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Roofing Systems

COMPANY

IB ROOF SYSTEMS

506 E Dallas Rd, Ste 300
Grapevine, TX 76051 United States

R15546

Noncombustible roof deck classifications are applicable for use over minimum 15/32-in. thick combustible roof decks when a barrier board of minimum 1/2-in. thick gypsum board, or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certaineed Gypsum Inc. "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)" or minimum 1/2-in. thick United States Gypsum Co. "FRX-G" are used directly over a plywood roof deck with all butt joints in the barrier board staggered a minimum of 6-in. from plywood roof deck butt joints.

Any system listed for use over a combustible roof deck can be installed over a non-combustible roof deck and achieve the same classification.

Uniform thickness or tapered insulation may be used in the following systems provided they do not exceed the indicated incline or thickness.

Unless otherwise indicated the use of a vapor retarder or ply sheet as a vapor retarder in a roofing assembly, either on combustible or noncombustible roof deck and beneath the roof insulation, is acceptable and will not change the existing Classification for the assembly. The vapor barrier may be viewed as optional in all Classified roofing systems.

Unless otherwise indicated, polystyrene insulation may be used under insulation to taper the roof system; limited to noncombustible decks.

"IB PVC Fleeceback" products are acceptable alternates to the "IB PVC" products.

Unless otherwise indicated the insulation may be mechanically fastened, adhered with any UL Classified adhesive or hot mopped.

Any UL Classified Insulation may be used below a barrier board of minimum 1/2-in. thick gypsum board, or minimum 7/16-in. thick National Gypsum Co. "DEXcell", or minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certaineed Gypsum Inc. "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board", or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)" or minimum 1/2-in. thick United States Gypsum Co. "FRX-G".

"Unless otherwise indicated, Concrete, porcelain, ceramic pavers, river rock, or natural stone, may be placed over the surface of any UL Certified IB Roof System while maintaining the rating of the Certification, limited to a 2.5 in. incline."

SINGLE PLY MEMBRANE SYSTEMS

"IB PVC Single Ply", "IB PVC Single Ply ChemGuard", "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback", "IB PVC" and "IB PVC Fleeceback" are produced 50 to 80 mil thickness.

For non-combustible roof deck applications one of the following insulation attachments may be used: (1) mechanically fastened (2) Insulation Adhesive (3) hot mopping asphalt adhesive in accordance with the manufacturer's recommendations.

Class A - Ballasted**1. Deck:** C-15/32**Incline:** 2**Insulation:** — Any UL Classified insulation, any thickness.**Membrane:** — "IB PVC Single Ply ChemGuard" "IB PVC Single Ply ChemGuard" or IB PVC Single Ply.**Surfacing:** — River bottom stone (3/4 to 1 1/2 in. diam) at 1000 lbs/100-ft.².**2. Deck:** C-15/32**Incline:** 2**Insulation:** — Polystyrene, polyisocyanurate, perlite, wood fiber, gypsum board, any thickness, laid loosely.**Slip Sheet (Optional):** — Glass fiber reinforced kraft paper.**Membrane:** — "IB PVC" laid loosely.**Surfacing:** — River bottom stone (1/2 to 2 1/2-in. diameter) 1000 lbs/100-ft.², or crushed stone (1/2 to 3/4-in.) applied at minimum of 900-lbs/100-ft.², or concrete blocks (10-lb/ft.²) spread not more than 1/8-in. apart, or "STYROFOAM" panels surfaced with 3/8-in. (maximum) concrete mortar (panels to be abutted together).**Class A - Fully Adhered****1. Deck:** NC**Incline:** 2**Insulation:** — Any UL Classified HD wood fiber board, "IB Energy Board II" or Atlas Roofing Corp. "ACFoam II" or Firestone Building Products Co. LLC "Iso 95+GL" or "Iso 95+GW" or Johns Manville "ENRGY 2A", any thickness, mechanically fastened or hot mopped.**Membrane:** — "IB PVC Single Ply ChemGuard" "IB PVC Single Ply ChemGuard", adhered with Ashland Inc. "Pliobond 7500" bonding adhesive, at 1-gal/160-ft.². The overlapping membrane joints are heat sealed.**2. Deck:** NC**Incline:** 2**Insulation:** — "IB Energy Board II" or "IB Energy Board III" or Johns Manville "ENRGY 2" or Atlas Roofing Corp. "ACFoam II", "ACFoam III" or Firestone Building Products Co. LLC "ISO 95+GL" any thickness, mechanically fastened.**Membrane:** — "IB PVC Single Ply ChemGuard", with "IB VERTIBOND ADHESIVE" at 60-ft.²/gal.**3. Deck:** NC**Incline:** 2**Insulation:** — Any UL Classified EPS Composite (EPS/perlite, perlite side up or EPS/wood fiber, wood fiber side up) any thickness, mechanically fastened.**Barrier Board (Optional):** — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum

7/16-in. thick National Gypsum Co. "DEXcell" Cement Board or 1/2-in Gypsum Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply ChemGuard", adhered with Ashland Inc."Pliobond 7500" bonding adhesive, at 1-gal/160-ft.² or "IB VERTIBOND ADHESIVE" at 1-gal/60-ft.². The overlapping joints are heat-sealed.

4. Deck: C-15/32

Incline: Unlimited

Impact: 4

Insulation: — Any UL Classified insulation, any thickness:

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck ® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply ChemGuard" adhered with "IB Vertibond 432 Bonding Adhesive" at 1-gal/60-ft.² or ITW Polymers Sealants North America Inc. "LA 432" adhesive at 1-gal/60-ft.² or "IB Water Borne 636 Adhesive" at 1-gal/140-ft.².

5. Deck: NC

Incline: 1

Insulation: — Firestone Building Products Co. LLC "ISO 95+GL", Johns Manville "ENRGY 3" any thickness, mechanically fastened.

Membrane: — "IB PVC Single Ply®", adhered with "IB Vertibond 432 Bonding Adhesive" at 1-gal/60-ft.² or ITW Polymers Sealants North America Inc. "LA 432" adhesive at 1-gal/60-ft.² or "IB Water Borne 636 Adhesive" at 1-gal/140-ft.².

6. Deck: C-15/32

Incline: Unlimited

Impact: 4

Insulation: — Any UL Classified insulation, any thickness:

Barrier Board: — Minimum 1/4-in. Georgia-Pacific Gypsum LLC "DensDeck ® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. SECUROCK Glass-Mat Roof Board, CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply®", adhered with "IB Vertibond 432 Bonding Adhesive" at 1-gal/60-ft.² or ITW Polymers Sealants North America Inc. "LA 432" adhesive at 1-gal/60-ft.² or "IB Water Borne 636 Adhesive" at 1-gal/140-ft.².

7. Deck: NC

Incline: 1-1/2

Insulation: — Atlas Roofing Corp. "ACFoam II", Atlas Roofing Corp. "ACFoam III", "IB Energy Board II", "IB Energy Board III", any thickness mechanically fastened.

Membrane: — "IB PVC Single Ply®", adhered with "IB Vertibond 432 Bonding Adhesive" or ITW Polymers Sealants North America Inc. "LA 432" adhesive at 1-gal/60-ft.² or "IB WATER BORNE ADHESIVE" bonding adhesive at 1-gal./170-ft.² (one side adhesive) and joints are heat sealed

8. Deleted

9. Deleted

10. Deck: C-15/32

Incline: 1/2

Barrier Board (Not required for noncombustible roof decks): — 1/2-in. minimum thick gypsum board mechanically fastened with insulation fasteners (6-in. offset of gypsum board joints from plywood deck joints).

Insulation: — Atlas Roofing Corp. "ACFoam II" or 3/4-in. minimum wood fiberboard over EPS.

Membrane: — "IB PVC" fully adhered with "IB Vertibond 432 Bonding Adhesive" at 2-gal/100-ft² or ITW Polymers Sealants North America Inc. "LA-432" applied at 2-gal/100-ft.² or "IB Water Borne 636 Adhesive" at applied at 2-1/4-gal/100-ft.².

11. **Deck:** C-15/32

Incline: 2

Barrier Board: — 1/2-in. minimum thick gypsum board, mechanically fastened with insulation fasteners. (6-in. offset of gypsum board joints from plywood deck joints.

Insulation: — 3/4-in. minimum wood fiberboard over EPS.

Membrane: — IB PVC", fully adhered to the insulation with "IB Vertibond 432 Bonding Adhesive" at 2-gal/100-ft² or ITW Polymers Sealants North America Inc. "LA-432" applied at 2-gal/100-ft.² or "IB Water Borne 636 Adhesive" at applied at 2-1/4-gal/100-ft.².

12. **Deck:** NC

Incline: 1/2

Insulation: — Atlas Roofing Corp. "ACFoam II" or 3/4-in. minimum wood fiberboard over EPS.

Membrane: — "IB PVC" fully adhered with "IB Vertibond 432 Bonding Adhesive" at 2-gal/100-ft² or ITW Polymers Sealants North America Inc. "LA-432" applied at 2-gal/100-ft.² or "IB Water Borne 636 Adhesive" at applied at 2-1/4-gal/100-ft.².

13. **Deck:** NC

Incline: 1/2

Membrane: — "IB PVC" fully adhered with "IB Water Borne 636 Adhesive" applied at 2-1/4-gal/100-ft.².

14. **Deck:** C-15/32

Incline: Unlimited

Insulation (Optional): — Any UL Classified (except EPS), any thickness, uniform or tapered.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, mechanically fastened with (butt joints of barrier board must be staggered a minimum of 6-in. from the plywood deck butt joints; staggered joints not required for noncombustible roof decks).

Membrane: — "IB PVC" fully adhered with "IB Vertibond 432 Bonding Adhesive" at 2-gal/100-ft² or ITW Polymers Sealants North America Inc. "LA-432" applied at 2-gal/100-ft.².

15. **Deck:** C-15/32

Incline: Unlimited

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation (Optional): — "IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam-III HD CoverBoard", any thickness mechanically fastened or adhered with any UL Classified adhesive.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certaineed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6-in. from the plywood roof deck butt joints.

Membrane: — "IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft².

16. **Deck:** NC

Incline: 1

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation: — "IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam HS CoverBoard", any thickness mechanically fastened or adhered with any UL Classified adhesive.

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or CertainTeed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", or minimum 1/4-in thick United States Gypsum Co. "FRX-G" or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6-in. from the plywood roof deck butt joints.

Membrane: — IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft².

17. **Deck:** NC

Incline: 1-1/2

Insulation: — Rmax Operating LLC "Multi-Max", any thickness, mechanically fastened or hot mopped.

Membrane: — "IB PVC Single Ply ChemGuard", adhered with Ashland Inc."Pliobond 7500" bonding adhesive, at 1-gal/160-ft.². The overlapping membrane joints are heat sealed.

18. **Deck:** NC

Incline: Unlimited

Impact: 4

Insulation: — Any UL Classified insulation, any thickness:

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply ChemGuard" adhered with "IB Vertibond 432 Bonding Adhesive" at 1-gal/60-ft² or ITW Polymers Sealants North America Inc. "LA 432" adhesive at 1-gal/60-ft.² or "IB Water Borne 636 Adhesive" adhesive at 1-gal/140-ft.².

19. **Deck:** NC

Incline: Unlimited

Impact: 4

Insulation: — Any UL Classified insulation, any thickness:

Barrier Board: — Minimum 1/4-in. Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. SECUROCK Glass-Mat Roof Board, CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply®", adhered with "IB Vertibond 432 Bonding Adhesive" at 1-gal/60-ft² or ITW Polymers Sealants North America Inc. "LA 432" adhesive at 1-gal/60-ft.² or "IB Water Borne 636 Adhesive" adhesive at 1-gal/140-ft.².

20. **Deck:** NC

Incline: Unlimited

Insulation (Optional): — Any UL Classified (except EPS), any thickness, uniform or tapered.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, mechanically fastened with (butt joints of barrier board must be staggered a minimum of 6-in. from the plywood deck butt joints; staggered joints not required for noncombustible roof decks).

Membrane: — "IB PVC" fully adhered with "IB Vertibond 432 Bonding Adhesive" at 2-gal/100-ft² or ITW Polymers Sealants North America Inc. "LA-432" applied at 2-gal/100-ft.².

21. **Deck:** NC

Incline: Unlimited

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation: — IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam-III HD CoverBoard", any thickness mechanically fastened or adhered with any UL Classified adhesive.

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or CertainTeed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6-in. from the plywood roof deck butt joints.

Membrane: — "IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft.².

22. **Deck:** C-15/32

Incline: Unlimited

Insulation: — Any UL Classified insulation, any thickness:

Barrier Board: — Minimum 1/4-in. thick

Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard"

United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" (Type SGMRX)

CertainTeed Gypsum "GlasRoc"

National Gypsum Co. "DEXcell Glass Mat Roof Board"

National Gypsum Co. "DEXcell FA Glass Mat Roof Board"

National Gypsum Co. 7/16" min. "DEXcell" Cement Board

1/2-in Gypsum Board

All joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply ChemGuard" or IB PVC Single Ply adhered with

"IB Vertibond 432 Bonding Adhesive" at 1-gal/60-ft²

"IB Water Borne 636 Adhesive" at 1-gal/140-ft.².

"IB WATER BORNE ADHESIVE" bonding adhesive at 1-gal./170-ft.2 (one side adhesive)

23. **Deck:** NC

Incline: 2

Insulation: — "IB Energy Board-H", "IB Energy Board CG-H", "IB HD ISO-H", "IB Energy Board II", "IB Energy Board III", Hunter Panels: "H-Shield", "H-Shield- CG", "H-Shield HD", Atlas Roof Corp: "AC Foam II", AC Foam III" or "AC Foam HD" any thickness, mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard" or IB PVC Single Ply adhered with

"IB Vertibond 432 Bonding Adhesive" at 1-gal/60-ft²

"IB Water Borne 636 Adhesive" at 1-gal/140-ft.².

"IB WATER BORNE ADHESIVE" bonding adhesive at 1-gal./170-ft.2 (one side adhesive)

24. **Deck:** NC

Incline: 3

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Type SGMRX Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, 1/2-in Gypsum board or 1/2-in. or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with "IB Rapid Set ECO Canister Foam" (spatter)

25. **Deck:** C-15/32

Incline: 3

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Type SGMRX Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, 1/2-in Gypsum board or 1/2-in. or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with "IB Rapid Set ECO Canister Foam" (spatter)

26. **Deck:** NC

Incline: 2

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with "IB Rapid Set ECO Canister Foam" (spatter)

27. **Deck:** C-15/32

Incline: 2

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with "IB Rapid Set ECO Canister Foam" (spatter)

28. **Deck:** NC

Incline: 1/4

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 1/4, 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with "IB Rapid Set ECO Canister Foam" (spatter)

29. **Deck:** C-15/32

Incline: 1/4

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 1/4, 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with "IB Rapid Set ECO Canister Foam" (spatter)

30. **Deck:** NC

Incline: 3

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Type SGMRX Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board or 1/2-in. or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: - "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with ITW FA 636 adhesive at 1-gal./140-ft.2

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

30. **Deck:** C-15/32

Incline: 3

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Type SGMRX Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board or 1/2-in. or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: - "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with

ITW FA 636 adhesive at 1-gal./140-ft.2

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

31. **Deck:** NC

Incline: 2

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with

ITW FA 636 adhesive at 1-gal./140-ft.2

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

32. **Deck:** C-15/32

Incline: 2

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with

ITW FA 636 adhesive at 1-gal./140-ft.2

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

33. **Deck:** NC

Incline: 1/4

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 1/4, 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with

ITW FA 636 adhesive at 1-gal./140-ft.

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

34. **Deck:** C-15/32

Incline: 1/4

Insulation (Optional): — Any UL Classified any thickness

Barrier Board: — 1/4, 3/8, 1/2, or 5/8-in. United States Gypsum Co, "Securock Type FRX-G" Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with

ITW FA 636 adhesive at 1-gal./140-ft.

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

35. **Deck:** NC

Incline: 1/2

Insulation (Optional): — "IB Energy Board-H", "IB Energy Board CG-H", "IB Energy Board II", "IB Energy Board III", "H-Shield", "H-Shield- CG", Atlas Roof Corp: "AC Foam II", AC Foam III" any thickness, mechanically fastened.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with

ITW FA 636 adhesive at 1-gal./140-ft.2.

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

36. **Deck:** NC

Incline: 1/2

Insulation: — "IB Energy Board-H", "IB Energy Board CG-H", "IB Energy Board II", "IB Energy Board III", "H-Shield", "H-Shield- CG", "AC Foam II", AC Foam III" any thickness, mechanically fastened.

Membrane: — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with

ITW FA 636 adhesive at 1-gal./140-ft.2.

"IB WATER BORNE ADHESIVE" adhesive at 1-gal./170-ft.2

37. **Deck:** NC**Incline:** 2**Insulation:** — Johns Manville "ENRGY 2", Atlas Roofing Corp. "ACFoam II", "ACFoam III", any thickness, mechanically fastened.**Membrane:** — "IB PVC Single Ply", adhered with "IB VERTIBOND ADHESIVE" at 60-ft.²/gal.38. **Deck:** NC**Incline:** 2**Insulation:** — Any UL Classified, any thickness, adhered with "IB Rapid Set ECO Canister Foam".**Membrane:** — "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" adhered with "IB Rapid Set ECO Canister Foam" (spatter)39. **Deck:** C-15/32**Incline:** 2**Insulation (Optional):** Any UL Classified insulation, any thickness, mechanically fastened.**Barrier Board:** — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck ® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc-2", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board or 1/2-in Gypsum Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.**Insulation (Optional):** — "IB Energy Board-H", "IB Energy Board CG-H", "IB Energy Board II", "IB Energy Board III", Hunter Panels: "H-Shield", "H-Shield- CG", Atlas Roof Corp: "AC Foam II", AC Foam III" any thickness, mechanically fastened.**Membrane:** — "IB PVC Single Ply", "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" and "IB PVC Single Ply ChemGuard" (40-80 mil), adhered with H.B. Fuller "Millennium KEE/PVC Single Ply Bonding Adhesive" or "Millenium Sprayable PVC Bonding Adhesive".40. **Deck:** C-15/32**Incline:** 1-3/4**Insulation (Optional):** Any UL Classified insulation, any thickness, mechanically fastened.**Barrier Board:** — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck ® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc-2", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board or 1/2-in Gypsum Board with all joints staggered 6-in. from the plywood joints, mechanically fastened or adhered.**Insulation (Optional):** — "IB Energy Board-H", "IB Energy Board CG-H", "IB Energy Board II", "IB Energy Board III", Hunter Panels: "H-Shield", "H-Shield- CG", Atlas Roof Corp: "AC Foam II", AC Foam III" any thickness, mechanically fastened.**Membrane:** — "IB PVC Single Ply", "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" and "IB PVC Single Ply ChemGuard" (40-80 mil), adhered with H.B. Fuller "PVC WB Bonding Adhesive".41. **Deck:** NC**Incline:** 1-3/4**Insulation (Optional):** — "IB Energy Board-H", "IB Energy Board CG-H", "IB Energy Board II", "IB Energy Board III", Hunter Panels: "H-Shield", "H-Shield- CG", Atlas Roof Corp: "AC Foam II", AC Foam III" any thickness, mechanically fastened.**Membrane:** — "IB PVC Single Ply", "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" and "IB PVC Single Ply ChemGuard" (40-80 mil), adhered with H.B. Fuller "PVC WB Bonding Adhesive".42. **Deck:** NC**Incline:** 2**Insulation (Optional):** — "IB Energy Board-H", "IB Energy Board CG-H", "IB Energy Board II", "IB Energy Board III", Hunter Panels: "H-Shield", "H-Shield- CG", Atlas Roof Corp: "AC Foam II", AC Foam III" any thickness, mechanically fastened.**Membrane:** — "IB PVC Single Ply", "IB PVC Single Ply Fleeceback", "IB PVC Single Ply ChemGuard Fleeceback" and "IB PVC Single Ply ChemGuard" (40-80 mil), adhered with H.B. Fuller "Millennium KEE/PVC Single Ply Bonding Adhesive" or "Millenium Sprayable PVC Bonding Adhesive".

Class B - Fully Adhered**1. Deck:** NC**Incline:** 3**Insulation:** — Atlas Roofing Corp. "ACFoam II" any thickness, mechanically fastened.**Membrane:** — "IB PVC" fully adhered with "IB Vertibond 432 Bonding Adhesive" at 2-gal/100-ft² or ITW Polymers Sealants North America Inc. "LA-432" applied at 2-gal/100-ft².**Class A - Mechanically Fastened****1. Deck:** NC**Incline:** 2**Insulation:** — Glass fiber, Johns Manville "Fesco-Foam", perlite or HD Wood fiber Board, 3/4 to 4-in.**Membrane:** — "IB PVC Single Ply ChemGuard".**2. Deck:** NC**Incline:** 2**Insulating Concretes:** — Cellular, gypsum vermiculite, perlite or structural, poured in place over deck.**Membrane:** — "IB PVC Single Ply ChemGuard".**3. Deck:** NC**Incline:** 2**Insulation:** — Any UL Classified polystyrene, any thickness, mechanically fastened.**Slip Sheet:** — Atlas Roofing Corp. "FR-50" or "IB Fire Sheet 50".**Membrane:** — "IB PVC Single Ply ChemGuard".**4. Deck:** NC**Incline:** 2**Slip Sheet (Optional):** — Atlas Roofing Corp. "FR-10 " or "IB Fire Sheet 10".**Insulation:** — "IB Energy Board II", Atlas Roofing Corp. "ACFoam II" or "ACFoam Supreme", any thickness, hot mopped in place or mechanically fastened.**Membrane:** — "IB PVC Single Ply ChemGuard".**5. Deck:** NC**Incline:** 1**Insulation:** — Any UL Classified polystyrene, any thickness.**Slip Sheet:** — Atlas Roofing Corp. "FR-10" or "IB Fire Sheet 10".**Membrane:** — "IB PVC Single Ply ChemGuard".**6. Deck:** NC**Incline:** 3**Insulation:** — Atlas Roofing Corp. "ACFoam II" or "ACF III", "IB Energy Board II", "IB Energy Board III", Firestone Building Products Co. LLC "ISO 95+GL" or "ISO 95+GW", Johns Manville "ENRGY 2A", any thickness.**Membrane:** — "IB PVC Single Ply ChemGuard".**7. Deck:** C-15/32**Incline:** 3

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck[®], DensDeck Prime[®]" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co. "FRX-G" or CertainTeed Gypsum "GlasRoc" or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in. (minimum) gypsum board with all joints staggered a minimum of 6-in. from the plywood joints.

Insulation: — Atlas Roofing Corp. "ACFoam II" or "ACF III" or "IB Energy Board II", "IB Energy Board III" or Firestone Building Products Co. LLC "ISO 95+GL" or "ISO 95+GW" or Johns Manville "ENRGY 2A" or "Thermarroof Plus", any thickness.

Membrane: — "IB PVC Single Ply ChemGuard".

8. Deck: C-15/32

Incline: Unlimited

Insulation (Optional): — Any UL Classified, any thickness.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck[®], DensDeck Prime[®]" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board," or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board with all joints staggered a minimum of 6-in. from the plywood joints.

Membrane: — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".

9. Deck: C-15/32

Incline: 1/2

Slip Sheet: — Two layers Atlas Roofing Corp. "FR-50" or "IB Fire Sheet 50".

Membrane: — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".

10. Deck: NC

Incline: 1

Insulation: — Owens Corning Specialty Products "Foamular", any thickness.

Slip Sheet: — Atlas Roofing. "FR-10" or "FR-50" or "IB Fire Sheet 10" or "IB Fire Sheet 50".

Membrane: — "IB PVC Single Ply ChemGuard".

11. Deck: C-15/32

Incline: 1/2

Slip Sheet: — One layer Atlas Roofing Corp. "FR-10", or "FR-50", "IB Fire Sheet 10" or "IB Fire Sheet 50".

Insulation: — "IB Energy Board III" or Atlas Roofing Corp. "ACFoam III", 1.5-in. minimum thickness with all joints staggered 6-in. minimum. from plywood joints.

Membrane: — "IB PVC Single Ply ChemGuard".

12. Deck: NC

Incline: 3

Insulation: — Firestone Building Products Co. LLC "ISO 95+GL", Johns Manville "ENRGY 2", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", Atlas Roofing Corp. "ACFoam III", "Johns Manville "ISO 1", "IB Energy Board II", any thickness, mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard".

13. Deck: C-15/32

Incline: 1/2

Slip Sheet: — Two layers Atlas Roofing Corp. "FR-50".

Insulation: — Minimum 1.5-in. thick Firestone Building Products Co. LLC "ISO 95+GL", Johns Manville "ENRGY-2", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", Atlas Roofing Corp. "ACFoam III", Johns Manville "ISO 1", "IB Energy Board II" with all joints staggered 6-in. from the plywood joints, mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard".

14. Deck: C-15/32

Incline: 1/2

Slip Sheet: — Two layers Atlas Roofing Corp. "FR-50" or "IB Fire Sheet 50".

Membrane: — "IB PVC Single Ply ChemGuard".

15. **Deck:** C-15/32

Incline: 1/2

Slip Sheet: — One layer Atlas Roofing Corp. "FR-10" or "FR-50".

Insulation: — Minimum 1.5-in. thick Atlas Roofing Corp. "ACFoam III" or "IB Energy Board III" with all joints staggered 6-in. from the plywood joints, mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".

16. **Deck:** C-15/32

Incline: 3/4

Slip Sheet: — Two layers Atlas Roofing Corp. "FR-10" or "IB Fire Sheet 10" mechanically fastened.

Insulation (Optional): — Any UL Classified, any thickness (except EPS and wood fiberboard).

Membrane: — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply"

17. **Deck:** C-15/32

Incline: 1-1/2

Slip Sheet: — Two layers GAF "VersaShield Underlayment" or "IB Fire Sheet - 2".

Membrane: — "IB PVC Single Ply ChemGuard".

18. **Deck:** C-15/32

Incline: 2

Slip Sheet: — Two layers GAF "VersaShield Underlayment".

Insulation: — Firestone Building Products Co. LLC "ISO 95+GL" or "ISO 95+GW" or Johns Manville "ENRGY 2A", any thickness, mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard".

19. **Deck:** C-15/32

Incline: 2

Slip Sheet: — Two layers GAF "VersaShield Underlayment".

Insulation (Optional): — Any thickness Firestone Building Products Co. LLC "ISO 95+GL", Johns Manville "ENRGY 2", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", Atlas Roofing Corp. "ACFoam III", Johns Manville "ISO 1", "IB Energy Board II"

Membrane: — "IB PVC Single Ply ChemGuard".

20. **Deck:** C-15/32

Incline: 1/2

Slip Sheet: — Two layers Atlas Roofing Corp. "FR 50" or "IB Fire Sheet 50".

Insulation: — Minimum 1.5-in. thick Firestone Building Products Co. LLC "ISO 95+GL", Johns Manville "ENRGY 2", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", Atlas Roofing Corp. "ACFoam III", Johns Manville "ISO 1", "IB Energy Board II" with all joints staggered 6-in. from the plywood joints.

Membrane: — "IB PVC Single Ply".

21. **Deck:** NC

Incline: 2-1/2

Insulation: — Any thickness Atlas Roofing Corp "AC Foam II", Atlas Roofing Corp "AC Foam III", "IB Energy Board II", "IB Energy Board III".

Membrane: — "IB PVC Single Ply".

22. **Deck:** NC

Incline: 1/2

Slip Sheet (Optional): — Any UL Classified Slip Sheet.

Insulation: — (1-in. minimum) One of the following:

Owens Corning "Foamular 150," "Foamular 250," in combination with one ply Atlas Roofing Corp. "FR-10"

Membrane: — "IB PVC"

23. **Deck:** C-15/32

Incline: 1/2

Insulation: — 1/2-in. gypsum board - (joint staggered a minimum of 6-in. with the joints in plywood); (optional) Branch River Foam 1.0 pcf EPS - 1/2-in. max.

Slip Sheet (Optional when EPS is not used): — 1 ply Atlas Roofing Corp. "FR-50"

Membrane: — "IB PVC"

24. **Deck:** C-15/32

Incline: 1/2

Barrier Board: — 1/2-in. minimum gypsum board, mechanically fastened (joints in gypsum board are staggered a minimum of 6-in. from plywood deck joints). The following insulations may be any thickness:

Insulation/Slip Sheet: —

a. "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

b. Atlas Roofing Corp. "ACFoam II" / 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

c. Owens Corning "Foamular 150," "Foamular 250" or Dow Chemical "Styrofoam SM" / 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

d. Polyisocyanurate (1-in. minimum) covered by perlite (3/4-in. minimum) / (optional) 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

e. BASF EPS (uniform thickness or tapered), covered with perlite (3/4-in. minimum) / (optional) 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

Membrane: — "IB PVC" (PVC).

25. **Deck:** NC

Incline: 1

Barrier Board (Optional): — 1/2-in. minimum gypsum board or 3/4-in. perlite, mechanically fastened.

Insulation: — Dow Chemical "Styrofoam SM, RM, TG or Grayboard," 1-in. minimum.

Slip Sheet: — 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10" or 3/4-in. minimum perlite with no slip-sheet.

Membrane: — "IB PVC" mechanically fastened.

26. **Deleted.**

27. **Deck:** NC

Incline: 1

Insulation: — Atlas Roofing Corp. "ACFoam II" (1-in. minimum), mechanically fastened or hot mopped.

Membrane: — "IB PVC".

28. **Deck:** C-15/32

Incline: 2

Barrier Board: — 1/2-in. gypsum board, joints staggered a minimum 6-in. from the plywood joints.

Membrane: — "IB PVC".

29. **Deck:** NC

Incline: 1

Insulation: — Cellular concrete, gypsum concrete, vermiculite concrete, perlite concrete or structural concrete.

Membrane: — "IB PVC".

30. **Deck:** NC

Incline: 4

Insulation: — One of the following or combinations of the following insulations any thickness, polyisocyanurate or wood fiberboard.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/2-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National

Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board

Membrane: — "IB PVC".

31. **Deck:** C-15/32

Incline: 2

Insulation: — Polystyrene, any thickness.

Insulation (Optional if slip sheet is used): — Polyisocyanurate, 1-in. minimum thickness.

Slip Sheet (Optional if polyisocyanurate is used): — 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10."

Membrane: — "IB PVC" mechanically fastened.

32. **Deck:** NC

Incline: 1

Insulation (Optional): — Polyisocyanurate, any thickness.

Insulation: — Polystyrene, any thickness (uniform or tapered).

Insulation (Optional): — Polyisocyanurate, 1-in. minimum thickness.

Slip Sheet (Optional if polyisocyanurate is used): — 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10".

Membrane: — "IB PVC" mechanically fastened.

33. **Deck:** C-15/32

Incline: 4

Barrier Board: — Minimum 1/2-in. gypsum board (joints staggered a minimum of 6-in. from the plywood deck joints).

Insulation (Optional): — Polyisocyanurate, any thickness.

Cover Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/2-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Membrane: — "IB PVC".

34. **Deck:** Structural Cement-Fiber Unit*

Incline: 1

Insulation: — Atlas Roofing Corp. "ACFoam II" (1-in. minimum).

Slip Sheet (Optional): — Any UL Classified.

Membrane: — "IB PVC".

* Minimum 2-in. thick, Classified under Structural Cement-Fiber Units (CIYT) Fire Resistance Directory.

35. **Deck:** Structural Cement-Fiber Unit*

Incline: 1/2

Membrane: — "IB PVC".

* Minimum 2-in. thick, Classified under Structural Cement-Fiber Units (CIYT) Fire Resistance Directory.

36. **Deck:** NC

Incline: 2-1/2

Insulation: — Atlas Roofing Corp. "ACFoam II" 1-in. minimum, mechanically fastened.

Membrane: — "IB PVC".

37. **Deck:** NC

Incline: 4

Barrier Board (Optional): — 1/2-in. minimum gypsum board.

Insulation (Optional): — Polyisocyanurate, any thickness.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/2-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Membrane: — "IB PVC".

38. **Deck:** C-15/32

Incline: Unlimited

Insulation (Optional): — Polyisocyanurate, urethane, wood fiber, polystyrene, EPS, polyisocyanurate composite mechanically fastened, any thickness.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Membrane: — "IB PVC".

39. **Deck:** C-15/32

Incline: 1/2

Slip Sheet: — Two plies "IB Fire Sheet 50" or Atlas Roofing Corp. "FR 50".

Membrane: — "IB PVC".

40. **Deck:** C-15/32

Incline: Unlimited

Slip Sheet: — Four plies Atlas Roofing "FR-10" or "IB Fire Sheet 10", mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard", "IB PVC Single Ply" or "IB PVC", mechanically fastened.

41. **Deck:** C-15/32

Incline: 3

Insulation (Optional): — Any UL Classified polyisocyanurate insulation, any thickness.

Slip Sheet: — Four plies Atlas Roofing "FR-10" or "IB Fire Sheet 10", mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard", "IB PVC Single Ply" or "IB PVC", mechanically fastened.

42. **Deck:** C-15/32

Incline: 2

Insulation (Optional): — Any UL Classified insulation, any thickness.

Slip Sheet: — Three plies Atlas Roofing "FR-10" or "IB Fire Sheet 10", mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard", "IB PVC Single Ply" or "IB PVC", mechanically fastened.

43. **Deck:** NC

Incline: 2-1/2

Insulation: — Rmax Operating LLC "Multi-Max", any thickness.

Membrane: — "IB PVC Single Ply ChemGuard".

44. **Deck:** C-15/32

Incline: 2-1/2

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck®", "DensDeck Prime®" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in. (minimum) gypsum board with all joints staggered a minimum of 6-in. from the plywood joints.

Insulation: — Rmax Operating LLC "Multi-Max", or "Thermarroof Plus", any thickness.

Membrane: — "IB PVC Single Ply ChemGuard".

45. **Deck:** NC

Incline: 1-1/2

Insulation: — Rmax Operating LLC "Multi-Max FA"

Membrane: — "IB PVC Single Ply ChemGuard".

46. **Deck:** C-15/32

Incline: 1-1/2

Slip Sheet: — Two layers GAF "VersaShield Underlayment".

Insulation (Optional): — Rmax Operating LLC "Multi-Max FA"

Membrane: — "IB PVC Single Ply ChemGuard".

47. **Deck:** Structural Cement-Fiber Unit*

Incline: 1/2

Insulation: — Rmax Inc. "Multi-Max" (1-in. minimum).

Slip Sheet (Optional): — Any UL Classified.

Membrane: — "IB PVC". * Minimum 2-in. thick, Classified under Structural Cement-Fiber Units (CIYT) Fire Resistance Directory.

48. **Deck:** NC

Incline: Unlimited

Insulation (Optional): — Any UL Classified, any thickness.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck®, DensDeck Prime®" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board," or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board with all joints staggered a minimum of 6-in. from the plywood joints.

Membrane: — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".

49. **Deck:** NC

Incline: Unlimited

Insulation (Optional): — Polyisocyanurate, urethane, wood fiber, polystyrene, EPS, polyisocyanurate composite mechanically fastened, any thickness.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Membrane: — "IB PVC".

Class B - Mechanically Fastened

1. **Deck:** C-15/32

Incline: 3/4

Slip Sheet: — Atlas Roofing Corp. "FR-50" or "IB Fire Sheet 50".

Insulation: — "IB Energy Board II", Atlas Roofing Corp. "ACFoam II" or "ACFoam Supreme", 1.5-in. minimum thickness, offset 6-in. from joints in plywood, hot mopped or mechanically fastened.

Membrane: — "IB PVC Single Ply ChemGuard".

2. **Deck:** C-15/32

Incline: 1/2

Slip Sheet: — One layer Atlas Roofing Corp. "FR-50" or "IB Fire Sheet 50".

Membrane: — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".

3. Deck: C-15/32**Incline:** 1/2**Slip Sheet:** — One ply Atlas Roofing Corp. "FR-10,"IB Fire Sheet 10 mechanically fastened.**Membrane:** — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".**4. Deck:** NC**Incline:** Unlimited**Insulation:** — Any UL Classified insulation, any thickness.**Slip Sheet:** — One ply Atlas Roofing Corp. "FR-50" or "IB Fire Sheet 50".**Membrane:** — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".**5. Deck:** C-15/32**Incline:** 1**Slip Sheet:** — Two layers Atlas Roofing Corp. "FR-50" or "IB Fire Sheet 50".**Membrane:** — "IB PVC Single Ply ChemGuard" or "IB PVC Single Ply".**6. Deck:** C-15/32**Incline:** 1-1/2**Slip Sheet:** — One layer GAF "VersaShield Underlayment".**Membrane:** — "IB PVC Single Ply ChemGuard".**7. Deck:** C-15/32**Incline:** 1-1/2**Slip Sheet:** — One layer GAF "VersaShield Underlayment".**Insulation:** — Firestone Building Products Co. LLC "ISO 95+GL" or "ISO 95+GW" or Johns Manville "ENRGY 2A" or "Thermarook Plus", any thickness.**Membrane:** — "IB PVC Single Ply ChemGuard".**8. Deck:** C-15/32**Incline:** 1-1/2**Slip Sheet:** — One layer GAF "VersaShield Underlayment".**Insulation:** — Firestone Building Products Co. LLC "ISO 95+GL", Johns Manville "ENRGY 2", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", Atlas Roofing Corp. "ACFoam III", Johns Manville "ISO 1", "IB Energy Board II" any thickness, mechanically fastened.**Membrane:** — "IB PVC Single Ply ChemGuard".**9. Deck:** C-15/32**Incline:** 1**Insulation:** — Any UL Classified Polystyrene, minimum 3/4-inch thick.**Slip Sheet:** — Two layers GAF "VersaShield Underlayment".**Membrane:** — "IB PVC Single Ply ChemGuard".**10. Deck:** NC**Incline:** 3**Barrier Board:** — For standing seam steel decks, 2-in. maximum perlite between the seams.**Insulation:** — Atlas Roofing Corp. "ACFoam II" any thickness.**Membrane:** — "IB PVC".**11. Deck:** NC**Incline:** No Limitations**Insulation:** — Polyisocyanurate, any thickness.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Membrane: — "IB PVC".

12. **Deck:** C-15/32

Incline: 1/2

Slip Sheet: — Two plies "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10".

Membrane: — "IB PVC".

13. **Deck:** C-15/32

Incline: 1/2

Slip Sheet: — One ply "IB Fire Sheet 50" or Atlas Roofing Corp. "FR-50".

Membrane: — "IB PVC".

14. **Deck:** C-15/32

Incline: 1-1/2

Slip Sheet: — One layer GAF "VersaShield Underlayment".

Insulation: — Rmax Operating LLC "Multi-Max" or "Thermarroof Plus", any thickness.

Membrane: — "IB PVC Single Ply ChemGuard".

15. **Deck:** C-15/32

Incline: 1-1/2

Slip Sheet: — One layer GAF "VersaShield Underlayment".

Insulation: — Rmax Operating LLC "Multi-Max FA"

Membrane: — "IB PVC Single Ply ChemGuard".

2. **Deck:** NC

Incline: Unlimited

Insulation: — Atlas Roofing Corp. "ACFoam II" mechanically fastened, 1-in. minimum.

Membrane: — "IB PVC".

FLUID APPLIED COATING SYSTEM

Class A

1. **Deck:** NC

Incline: 2

Insulation (Optional): — Any UL Classified polyisocyanurate insulation, any thickness, mechanically fastened or adhered with any UL Classified insulation adhesive.

Barrier Board (Optional): — Minimum 1/4-in. thick GP Gypsum Corp. "DensDeck® Roofboard", "DensDeck Prime® Roofboard" or "DensDeck DuraGuard™ Roofboard" mechanically fastened with all butt joints staggered a minimum of 6-in. from plywood roof deck butt joints.

Base Coat: — "IB Acrylic Pro Coating", or "IB Acrylic Pro-QS Coating", or "IB Acrylic Pro EZ Coat" or "IB BleedBlock", "IB Acrylic HT Coating" or "IB Acrylic HT-QS Coating" or "IB Acrylic HT EZ Coat" acrylic roof coatings applied at a rate of 1 1/2-gal./100-ft. ² or "IB Silicone Coating" silicone roof coating applied at a rate of 1-gal./100-ft. ²

Top Coat: — Top Coat: "IB Acrylic Pro Coating", or "IB Acrylic Pro-QS Coating", or "IB Acrylic Pro EZ Coat" or "IB BleedBlock", "IB Acrylic HT Coating" or "IB Acrylic HT-QS Coating" or "IB Acrylic HT EZ Coat" acrylic roof coatings applied at a rate of 1½-gal./100-ft. ² or "IB Silicone Coating" silicone roof coating applied at a rate of 1-gal./100-ft. ²

Surfacing (Optional): — No. 11 ceramic coated roof granules applied at 30-lbs/100-ft² into wet top coat.

2. Deck: C-15/32

Incline: 2

Insulation (Optional): — Any UL Classified polyisocyanurate insulation, any thickness, mechanically fastened or adhered with any UL Classified insulation adhesive.

Barrier Board: — Minimum ¼-in. thick GP Gypsum Corp. "DensDeck® Roofboard", "DensDeck Prime® Roofboard" or "DensDeck DuraGuard™ Roofboard" mechanically fastened with all butt joints staggered a minimum of 6-in. from plywood roof deck butt joints.

Base Coat: — "IB Acrylic Pro Coating", or "IB Acrylic Pro-QS Coating", or "IB Acrylic Pro EZ Coat" or "IB BleedBlock", "IB Acrylic HT Coating" or "IB Acrylic HT-QS Coating" or "IB Acrylic HT EZ Coat" acrylic roof coatings applied at a rate of 1½-gal./100-ft. ² or "IB Silicone Coating" silicone roof coating applied at a rate of 1-gal./100-ft. ²

Top Coat: — Top Coat: "IB Acrylic Pro Coating", or "IB Acrylic Pro-QS Coating", or "IB Acrylic Pro EZ Coat" or "IB BleedBlock", "IB Acrylic HT Coating" or "IB Acrylic HT-QS Coating" or "IB Acrylic HT EZ Coat" acrylic roof coatings applied at a rate of 1½-gal./100-ft. ² or "IB Silicone Coating" silicone roof coating applied at a rate of 1-gal./100-ft. ²

Surfacing (Optional): — No. 11 ceramic coated roof granules applied at 30-lbs/100-ft² into wet top coat.

MAINTENANCE AND REPAIR SYSTEMS

Class A

1. Deck: NC

Incline: 2

Existing Roof System: — Class A BUR covered with:

Membrane: — "IB PVC Single Ply ChemGuard", mechanically fastened with metal screws and discs per manufacturer's instructions.

2. Deck: NC

Incline: 1/4

Existing Roof System: — Class A, B or C BUR covered with:

Insulation: — 1-in. phenolic, covered with Johns Manville 1/2-in. "Retrofit Board".

Membrane: — "IB PVC Single Ply ChemGuard", mechanically fastened.

3. Deck: NC

Incline: 1/2

Existing Roof System: — Class A, B or C built up system, smooth surface, cap sheet or gravel surfaced, gravel may be removed.

Insulation: — Insulfoam "R-TECH" Types "I", "VIII", "II", "IX" or "FanFold" 1-in. maximum thickness.

Membrane: — "IB PVC Single Ply ChemGuard", mechanically fastened.

4. Deck: C-15/32

Incline: 1/2

Existing Roof System: — Class A, B or C built up system, smooth surface or gravel surfaced, gravel may be removed.

Insulation: — Insulfoam "R-TECH" Types "I", "VIII", "II", "IX" or "FanFold" any thickness.

Membrane: — "IB PVC Single Ply ChemGuard".

Surfacing: — River bottom stone (¾-in. to 1½-in. diameter) at 900-lbs/100-ft. ².

5. Deck: NC

Incline: 1/2

Existing Roof System: — Insulated or noninsulated cap sheet, smooth or gravel surfaced (loose gravel may be removed).

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Insulation/Slip Sheet: — (any thickness)

a. Perlite/(optional) 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

b. "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

c. Atlas Roofing Corp. "ACFoam II"/"IB Fire Sheet 10" or 1 ply Atlas Roofing Corp. "FR-10"

d. Owens Corning "Foamular 150," "Foamular 250" or Dow Chemical "Styrofoam SM"/1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

e. Polyisocyanurate (1.0-in. minimum) covered by perlite (3/4-in. minimum)/(optional) 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

f. BASF EPS (uniform thickness or tapered), covered with perlite (3/4-in. minimum)/(optional) 1 ply "IB Fire Sheet 10" or Atlas Roofing Corp. "FR-10"

Membrane: — "IB PVC"

6. **Deck:** NC

Incline: 3

Existing Roof System: — Insulated or noninsulated cap, sheet smooth or gravel surfaced (loose gravel may be removed).

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Insulation: — Atlas Roofing Corp. "ACFoam II," mechanically fastened any thickness.

Membrane: — "IB PVC".

7. **Deck:** C-15/32

Incline: 1

Existing Roof System: — Insulated or noninsulated cap sheet, smooth or gravel surfaced bur (gravel may be removed from noncombustible decks) or PVC roof system, covered with:

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Membrane: — "IB PVC".

8. **Deck:** NC

Incline: 1

Existing Roof System: — Insulated or noninsulated cap sheet, smooth or gravel surfaced bur (gravel may be removed from noncombustible decks) or PVC roof system, covered with:

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard", "DensDeck Prime® Roofboard", "DensDeck DuraGuard™ Roofboard" or United States Gypsum Co. "SECUROCK Glass-Mat Roof Board" or minimum 1/4-in thick United States Gypsum Co "FRX-G" or CertainTeed Gypsum "GlasRoc", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, or 1/2-in Gypsum Board.

Membrane: — "IB PVC".

Class A, B or C

1. Deck: C-15/32**Incline:** 1/2**Existing Roof System** — Class A, B or C to retain existing Classification, BUR covered with gravel maintained at 400-lbs/100-ft.².**Separation Sheet:** — Amocor P14, PB4 or PB6.**Membrane:** — "IB PVC Single Ply ChemGuard", mechanically fastened.**2. Deck:** C-15/32**Incline:** Unlimited**Existing Roof System:** — Class A to retain existing Classification, Insulated or Uninsulated cap sheet or smooth surfaced roof.**Insulation (Optional):** — Polyisocyanurate, any thickness.**Barrier Board:** — Minimum 1/2-in. gypsum board.**Membrane:** — "IB PVC Single Ply ChemGuard", mechanically fastened.**3. Deck:** C-15/32**Incline:** 1-1/2**Existing Roof System:** — Any Class A, B or C built-up roof system.**Slip Sheet:** — One layer GAF "VersaShield Underlayment", mechanically fastened.**Roof Covering:** — "IB PVC Single Ply ChemGuard", mechanically fastened.**4. Deck:** NC**Incline:** 1/2**Existing Roof System:** — Class A, B or C built up systems, smooth surfaced, cap sheet or gravel surfaced (gravel maintained) to retain the existing Classification.**Insulation:** — "R-TECH" Type "I", "VIII", "II", "IX" or "FanFold" or "Insulfoam" Type "I", "VIII", "II", "IX", 1-in. max thickness.**Membrane:** — "IB PVC Single Ply ChemGuard", mechanically fastened.**Surfacing:** — River bottom stone (3/4-in. to 1 1/2-in. diameter) at 900-lbs/100-ft.².**5. Deck:** C-15/32**Incline:** 1/2**Existing Roof System:** — Class A, B or C built up systems, smooth surfaced, cap sheet or gravel surfaced (gravel maintained) to retain the existing Classification.**Insulation:** — "R-TECH" Type "I", "VIII", "II", "IX" or "FanFold" or "Insulfoam" Type "I", "VIII", "II", "IX", 1 in. max thickness.**Membrane:** — "IB PVC Single Ply ChemGuard", mechanically fastened.**Surfacing:** — River bottom stone (3/4-in. to 1 1/2-in. diameter) at 900 lbs/100-ft.².**6. Deck:** C-15/32**Incline:** 1-1/2**Existing Roof System:** — Any Class A, B or C built-up roof system to maintain existing classification.**Slip Sheet:** — One layer Atlas Roofing Corp. "FR-10" or "IB Fire Sheet 10" mechanically fastened.**Roof Covering:** — "IB PVC Single Ply ChemGuard", IB PVC Single Ply & IB PVC mechanically fastened.**7. Deleted****8. Deleted****9. Deck:** C-15/32**Incline:** 1**Existing Roof System:** — Class A, B or C insulated (any thickness wood fiber, perlite, polyisocyanurate, urethane or polystyrene with a slip sheet).**Polyester Fleece:** — One ply 2.5-oz/yd.² (maximum) polyester fleece.**Membrane:** — "IB PVC" mechanically fastened.

10. Deck: C-15/32**Incline:** 1

Existing Roof System: — Class A, B or C built-up system, smooth surface, cap sheet or gravel surfaced, gravel to be maintained at 400-lbs/100-ft.², to retain existing Classification.

Insulation: — (Optional) Owens Corning Specialty Products "Foamular," 1-in. max.

Slip Sheet: — 1 ply "IB Fire Sheet 10" or Atlas Roofing "FR10".

Membrane: — "IB PVC" mechanically fastened.

11. Deck: C-15/32**Incline:** Unlimited

Existing Roof System: — Any Class A, B or C UL Classified single ply membrane system, mechanically fastened or fully adhered, non-insulated or insulated, to retain existing Classification.

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation: — "IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam-III HD CoverBoard", any thickness mechanically fastened or adhered with any UL Classified adhesive.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6 in. from the plywood roof deck butt joints.

Membrane: — "IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft².

12. Deck: NC**Incline:** 1

Existing Roof System: — Any Class A, B or C UL Classified single ply membrane system, mechanically fastened or fully adhered, non-insulated or insulated, to retain existing Classification.

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation: — "IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam-III HD CoverBoard", minimum 1 in. thick mechanically fastened or adhered with any UL Classified adhesive.

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", or minimum 1/4-in thick United States Gypsum Co. "FRX-G" or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6-in. from the plywood roof deck butt joints.

Membrane: — "IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft².

13. Deck: C-15/32**Incline:** 1

Existing Roof System: — Any Class A, B or C built up roof system.

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation (Optional): — "IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam-III HD CoverBoard", any thickness mechanically fastened or adhered with any UL Classified adhesive

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", minimum 1/4-in thick United States Gypsum Co. "FRX-G" or or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof

Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6-in. from the plywood roof deck butt joints.

Membrane: — "IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft².

14. **Deck:** NC

Incline: Unlimited

Existing Roof System: — Class A to retain existing Classification, Insulated or Uninsulated cap sheet or smooth surfaced roof.

Insulation (Optional): — Polyisocyanurate, any thickness.

Barrier Board: — Minimum 1/2-in. gypsum board.

Membrane: — "IB PVC Single Ply ChemGuard", mechanically fastened.

15. **Deck:** NC

Incline: 1-1/2

Existing Roof System: — Any Class A, B or C built-up roof system to maintain existing classification.

Slip Sheet: — One layer Atlas Roofing Corp. "FR-10" or "IB Fire Sheet 10" mechanically fastened.

Roof Covering: — "IB PVC Single Ply ChemGuard", IB PVC Single Ply & IB PVC mechanically fastened.

16. **Deck:** NC

Incline: Unlimited

Existing Roof System: — Any Class A, B or C UL Classified single ply membrane system, mechanically fastened or fully adhered, non-insulated or insulated, to retain existing Classification.

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation: — "IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam-III HD CoverBoard", any thickness mechanically fastened or adhered with any UL Classified adhesive.

Barrier Board: — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6 in. from the plywood roof deck butt joints.

Membrane: — "IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft².

17. **Deck:** NC

Incline: 1

Existing Roof System: — Any Class A, B or C built up roof system.

Vapor Barrier (Optional): — Polyethylene, Kraft or Soprema Inc. "SopraVap'r", self-adhered.

Insulation (Optional): — "IB Energy Board II", "IB Energy Board III", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or "ACFoam-III HD CoverBoard", any thickness mechanically fastened or adhered with any UL Classified adhesive.

Barrier Board (Optional): — Minimum 1/4-in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime 2™ Roofboard" or "DensDeck DuraGuard® Roofboard" or Certainteed Gypsum Inc. "GlasRoc" or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board (Type SGMRX)", or minimum 1/4-in thick United States Gypsum Co. "FRX-G" or National Gypsum Co. "DEXcell Glass Mat Roof Board" or National Gypsum Co. "DEXcell FA Glass Mat Roof Board", or minimum 7/16-in. thick National Gypsum Co. "DEXcell" Cement Board, loose laid, mechanically fastened or adhered with any UL Classified insulation adhesive with all butt joints in the barrier board staggered a minimum of 6-in. from the plywood roof deck butt joints.

Membrane: — "IB PVC Fleeceback" adhered with ICP Adhesives "CR-20" at 3.75 lb/100 ft².

18. **Deck:** NC**Incline:** 2

Existing Roof Covering System: — Any UL Classified existing base sheet and cap sheet built-up roofing system to retain existing Classification, covered with:

Base Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1 to 1-1/2 gal./100-ft.² or “IB Silicone Coating” silicone roof coatings, applied at a rate of 1-gal./100-ft.².

Top Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1 to 1-1/2 gal./100-ft.² or “IB Silicone Coating” silicone roof coatings, applied at a rate of 1-gal./100-ft.².

19. **Deck:** C-15/32**Incline:** See Note 1

Existing Roof System: — Any Class A, B or C uncoated, insulated or uninsulated, modified bitumen membrane, mechanically fastened or fully adhered or Type G3 mineral surfaced cap BUR to retain existing Classification.

Surfacing: — “IB Silicone Coating” applied at 1-1/2 gal./100-ft.².

Surfacing (optional): — No. 11 ceramic coated roof granules, applied at 30-lbs/100-ft² into wet top coat.

Note 1: Classification (A, B or C) and maximum incline will be the same as that of the Classified Roofing System (TGFU).

20. **Deck:** NC**Incline:** 2

Existing Roof Covering System: — Any UL Classified existing base sheet and cap sheet built-up roofing system to retain existing Classification, covered with:

Foamed Plastic: — Minimum 1-1/2 in. thick Everest Systems LLC “OPTICELL 2.7”, “OPTICELL 3.0” (2.7 to 3.0-lbs./ft.³) or Everest Systems LLC “EVERCELL 27”, “EVERCELL 30” (2.7 to 3.0-lbs./ft.³) spray applied foamed plastic.

Base Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1 to 1-1/2 gal./100-ft.² or “IB Silicone Coating” silicone roof coatings, applied at a rate of 1-gal./100-ft.².

Top Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1 to 1-1/2 gal./100-ft.² or “IB Silicone Coating” silicone roof coatings, applied at a rate of 1-gal./100-ft.².

21. **Deck:** C-15/32**Incline:** 1/2

Existing Roof System: Class A, B, or C insulated or uninsulated modified bitumen membrane roof covering system or mineral surfaced BUR to maintain existing Class A, B, or C Classification surfaced with:

Base Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coating applied at a rate of 1-gal./100-ft.²

Reinforcement (Optional): Polyester fabric (maximum 3-oz./yd.²) embedded into wet base coat.

Top Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coating applied at a rate of 1-gal./100-ft.²

Surfacing (optional): Broadcast application of No. 11 ceramic coated roofing granules applied at 35 to 40-lbs/100-ft.²

22. **Deck:** C-15/32**Incline:** 1

Existing Roof System: Class A, B, or C insulated or uninsulated, mechanically fastened or fully adhered PVC/TPA single ply membrane roof covering system to maintain existing Class A, B or C Classification surfaced with:

Base Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coatings applied at a rate of 1-gal./100-ft.²

Reinforcement: Polyester fabric (maximum 3-oz./yd.²) embedded into wet base coat.

Top Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coating applied at a rate of 1-gal./100-ft.²

Surfacing (optional): Broadcast application of No. 11 ceramic coated roofing granules applied at 35 to 40-lbs/100-ft.²

23. **Deck:** C-15/32**Incline:** ½

Existing Roof System: Class A, B, or C insulated or uninsulated fully adhered or mechanically fastened EPDM single ply membrane roof covering system to maintain existing Class A, B or C Classification surfaced with:

Base Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coatings applied at a rate of 1-gal./100-ft.²

Reinforcement (Optional): Polyester fabric (maximum 3-oz./yd.²) embedded into wet base coat over the lap seam, maximum 3 inches wide.

Top Coat: — “IB Acrylic Pro Coating”, “IB Acrylic Pro-QS Coating”, “IB Acrylic Pro EZ Coat” “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coating applied at a rate of 1-gal./100-ft.²

Surfacing (optional): Broadcast application of No. 11 ceramic coated roofing granules applied at 35 to 40-lbs/100-ft.²

24. **Deck:** C-15/32**Incline:** 1-½

Existing Roof System: Class A, B, or C insulated or uninsulated fully adhered or mechanically fastened TPO single ply membrane roof covering system to maintain existing Class A, B or C Classification surfaced with:

Base Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat” or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coatings applied at a rate of 1-gal./100-ft.²

Reinforcement (Optional): Polyester fabric (maximum 3-oz./yd.²) embedded into wet base coat over the lap weld, maximum 3 inches wide.

Top Coat: — “IB Acrylic Pro Coating”, or “IB Acrylic Pro-QS Coating”, or “IB Acrylic Pro EZ Coat”, or “IB BleedBlock”, or “IB Acrylic HT Coating” or “IB Acrylic HT-QS Coating” or “IB Acrylic HT EZ Coat” acrylic roof coatings applied at a rate of 1½-gal./100-ft.² or “IB Silicone Coating” silicone roof coating applied at a rate of 1-gal./100-ft.²

Surfacing (optional): Broadcast application of No. 11 ceramic coated roofing granules applied at 35 to 40-lbs/100-ft.²

25. **Deck:** C-15/32 or NC**Incline:** 2

Existing Roof System: — Any Class A, B or C roofing system, to retain the existing Classification, is covered with:

Insulation: — IB Roof Systems: “IB HD ISO-H”, Hunter Panels “H-Shield HD”, “H-Shield HD90”, “H-Shield HD Composite”, “H-Shield HD NH” or “H-Shield HD90 NH”.

Membrane: — “IB PVC Single Ply ChemGuard”, IB PVC Single Ply & IB PVC mechanically fastened.

26. **Deck:** C - 15/32 or NC**Incline:** 1/2

Existing Roof System: — Class A, B or C built-up system, smooth surface, cap sheet or gravel surfaced (gravel maintained) to retain the existing Classification.

Insulation: — “ThermalStar” or “ThermalStar LRI”, 1-in. thick maximum.

Membrane: — “IB PVC Single Ply ChemGuard”, IB PVC Single Ply & IB PVC mechanically fastened.

27. **Deck:** C-15/32 or NC**Incline:** 1/2

Existing Roof System: — Class A, B or C built-up system, smooth surface, cap sheet or gravel surfaced (gravel maintained) to retain the existing Classification.

Insulation: — “Insulfoam® R-TECH™ Fan Fold”, “Insulfoam® INSUL-RX™ Fanfold”, “Insulfoam® INSUL-X™ Fanfold”, “Insulfoam® R-TECH™ Insulation Board” Type I, “Insulfoam® R-TECH™ Insulation Board” Type VIII, “Insulfoam® R-TECH™ Insulation Board” Type II, “Insulfoam® R-TECH™ Insulation Board” Type IX, “Insulfoam® INSUL-RX™ Insulation Board” Type I, “Insulfoam® INSUL-RX™ Insulation Board” Type VIII, “Insulfoam® INSUL-RX™ Insulation Board” Type II, “Insulfoam® INSUL-RX™ Insulation Board” Type IX, “Insulfoam® INSUL-X™ Insulation Board” Type I, “Insulfoam® INSUL-X™ Insulation Board” Type VIII, “Insulfoam® INSUL-X™ Insulation Board” Type II or “Insulfoam® INSUL-X™ Insulation Board” Type IX or “Insulfoam” Type “I”, “VIII”, “II”, “IX”, 1 in. max thickness.

Membrane: — “IB PVC Single Ply ChemGuard”, IB PVC Single Ply & IB PVC mechanically fastened.

28. **Deck:** C-15/32 or NC**Incline:** 1/2

Existing Roof System: — Class A, B or C built-up system or modified bitumen system, smooth surface, cap sheet or gravel surfaced (gravel maintained) to retain the existing Classification.

Insulation: — “Cellofoam EPS”, “Type I”, “PolyShield” or “Polyshield Fanfold”, 1 in. max thickness.

Membrane: — “IB PVC Single Ply ChemGuard”, IB PVC Single Ply & IB PVC mechanically fastened

29. **Deck:** C - 15/32**Incline:** 1/2

Insulation: — Class A, B or C built-up system, smooth surface, cap sheet or gravel surfaced (gravel maintained) to retain the existing Classification.

Insulation: — "R-Control EPS", "R-Control MAX 100", "R-Control MAX 130", "R-Control MAX 150", "R-Control MAX 200", or "Foam-Control MAX 250", flat or tapered, 1-inch thick maximum.

Membrane: — "IB PVC Single Ply ChemGuard", IB PVC Single Ply & IB PVC mechanically fastened

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