-inch o.c. Laps sealed with 5-inch heat weld that encapsulates the batten. Field Row: Fasteners 6-inch o.c. through battens in one intermediate row between laps. Batten strips covered with 5-inch wide UltraPly TPO strips sealed on both sides with 1.5-inch heat weld.	-135.0

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
ULTRAPLY TPO SYSTEMS								
C-1	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Hot Asphalt	Min. 0.5-inch Firestone FiberTop	Hot Asphalt	UltraPly TPO / UP-BA, LVOC-BA-1168	-135.0*
C-2	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL or RESISTA	Hot Asphalt	(Optional) Tapered ISO 95+ GL	Hot asphalt	UltraPly TPO / UP-BA, LVOC-BA-1168	-180.0*
C-3	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Hot Asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	UltraPly TPO / UP-BA	-195.0*
C-4	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Hot Asphalt	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	UltraPly TPO / LVOC-BA-1168	-195.0*
C-5	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layers of base insulation	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-165.0*
C-6	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack, 8-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Twin Pack, 8-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168	-240.0*
C-7	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack, 4-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168	-285.0*
C-8	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Twin Pack	(Optional) Additional layers of base insulation	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-165.0*
C-9	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Twin Pack, 8-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Twin Pack, 8-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-240.0*
C-10	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Twin Pack, 6-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Twin Pack, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
C-11	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Twin Pack, 6-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Twin Pack, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-360.0*
C-12	Min. 2,500 psi concrete	None	Min. 1-inch RESISTA	I.S.O. Twin Pack	Min. 1-inch RESISTA	I.S.O. Twin Pack	UltraPly TPO / LVOC-BA-1168	-450.0*
C-13	Min. 2,500 psi concrete	None	Min. two layers min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.5-inch FiberTop C or S	I.S.O. Twin Pack	UltraPly TPO / LVOC-BA-1168	-210.0*
C-14	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168	-127.5*
C-15	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA	-157.5*

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
C-16	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack, 8-inch o.c.	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack, 8-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168	-187.5*
C-17	Min. 2,500 psi concrete	None	Two layers min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack, 8-inch o.c.	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack, 8-inch o.c.	UltraPly TPO / UP-BA	-195.0*
C-18	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 1-inch ISO 95+ GL or 0.5-inch Tapered ISO 95+GL; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / WBBA-S	-240.0*
C-19	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack, 4-inch o.c.	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack, 4-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168	-247.5*
C-20	Min. 2,500 psi concrete	None	Min. two layers min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / LVOC-BA-1168	-262.5*
C-21	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-222.5*
C-22	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168	-247.5*
C-23	Min. 2,500 psi concrete	None	Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	None	N/A	UltraPly TPO / UP-BA, LVOC-BA-1168, WBBA-S, WBBA-P	-300.0*
C-24	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Additional layers base insulation	3M CR-20	UltraPly TPO / UP-BA, LVOC-BA-1168	-270.0*
C-25	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-195.0*
C-26	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA, LVOC-BA-1168	-240.0*
C-27	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168	-150.0*
C-28	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-150.0*
C-29	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Stick, 6-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Stick, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
C-30	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / UP-BA	-270.0*
C-31	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Stick, 6-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Stick, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-360.0*
C-32	Min. 2,500 psi concrete	None	Min. 1-inch RESISTA	I.S.O. Stick	Min. 1-inch RESISTA	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-450.0*

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
C-33	Min. 2,500 psi concrete	None	Min. two layers min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 0.5-inch FiberTop C or S	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-210.0*
C-34	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA	-150.0*
C-35	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-150.0*
C-36	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 1-inch ISO 95+ GL or 0.5-inch Tapered ISO 95+GL; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / WBBA-S	-240.0*
C-37	Min. 2,500 psi concrete	None	Min. two layers min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-262.5*
C-38	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
C-39	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168	-300.0*
C-40	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Stick, 6-inch o.c.	Min. 0.5-inch ISOGARD HD	I.S.O. Stick, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-360.0*
C-41	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 19/32-inch plywood	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-247.5*
C-42	Min. 2,500 psi concrete	None	Min. 0.5-inch ISOGARD HD	I.S.O. Stick	None	N/A	UltraPly TPO / UP-BA, LVOC-BA-1168, WBBA-S, WBBA-P	-405.0 *
C-43	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. FIX II, 6-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. FIX II, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
C-44	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. FIX II, 6-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. FIX II, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-360.0*
C-45	Min. 2,500 psi concrete	None	Min. 1-inch RESISTA	I.S.O. FIX II	Min. 1-inch RESISTA	I.S.O. FIX II	UltraPly TPO / LVOC-BA-1168	-450.0*
C-46	Min. 2,500 psi concrete	None	Min. two layers min. 1.5-inch ISO 95+ GL	I.S.O. FIX II	Min. 0.5-inch FiberTop C or S	I.S.O. FIX II	UltraPly TPO / LVOC-BA-1168	-210.0*
C-47	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. FIX II	Optional additional layers of base insulation or min. 1-inch ISO 95+ GL or 0.5-inch Tapered ISO 95+GL; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO / WBBA-S	-240.0*
C-48	Min. 2,500 psi concrete	None	Min. two layers min. 1.5-inch ISO 95+ GL	I.S.O. FIX II	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO / LVOC-BA-1168	-262.5*

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
C-49	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	I.S.O. FIX II	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
C-50	Min. 2,500 psi concrete	None	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II, 4-inch o.c.	None	N/A	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
C-51	Min. 2,500 psi concrete	None	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II, 4-inch o.c.	None	N/A	UltraPly TPO / UP-BA, LVOC-BA-1168	-247.5*
C-52	Min. 2,500 psi concrete	None	One or more layers, min. 1.5-inch ISO 95+ GL	I.S.O. FIX II	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO / UP-BA, LVOC-BA-1168	-300.0*
C-53	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. FIX II, 6-inch o.c.	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-360.0*
C-54	Min. 2,500 psi concrete	None	Min. 0.5-inch ISOGARD HD	I.S.O. FIX II, 4-inch o.c.	None	N/A	UltraPly TPO / LVOC-BA	-360.0*
C-55	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL	I.S.O. Spray S	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
C-56	Min. 2,500 psi concrete	None	Min. 1-inch RESISTA	I.S.O. Spray S	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered RESISTA	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
C-57	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-277.5*
C-58	Min. 2,500 psi concrete	None	Min. 1.5-inch RESISTA	I.S.O. Spray S, 6-inch o.c.	(Optional) Additional layers of base insulation	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-360.0*
C-59	Min. 2,500 psi concrete	None	Min. 1-inch RESISTA	I.S.O. Spray S	Min. 1-inch RESISTA	I.S.O. Spray S	UltraPly TPO / LVOC-BA-1168	-450.0*
C-60	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
C-61	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-277.5*
C-62	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA	-60.0*
C-63	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
C-64	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO / LVOC-BA-1168	-262.5*

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
C-65	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
C-66	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	I.S.O. Spray S	Optional additional layers of base insulation or min. 1-inch ISO 95+ GL or 0.5-inch Tapered ISO 95+GL; Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO / WBBA-S	-240.0*
C-67	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA	-247.5*
C-68	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO / LVOC-BA-1168	-262.5*
C-69	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 19/32-inch plywood	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-247.5*
ULTRAPLY TPO XR SYSTEMS IN XR BONDING ADHESIVE								
C-70	Min. 2,500 psi concrete	ASTM D41	Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	Hot Asphalt	None	N/A	UltraPly TPO XR / XR-BA	-232.5*
C-71	Min. 2,500 psi concrete	ASTM D41	One or two layers min. 1.5-inch ISO 95+ GL	Hot Asphalt	Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	Hot Asphalt	UltraPly TPO XR / XR-BA	-300.0*
C-72	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / XR-BA	-112.5*
C-73	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / XR-BA	-390.0*
C-74	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-300.0*
C-75	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / XR-BA	-187.5*

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
C-76	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO XR / XR-BA	-277.5*
C-77	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO XR / XR-BA	-45.0*
ULTRAPLY TPO XR SYSTEMS IN HOT ASPHALT								
C-78	Min. 2,500 psi concrete	(Optional) ASTM D41	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	None	N/A	UltraPly TPO XR / Hot Asphalt	-232.5*
C-79	Min. 2,500 psi concrete	(Optional) ASTM D41	Min. 1.5-inch ISO 95+ GL	Hot asphalt	(Optional) Additional layers of base insulation	Hot asphalt	UltraPly TPO XR / Hot Asphalt	-300.0*
C-80	Min. 2,500 psi concrete	ASTM D41	Min. 1.5-inch ISO 95+ GL	Hot Asphalt	None	N/A	UltraPly TPO XR / Hot Asphalt	-382.5*
C-81	Min. 2,500 psi concrete	None	Min. 1.5-inch ISO 95+ GL	Hot Asphalt	None	N/A	UltraPly TPO XR / Hot Asphalt	-487.5*
C-82	Min. 2,500 psi concrete	(Optional) ASTM D41	Min. 1.5-inch ISO 95+ GL	Hot Asphalt	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	UltraPly TPO XR / Hot Asphalt	-457.5*
C-83	Min. 2,500 psi concrete	(Optional) ASTM D41	Two layers min. 1.5-inch ISO 95+ GL	Hot Asphalt	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	UltraPly TPO XR / Hot Asphalt	-300.0*
C-84	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / Hot Asphalt	-390.0*
C-85	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / Hot Asphalt	-187.5*
ULTRAPLY TPO XR SYSTEMS IN I.S.O. SPRAY S OR XR STICK:								
C-86	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
C-87	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-88	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*

TABLE 3A-1: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
			Type	Attach	Type	Attach		
C-89	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*
C-90	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-91	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-92	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-60.0*
C-93	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-94	Min. 2,500 psi concrete	None	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack; I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. Twin Pack; I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-95	Min. 2,500 psi concrete	None	Min. 1-inch Insulfoam EPS (2 pcf)	I.S.O. Spray S	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-112.5*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF) SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER									
Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
ULTRAPLY TPO SYSTEMS:									
C-96	Min. 2,500 psi concrete	ASTM D41	MB Base M, adhered in I.S.O. Twin Pack	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA	-232.5*
C-97	Min. 2,500 psi concrete	ASTM D41	MB Base M, adhered in I.S.O. Twin Pack	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / LVOC-BA-1168	-232.5*
C-98	Min. 2,500 psi concrete	ASTM D41	SBS Poly Torch or SBS Glass Torch Base, torch applied	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA	-232.5*
C-99	Min. 2,500 psi concrete	ASTM D41	SBS Poly Torch or SBS Glass Torch Base, torch applied	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / LVOC-BA-1168	-232.5*
C-100	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL	I.S.O. Spray S, 6-inch o.c.	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
C-101	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch RESISTA	I.S.O. Spray S, 6-inch o.c.	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered RESISTA	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
C-102	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-255.0*
C-103	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
C-104	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-255.0*
C-105	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA	-60.0*
C-106	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
C-107	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / LVOC-BA-1168	-255.0*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
C-108	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA- P	-135.0*
C-109	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA	-247.5*
C-110	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / LVOC-BA-1168	-255.0*
C-111	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 19/32-inch plywood	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA, WBBA-S, WBBA-P	-247.5*
C-112	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layers of base insulation	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA- P	-45.0*
C-113	Min. 2,500 psi concrete	V-Force WB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layers of base insulation	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA	-97.5
C-114	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	None	N/A	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA	-277.5*
C-115	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA- P	-45.0*
C-116	Min. 2,500 psi concrete	V-Force WB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA	-57.5
C-117	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA	-262.5*
C-118	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	None	N/A	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA	-277.5*
C-119	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA- P	-135.0*
C-120	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA	-262.5*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
C-121	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.5-inch FiberTop C or S	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA	-60.0*
C-122	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.5-inch FiberTop C or S	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA- P	-135.0*
C-123	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.5-inch FiberTop C or S	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-262.5*
C-124	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.25-inch Dens Deck Prime or SECURock Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA- P	-135.0*
C-125	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.25-inch Dens Deck Prime or SECURock Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA	-247.5*
C-126	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 0.25-inch Dens Deck Prime or SECURock Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-262.5*
C-127	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL; Min. 19/32-inch plywood	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA- 1168, LVOC-BA, WBBA-S, WBBA-P	-247.5*
ULTRAPLY TPO XR SYSTEMS:									
C-128	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURock Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / Hot Asphalt	-202.5*
C-129	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURock Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / Hot Asphalt	-60.0*
C-130	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURock Gypsum-Fiber Roof Board	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / Hot Asphalt	-247.5*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
C-131	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO XR / Hot Asphalt	-210.0*
C-132	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-112.5*
C-133	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-202.5*
C-134	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-202.5*
C-135	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Stick	UltraPly TPO XR / XR-BA	-60.0*
C-136	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / XR-BA	-112.5*
C-137	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / XR-BA	-60.0*
C-138	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / XR-BA	-247.5*
C-139	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / XR-BA	-60.0*
C-140	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / XR-BA	-247.5*
C-141	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. FIX II	UltraPly TPO XR / XR-BA	-112.5*
C-142	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO XR / XR-BA	-210.0*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
C-143	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO XR / XR-BA	-210.0*
C-144	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO XR / XR-BA	-45.0*
C-145	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO XR / XR-BA	-255.0*
C-146	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	None	N/A	UltraPly TPO XR / XR-BA	-112.5*
C-147	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL; Min. 0.5-inch FiberTop C or S	I.S.O. Stick	UltraPly TPO XR / XR-BA	-45.0*
C-148	Min. 2,500 psi concrete	V-Force SB Primer	V-Force Vapor Barrier Membrane	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / XR-BA	-262.5*
C-149	Min. 2,500 psi concrete	ASTM D41	Firestone APP 80 Glass Base, torched	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-112.5*
C-150	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
C-151	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-152	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-153	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*
C-154	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
C-155	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-156	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-60.0*
C-157	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-158	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-159	Min. 2,500 psi concrete	ASTM D41	Firestone APP 80 Glass Base, torched	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
C-160	Min. 2,500 psi concrete	ASTM D41	Firestone APP 80 Glass Base, torched	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-161	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-60.0*
C-162	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
C-163	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-182.5*
C-164	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-165	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-60.0*
C-166	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
C-167	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-168	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-169	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-60.0*
C-170	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick, 6- inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick, 6- inch o.c.	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-171	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-172	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
C-173	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-174	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
C-175	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*
C-176	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-177	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*

TABLE 3A-2: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER

Sys. No.	Deck (See Note 1)	Primer	Vapor Barrier / Temporary Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
				Type	Attach	Type	Attach		
C-178	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-60.0*
C-179	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
C-180	Min. 2,500 psi concrete	ASTM D41	Asphaltic (See Note 19)	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. FIX II	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*

TABLE 3B: CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Note 1)	Primer	Roof Cover				MDP (psf)
			Base Ply	Application	Top Ply	Application	
C-181	Min. 2,500 psi concrete	None	None	N/A	UltraPly TPO XR	XR Stick, 12-inch o.c.	-97.5*
C-182	Min. 2,500 psi concrete	None	None	N/A	UltraPly TPO XR	XR-BA	-360.0*
C-183	Min. 2,500 psi concrete	None	None	N/A	UltraPly TPO XR	XR Stick, 6-inch o.c.	-150.0*
C-184	Min. 2,500 psi concrete	ASTM D41	None	N/A	UltraPly TPO XR	XR-BA	-180.0*
C-185	Min. 2,500 psi concrete	ASTM D41	One or two plies Firestone Type IV (4) M or Type VI (6) M or one ply of MB Base, SBS Base, SBS PolyBase or SBS Premium Base	Hot asphalt	UltraPly TPO XR	I.S.O. Spray S, 4-inch o.c.	-240.0*
C-186	Min. 2,500 psi concrete	ASTM D41	One or two plies Firestone Type IV (4) M or Type VI (6) M or one ply of MB Base, SBS Base, SBS PolyBase or SBS Premium Base	Hot asphalt	UltraPly TPO XR	XR Stick, 4-inch o.c.	-315.0*
C-187	Min. 2,500 psi concrete	None	None	N/A	UltraPly TPO XR	Hot asphalt	-487.5*
C-188	Min. 2,500 psi concrete	None	None	N/A	UltraPly TPO XR	I.S.O. Spray S, 4-inch o.c.	-472.5*
C-189	Min. 2,500 psi concrete	ASTM D41	None	N/A	UltraPly TPO XR	Hot asphalt	-495.0*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-1	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-217.5*
LWC-2	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-217.5*
LWC-3	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Twin Pack	Min. 2-inch ISOGARD HD Composite	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-217.5*
LWC-4	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-217.5*
LWC-5	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-217.5*
LWC-6	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-217.5*
LWC-7	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
LWC-8	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-217.5*
LWC-9	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Twin Pack	Min. 2-inch ISOGARD HD Composite	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-135.0*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-10	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
LWC-11	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURUCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
LWC-12	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-187.5*
LWC-13	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-187.5*
LWC-14	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC.	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / UP-BA	-225.0*
LWC-15	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Stick	Min. 2-inch ISOGARD HD Composite	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-187.5*
LWC-16	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-187.5*
LWC-17	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURUCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-187.5*
LWC-18	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore, Elastizell, Mearlcrete or Insulcel cellular LWIC.	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	Min. 0.25-inch Dens Deck Prime or SECURUCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA	-225.0*
LWC-19	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-187.5*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-20	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
LWC-21	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-187.5*
LWC-22	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Stick	Min. 2-inch ISOGARD HD Composite	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
LWC-23	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
LWC-24	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
LWC-25	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-112.5*
LWC-26	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-142.5*
LWC-27	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Twin Pack	Min. 2-inch ISOGARD HD Composite	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-217.5*
LWC-28	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-217.5*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-29	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-217.5*
LWC-30	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
LWC-31	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
LWC-32	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Twin Pack	Min. 2-inch ISOGARD HD Composite	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-33	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-34	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-35	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-36	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Twin Pack	Min. 2-inch ISOGARD HD Composite	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*
LWC-37	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-38	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-60.0*
LWC-39	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-40	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-41	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Twin Pack	Min. 2-inch ISOGARD HD Composite	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-42	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-43	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-44	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Stick	UltraPly TPO XR / XR-BA	-112.5*
LWC-45	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Stick	UltraPly TPO XR / XR-BA	-142.5*
LWC-46	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Stick	Min. 2-inch ISOGARD HD Composite	I.S.O. Stick	UltraPly TPO XR / XR-BA	-187.5*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-47	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / XR-BA	-187.5*
LWC-48	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURUCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / XR-BA	-187.5*
LWC-49	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
LWC-50	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-142.5*
LWC-51	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Stick	Min. 2-inch ISOGARD HD Composite	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-52	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-53	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURUCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-54	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 12-inch o.c.	-45.0*
LWC-55	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Stick	Min. 2-inch ISOGARD HD Composite	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-56	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-82.5*
LWC-57	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 6-inch o.c.	-60.0*
LWC-58	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch ISO 95+ GL	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-59	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1-inch RESISTA	I.S.O. Stick	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered RESISTA	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-60	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	(Optional) Min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Stick	Min. 2-inch ISOGARD HD Composite	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-61	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-62	Structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECURROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / I.S.O Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
LWC-63	Structural concrete	Min. 200 psi, min. 2-inch thick Elastizell cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Additional layers base insulation	3M CR-20	UltraPly TPO / UP-BA	-180.0*
LWC-64	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Additional layers base insulation	3M CR-20	UltraPly TPO / UP-BA	-222.5*
LWC-65	Structural concrete	Min. 200 psi, min. 2-inch thick Mearlcrete cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Additional layers base insulation	3M CR-20	UltraPly TPO / UP-BA	-240.0*
LWC-66	Structural concrete	Min. 200 psi, min. 2-inch thick Elastizell cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck or SECURROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-180.0*

TABLE 4A: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)		Base Insulation Layer		Coverboard		Roof Cover / Adhesive	MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach		
LWC-67	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore or Mearlcrete cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-195.0*
LWC-68	Structural concrete	Min. 200 psi, min. 2-inch thick Elastizell cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-180.0*
LWC-69	Structural concrete	Min. 200 psi, min. 2-inch thick Celcore cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-222.5*
LWC-70	Structural concrete	Min. 200 psi, min. 2-inch thick Mearlcrete cellular LWIC.	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-240.0*

TABLE 4B: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER
SYSTEM TYPE D-1: MECHANICALLY ATTACHED ROOF COVER (THROUGH LWC TO ENGAGE STRUCTURAL DECK)

System No.	Deck (See Note 1)		Insulation		Roof Cover			MDP (psf)
	Structural Deck	LWC (See Note 1)	Type	Attach	Membrane	Fasteners	Attachment	
LWC-71	Min. 22 ga., type BV (0.5%), 60 ksi steel; 5' spans, 5/8" puddle welds 6" o.c. or structural concrete	Min. 200 psi, min. 2-inch thick Elastizell	(Optional) One or more layers, any combination, min. 0.5-inch	Prelim. Attach	UltraPly TPO	Firestone HD Fasteners or Firestone Concrete Drive (concrete only) with Firestone HD Seam Plates	Fastened through to engage structural deck, 6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. and sealed with a 1.5-inch heat weld.	-45.0

TABLE 4C: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Note 1)		Roof Cover / Adhesive	MDP (psf)
	Structural Deck	LWC		
ULTRAPLY TPO SYSTEMS:				
LWC-72	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; Tek/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board.	UltraPly TPO / UP-BA	-67.5*
LWC-73	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft spans; Tek/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Firestone Insulation Fastening Plates with Firestone HD Fasteners at a density of 1 per 2 ft ² .	UltraPly TPO / UP-BA	-135.0*
LWC-74	Min. 2,500 psi structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	UltraPly TPO / UP-BA	-247.5*
ULTRAPLY TPO XR SYSTEMS:				
LWC-75	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; Tek/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Celcore cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board.	UltraPly TPO XR / XR-BA	-45.0*
LWC-76	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; 5/8" puddle welds with washer 6" o.c. or min. 2,500 psi structural concrete	Min. 200 psi, min. 2-inch thick Celcore cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Firestone Insulation Fastening Plates with Firestone HD Fasteners at a density of 1 per 2 ft ² .	UltraPly TPO XR / XR-BA	-90.0*
LWC-77	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; Tek/5 screws 6" o.c. or min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Approved cellular LWIC with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Firestone Insulation Fastening Plates with Firestone HD Fasteners at a density of 1 per 2 ft ² . <i>Note: To qualify the LWIC under this assembly, an ES Products FM-90 Fastener shall achieve a MCRF of 100 lbf when tested per TAS 105.</i>	UltraPly TPO XR / XR-BA	-75.0*
LWC-78	Min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Approved cellular LWIC. <i>Note: To qualify the LWIC under this assembly, an ES Products FM-90 Fastener shall achieve a MCRF of 95 lbf when tested per TAS 105.</i>	UltraPly TPO XR / XR-BA	-467.5*
LWC-79	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; 5/8" puddle welds with washers 6" o.c.	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	UltraPly TPO XR / XR-BA	-52.5*
LWC-80	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; Traxx/5 screws 6" o.c.	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	UltraPly TPO XR / XR-BA	-60.0*
LWC-81	Min. 22 ga., type B, Grade 33 vented steel deck at max. 5 ft spans; Traxx/5 screws 6" o.c.	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	UltraPly TPO XR / XR-BA	-82.5*
LWC-82	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; Tek/5 screws 6" o.c.	Min. 300 psi, min. 2-inch thick Elastizell Lightweight Insulating Concrete, with optional 1-inch thick, 1.0 pcf EPS holey board.	UltraPly TPO XR / XR-BA	-82.5*
LWC-83	Min. 22 ga., type B, Grade 33 vented steel deck at max. 4 ft spans; Traxx/5 screws 6" o.c.	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	UltraPly TPO XR / XR-BA	-90.0*

TABLE 4C: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Note 1)		Roof Cover / Adhesive	MDP (psf)
	Structural Deck	LWC		
LWC-84	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; Tek/5 screws 6" o.c.	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound. When walkable, LWC is mechanically attached with Firestone Insulation Fastening Plates with Firestone HD Fasteners at a density of 1 per 2 ft ² .	UltraPly TPO XR / XR-BA	-90.0*
LWC-85	Min. 2,500 psi structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	UltraPly TPO XR / XR-BA	-90.0*
LWC-86	Min. 22 ga., type B, Grade 33 vented steel deck at max. 6 ft spans; 5/8" puddle welds with washers 6" o.c.	Min. 250 psi, min. 2-inch thick Elastizell Range II Lightweight Insulating Concrete with optional 1-inch thick, 1.0 pcf EPS holey board. When walkable, LWC is mechanically attached with Firestone Insulation Fastening Plates with Firestone HD Fasteners at a density of 1 per 2 ft ² .	UltraPly TPO XR / XR-BA	-82.5*
LWC-87	Min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Elastizell Range II Lightweight Insulating Concrete with 1-inch thick, 1.0 pcf EPS holey board.	UltraPly TPO XR / XR-BA	-90.0*
LWC-88	Min. 2,500 psi structural concrete	Min. 250 psi, min. 2-inch thick Elastizell Range II Lightweight Insulating Concrete. No EPS holey board.	UltraPly TPO XR / XR-BA	-210.0*
LWC-89	Min. 2,500 psi structural concrete	Min. 350 psi, min. 2-inch thick Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture, with optional 1-inch thick, 1.0 pcf EPS holey board and surfacing of Celcore PVA Curing Compound.	UltraPly TPO XR / XR Stick; 4-inch o.c. (full coverage)	-75.0*

TABLE 5A: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Attach	Type	Attach		
CWF-1.	Tectum	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA	-45.0*
CWF-2.	Tectum	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-45.0*
CWF-3.	Tectum	Min. 1.5-inch ISO 95+ GL	I.S.O. Spray S, full coverage	(Optional) Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, full coverage	UltraPly TPO / UP-BA	-45.0*
CWF-4.	Tectum or Fibroplank	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-52.5*
CWF-5.	Tectum or Fibroplank	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / LVOC-BA-1168	-52.5*

TABLE 5B: CEMENTITIOUS WOOD FIBER DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)
SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Anchor Sheet			Base Insulation		Top Insulation		Roof Cover / Adhesive	MDP (psf)
		Type	Fasten	Attach	Type	Attach	Type	Attach		
CWF-6.	Tectum	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Locking Nail	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA	-45.0*
CWF-7.	Tectum	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Locking Nail	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-45.0*

TABLE 6A: GYPSUM DECKS - REROOF (TEAR-OFF)
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover / Adhesive	MDP (psf)
		Type	Attach	Type	Attach		
ULTRAPLY TPO SYSTEMS:							
G-1.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layers of base insulation	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168	-165.0*
G-2.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168	-127.5*
G-3.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA	-157.5*
G-4.	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / UP-BA	-230.0
G-5.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Additional layers base insulation	3M CR-20	UltraPly TPO / UP-BA, LVOC-BA-1168	-257.5*
G-6.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-195.0*
G-7.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA, LVOC-BA-1168	-240.0*
G-8.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA	-112.5*
G-9.	Existing poured gypsum or gypsum plank	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-112.5*
ULTRAPLY TPO XR SYSTEMS:							
G-10.	Existing poured gypsum or gypsum plank	(Optional) Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / XR Stick, 4-inch o.c. (full coverage)	-230.0

TABLE 6B: GYPSUM DECKS - NEW CONSTRUCTION OR REROOF (TEAR-OFF)

SYSTEM TYPE A-2: MECHANICALLY ATTACHED ANCHOR SHEET, BONDED INSULATION, BONDED ROOF COVER

System No.	Deck (See Note 1)	Anchor Sheet			Base Insulation		Top Insulation		Roof Cover / Adhesive	MDP (psf)
		Type	Fasten	Attach	Type	Attach	Type	Attach		
G-11.	Existing gypsum deck	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Locking Nail (MCRF \geq 105 lbf)	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA	-45.0*
G-12.	Existing gypsum deck	SBS Base, SBS Premium Base, MB Base or APP 160	Two Piece Locking Nail (MCRF \geq 105 lbf)	9-inch o.c. in the min. 2-inch lap and 18-inch o.c. in two, equally spaced center rows	Min. 1.5-inch ISO 95+ GL	I.S.O. Stick	(Optional) Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / LVOC-BA-1168	-45.0*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP (psf)
		Type	Attach	Type	Attach		
ULTRAPLY TPO SYSTEMS							
R-1	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Hot Asphalt	Min. 0.5-inch Firestone FiberTop	Hot Asphalt	UltraPly TPO / UP-BA, LVOC-BA-1168	-135.0*
R-2	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	Hot Asphalt	(Optional) Tapered ISO 95+ GL	Hot asphalt	UltraPly TPO / UP-BA, LVOC-BA-1168	-180.0*
R-3	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Hot Asphalt	Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	UltraPly TPO / UP-BA	-195.0*
R-4	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL with optional Tapered ISO 95+ GL	Hot Asphalt	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	UltraPly TPO / LVOC-BA-1168	-195.0*
R-5	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Min. 0.25-inch Dens Deck, Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA	-157.5*
R-6	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / LVOC-BA-1168	-157.5*
R-7	Existing asphaltic BUR or granule surface modified bitumen	(Optional) Min. 1.5-inch ISO 95+ GL	I.S.O. Twin Pack	Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168	-157.5*
R-8	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL	I.S.O. Twin Pack	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
R-9	Existing granule surface modified bitumen	Min. 1-inch RESISTA	I.S.O. Twin Pack	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered RESISTA	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
R-10	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-262.5*
R-11	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-12	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-262.5*
R-13	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / WBBA-S, WBBA-P	-135.0*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP (psf)
		Type	Attach	Type	Attach		
R-14	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA	-247.5*
R-15	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO / UP-BA, LVOC-BA-1168	-262.5*
R-16	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	3M CR-20	(Optional) Additional layers base insulation	3M CR-20	UltraPly TPO / UP-BA, LVOC-BA-1168	-262.5*
R-17	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA	-195.0*
R-18	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL	3M CR-20	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	3M CR-20	UltraPly TPO / UP-BA, LVOC-BA-1168	-240.0*
R-19	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL	I.S.O. FIX II	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. FIX II	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
R-20	Existing granule surface modified bitumen	Min. 1-inch RESISTA	I.S.O. FIX II	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered RESISTA	I.S.O. FIX II	UltraPly TPO / WBBA-S, WBBA-P	-195.0*
R-21	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. FIX II	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-195.0*
R-22	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-23	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. FIX II	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-195.0*
R-24	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-25	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-195.0*
R-26	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
R-27	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered RESISTA	I.S.O. Stick	UltraPly TPO / WBBA-S, WBBA-P	-60.0*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP (psf)
		Type	Attach	Type	Attach		
R-28	Existing asphaltic BUR	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-60.0*
R-29	Existing granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	(Optional) Additional layers of base insulation	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-120.0*
R-30	Existing asphaltic BUR or granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-60.0*
R-31	Existing asphaltic BUR	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-60.0*
R-32	Existing granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-120.0*
R-33	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL	I.S.O. Spray S, 6-inch o.c.	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
R-34	Existing asphaltic BUR	Min. 1-inch RESISTA	I.S.O. Spray S, 6-inch o.c.	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered RESISTA	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-247.5*
R-35	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL or Tapered RESISTA	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-255.0*
R-36	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-37	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-255.0*
R-38	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA	-60.0*
R-39	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-40	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / LVOC-BA-1168	-255.0*
R-41	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-42	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA	-247.5*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP (psf)
		Type	Attach	Type	Attach		
R-43	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / LVOC-BA-1168	-255.0*
R-44	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 19/32-inch plywood	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-247.5*
R-45	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL	I.S.O. Spray S	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-45.0*
R-46	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL	I.S.O. Spray S	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered ISO 95+ GL	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-202.5*
R-47	Existing granule surface modified bitumen	Min. 1-inch RESISTA	I.S.O. Spray S	(Optional) Additional layers of base insulation and/or min. 0.5-inch Tapered RESISTA	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-202.5*
R-48	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-49	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch ISOGARD HD	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-202.5*
R-50	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA	-60.0*
R-51	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-52	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO / LVOC-BA-1168	-202.5*
R-53	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO / WBBA-S, WBBA-P	-135.0*
R-54	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA	-202.5*
R-55	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 19/32-inch plywood	I.S.O. Spray S	UltraPly TPO / UP-BA, LVOC-BA-1168, LVOC-BA, WBBA-S, WBBA-P	-202.5*
ULTRAPLY TPO XR SYSTEMS							
R-56	Existing granule surface modified bitumen	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	None	N/A	UltraPly TPO XR / Hot Asphalt	-457.5*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP (psf)
		Type	Attach	Type	Attach		
R-57	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO XR / Hot Asphalt	-195.0*
R-58	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / Hot Asphalt	-262.5*
R-59	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / Hot Asphalt	-352.5*
R-60	Existing granule-surfaced, asphaltic modified bitumen	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	Hot Asphalt	None	N/A	UltraPly TPO XR / XR-BA	-300.0*
R-61	Existing granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-112.5*
R-62	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-262.5*
R-63	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Twin Pack	UltraPly TPO XR / XR-BA	-262.5*
R-64	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / XR-BA	-195.0*
R-65	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II	UltraPly TPO XR / XR-BA	-195.0*
R-66	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / XR-BA	-60.0*
R-67	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. Stick	UltraPly TPO XR / XR-BA	-352.5*
R-68	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Stick	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Stick	UltraPly TPO XR / XR-BA	-300.0*
R-69	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO XR / XR-BA	-45.0*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP (psf)
		Type	Attach	Type	Attach		
R-70	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S, 6-inch o.c.	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S, 6-inch o.c.	UltraPly TPO XR / XR-BA	-255.0*
R-71	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.5-inch FiberTop C or S	I.S.O. Spray S	UltraPly TPO XR / XR-BA	-45.0*
R-72	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. Spray S	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+GL or Tapered RESISTA; Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	UltraPly TPO XR / XR-BA	-202.5*
R-73	Existing asphaltic BUR	Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board or min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	None	N/A	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-45.0*
R-74	Existing granule surface modified bitumen	Min. 0.5-inch ISOGARD HD	I.S.O. Spray S, 6-inch o.c.	None	N/A	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 6-inch o.c.	-82.5*
R-75	Existing granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 6-inch o.c.	-142.5*
R-76	Existing granule surface modified bitumen	Min. 1.5-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	(Optional) Additional layer of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
R-77	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
R-78	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 6-inch o.c.	-82.5*
R-79	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 0.5-inch ISOGARD HD	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
R-80	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
R-81	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 6-inch o.c.	-60.0*

TABLE 7A: RECOVER APPLICATIONS
SYSTEM TYPE A-1A: BONDED INSULATION, BONDED ROOF COVER

System No.	Substrate (See Notes 1 & 12)	Base Insulation Layer		Top Insulation Layer		Roof Cover	MDP (psf)
		Type	Attach	Type	Attach		
R-82	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c. (full coverage)	-172.5*
R-83	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL or RESISTA	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	Optional additional layers of base insulation or min. 0.5-inch Tapered ISO 95+ GL or RESISTA followed by min. 19/32-inch plywood	I.S.O. FIX II; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
R-84	Existing asphaltic BUR	Min. 1-inch ISO 95+ GL	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	(Optional) Min. 0.5-inch ISOGARD HD or Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-172.5*
R-85	Existing asphaltic BUR	Min. 0.5-inch ISOGARD HD or Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. FIX II; I.S.O. Spray S; I.S.O. Stick; I.S.O. Twin Pack	None	N/A	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-172.5*
R-86	Existing granule surface modified bitumen	Min. 1-inch ISO 95+ GL	I.S.O. Spray S	(Optional) Min. 0.5-inch ISOGARD HD, Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board or min. 19/32-inch plywood	I.S.O. Spray S	UltraPly TPO XR / I.S.O. Spray S, 4-inch o.c.	-172.5*
R-87	Existing granule surface modified bitumen	Min. 0.5-inch ISOGARD HD or Min. 0.25-inch Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board	I.S.O. Spray S	None	N/A	UltraPly TPO XR / I.S.O. Spray S, XR Stick, 4-inch o.c.	-172.5*

TABLE 7B: STEEL - RECOVER						
SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER						
Note: All areas where the existing metal panels do not lay flush on the underlying purlin shall have a 0.25-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.						
System No.	Substrate (See Notes 1 & 11)	Insulation Layer	Attach		Roof Cover / Adhesive	MDP (psf)
			Fasten	Spacing		
R-88	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened per FM Approvals requirements	Firestone Purlin Fasteners and UltraPly TPO InvisiWeld Plates are fastened through to purlins	12-inch o.c. along purlins	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-45.0
R-89	Existing standing seam or lap seam metal roof covers having min. ¼-inch thick steel purlins spaced max. 120-inch o.c.	One or more layers, any combination, preliminarily fastened per FM Approvals requirements	Firestone Purlin Fasteners and UltraPly TPO InvisiWeld Plates are fastened through to purlins	6-inch o.c. along purlins	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-52.5
R-90	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 60-inch o.c.	One or more layers, any combination, preliminarily fastened per FM Approvals requirements	Firestone Purlin Fasteners and UltraPly TPO InvisiWeld Plates are fastened through to purlins	6-inch o.c. along purlins	UltraPly TPO bonded to UltraPly TPO InvisiWeld Plates with RhinoBond Portable Plate Bonding Tool and weighted RhinoBond Cooling Clamps.	-82.5

TABLE 7C: STEEL - RECOVER							
SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER							
Note: All areas where the existing metal panels do not lay flush on the underlying purlin shall have a 0.25-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.							
System No.	Deck (See Notes 1 & 11)	Insulation		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasteners	Attach	
R-91	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 90-inch o.c.	One or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone Purlin Fasteners and Firestone HD Seam Plates	12-inch o.c. within 6-inch wide laps spaced max. 90-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld.	-45.0
R-92	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 142-inch o.c.	One or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone Purlin Fasteners and Firestone HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced max. 142-inch o.c. to engage steel purlin. Laps sealed with 1.5-inch heat weld.	-52.5

TABLE 7D: STEEL - RECOVER							
SYSTEM TYPE D-2: INSULATED, MECHANICALLY ATTACHED ROOF COVER (RMA STRIPS)							
Note: All areas where the existing metal panels do not lay flush on the underlying purlin shall have a 0.25-inch diameter pilot hole pre-drilled into the panel prior to driving the Purlin Fastener into the purlin.							
System No.	Deck (See Notes 1 & 11)	Insulation		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasten	Attach	
R-93	Existing standing seam or lap seam metal roof covers having min. 3/16-inch to max. ¼-inch thick steel purlins spaced max. 10-inch o.c.	One or more layers, any combination	Prelim. attached	UltraPly TPO	Firestone Purlin Fasteners and Firestone Coiled Metal Batten Strip	Firestone UltraPly QuickSeam R.M.A. Strips are applied over the insulation spaced 120-inch o.c. positioned over each steel purlin location. The batten is centered over each strip and fastened into the purlins 6-inch o.c. Roof cover adhered to each strip by first priming the membrane underside with Firestone UltraPly TPO QuickPrime at the strip location, then rolling into place with a hand roller. The min. 2-inch side laps are sealed with a min. 1.5-inch outside heat weld.	-45.0

TABLE 7E: RECOVER APPLICATIONS
SYSTEM TYPE E: NON-INSULATED, MECHANICALLY ATTACHED ROOF COVER

System No.	Deck (See Note 1)	Roof Cover			MDP (psf)
R-94	Min. 22 ga., type B, Grade 80 steel	UltraPly TPO XR	Firestone HD Plus Fasteners (steel only) with Firestone HD Plus Seam Plates	12-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
R-95	Min. 22 ga., type B, Grade 33 steel or struct. conc.	UltraPly TPO XR	Firestone HD Fasteners with Firestone HD Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-45.0
R-96	Min. 22 ga., type B, Grade 80 steel	UltraPly TPO XR	Firestone HD Plus Fasteners (steel only) with Firestone HD Plus Seam Plates	6-inch o.c. within 6-inch wide laps spaced 114-inch o.c. Laps sealed with 1.5-inch heat weld.	-67.5

TABLE 7F: RECOVER APPLICATIONS
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER

System No.	Deck (See Notes 1 & 12)	Primer	Roof Cover		MDP (psf)
			Type	Application	
R-97	Existing asphaltic BUR or granule-surfaced modified bitumen roof cover	None	UltraPly TPO XR	I.S.O. Spray S, XR Stick, 12-inch o.c.	-45.0*
R-98	Existing granule-surfaced, asphaltic modified bitumen roof cover	None	UltraPly TPO XR	I.S.O. Spray S, XR Stick, 6-inch o.c.	-142.5*
R-99	Existing asphaltic BUR over structural concrete deck	None	UltraPly TPO XR	I.S.O. Spray S, 4-inch o.c.	-240.0*
R-100	Existing asphaltic BUR over structural concrete deck	None	UltraPly TPO XR	XR Stick, 4-inch o.c.	-315.0*
R-101	Existing granule surfaced SBS modified bitumen over structural concrete deck	None	UltraPly TPO XR	XR Stick, 4-inch o.c.	-392.5
R-102	Existing granule surfaced APP modified bitumen over structural concrete deck	None	UltraPly TPO XR	XR Stick, 4-inch o.c.	-422.5
R-103	Existing asphaltic BUR or granule surface modified bitumen over structural concrete or steel deck	None	UltraPly TPO XR	Hot asphalt	-495.0*