Roofing Systems

COMPANY	R16377

IKO INDUSTRIES LTD
IKO RESEARCH CENTRE
40 HANSEN RD S
BRAMPTON, ON L6W 3H4 Canada

"IKOTherm", "IKOTherm 25 PSI", "IKOTherm III", "IKOTherm III 25 PSI", "IKOTherm Tapered", "IKOTherm Tapered 25 PSI", "IKOTherm III Tapered", "IKOTherm III Tapered 20 PSI", "IKOTherm-A",or "IKOTherm-A 25 PSI", or "IKOTherm-A Tapered", or "IKOTherm-A Tapered 25 PSI", or "IKOTherm-A III", or "IKOTherm-A III 25 PSI", or "IKOTherm-A III Tapered", or "IKOTherm-A III Tapered 20 PSI", or "IKOTherm-A CoverShield", or "CRCTherm", or "ShieldBase", or "ShieldBase 180 Sanded" and "CoverShield" insulation may be used wherever polyisocyanurate insulation is specified.

"IKOTherm ShieldPlus" insulation may be used wherever polyisocyanurate insulation is specified (limited to modified bitumen systems).

Georgia Pacific Gypsum LLC "DensDeck StormX", United States Gypsum Co. Securock® "Cement Roof Board", "Securock® Gypsum-Fiber Roof Board", " Securock ® Ultralight Glass-Mat Roof Board", " Securock ® Ultralight Coated Glass Mat Roof Board", National Gypsum Co. "DEXcell FA VSH Glass Mat Roof Board", "DEXcell Cement Roof Board", "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board" may be used in any UL Classified roof covering system assembly that incorporates the use of minimum 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck® Roofboard", or "DensDeck DuraGuard™ Roofboard", or "DensDeck Prime® Roofboard".

"IKO Cold Gold Adhesive" may be used wherever hot roofing asphalt is specified.

The following acceptable alternate membranes and base/ply sheets can be used in lieu of membranes and base/ply sheets listed, in any Classified roof covering system:

Membrane Listed:	**Acceptable Alternative:**
"Modiflex MP-250 Cap"	"Modiflex MP-HD Cap"
"ArmourCool Granular TP"	"ArmourCool Granular TP-HD"
"ArmourCool Granular MP"	"ArmourCool Granular MP-HD"
"Torchflex TP-250 Cap"	"Torchflex TP-HD Cap"
"Modiflex MP-180-SS-Base"	"Modiflex HD-SS Base"

"Modiflex MP-180-FS-Base"	"Modiflex HD-FS Base"
"Fast-N-Stick-180-Base"	"Fast-N-Stick-HD Base"
"Prevent MP-250 Cap"	"Prevent MP-HD Cap"
"Prevent TP-250 Cap"	"Prevent TP-HD Cap"
"ArmourCool Granular Prevent MP"	"ArmourCool Granular Prevent MP-HD"
"ArmourCool Granular Prevent TP"	"ArmourCool Granular Prevent TP-HD"
"Prevent Premium MP-250 Cap"	"Prevent Premium MP-HD Cap"
"Prevent Premium TP-250 Cap"	"Prevent Premium TP-HD Cap"
"ArmourCool Granular Prevent Premium MP"	"ArmourCool Granular Prevent Premium MP-HD"
"ArmourCool Granular Prevent Premium TP"	"ArmourCool Granular Prevent Premium TP-HD"
"Armourbond 180"	"Armourbond 180 HD"
"Armourbond Flash"	"Armourbond Flash HD"
"Armourbond Flash Sand"	"Armourbond Flash Sand HD"
"Armourvent"	
"Modiflex MP-180-Cap"	
"Modiflex MP-250-Cap"	
"Modiflex MP-HD-Cap"	
"ArmourCool Granular TP"	
"ArmourCool Granular TP-HD"	
"ArmourCool Granular MP"	
"ArmourCool Granular MP-HD"	
"Torchflex TP-180-Cap"	
"Torchflex TP-250-Cap"	
"Torchflex TP-250-Cap/5 mm"	
"Torchflex TP-HD-Cap"	
"Armourplast Granular APP"	
"Prevent MP180CAP"	

"ArmourCool Granular Prevent MP"	
"Prevent MP250CAP"	
"ArmourCool Granular Prevent MP-HD"	
"Prevent MP-HD-Cap"	
"ArmourCool Granular Prevent TP"	
"ArmourCool Granular Prevent TP"	
"Prevent TP180CAP"	
"ArmourCool Granular Prevent TP-HD"	
"ArmourCool Granular Prevent TP-HD"	
"Prevent TP250CAP"	
"Prevent TP250CAP/5 mm"	
"Prevent TP250CAP/5 mm"	"Prevent TP-HD Cap/5 mm"
"Prevent TP-HD-Cap"	
"Prevent Premium MP180CAP"	
"ArmourCool Granular Prevent Premium MP"	
"Prevent Premium MP250CAP"	
"ArmourCool Granular Prevent Premium MP-HD"	
"Prevent Premium MP-HD-Cap"	
"ArmourCool Granular Prevent Premium TP"	
"Prevent Premium TP180CAP"	
"ArmourCool Granular Prevent Premium TP-HD"	
"Prevent Premium TP250CAP"	
"Prevent Premium TP-HD-Cap"	
"Torchflex TP-HD-Cap"	"Torchflex Ultra TP-HD-Cap"
"Torchflex TP-HD-FF-Base"	"Torchflex Ultra TP-HD-FF-Base"

Unless otherwise indicated, "Protectobase 180" or "ProtectoBase Sanded" can be used in lieu of the coverboard and base sheet combination of "Protectoboard" and either "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-

Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", mechanically fastened, or "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armourbond Flash", "Armourbond Flash Sand", "Armourbond 180", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", "Armourbond 180 HD, "Armourstick HD Base", "Roof-Fast-Base". in any applicable roofing system.

ASPHALT FELT SYSTEMS (ORGANIC OR GLASS FIBER) WITH HOT ROOFING ASPHALT

Class A, B or C

Hot roofing asphalt: for use in asphalt organic or glass fiber felt roofing systems.

Unless otherwise indicated, "Modi-Melt SEBS" can be used in lieu of hot roofing asphalt in any system.

"IKO Cold Gold Adhesive" may be used wherever hot roofing asphalt is specified.

Unless otherwise indicated, "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base" can be used in addition to, or in lieu of, the first layer of Type G1 asphalt glass fiber felt in any of the following systems.

Asphalt organic fiber felts: Type 15 Asphalt Felt-Perforated for use in asphalt organic fiber felt roofing system.

Asphalt glass fiber felts: Type G1 or Type G2 ply sheet for use in asphalt glass fiber felt roofing systems.

Class A

1. **Deck:** NC   **Incline:** 3

 Insulation: — 3/4 in. minimum thick UL Classified perlite, polyisocyanurate, wood fiber or glass fiberboard roof insulation, any thickness, any combinations.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard".
Membrane: — Five layers perforated Type 15 felt, or two to five layers "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base.
Surfacing: — 400 lbs. roofing gravel or crushed stone or 300 lbs. crushed slag per square of finished roof embedded in a flood coat of hot roofing asphalt at a minimum of 60 lbs. per square.

2. **Deck:** C-15/32   **Incline:** 3

 Insulation: — 3/4 in. minimum thick UL Classified perlite, polyisocyanurate or glass fiberboard roof insulation, any thickness, any combinations.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard".
Membrane: — Three to five layers perforated Type 15 felt, or two to five layers "Modiflex MF-95-FS-

Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Surfacing: — 400 lbs. roofing gravel or crushed stone or 300 lbs. crushed slag per square of finished roof embedded in a flood coat of hot roofing asphalt at a minimum of 60 lbs. per square.

3. **Deck:** NC   **Incline:** 3

Insulation: — 3/4 in. minimum thick UL Classified perlite, polyisocyanurate, wood fiber or glass fiberboard roof insulation, any thickness, any combinations.

Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard"

Membrane: — Three layers Type G1 or Type G2 asphalt glass fiber felts, or two to five layers "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Surfacing: — 400 lbs. roofing gravel or crushed stone or 300 lbs. crushed slag per square of finished roof embedded in a flood coat of hot roofing asphalt at a minimum of 60 lbs. per square.

4. **Deck:** NC   **Incline:** 3

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer. **Insulation:** — 3/4 in. minimum thick UL Classified perlite, polyisocyanurate, wood fiber, glass fiber or EPS (covered with minimum 15/16 in. thick wood fiber or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" roof insulation, any thickness, any combination.

Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard".

Membrane: — Three to five layers perforated Type 15 felt, or two to five layers "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Surfacing: — 400 lbs. roofing gravel or crushed stone or 300 lbs. crushed slag per square of finished roof embedded in a flood coat of hot roofing asphalt at a minimum of 60 lbs. per square.

5. **Deck:** NC   **Incline:** 3

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer. **Insulation:** — 3/4 in. minimum thick UL Classified perlite, polyisocyanurate, wood fiber, glass fiber or EPS (covered with minimum 15/16 in. thick wood fiber or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" roof insulation, any thickness, any combination.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard".
Membrane: — Three to five layers Type G1, or Type G2 asphalt glass fiber felts, or two to five layers "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Surfacing: — 400 lbs. roofing gravel or crushed stone or 300 lbs. crushed slag per square of finished roof embedded in a flood coat of hot roofing asphalt at a minimum of 60 lbs. per square.

6. **Deck:** C-15/32   **Incline:** 3

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer. **Insulation:** — 3/4 in. minimum thick UL Classified perlite, polyisocyanurate, wood fiber or glass fiber roof insulation, any thickness, any combination.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard".
Membrane: — Three to five layers Type G1 or Type G2 asphalt glass fiber felts, "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Surfacing: — 400 lbs. roofing gravel or crushed stone or 300 lbs. crushed slag per square of finished roof embedded in a flood coat of hot roofing asphalt at a minimum of 60 lbs. per square.

SINGLE PLY MEMBRANE SYSTEMS

Unless otherwise indicated the use of a vapor retarder (not UL Classified) 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, the use of "MVP" or "MVP Sand" as a vapor retarder beneath the roof insulation or barrier board in a roofing assembly, either on combustible or noncombustible roof deck, 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 the roof insulation is mechanically fastened, adhered with hot roofing asphalt or UL Classified urethane insulation adhesive.

Unless otherwise indicated, "Modi-Melt SEBS" can be used in lieu of hot roofing asphalt in any system.

Unless otherwise indicated the Type G2 Modiflex Base Sheets may be mechanically fastened or applied with hot roofing asphalt.

Unless otherwise indicated the Type G2 Torchflex Base Sheets may be mechanically fastened or heat fused.

Unless otherwise indicated, Modiflex Cap Sheets are applied with hot roofing asphalt and Torchflex and Armourplast Cap Sheets are heat fused.

1 in. minimum tongue and grove board is a suitable alternate for 15/32 plywood decks with all joints blocked.

Polyisocyanurate and Polystyrene insulation can be used in any of the following insulated noncombustible systems when covered with a minimum thickness of 1/2 in. perlite or wood fiber board.

Unless otherwise indicated, these constructions may utilize any thickness of perlite, glass fiber, polyurethane, polyisocyanurate, combination polyisocyanurate/perlite or polyurethane/perlite insulation hot mopped or mechanically fastened. Wood fiber insulation is a suitable substitute on noncombustible decks only.

1/2 in. thick (minimum) gypsum board or 1/4 in. thick (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" overlayment board may be used in any existing noncombustible deck Classification. The resulting roofing system is acceptable for use over combustible (15/32 in. minimum) roof decks. The joints in the gypsum board and overlayment board are offset 6 in. with the joints in the deck. Polystyrene insulation must be placed beneath the overlayment board.

Acceptable alternatives to the products specified in the Classification:

Product Specified	Acceptable Alternate
Georgia-Pacific Gypsum LLC DensDeck®	Georgia-Pacific Gypsum LLC DensDeck Prime®, DensDeck® Roofboard", "DensDeck Prime® Roofboard"
IKO "Protectoboard"	Hal "PERMA-BOARD"
"Roof-Fast-Base"	Hal Industries, Inc. "PERMA-BOARD", Western Louiseville Fiberboard Inc "Western Louiseville fiberboard"

Class A - Ballasted

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

Barrier Board (Optional): — Gypsum board, any thickness.
Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.
Insulation (Optional): — Polyisocyanurate, glass fiber, perlite, wood fiber, (polystyrene covered with wood fiberboard or perlite), any thickness, mechanically fastened or adhered with hot roofing asphalt.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD", or

1/4 in. (minimum) Georgia-Pacific Gypsum LLC ""DensDeck® Roofboard".

Base Sheet: — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP", or "Armourcool Granular MP-HD", hot-mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Torchflex Ultra TP-HD-Cap", "Armourcool Granular TP" or "Armourcool Granular TP-HD", heat-fused.

Surfacing: — River bottom stone (1/2 to 2-1/2 in. diameter) at 900 lbs/sq minimum.

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

Barrier Board (Optional): — Gypsum board, any thickness.

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.

Barrier Board: — 1/4 in. (minimum) Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" with 6 in. offset joints from the plywood joints.

Insulation (Optional): — Polyisocyanurate, fiberglass, perlite, wood fiberboard, (polystyrene covered with perlite or wood fiberboard), any thickness.

Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD", or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC ""DensDeck® Roofboard".

Base Sheet (Optional): — Type G2, or two to five layers "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened. **Ply Sheet:** — Three or more plies Type 15 felt, Type G1 or Type G2, or two to five layers "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", hot mopped.

Surfacing: — Hot roofing asphalt and gravel.

3. **Deck:** NC   **Incline:** 2

Barrier Board (Optional): — Gypsum board, any thickness.

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.

Insulation (Optional): — Polyisocyanurate, fiberglass, perlite wood fiberboard (polystyrene covered with wood fiberboard or perlite), any thickness.

Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD", or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC ""DensDeck® Roofboard".

Base Sheet (Optional): — Type G2 or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet: — Three or more plies Type 15, G1 or Type G2, "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Surfacing: — Hot roofing asphalt and gravel.

4. **Deck:** NC   **Incline:** 2

Barrier Board (Optional): — Gypsum board, any thickness.

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.

Insulation (Optional): — Polyisocyanurate, glass fiber, perlite, wood fiber, (polystyrene covered with wood fiberboard or perlite), any thickness, mechanically fastened or adhered with hot roofing asphalt.

Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD", or 1/4 in. (minimum) Georgia-Pacific Gypsum LLC ""DensDeck® Roofboard".

Base Sheet: — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened. **Surfacing:** — River bottom stone (1/2 to 2-1/2 in. diameter) at 900 lbs/sq minimum.

5. **Deck:** NC   **Incline:** 3

Barrier Board (Optional): — Gypsum board, any thickness.
Membrane: — Any UL Classified membrane, adhered with "Cold Gold Field Adhesive".
Surfacing: — River bottom stone (3/4 in. to 1-1/2 in. diam) at 1000 lb/sq.

Class A - Fully Adhered

1. **Deck:** NC   **Incline:** 1/2

Barrier Board (Optional): — Gypsum board, any thickness.
Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.
Insulation (Optional): — Polyisocyanurate, glass fiber, perlite, wood fiber, (polystyrene covered with wood fiberboard or perlite) or mineral fiber, any thickness, any combination, mechanically fastened or adhered with hot roofing asphalt.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.
Base Sheet: "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP ", or "Armourcool Granular MP-HD", hot mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Torchflex Ultra TP-HD-Cap","Armourcool Granular TP", or "Armourcool Granular TP-HD", heat-fused
Surfacing: — Hot roofing asphalt and gravel.

2. **Deck:** NC   **Incline:** 1-1/2

Barrier Board (Optional): — Gypsum board, any thickness.
Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.
Insulation (Optional): — Perlite, wood fiberboard, fiberglass or polyisocyanurate, any thickness.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.
Base Sheet: — One or more plies Type G1 or Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand",

"Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "Armourplast Granular APP", heat-fused.

Surfacing: — Karnak "97AF" at 1-1/2 gal/sq.

3. **Deleted.**

4. **Deleted.**

5. **Deck:** NC   **Incline:** 1/2

Barrier Board (Optional): — Gypsum board, any thickness.

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.

Insulation (Optional): — 1.5 in. (minimum) polyisocyanurate with 7/16 in. (minimum) coverboard of wood fiber, perlite or fiberglass or 1/8 in. or 3/16 in. or ¼" in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or any combination.

Base Sheet: — One or more plies Type G2 ply sheet, or"Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — One or more plies Type G1 hot-mopped, or "Armourplast Classic", heat-fused, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "Armourplast Granular APP", heat-fused

6. **Deleted.**

7. **Deck:** NC   **Incline:** 1/4

Barrier Board (Optional): — Gypsum board, any thickness.

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof

deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.

Insulation (Optional): — Polyisocyanurate, perlite, fiberglass, wood fiber or polystyrene (covered with wood fiber or perlite), any thickness, any combination, mechanically attached or hot asphalt attached.

Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼ in. thick "Protectoboard" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.

Base Sheet: — One ply Type G1 or Type G2, hot-mopped, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — One or more plies Type G1 or G2, hot mopped, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP", "Armourcool Granular MP-HD", "PrevENt MP-180-Cap", "PrevENt MP-250-Cap", "PrevENt MP-HD-Cap", "ArmourCool Granular PrevENt MP", or "ArmourCool Granular PrevENent MP-HD", hot-mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Armourcool Granular TP". "Armourcool Granular TP-HD", "Torchflex Ultra TP-HD-Cap", "PrevENt TP-250-Cap", "PrevENt TP-250-Cap 5 mm", "PrevENt TP-180-Cap", "ArmourCool Granular PrevENt TP", or "ArmourCool Granular PrevENt TP-HD", heat-fused.

8. **Deck:** NC   **Incline:** 1/4

Barrier Board (Optional): — Gypsum board, any thickness.

Vapor Barrier (Optional): Not UL Classified vapor barrier, loose laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.

.**Insulation (Optional):** — Polyisocyanurate, perlite, fiberglass, wood fiber or polystyrene (covered with wood fiber or perlite), any thickness, any combination, mechanically attached or hot asphalt attached.

Coverboard (Optional): — 1/8 in. or 3/16 in. . or ¼ in. thick "Protectoboard" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.

Base Sheet: — One or more plies Type G1 or Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — One ply "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex

TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP", "Armourcool Granular MP-HD", "PrevENt MP-180-Cap", "PrevENt MP-250-Cap", "PrevENt MP-HD-Cap", "ArmourCool Granular PrevENt MP", or "ArmourCool Granular PrevENent MP-HD", hot-mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Armourcool Granular TP". "Armourcool Granular TP-HD", "Torchflex Ultra TP-HD-Cap", "PrevENt TP-250-Cap", "PrevENt TP-250-Cap 5 mm", "PrevENt TP-180-Cap", "ArmourCool Granular PrevENt TP", or "ArmourCool Granular PrevENt TP-HD", heat-fused.

9. **Deck:** NC   **Incline:** 1/4

Barrier Board (Optional): — Gypsum board, any thickness.
Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose-laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.
.**Insulation (Optional):** — Polyisocyanurate, perlite, fiberglass, wood fiber or polystyrene (covered with wood fiber or perlite), any thickness, any combination, mechanically attached or hot asphalt attached.
Coverboard (Optional): — 1/8 in. or 3/16 in. or 1/4 in. thick "Protectoboard" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.
Base Sheet: — One ply "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP", "Armourcool Granular MP-HD", "PrevENt MP-180-Cap", "PrevENt MP-250-Cap", "PrevENt MP-HD-Cap", "ArmourCool Granular PrevENt MP", or "ArmourCool Granular PrevENent MP-HD", hot-mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Armourcool Granular TP", "Armourcool Granular TP-HD", "Torchflex Ultra TP-HD-Cap", "PrevENt TP-250-Cap", "PrevENt TP-250-Cap 5 mm", "PrevENt TP-180-Cap", "ArmourCool Granular PrevENt TP", or "ArmourCool Granular PrevENt TP-HD", heat-fused.

10. **Deck:** NC   **Incline:** 1-1/2

Barrier Board (Optional): — Gypsum board, any thickness.
Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose-laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.
Insulation (Optional): — Polyisocyanurate, perlite, fiberglass, wood fiber or polystyrene (covered with wood fiber or perlite), any thickness, any combination, mechanically attached or hot asphalt attached.
Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼" thick "Protectoboard" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.
Base Sheet: — One ply Type G1 or Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-

Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — One or more plies Type G1 or Type G2, "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "PrevENt MP-180-Cap","PrevENt MP-250-Cap", "PrevENt MP-HD-Cap", "ArmourCool Granular Prevent MP", or "ArmourCool Granular PrevENent MP-HD", hot mopped, "PrevENt TP-180-Cap", "Prevent TP-250-Cap", "Prevent TP-250-Cap 5 mm", "PrevENt TP-HD-Cap", "ArmourCool Granular PrevENt TP", or "ArmourCool Granular or "PrevENt TP-HD", heat-fused.

11. **Deck:** NC   **Incline:** 1-1/2

Barrier Board (Optional): — Gypsum board, any thickness.

Vapor Barrier (Optional): — Not UL Classified vapor barrier, loose-laid, adhered, or self-adhered to the roof deck with either hot mopping asphalt at a rate of 25 lbs. per square or Not UL Classified vapor retarder adhesive or Not UL Classified vapor retarder primer.**Insulation (Optional): —** Polyisocyanurate, perlite, fiberglass, wood fiber or polystyrene (covered with wood fiber or perlite), any thickness, any combination, mechanically attached or hot asphalt attached.

Coverboard (Optional): — 1/8 in. or 3/16 in. or ¼" thick "Protectoboard" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.

Base Sheet: — One or more plies Type G1 or Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — One ply "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "PrevENt MP-180-Cap","PrevENt MP-250-Cap", "PrevENt MP-HD-Cap", "ArmourCool Granular Prevent MP", or "ArmourCool Granular PrevENent MP-HD", hot mopped, or "PrevENt TP-180-Cap", "Prevent TP-250-Cap", "Prevent TP-250-Cap 5 mm", "PrevENt TP-HD-Cap", "ArmourCool Granular PrevENt TP", "ArmourCool Granular PrevENt TP-HD", heat-fused.

12. **Deleted.**

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

Barrier Board (Optional): — Gypsum board, any thickness.
Base Sheet: — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "PrevENt Premium MP-180-Cap", "PrevENt Premium MP-250-Cap", "PrevENt Premium MP-HD-Cap", "ArmourCool Granular PrevENt Premium MP", "ArmourCool Granular PrevENt Premium MP-HD", hot mopped, or "PrevENt Premium TP-180-Cap", "PrevENt Premium TP-250-Cap", "PrevENt Premium TP-HD-Cap", "ArmourCool Granular PrevENt Premium TP", "ArmourCool Granular PrevENt Premium TP-HD", heat-fused.

14. **Deck:** NC   **Incline:** 2-1/2

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Polyisocyanurate, glass fiber, perlite, wood fiber, any thickness.
Base Sheet: — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "Prevent Premium MP-180-Cap", "Prevent Premium MP-250-Cap", "Prevent Premium MP-HD-Cap", or "ArmourCool Granular Prevent Premium MP", hot-mopped, or "Prevent Premium TP-180-Cap", "Prevent Premium TP-250-Cap", "Prevent Premium TP-HD-Cap", or "ArmourCool Granular Prevent Premium TP", heat-fused.

15. **Deck:** NC   **Incline:** 1-1/2

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Polyisocyanurate, glass fiber, perlite, wood fiber, any thickness.
Base Sheet: "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "PrevENt MP-180-Cap","PrevENt MP-250-Cap", "PrevENt MP-HD-Cap", "ArmourCool Granular Prevent MP", or "ArmourCool Granular PrevENent MP-HD", hot mopped, or "PrevENt TP-180-Cap", "Prevent TP-250-Cap", "Prevent TP-250-Cap 5 mm", "PrevENt TP-HD-Cap", "ArmourCool Granular PrevENt TP", or "ArmourCool Granular PrevENt TP-HD", heat-fused.

Class B - Fully Adhered

1. **Deleted.**

2. **Deck:** C-15/16   **Incline:** 1/2

Vapor Barrier (Optional): — Not UL Classified or Armourgard Vapor Retardant loose-laid or adhered to the roof deck with hot mopping asphalt at a rate of 25 lbs. per square or UL Classified vapor retarder adhesive.

Coverboard (Optional): — 1/8 in. or 3/16 in. thick IKO Protectoboard.

Base Sheet: — Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet: — Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "Armourplast Granular APP", heat fused.

Surfacing: — Karnak "97AF" at 1-1/2 gal/sq.

3. **Deck:** C-15/16   **Incline:** 1/2

Vapor Barrier (Optional): — Not UL Classified, Red Rosin, vapor retarder.

Insulation (Optional): — 1.5 in. (minimum) polyisocyanurate with 7/16 in. (minimum) coverboard of wood fiber, perlite or fiberglass or 1/8 in. or 3/16 in. thick "Protectoboard", Hal Industries, Inc. "PERMA-BOARD" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or any combination.

Base Sheet: — One or more plies Type G2 ply sheet, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — One or more plies Type G1 hot-mopped, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD",

"Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened, or "Armourplast Classic", heat-fused.
Membrane: — "Armourplast Granular APP", heat fused.
Surfacing: — "Karnak No. 97AF" at the rate of 1 gal/sq.

4. **Deleted.**

5. **Deleted.**

6. **Deleted.**

7. **Deleted.**

8. **Deleted.**

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

Barrier Board (Optional): — Gypsum board, any thickness.
Base Sheet: — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "Prevent Premium MP250 CAP", "Prevent Premium MP180CAP", "ArmourCool Granular Prevent Premium MP", "Prevent Premium TP250CAP", "Prevent Premium TP180CAP", "ArmourCool Granular Prevent Premium TP" or "Prevent Premium ArmourCool Granular" hot-mopped or heat-fused.

10. **Deck:** NC   **Incline:** 2-1/2

Insulation (Optional): — Polyisocyanurate, glass fiber, perlite, wood fiber, any thickness.
Base Sheet: — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "Prevent Premium MP250CAP", "Prevent Premium MP180CAP", "ArmourCool Granular Prevent Premium MP", "Prevent Premium TP250CAP", "Prevent Premium TP180CAP", "ArmourCool Granular Prevent Premium TP" or "Prevent Premium ArmourCool Granular" hot-mopped or heat-fused.

Class C - Fully Adhered

1. **Deck:** C-15/16   **Incline:** 3

Barrier Board (Optional): — Gypsum board, any thickness.
Vapor Retarder (Optional): — Not UL Classified, Red Rosin, vapor retarder or Armourgard Vapour Retardant loose-laid or adhered to the roof deck with either Type 2 or 3 hot mopping asphalt at a rate of 25 lbs. per square or UL Classified vapor retarder adhesive.
Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Polyisocyanurate, wood fiber, perlite, rockwool or polystyrene, any thickness, any combinations.
Coverboard (Optional): — — "Protectoboard" 1/8 in. or 3/16 in., Hal Industries, Inc. "PERMA BOARD", Western Louiseville Fiberboard Inc "Western Louiseville fiberboard", minimum 7/16 inch thick or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck Prime® Roofboard", or hot mopped or mechanically fastened.
Base Sheet: — One or more plies Type G1 or Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Ply Sheet (Optional): — One or more plies Type G1, hot mopped, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP", or "Armourcool Granular MP-HD", hot-mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Torchflex Ultra TP-HD-Cap", "Armourcool Granular TP" or "Armourcool Granular TP-HD", heat-fused.

2. **Deck:** C-15/16   **Incline:** 3

Barrier Board (Optional): — Gypsum board, any thickness.
Vapor Barrier (Optional): — Not UL Classified, Red Rosin, vapor retarder or "Armourgard Vapour Retardant" loose-laid or adhered to the roof deck with either Type 2 or 3, hot mopping asphalt at a rate of 25-lbs./100-ft.^{2} or UL Classified vapor retarder adhesive.
Barrier Board (Optional): — Gypsum board, any thickness.
Insulation: — Polyisocyanurate, wood fiber, perlite, rockwool or polystyrene, any thickness, any combinations.
Coverboard (Optional): — "Protectoboard" 1/8 in. or 3/16 in., Hal Industries, Inc. "PERMA BOARD", Western Louiseville Fiberboard Inc "Western Louiseville fiberboard", minimum 7/16 in.thick or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC. "DensDeck® Roofboard", "DensDeck Prime® Roofboard" , hot mopped or mechanically fastened.
Base Sheet (Optional): — One or more plies Type G1 or Type G2, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base",

"Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — One or more plies Type G1, hot mopped, or "Modiflex MF-95-FS-Base", "Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP", or "Armourcool Granular MP-HD", hot-mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Torchflex Ultra TP-HD-Cap", "Armourcool Granular TP" or "Armourcool Granular TP-HD", heat-fused.

3. **Deck:** NC   **Incline:** 1

   Membrane: — "Roof-Fast Cap" self-adhered

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

   Membrane: — "ArmourStick HD Cap", self-adhered.

5. **Deleted.**

6. **Deck:** NC   **Incline:** 3

   Barrier Board (Optional): — Gypsum board, any thickness.
   Vapor Barrier (Optional): — Not UL Classified loose-laid or adhered to the roof deck with either Type 2, 3 or 4, hot mopping asphalt at a rate of 25-lbs./100-ft.^{2} UL Classified vapor retarder adhesive.
   Barrier Board (Optional): — Gypsum board, any thickness.
   Insulation: — Polyisocyanurate with kraft/glass or foil facer, perlite, fiberglass, polyurethane or wood fiber, mechanically fastened or adhered with hot asphalt, any thickness, any combination.
   Coverboard (Optional): — "Protectoboard", Hal Industries, Inc. "PERMA-BOARD" or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" with the option to tape the joints between the boards, minimum 7/16 in. wood fiber, or minimum 3/4 in. perlite adhered with hot asphalt or mechanically fastened.
   Base Sheet: — One ply "Modiflex MF-95-FS-Base", "Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
   Ply Sheet (Optional): — "Modiflex MF-95-FS-Base", "Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base",

"Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.
Membrane: — "Modiflex MP-180-Cap", "Modiflex MP-250-Cap", "Modiflex MP-HD-Cap", "Armourcool Granular MP", or "Armourcool Granular MP-HD", hot-mopped, or "Armourplast Granular APP", "Torchflex TP-180-Cap", "Torchflex TP-250-Cap", "Torchflex TP-250-Cap 5 mm", "Torchflex TP-HD-Cap", "Torchflex Ultra TP-HD-Cap", "Armourcool Granular TP" or "Armourcool Granular TP-HD", heat-fused.

7. **Deck:** C 15/32   **Incline:** 3

Vapor Barrier (Optional): — Not UL Classified loose-laid or adhered to the roof deck with hot mopping asphalt at a rate of 25-lbs./100-ft.^{2} or UL Classified vapor retarder adhesive or red rosin.
Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Polyisocyanurate, wood fiberboard, rockwool, perlite or polystyrene (covered with wood fiber or perlite), 1/8 in. or 3/16 in. "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD", any thickness, any combination, mechanically attached or adhered.
Overlayment (Optional): — 7/16 in. minimum wood fiber, 1/8 in. or 3/16 in. "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" hot mopped, urethane adhesive adhered, or mechanically fastened.
Base Sheet: — One or more plies "Fast-N-Stick-180-Base", "Modiflex MF-95-FS Base", "Modiflex MF-95-SS Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base", Type G1 or Type G2 cold adhesive applied with Karnak 81AF SBS Cold Adhesive, Monsey-Bakor MBA Gold Adhesive, Henry Company #403 Cold-Ap Spray Grade Adhesive, or Henry Company #902 Permanent Bond Adhesive at a full coverage rate of one and one-half gallons per one hundred square feet or spot attached at a rate of sixty spots per one hundred square feet, with spots being four inches to six inches in diameter, for the first layer and either cold adhesive or heat fused for successive layers. As an option to the above, the first ply of base sheet may be mechanically fastened.
Ply Sheet (Optional): — One or more plies Type G2 cold adhesive applied or heat-fused, or "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", hot-mopped, heat-fused, or mechanically fastened
Membrane: — One ply "Modiflex MP-180-Cap", "ArmourCool Granular MP", "Modiflex MP-250-Cap", cold adhesive applied or "Torchflex TP-180-Cap", "ArmourCool Granular TP", "Torchflex TP-250-Cap".

8. **Deck:** NC   **Incline:** 1

Vapor Barrier (Optional): — Not UL Classified loose-laid or adhered to the roof deck with hot asphalt at 25 lbs/ft^2 or UL Classified retarder adhesive or red rosin paper.
Barrier Board (Optional): — Gypsum board, any thickness.
Insulation: — Polyisocyanurate, woodfiber board, rockwool, perlite, polystyrene/wood fiberboard or polystyrene/perlite, 1/8 in. or 3/16 in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD", any thickness, any combination, mechanically fastened or fully adhered.
Overlayment: — 1/8 in. or 3/16 in. thick "Protectoboard" or Hal Industries, Inc. "PERMA-BOARD" (asphalt primed), 1/4 in. minimum or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC ""DensDeck® Roofboard" or "DensDeck Prime® Roofboard" " (asphalt primed) or "DensDeck Prime®" hot mopped, urethane insulation adhesive or mechanically fastened. Base Sheet: — One ply "Roof-Fast-Base" self-adhered.

Base Sheet: — One ply "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Ply Sheet (Optional): — "Modiflex MF-95-FS-Base","Modiflex MF-95-SS-Base", "Modiflex MP-180-FS-Base", "Modiflex MP-180-SS-Base", "Modiflex MP-180-FS-Base 3 mm", "Modiflex MP-180-FS-Base 3.5 mm", "Modiflex HD-FS-Base", "Modiflex HD-SS-Base", "Fast-N-Stick-180-Base", "Fast-N-Stick-HD-Base", "Torchflex TF-95-FF-Base", Torchflex TF-95-FF-2.2 Base", "Torchflex TF-95-SF-Base", "Torchflex TF-95-SF-Base 3 mm", "Torchflex TP-180-FF-Base", "Torchflex TP-180-SF-Base 3 mm", "Torchflex TP-180-SF-Base 3.5 mm", "Torchflex TP-HD-FF-Base", "Torchflex Ultra TP-HD-FF-Base", "Armorbond 180", "Armourbond Flash Sand", "Armourbond Flash", "Armourvent", "Armourbond Flash HD", "Armourbond Flash Sand HD", or "Armourstick HD Base", hot-mopped, heat-fused, self-adhered, or mechanically fastened.

Membrane: —"ArmourStick HD Cap", "ArmourStick PrevENt HD-Cap", or "Roof-Fast Cap", self-adhered.

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

Barrier Board (Optional): — Gypsum board, any thickness.
Base Sheet: — One ply "Roof-Fast-Base" self-adhered.
Membrane: —"ArmourStick HD Cap", self-adhered.

Class A - Fully Adhered (TPO)

"IKO Innovi TPO" may be primed with "InnoviPrime TPO Primer" or "InnoviPrime TPO Primer LVOC" and may be covered with "InnoviFlash TPO Seam Tape", "InnoviFlash TPO Cover Tape", "InnoviFlash YELLOW TPO SAFETY STRIP", or "InnoviFlash TPO Reinforced Perimeter Strip (RPS) ". The TPO membrane joint edges are sealed with a nominal 1/4 in (6.4 mm) bead of "InnoviSeal TPO General Purpose Sealant".

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

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Any UL Classified, any thickness.
Barrier Board: — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with "InnoviBond Membrane Adhesive", at an application rate 40 - 60 sq. ft./gal. or "InnoviBond Water Based Bonding Adhesive" at an application rate of 100 - 120 sq. ft./gal.

2. **Deck:** NC   **Incline:** 1-1/2

Barrier Board (Optional): — — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. "SECUROCK® Gypsum-Fiber Roof Board" (Type FRX-G), or "SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with "InnoviBond Membrane Adhesive", at an application rate 40 - 60 sq. ft./gal. or "InnoviBond Water Based Bonding Adhesive" at an application rate

of 100 - 120 sq. ft./gal.

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

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Any UL Classified, any thickness.
Barrier Board: — — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with "InnoviBond Membrane Adhesive LVOC", at an application rate 40 - 60 sq. ft./gal.

4. Deck: NC   **Incline:** 1

Barrier Board (Optional): — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. "SECUROCK® Gypsum-Fiber Roof Board" (Type FRX-G), or "SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with "InnoviBond Membrane Adhesive LVOC", at an application rate 40 - 60 sq. ft./gal.

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

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Any UL Classified, any thickness.
Barrier Board: — — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with "InnoviBond Membrane Adhesive SPR" at an application rate 1000 ft^2/45 lb. canister.

6. Deck: NC   **Incline:** 2

Barrier Board (Optional): — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. "SECUROCK® Gypsum-Fiber Roof Board" (Type FRX-G), or "SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with "InnoviBond Membrane Adhesive SPR" at an application rate 1000 ft^2/45 lb. canister.

7. Deck: NC   **Incline:** 1/8

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — Min. 1/2 in. "IKOTherm CoverShield" over "IKOTherm", "IKOTherm III", "IKOTherm III Tapered 20 PSI", or "IKOTherm Tapered", or "IKOTherm-A", or "IKOTherm-A 25 PSI", or "IKOTherm-A Tapered", or "IKOTherm-A Tapered 25 PSI", or "IKOTherm-A III", "IKOTherm-A III 25 PSI", or "IKOTherm-A III Tapered", or "IKOTherm-A III Tapered 20 PSI", or "IKOTherm-A CoverShield" mechanically fastened, any thickness.

Membrane: — - "IKO Innovi TPO" 45 - 80 mils, adhered with: "InnoviBond Membrane Adhesive" or "InnoviBond Membrane Adhesive LVOC" at an application rate 40 - 60 sq. ft./gal., or "InnoviBond Water Based Bonding Adhesive" at an application rate of 100 - 120 sq. ft./gal., or "InnoviBond Membrane Adhesive SPR" at an application rate 1000 ft^2/45 lb. canister.

8. **Deck:** NC   **Incline:** 1/8

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation (Optional): — - "IKOTherm", "IKOTherm III", "IKOTherm III Tapered 20 PSI", or "IKOTherm Tapered", or "IKOTherm-A", or "IKOTherm-A 25 PSI", or "IKOTherm-A Tapered", or "IKOTherm-A Tapered 25 PSI", or "IKOTherm-A III", "IKOTherm-A III 25 PSI", or "IKOTherm-A III Tapered", or "IKOTherm-A III Tapered 20 PSI", or "IKOTherm-A CoverShield" mechanically fastened, any thickness.
Membrane: — - "IKO Innovi TPO" 45 - 80 mils, adhered with: "InnoviBond Membrane Adhesive" at an application rate 40 - 60 sq. ft./gal., or "InnoviBond Water Based Bonding Adhesive" at an application rate of 100 - 120 sq. ft./gal., or "InnoviBond Membrane Adhesive SPR" at an application rate 1000 ft ^{2}/45 lb. canister.

9. **Deck:** C-15/32   **Incline:** 1/8

Barrier Board (Optional): — Gypsum board, any thickness.
Insulation: — Min. 1-1/2 in. thick "IKOTherm III", mechanically fastened, all insulation joints must be staggered a minimum of 12-in. from the plywood deck joints.
Cover Board (Optional): — Min. 1/2 in. "IKOTherm CoverShield", mechanically fastened
Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with: "InnoviBond Membrane Adhesive" or "InnoviBond Membrane Adhesive LVOC" at an application rate 40 - 60 sq. ft./gal., or "InnoviBond Water Based Bonding Adhesive" at an application rate of 100 - 120 sq. ft./gal., or "InnoviBond Membrane Adhesive SPR" at an application rate 1000 ft^2 /45 lb. canister.

Class B - Fully Adhered (TPO)

1. **Deck:** C-15/32   **Incline:** 1/4

Barrier Board (Optional): — Gypsum board, any thickness.

Insulation: — Min. 1-1/2 in. thick "IKOTherm III", mechanically fastened, all insulation joints must be staggered a minimum of 12-in. from the plywood deck joints.

Cover Board (Optional): — Min. 1/2 in. "IKOTherm CoverShield", mechanically fastened

Membrane: — "IKO Innovi TPO" 45 - 80 mils, adhered with: "InnoviBond Membrane Adhesive" or "InnoviBond Membrane Adhesive LVOC" at an application rate 40 - 60 sq. ft./gal., or "InnoviBond Water Based Bonding Adhesive" at an application rate of 100 - 120 sq. ft./gal., or "InnoviBond Membrane Adhesive SPR" at an application rate 1000 ft^2 /45 lb. canister.

Class A - Mechanically Fastened (TPO)
"IKO Innovi TPO" may be primed with "InnoviPrime TPO Primer" or "InnoviPrime TPO Primer LVOC" and may be covered with "InnoviFlash TPO Seam Tape", "InnoviFlash TPO Cover Tape", "InnoviFlash YELLOW TPO SAFETY STRIP", or "InnoviFlash TPO Reinforced Perimeter Strip (RPS) ". The TPO membrane joint edges are sealed with a nominal 1/4 in (6.4 mm) bead of "InnoviSeal TPO General Purpose Sealant".

1. **Deck:** NC   **Incline:** 1/2

      Barrier Board (Optional): — Gypsum board, any thickness.
      Insulation (Optional): — "IKOTherm", "IKOTherm III", "IKOTherm III Tapered 20 PSI", or "IKOTherm Tapered", or "IKOTherm-A", or "IKOTherm-A 25 PSI", or "IKOTherm-A Tapered", or "IKOTherm-A Tapered 25 PSI", or "IKOTherm-A III", "IKOTherm-A III 25 PSI", or "IKOTherm-A III Tapered", or "IKOTherm-A III Tapered 20 PSI" , or "IKOTherm-A CoverShield" mechanically fastened, any thickness.
      Membrane: — "IKO Innovi TPO" 45 - 80 mils, mechanically fastened

2. **Deck:** NC   **Incline:** 3/4

      Barrier Board (Optional): — Gypsum board, any thickness.
      Insulation (Optional): — Min. 1/2 in. "IKOTherm CoverShield" over "IKOTherm", "IKOTherm III", "IKOTherm III Tapered 20 PSI", or "IKOTherm Tapered", or "IKOTherm-A", or "IKOTherm-A 25 PSI", or "IKOTherm-A Tapered", or "IKOTherm-A Tapered 25 PSI", or "IKOTherm-A III", or "IKOTherm-A III 25 PSI", or "IKOTherm-A III Tapered", or "IKOTherm-A III Tapered 20 PSI" , or "IKOTherm-A CoverShield" mechanically fastened, any thickness.
      Membrane: — "IKO Innovi TPO" 45 - 80 mils, mechanically fastened

3. **Deck:** C-15/32   **Incline:** 3

      Barrier Board (Optional): — Gypsum board, any thickness.
      Insulation (Optional): — Any UL Classified, any thickness.
      Barrier Board: — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. "SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
      Membrane: — "IKO Innovi TPO" 45 - 80 mils, mechanically fastened

4. **Deck:** NC   **Incline:** 3

      Barrier Board (Optional): — — Min. 1/4-in. thick Georgia-Pacific Gypsum Corp. "DensDeck ® Roofboard", , or "DensDeck Prime® Roofboard", or United States Gypsum Co. ""SECUROCK® Gypsum-Fiber Roof Board" (Type FRX-G), or SECUROCK® Glass-Mat Roof Board "(Type SGMRX), or "SECUROCK® Coated Glass Mat Roof Board" (Type SGMRX), or National Gypsum "DEXcell Glass Mat Roof Board", or "DEXcell FA Glass Mat Roof Board".
      Membrane: — : "IKO Innovi TPO" 45 - 80 mils, mechanically fastened

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

Barrier Board (Optional): — Gypsum board, any thickness.

Insulation: — Min. 1-1/2 in. thick "IKOTherm III", mechanically fastened, all insulation joints must be staggered a minimum of 12-in. from the plywood deck joints.

Cover Board (Optional): — Min. 1/2 in. "IKOTherm CoverShield", mechanically fastened.

Membrane: — "IKO Innovi TPO" 45 - 80 mils, mechanically fastened or induction bonded plates.

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

Barrier Board (Optional): — Gypsum board, any thickness.

Insulation (Optional): — "IKOTherm", "IKOTherm III", or "IKOTherm Tapered" mechanically fastened, any thickness.

Cover Board: — Min. 1/2 in. "IKOTherm CoverShield", mechanically fastened, all insulation joints must be staggered a minimum of 12-in. from the plywood deck joints.

Membrane: — "IKO Innovi TPO" 45 - 80 mils, mechanically fastened or induction bonded plates.

Class A, B or C (See Note)

1. **Deck:** NC (See Note 1)   **Incline:** See Note 1

Insulation: — Any UL Classified, any thickness, adhered with "IKO Millennium Adhesive".
Membrane: — Any UL Classified modified bitumen system, BUR system or CPE, CSM, CSPE, EPDM, NBP, PIB, PVC, TPO or TRE membrane system suitable for use with any roof insulation.
Note 1: Classification (A, B or C) and maximum incline will be the same as that of the Classified Roof covering System (TGFU) currently limited to noncombustible roof deck.

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