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EVALUATION REPORT

IB Roof Systems, Inc.
2877 Chad Drive
Eugene, Oregon 97408

Evaluation Report 02641.03.04-R4
FL2534-R4
Date of Issuance: 07/18/2005
Revision 4: 12/17/2008

SCOPE:

This Evaluation Report is issued under Rule 9B-72 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 designed to comply with the 2007 Florida Building Code.

DESCRIPTION: IB Single Ply Roof Systems

LABELING: Each unit shall bear labeling 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.

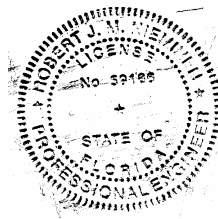
ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity | ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 4, plus a 17-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 12/17/2008. 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.

ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Single Ply Roof Systems
Compliance Statement: IB Single-Ply roof systems, as marketed by IB Roof Systems, Inc., have demonstrated compliance with the following sections of the Florida Building Code 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>
1504.3.1	Wind	FM 4470	1992
1504.7	Impact	FM 4470	1992
1507.13.2	Physical Properties	ASTM D4434	2004
1507.13.2	Physical Properties	CAN/CGSB 37.54-95	1995

3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
FM (TST 1867)	FM 4470	2D5A9.AM	06/22/1999
FM (TST 1867)	FM 4470	3005937	11/23/1999
FM (TST 1867)	FM 4470	3005938	11/23/1999
FM (TST 1867)	FM 4470	3009502	12/21/2000
FM (TST 1867)	FM 4470	3015444	07/11/2003
FM (TST 1867)	FM 4470	3014692	08/05/2003
FM (TST 1867)	FM 4470	3014751	08/27/2003
FM (TST 1867)	FM 4470	3012321	07/29/2006
FM (TST 1867)	FM 4470	3022560	07/07/2006
FM (TST 1867)	FM 4470	3029864	09/06/2007
UL (TST 1740)	ASTM D4434	02NK18635	11/12/2003
UL (TST 1740)	CAN/CGSB 37.54-95	02NK18635	11/12/2003
MTI (TST 2508)	ASTM D4434	EX23K2A	10/31/2002
ICC-ES (EVL 2396)	2000 IBC Compliance	ER-5405	11/01/2005
Miami-Dade (CER 1592)	HVHZ Compliance	Various NOAs	Various
FM (QUA 1860)	Quality Assurance	PLA	07/26/2005
FM (QUA 1860)	Quality Assurance	PLA	09/01/2006

4. PRODUCT DESCRIPTION:

- 4.1 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.
- 4.1.1 **IB Single-Ply** is a nominal 40-mil (1.0 mm) to 80-mil (2.0-mm) thick polyester fabric (9x9, 1000 denier) reinforced plasticized polyvinyl chloride (PVC) roof cover with a white, gray, blue, brown, tan or green weathering surface. IB Single-Ply Membrane is supplied in rolls 72 in. (1.8 m) by 100 ft (33.3 m) long.
- 4.1.2 **IB Single Ply Fleeceback** is a nominal 40-mil (1.0 mm) to 80-mil (2.0-mm) thick polyester fabric (9x9, 1000 denier) reinforced plasticized polyvinyl chloride (PVC) roof cover with a white, gray, blue, brown, tan or green weathering surface. IB Single-Ply Fleeceback is supplied in rolls 72 in. (1.8 m) by 100 ft (33.3 m) long.

5. LIMITATIONS:

- 5.1 This Evaluation Report is not for use in HVHZ.
- 5.2 Refer to a current 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 or 2603.6 apply.
- 5.4 Unless otherwise noted in Appendix 1, roof decking and its attachment shall be specified and installed to meet project design criteria to the satisfaction of the AHJ.
- 5.5 For recover installations, the existing roof shall be examined in accordance with FBC 1510.
- 5.6 For mechanically attached insulation or membrane or strip-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16. Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are RAS 117, RAS 137 and FM LPDS 1-29.
- 5.7 For mechanically attached insulation or membrane over existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing and analysis shall be in accordance with TAS 105.
- 5.8 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with ASTM E907 or FM LPDS 1-52 shall be conducted on mock-ups of the proposed new roof assembly.
- 5.9 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 ASTM E907 or FM LPDS 1-52.
- 5.10 Metal edge attachment (except gutters), shall be designed and installed for wind loads in accordance with FBC Chapter 16 and tested for resistance in accordance with ANSI/SPRI ES-1 or RAS 111, except the basic wind speed shall be determined from FBC Figure 1609.
- 5.11 All products in the roof assembly shall have quality assurance audit in accordance with the FBC and F.A.C. Rule 9B-72.

6. INSTALLATION:

- 6.1 IB Single-Ply and IB Single-Ply Fleeceback shall be installed in accordance with IB Roof Systems 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.
- 6.3 For mechanically fastened membrane systems (Type D) over profiled steel deck, membrane shall be installed running perpendicular to steel deck flutes.

7. BUILDING PERMIT REQUIREMENTS:

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

8. MANUFACTURING PLANTS:

Cambridge, ON Canada

9. QUALITY ASSURANCE ENTITY:

FM Approvals – QUA 1860

- THE 17-PAGES THAT FOLLOW FORM PART OF THIS EVALUATION REPORT -

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE

Table	Deck	Application	Type	Description	Page
1A	Wood	New, Reroof (Tear-Off), Recover	C	Mechanically Attached Insulation, Bonded Roof Cover	4
1B	Wood	New, Reroof (Tear-Off), Recover	D	Insulated, Mechanically Attached Roof Cover	4
1C	Wood	New, Reroof (Tear-Off), Recover	E	Non-Insulated, Mechanically Attached Roof Cover	5
2A	Steel	New, Reroof (Tear-Off), Recover	C	Mechanically Attached Insulation, Bonded Roof Cover	6
2B	Steel	New, Reroof (Tear-Off), Recover	D	Insulated, Mechanically Attached Roof Cover	6
3A	Concrete	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	7-8
3B	Concrete	New, Reroof (Tear-Off)	A-1B	Bonded Temporary Roof, Bonded Insulation, Bonded Roof Cover	9
3C	Concrete	New, Reroof (Tear-Off), Recover	C	Mechanically Attached Insulation, Bonded Roof Cover	10
3D	Concrete	New, Reroof (Tear-Off), Recover	D	Insulated, Mechanically Attached Roof Cover	10
3E	Concrete	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	11
4A	LWIC	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	12-13
4B	LWIC	New, Reroof (Tear-Off)	F	Non-Insulated, Bonded Roof Cover	13
5A	CWF	New, Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	14
6A	Gypsum	Reroof (Tear-Off)	A-1A	Bonded Insulation, Bonded Roof Cover	15
7	Various	Recover	A-1A	Bonded Insulation, Bonded Roof Cover	16-17

The following notes apply to the systems outlined herein:

1. Roof decks shall be in accordance with FBC requirements to the satisfaction of the AHJ. Wind load resistance of the roof deck shall be documented through proper codified and/or FBC Approval documentation.
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: IB Standard #12 or IB Heavy Duty #14 with IB Insulation Plates or OMG Std (#12) or HD (#14) with 3" Galvalume Plates. Min. ¾-inch plywood penetration or minimum 1-inch wood plank embedment.
 - Steel Deck: IB Standard #12 or IB Heavy Duty #14 with IB Insulation Plates or OMG Std (#12) or HD (#14) with 3" Galvalume Plates. Minimum ¾-inch steel penetration, engage the top flute of the steel deck.
 - Concrete Deck: IB Heavy Duty #14 with IB Insulation Plates or OMG HD (#14) or CD-10 with 3" Galvalume Plates. Minimum 1-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, DensDeck, DensDeck Prime, DensDeck DuraGuard or Securock that meets the QA requirements of F.A.C. Rule 9B-72 and is documented as meeting FBC 1505.1 and, for foam plastic, FBC 2603.4.1 or 2603.6, when installed with the roof cover.
4. Minimum 200 psi, minimum 2-inch thick lightweight insulating concrete may be substituted for rigid insulation board for System Type D (mechanically attached membrane), whereby the membrane fasteners are installed through the LWIC to engage the structural steel or concrete deck. The structural deck shall be of equal or greater configuration to the steel and concrete deck listings.
5. Preliminary insulation attachment for System Type 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.
 - Hot Asphalt (HA): Full mopping, 25-30 lbs/square.
 - IBond or Pliodeck Insulation Adhesive (PDIA): Continuous ½-inch beads, 12-inch o.c. Beads in all subsequent layers shall be perpendicular to preceding layer.
 - Insta-Stik Roofing Adhesive (ISRA): Continuous ¾ to 1-inch beads, 12-inch o.c.
 - Millennium One-Step Foamable Adhesive (OSFA): Continuous ½ to ¾-inch beads, 12-inch o.c.
 - OlyBond 500 (OB-500): Continuous ¾ to 1-inch wide ribbons, 12-inch o.c. using PaceCart or SpotShot application devices
 - TITSESET Insulation Adhesive: Continuous 2½ to 3½-inch ribbons, 12-inch o.c.
7. Tapered polyisocyanurate may be substituted for the flat stock board with the following Maximum Design Pressure (MDP) limitations:
 - IBond or Pliodeck Insulation Adhesive (PDIA): As noted in Tables
 - Insta-Stick Roofing Adhesive (ISRA): Max. Design Pressure -112.5 psf
 - Millennium One-Step Foamable Adhesive (OSFA): Max. Design Pressure -157.5 psf
 - OlyBond 500 or OlyBond Adhesive Fastener: Max. Design Pressure -120.0 psf
 - TITSESET Insulation Adhesive: Max. Design Pressure -117.5 psf
8. Bonded polyisocyanurate insulation boards shall be maximum 4 x 4 ft.
9. For mechanically attached components or partially bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC Chapter 16, and Zones 2 and 3 shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria.
10. For fully bonded assemblies, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16, and no rational analysis is permitted.



11. For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with TAS 105.
12. For existing substrates in a bonded 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 FM LPDS 1-52 or ANSI/SPRI IA-1. Trinity|ERD recommends field testing to 1.5 times design.
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 System Types D and E:
 - In-Seam Fastened Systems involve a 5-inch lap with the stress plates or batten strips and fasteners installed along the fastener-line preprinted on the membrane, finished with a 1½-inch field weld. Attachment is expressed as follows: In-Seam: <max fastener spacing> x <max lap spacing>
 - In-Field Fastened Systems involve stress plate or batten strips and fastener placement through the field of the membrane and covered with a min. 5-inch wide PVC cover strip with 1½-inch field welds on both sides. Attachment is expressed as follows: In-Field: <max fastener spacing> x <max row spacing>
15. For Recover or Concrete Deck Applications using System Type D, the insulation is optional.
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:

<u>Membrane</u>	<u>Adhesive</u>	<u>Application</u>	<u>Rate</u>
IB Single-Ply	IB Water Borne Adhesive	Substrate only	0.357 gal/sq.
IB Single-Ply	Pliobond 7008	Substrate only	0.357 gal/sq.
IB Single-Ply Fleeceback	IB Water Borne Adhesive	Substrate only	0.40 gal/sq.
IB Single-Ply Fleeceback	Pliobond 7008	Substrate only	0.40 gal/sq.

TABLE 1A: WOOD DECKS - NEW CONSTRUCTION or REROOF (Tear-Off) or RECOVER SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER								
System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		MDP (psf)
			Type	Fasteners	Attach	Type	Attach	
W-1.	Min. 15/32-inch, APA rated CDX, 5-ply plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) One or more layers, any combination	Min. 1.5-inch R-Max Multi-Max FA3 or Atlas AC Foam II	See Note 2	1 per 1.6 ft ²	IB Single-Ply or IB Single-Ply Fleecebacked	IB Water Based Adhesive at 0.5 gal/sq.	-45.0

TABLE 1B: WOOD DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER								
System No.	Deck (See Note 1)	Thermal Barrier	Insulation		Roof Cover			MDP (psf)
			Type	Attach	Membrane	Fasteners	Attach	
W-2.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 12-inch x 67-inch	-30.0
W-3.	Min. 15/32-inch, APA rated CDX, 5-ply plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB #12 or IB Heavy Duty Fasteners #14 with IB 2" Galvalume Barbed Plates	In-Seam: 6-inch x 67-inch	-37.5
W-4.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 6-inch x 67-inch	-45.0
W-5.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 4-inch x 67-inch	-52.5
W-6.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 3-inch x 67-inch	-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)	Thermal Barrier		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasteners	Attachment	
W-7.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	Loose laid	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 12-inch x 67-inch	-30.0
W-8.	Min. 15/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	Loose laid	IB Single-Ply	IB Heavy Duty Fasteners #14 with IB 2" Galvalume Barbed Plates	In-Seam: 6-inch x 67-inch	-37.5
W-9.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	Loose laid	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 6-inch x 67-inch	-45.0
W-10.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	Loose laid	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 4-inch x 67-inch	-52.5
W-11.	Min. 19/32-inch plywood attached 6" o.c. with 8d common nails to supports spaced max. 24" o.c.	(Optional) Any thermal barrier to obtain fire classification	Loose laid	IB Single-Ply	IB Heavy Duty Fasteners #14 or IB Magnum Fasteners with IB 2" Galvalume Barbed Plates or OMG HD or XHD Fasteners with OMG 2-in. Barbed Plates	In-Seam: 3-inch x 67-inch	-60.0

**TABLE 2A: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		MDP (psf)
			Type	Fasteners	Attach	Type	Attach	
S-1.	Min. 22 ga., Type B, Grade 33 steel	(Optional) One or more layers, any combination, loose laid	Min 1.5 in. thick, max. 4 x 4 ft ACFoam-II, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	See Note 2	1 per 3.2 ft ²	IB Single-Ply or IB Single-Ply Fleecbacked	IB Water Borne Adhesive or Pliobond 7008	-30.0
S-2.	Min. 22 ga., Type B, Grade 33 steel	(Optional) One or more layers, any combination, loose laid	Min 1.5 in. thick, max. 4 x 4 ft ACFoam-II, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	See Note 2	1 per 2 ft ²	IB Single-Ply or IB Single-Ply Fleecbacked	IB Water Borne Adhesive or Pliobond 7008	-45.0
S-3.	Min. 22 ga., Type B, Grade 33 steel	(Optional) One or more layers, any combination, loose laid	Min 1.5 in. thick, max. 4 x 4 ft ACFoam-II, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	See Note 2	1 per 4 ft ²	IB Single-Ply or IB Single-Ply Fleecbacked	IB Water Borne Adhesive or Pliobond 7008	-45.0

**TABLE 2B: STEEL DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasteners	Attach	
S-4.	Min. 22 ga., Type B, Grade 80 steel	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB Magnum Fasteners with IB Magnum Plates or OMG XHD Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 18-inch x 67-inch	-30.0
S-5.	Min. 22 ga., Type B, Grade 80 steel	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB Magnum Fasteners with IB Magnum Plates or OMG XHD Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 12-inch x 67-inch	-45.0
S-6.	Min. 22 ga., Type B, Grade 80 steel	One or more layers, any combination	Prelim. attach	IB Single-Ply	IB Magnum Fasteners with IB Magnum Plates or OMG XHD Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 6-inch x 67-inch	-60.0
S-7.	Min. 22 ga., Type B, Grade 80 steel	One or more layers, any combination	Prelim. attach	Min. 80-mil IB Single-Ply	IB Magnum Fasteners with IB Magnum Plates or OMG XHD Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 6-inch x 67-inch	-67.5
S-8.	Min. 22 ga., Type B, Grade 80 steel	One or more layers, any combination	Prelim. attach	IB Single-Ply	OMG XHD Fasteners through OMG Polymer Batten Strips	In-Field: 6-inch x 96-inch	-67.5
S-9.	Min. 22 ga., Type B, Grade 80 steel	One or more layers, any combination	Prelim. attach	IB Single-Ply	OMG XHD Fasteners through OMG Metal Batten Strips	In-Field: 6-inch x 96-inch	-75.0

**TABLE 3A: 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		Top Insulation Layer		Roof Cover		MDP (psf)
		Type	Attach	Type	Attach	Type	Attach	
INSULATION IN HOT ASPHALT:								
C-1.	Min. 2,500 psi concrete	Min. 1.5" thick ASTM C578, type IX EPS board	HA (back-mopped)	Min. ¼-inch DensDeck or Securock	HA (back-mopped)	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-202.5
C-2.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II or Multi-Max FA3	HA	(Optional) Additional layers(s) of base insulation	HA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-215.0
C-3.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II or Multi-Max FA3	HA	Min. ¼-inch DensDeck or Securock	HA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-255.0
INSULATION IN IBOND OR PLIODECK INSULATION ADHESIVE:								
C-4.	Min. 2,500 psi concrete	Min. 1.5" thick ASTM C578, type IX EPS board	IBond or PDIA	Min. ½-inch FM Approved high density wood fiberboard, min. ¼-inch DensDeck or Securock or minimum 7/16-inch plywood or OSB	IBond or PDIA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-67.5
C-5.	Min. 2,500 psi concrete	Tapered or flat ACFoam-II, ENRGY 3, Iso 95+ GL, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	IBond or PDIA	Min. ½-inch FM Approved high density wood fiberboard, min. ¼-inch DensDeck or Securock or minimum 7/16-inch plywood or OSB	IBond or PDIA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-105.0
C-6.	Min. 2,500 psi concrete	Tapered or flat ACFoam-II, ENRGY 3, Iso 95+ GL, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	IBond or PDIA	(Optional) Additional layers(s) of base insulation	IBond or PDIA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-157.5
INSULATION IN INSTA-STIK ROOFING ADHESIVE:								
C-7.	Min. 2,500 psi concrete	Min. 1.5" thick Multi-Max FA3	ISRA	(Optional) Additional layers(s) of base insulation	ISRA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-67.5
C-8.	Min. 2,500 psi concrete	Min. 1.5" thick Multi-Max FA3	ISRA	Min. ¼-inch DensDeck or Securock	ISRA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-67.5
C-9.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II	ISRA	(Optional) Additional layers(s) of base insulation	ISRA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-120.0
C-10.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II	ISRA	Min. ¼-inch DensDeck or Securock	ISRA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-120.0

**TABLE 3A: 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		Top Insulation Layer		Roof Cover		MDP (psf)
		Type	Attach	Type	Attach	Type	Attach	
C-11.	Min. 2,500 psi concrete	One or more layers, min. 1.5" thick ASTM C578, type IX EPS board	ISRA	Min. ¼-inch DensDeck or Securock	ISRA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-120.0
INSULATION IN ONE STEP FOAMABLE ADHESIVE:								
C-12.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II or Multi-Max FA3	OSFA	(Optional) Additional layers(s) of base insulation	OSFA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-215.0
C-13.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II or Multi-Max FA3	OSFA	Min. ¼-inch DensDeck or Securock	OSFA	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-232.5
INSULATION IN OLYBOND 500:								
C-14.	Min. 2,500 psi concrete	Min. 1.0" thick ASTM C578, type IX EPS board	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-52.5
C-15.	Min. 2,500 psi concrete	Min. 2.0" thick ASTM C578, type IX EPS board	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-120.0
C-16.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II	OB-500	(Optional) Additional layers(s) of base insulation	OB-500	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-150.0
C-17.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-150.0
INSULATION IN TITASET:								
C-18.	Min. 2,500 psi concrete	One or more layers, min. 1.5" thick ASTM C578, type IX EPS board	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-180.0
C-19.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layers(s) of base insulation	TITASET	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-215.0
C-20.	Min. 2,500 psi concrete	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply Fleeckbacked	IB Water Borne Adhesive or Pliobond 7008	-255.0

**TABLE 3B: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE A-1B: BONDED TEMP ROOF, BONDED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Vapor Barrier / Temp Roof	Base Insulation Layer		Top Insulation Layer		Roof Cover		Max. DP (psf)
			Type	Attach	Type	Attach	Type	Attach	
C-21.	Struct. concrete	Note A, Option 4	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layer(s) of base insulation	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-67.5
C-22.	Struct. concrete	Note A, Option 2	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layer(s) of base insulation	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-168.5
C-23.	Struct. concrete	Note A, Option 1 or 3	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layer(s) of base insulation	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-215.0
C-24.	Struct. concrete	Note A, Option 4	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-67.5
C-25.	Struct. concrete	Note A, Option 2	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-168.5
C-26.	Struct. concrete	Note A, Option 3	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-250.0
C-27.	Struct. concrete	Note A, Option 1	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-255.0
C-28.	Struct. concrete	Note A, Option 4	Min. 1.5" thick, min. 1.5 pcf ASTM C578 EPS	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-67.5
C-29.	Struct. concrete	Note A, Option 2	Min. 1.5" thick, min. 1.5 pcf ASTM C578 EPS	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-168.5
C-30.	Struct. concrete	Note A, Option 1 or 3	Min. 1.5" thick, min. 1.5 pcf ASTM C578 EPS	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-180.0
C-31.	Struct. concrete	Note A, Option 1 or 3	Min. 1.5" thick, min. 2.0 pcf ASTM C578 EPS	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-202.5

A. Temporary roof / vapor barrier for Table 3B shall be one of the following. Consult the vapor barrier / temporary roof system manufacturer for compatibility of cold adhesives used in roof assemblies involving EPS material.

1. Hot-Applied: Primed concrete followed by optional hot asphalt applied base and/or ply sheets approved for use with roof cover followed by asphalt applied CertainTeed Flintlastic GMS, Firestone SBS Cap, GAF Ruberoid 30, Johns Manville DynaGlas, Soprema Elastophene GR or Sopralene 180 or 250 GR or Siplast Paradiene 30.
2. Torch-Applied: Primed concrete followed by optional torch-applied base membrane approved for use with roof cover followed by CertainTeed Flintlastic GTA or GTS, Firestone APP 180 FR Cap, GAF Ruberoid Torch GR, Johns Manville APPeX 4.5M, Soprema Elastophene Flam GR or Sopralene Flam 180 or 250 GR or Siplast Paradiene 30 TG.
3. Self-Adhering: Primed concrete followed by optional self-adhered base membrane approved for use with roof cover followed by CertainTeed Flintlastic SA Cap, GAF Liberty Cap, Johns Manville DynaGrip Cap or JMCleanBond Cap, Polyglass Elastoflex SA VG or Soprema Colphene FR GR or Colphene HR FR GR.
4. Cold-Applied: Primed concrete followed by optional cold-applied base and/or ply sheet approved for use with the roof cover followed by CertainTeed Flintlastic GMS in FlintBond Adhesive, GAF Ruberoid 30 in Matrix 102 Adhesive, Johns Manville DynaGlas in MBR Adhesive, Polyglass Elastoflex VG in 1000 MB SBS Adhesive, Soprema Elastophene GR or Sopralene 180 or 250 GR in FM Adhesive or FM Adhesive (VOC) or Siplast Paradiene 30 in PA-311 Adhesive.

**TABLE 3C: CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE C: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Base Insulation Layer	Top Insulation Layer			Roof Cover		MDP (psf)
			Type	Fasteners	Attach	Type	Attach	
C-32.	Min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min 1.5 in. thick, max. 4 x 4 ft AC Foam-II, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	See Note 2	1 per 3.2 ft ²	IB Single-Ply or IB Single-Ply Fleecbacked	IB Water Borne or Pliobond 7008	-30.0
C-33.	Min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min 1.5 in. thick, max. 4 x 4 ft AC Foam-II, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	See Note 2	1 per 2 ft ²	IB Single-Ply or IB Single-Ply Fleecbacked	IB Water Borne or Pliobond 7008	-45.0
C-34.	Min. 2,500 psi structural concrete	(Optional) One or more layers, any combination, loose laid	Min 1.5 in. thick, max. 4 x 4 ft AC Foam-II, Hy-Therm AP Roof Insulation, Hy-Therm(a) AP Roof Insulation or Multi-Max FA3	See Note 2	1 per 4 ft ²	IB Single-Ply or IB Single-Ply Fleecbacked	IB Water Borne or Pliobond 7008	-45.0

**TABLE 3D: CONCRETE DECKS - NEW CONSTRUCTION, REROOF (Tear-Off) or RECOVER
SYSTEM TYPE D: INSULATED, MECHANICALLY ATTACHED ROOF COVER**

System No.	Deck (See Note 1)	Insulation		Roof Cover			MDP (psf)
		Type	Attach	Membrane	Fasteners	Attach	
C-35.	Min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. attach	IB Single-Ply	OMG CD-10 Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 18-inch x 67-inch	-30.0
C-36.	Min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. attach	IB Single-Ply	OMG CD-10 Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 12-inch x 67-inch	-45.0
C-37.	Min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. attach	IB Single-Ply	OMG CD-10 Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 6-inch x 67-inch	-60.0
C-38.	Min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. attach	Min. 80-mil IB Single-Ply	OMG CD-10 Fasteners with OMG 2-3/8 XHD Barbed Stress Plates	In-Seam: 6-inch x 67-inch	-67.5
C-39.	Min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. attach	IB Single-Ply	OMG CD-10 Fasteners through OMG Polymer Batten Strips	In-Field: 6-inch x 96-inch	-67.5
C-40.	Min. 2,500 psi structural concrete	One or more layers, any combination	Prelim. attach	IB Single-Ply	OMG CD-10 Fasteners through OMG Metal Batten Strips	In-Field: 6-inch x 96-inch	-75.0

**TABLE 3E: CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

System No.	Deck (See Note 1)	Roof Cover		MDP (psf)
		Type	Attach	
C-41.	Min. 2,500 psi concrete	IB Single-Ply or IB Single-Ply Fleecbacked	IB Water Borne or Pliobond 7008	-512.5

**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		MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach	Type	Attach	
INSULATION IN IBOND OR PLIODECK INSULATION ADHESIVE:									
LWC-1	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	IBond or PDIA	(Optional) Additional layers base insulation	IBond or PDIA	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-187.5
LWC-2	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	IBond or PDIA, 6"o.c.	(Optional) Additional layers base insulation	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-215.0
LWC-3	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	IBond or PDIA	Min. ¼-inch DensDeck or Securock	IBond or PDIA	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-187.5
LWC-4	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	IBond or PDIA, 6"o.c.	Min. ¼-inch DensDeck or Securock	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-215.0
LWC-5	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5", min. 1.0 pcf ASTM C578, EPS	IBond or PDIA	Min. ¼-inch DensDeck or Securock	IBond or PDIA	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-52.5
LWC-6	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5", min. 1.0 pcf ASTM C578, EPS	IBond or PDIA, 6"o.c.	Min. ¼-inch DensDeck or Securock	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-165.0
LWC-7	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5", min. 2.0 pcf ASTM C578, EPS	IBond or PDIA	Min. ¼-inch DensDeck or Securock	IBond or PDIA	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-90.0
LWC-8	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5", min. 2.0 pcf ASTM C578, EPS	IBond or PDIA, 6"o.c.	Min. ¼-inch DensDeck or Securock	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-187.5
INSULATION IN OLYBOND 500:									
LWC-9	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II	OB-500	(Optional) Additional layers base insulation	OB-500	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-215.0
LWC-10	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-225.0
INSULATION IN TITASET:									
LWC-11	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layers base insulation	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-180.0
LWC-12	Struct concrete	Min. 200 psi, min. 2" thick Celcore LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layers base insulation	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-215.0
LWC-13	Struct concrete	Min. 200 psi, min. 2" thick Mearlcrete LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layers base insulation	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-215.0
LWC-14	Struct concrete	Min. 200 psi, min. 2" thick Elastizell LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-180.0
LWC-15	Struct concrete	Min. 200 psi, min. 2" thick Celcore LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-222.5

**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		MDP (psf)
	Struct	LWC	Type	Attach	Type	Attach	Type	Attach	
LWC-16	Struct concrete	Min. 200 psi, min. 2" thick Mearlcrete LWIC.	Min. 1.5" ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-240.0
LWC-17	Struct concrete	Min. 200 psi, min. 2" thick Elastizell, Celcore or Mearlcrete	Min. 1.5", min. 1.5 pcf ASTM C578, EPS	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-180.0
LWC-18	Struct concrete	Min. 200 psi, min. 2" thick Elastizell, Celcore or Mearlcrete	Min. 1.5", min. 2.0 pcf ASTM C578, EPS	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-202.5

**TABLE 4B: LIGHTWEIGHT CONCRETE DECKS - NEW CONSTRUCTION or REROOF (Tear-Off)
SYSTEM TYPE F: NON-INSULATED, BONDED ROOF COVER**

System No.	Deck (See Note 1)		Treatment	Roof Cover		MDP (psf)
	Roof Deck	LWC		Type	Attach	
LWC-19	Structural concrete	Min. 200 psi, min. 2" thick Celcore, Elastizell or Mearlcrete LWIC	In accordance with LWC manufacturer's requirements	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-242.5

**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		MDP (psf)
		Type	Attach	Type	Attach	Type	Attach	
CWF-1.	Tectum Plank or Tectum LS Plank	Min. 1.5" ACFoam II or Mult-Max FA3	OB-500	(Optional) Additional layer(s) of base insulation	OB-500	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-45.0
CWF-2.	Tectum Plank or Tectum LS Plank	(Optional) Min. 1.5" ACFoam II or Mult-Max FA3	OB-500	Min. ¼" DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-45.0
CWF-3.	Tectum Plank or Tectum LS Plank or Fibroplank	Min. 1.5" ACFoam II or Mult-Max FA3	TITESET	(Optional) Additional layer(s) of base insulation	TITESET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-52.5
CWF-4.	Tectum Plank or Tectum LS Plank	(Optional) Min. 1.5" ACFoam II or Mult-Max FA3	TITESET	Min. ¼" DensDeck or Securock	TITESET	IB Single-Ply or IB Single-Ply FB	IB Water Borne or Pliobond 7008	-52.5

**TABLE 6A: GYPSUM DECKS - 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		MDP (psf)
		Type	Attach	Type	Attach	Type	Attach	
INSULATION IN ONE STEP FOAMABLE ADHESIVE:								
G-1.	Existing poured gypsum or gypsum plank	Min. 1.5" thick ACFoam II or Multi-Max FA3	OSFA	(Optional) Additional layers(s) of base insulation	OSFA	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-202.5
G-2.	Existing poured gypsum or gypsum plank	Min. 1.5" thick ACFoam II or Multi-Max FA3	OSFA	Min. ¼-inch DensDeck or Securock	OSFA	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-202.5
INSULATION IN OLYBOND 500:								
G-3.	Existing poured gypsum or gypsum plank	Min. 1.0" thick ASTM C578, type IX EPS board	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-52.5
G-4.	Existing poured gypsum or gypsum plank	Min. 2.0" thick ASTM C578, type IX EPS board	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-112.5
G-5.	Existing poured gypsum or gypsum plank	Min. 1.5" thick ACFoam II	OB-500	(Optional) Additional layers(s) of base insulation	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-112.5
G-6.	Existing poured gypsum or gypsum plank	Min. 1.5" thick ACFoam II	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-112.5
INSULATION IN TITASET:								
G-7.	Existing poured gypsum or gypsum plank	One or more layers, min. 1.5" thick ASTM C578, type IX EPS board	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-180.0
G-8.	Existing poured gypsum or gypsum plank	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layers(s) of base insulation	TITASET	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-215.0
G-9.	Existing poured gypsum or gypsum plank	Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-245.0

**TABLE 7: 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	Type	Attach	
INSULATION IN HOT ASPHALT:								
R-1.	Existing asphaltic BUR or mod bit	Min. 1.5" thick ASTM C578, type IX EPS board	HA (back-mopped)	Min. ¼-inch DensDeck or Securock	HA (back-mopped)	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-202.5
R-2.	Existing asphaltic BUR or mod bit	Min. 1.5" thick ACFoam II or Multi-Max FA3	HA	(Optional) Additional layers(s) of base insulation	HA	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-215.0
R-3.	Existing asphaltic BUR or mod bit	(Optional) Min. 1.5" thick ACFoam II or Multi-Max FA3	HA	Min. ¼-inch DensDeck or Securock	HA	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-255.0
INSULATION IN IBOND OR PLIODECK INSULATION ADHESIVE:								
R-4.	Existing smooth surfaced BUR	Min. 1.5" thick ASTM C578, type IX EPS board	IBond or PDIA, 6"o.c.	Min. ¼-inch DensDeck or Securock	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-52.5
R-5.	Existing gran. surfaced mod bit	Min. 1.5" thick ASTM C578, type IX EPS board	IBond or PDIA, 6"o.c.	Min. ¼-inch DensDeck or Securock	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-172.5
R-6.	Existing smooth surfaced BUR	(Optional) Min. 1.5" thick flat or tapered ACFoam II or Multi-Max FA3	IBond or PDIA, 6"o.c.	Min. ¼-inch DensDeck or Securock	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-52.5
R-7.	Existing gran. surfaced mod bit	(Optional) Min. 1.5" thick flat or tapered ACFoam II or Multi-Max FA3	IBond or PDIA, 6"o.c.	Min. ¼-inch DensDeck or Securock	IBond or PDIA, 6"o.c.	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-172.5
INSULATION IN ONE STEP FOAMABLE ADHESIVE:								
R-8.	Existing asphaltic BUR or mod bit	Min. 1.5" thick ACFoam II or Multi-Max FA3	OSFA	(Optional) Additional layers(s) of base insulation	OSFA	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-215.0
R-9.	Existing asphaltic BUR or mod bit	(Optional) Min. 1.5" thick ACFoam II or Multi-Max FA3	OSFA	Min. ¼-inch DensDeck or Securock	OSFA	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-232.5
INSULATION IN OLYBOND 500:								
R-10.	Existing asphaltic BUR or mod bit	Min. 1.0" thick ASTM C578, type IX EPS board	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-52.5
R-11.	Existing asphaltic BUR or mod bit	Min. 2.0" thick ASTM C578, type IX EPS board	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-120.0

**TABLE 7: 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	Type	Attach	
R-12.	Existing asphaltic BUR or mod bit	Min. 1.5" thick ACFoam II	OB-500	(Optional) Additional layers(s) of base insulation	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-120.0
R-13.	Existing asphaltic BUR or mod bit	(Optional) Min. 1.5" thick ACFoam II	OB-500	Min. ¼-inch DensDeck or Securock	OB-500	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-120.0
INSULATION IN TITASET:								
R-14.	Existing asphaltic BUR or mod bit	One or more layers, min. 1.5" thick ASTM C578, type IX EPS board	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-180.0
R-15.	Existing asphaltic BUR or mod bit	(Optional) Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	(Optional) Additional layers(s) of base insulation	TITASET	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-215.0
R-16.	Existing asphaltic BUR or mod bit	(Optional) Min. 1.5" thick ACFoam II or Multi-Max FA3	TITASET	Min. ¼-inch DensDeck or Securock	TITASET	IB Single-Ply or IB Single-Ply Fleebacked	IB Water Borne Adhesive or Pliobond 7008	-255.0