

## UL PRODUCT CATEGORY

### Roofing Systems

See General Information for Roofing Systems

#### CONKLIN CO INC

551 Valley Park Dr

Shakopee, MN 55379-0155 USA

R8435

#### FLUID APPLIED COATING SYSTEMS

Unless otherwise specified, joints in the deck or insulation may or may not be sealed with "KWIK KAULK" (available in various colors) caulking compound.

#### Class A

##### 1. Deleted.

##### 2. Deck: NC

Incline: 2

**Primer (Optional):** — "Prime Time", 3/4 gal./100-ft.<sup>2</sup> or "Metal Ready Universal", 0.45 gal/100-ft.<sup>2</sup>

**Base Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1-1/2 gal./100-ft.<sup>2</sup>

**Ply Sheet:** — Optional polyester mat embedded in wet coating.

**Top Coat:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat or "Puma XL", 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing (Optional):** — No. 11 roofing granules, 50-lbs/100-ft.<sup>2</sup>

##### 3. Deck: NC

Incline: 1-1/2

**Insulation:** — Johns Manville "Fesco-Foam" or Atlas Roofing Corp. "ACFoam I" or "ACFoam II", 2-in. maximum, mechanically fastened.

**Polyester:** — 4-in. strip polyester fabric is embedded into a wet strip of "Rapid Roof III" or "Bench Mark" base coat, centered over all joints in the insulation.

**Base Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1-1/2 gal./100-ft.<sup>2</sup> polyester mat embedded in wet coating.

**Second Coat:** — "Rapid Roof III", "Equinox" base coat or "Benchmark" base coat, 1/2 gal/100-ft.<sup>2</sup>

**Top Coat:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat or "Puma XL", 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing (Optional):** — No. 11 roofing granules, 50-lbs/100-ft.<sup>2</sup>

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

**Foil:** — Deck joints are covered with a double layer of aluminum foil with a total thickness of 2 mil and a width of 3-in. The aluminum foil is stapled 12-in. OC along both edges.

**Insulation:** — Johns Manville "Fesco-Foam" or Atlas Roofing Corp. "ACFoam I" or "ACFoam II", 2 in. maximum, mechanically fastened. Insulation joints are caulked with "KWIK KAULK".

**Polyester Mat:** — A 4-in. wide strip of polyester fabric is embedded into a wet strip of "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, centered over all joints in the insulation.

**Base Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1-1/2 gal/100-ft.<sup>2</sup> with polyester mat embedded in the wet coating.

**Second Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1/2 gal./100-ft.<sup>2</sup>

**Top Coat:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat or "Puma XL", 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing:** — No. 11 granules, 50-lbs/100-ft.<sup>2</sup>

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

**Foil:** — Deck joints are covered with a double layer of aluminum foil with a total thickness of 2 mil and a width of 3-in. The foil is stapled 12-in. OC along both edges.

**Insulation:** — Perlite, 1-in., mechanically fastened followed by one layer Atlas Roofing Corp. "ACFoam I" or "ACFoam II", 1-in. thick, mechanically fastened to the deck. Insulation joints are caulked with "KWIK KAULK".

**Polyester Mat:** — A 4-in. wide strip of polyester fabric (2.5-g/yd<sup>2</sup>) is embedded into a wet strip of "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, centered over the insulation joints.

**Base Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1-1/2 gal./100-ft.<sup>2</sup> with polyester mat embedded in the wet coating.

**Second Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat 1/2 gal./100-ft.<sup>2</sup>

**Top Coat:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat, or "Puma XL", 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing:** — As an option No. 11 granules, 50-lbs/100-ft.<sup>2</sup> may be added.

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

**Insulation:** — Perlite, 1-in. thick, mechanically fastened followed by one layer Atlas Roofing Corp. "ACFoam I" or "ACFoam II", 1-in. thick, mechanically fastened to the deck. Insulation joints are caulked with "KWIK KAULK".

**Polyester Mat:** — A 4 in. wide strip of polyester fabric (2.5 g/yd.<sup>2</sup>) is embedded into a wet strip of "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, centered over the insulation joints.

**Base Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1-1/2 gal/100-ft.<sup>2</sup> with polyester mat embedded in the wet coating.

**Second Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1/2 gal/100-ft.<sup>2</sup>

**Top Coat:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" base coat, or "Puma XL", 1-1/2 gal/100-ft.<sup>2</sup>

**Surfacing** — (Optional): No. 11 granules, 50-lbs/100-ft.<sup>2</sup>

7. **Deck:** NC

**Incline:** 1-1/2

**Base Coat:** — Longitudinal metal joints, "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, applied at 2-gal./100-ft.<sup>2</sup> with one ply of polyester fabric embedded in coating. End metal joints (lapped), "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, applied at 2-gal./100-ft.<sup>2</sup> with one ply of "Spunflex II" polyester fabric embedded in coating, followed by a second application of "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, applied at 2-gal./100-ft.<sup>2</sup>, with one ply of polyester embedded in base coat.

**Top Coat:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat or "Puma XL", applied at 1-1/2 gal./100-ft.<sup>2</sup>

### Class C

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

**Incline:** 1/4

**Polyester:** — A 4 in. strip of polyester fabric is embedded into a wet strip of "Rapid Roof III" or "Bench Mark" base coat, centered over all joints.

**Base Coat:** — "Rapid Roof III", "Equinox" base coat or "Bench Mark" base coat, 1-1/2 gal/100-ft.<sup>2</sup>

**Top Coat:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat or "Puma XL", 1-1/2 gal/100-ft.<sup>2</sup>

**Surfacing:** — No. 11 roofing granules, 50-lbs/100-ft.<sup>2</sup>

## MAINTENANCE AND REPAIR

### Class A

1. **Deck:** NC

**Incline:** 1/2

**Existing Roof System:** — Class A, B or C, smooth built-up roof.

**Primer:** — "Prime Time", applied at 1-gal./100-ft.<sup>2</sup>

**Base Coat:** — "Rapid Roof III", base coat "Equinox" base coat or "Bench Mark" base coat, applied at 1-1/2 gal./100-ft.<sup>2</sup> followed by one ply Spunflex polyester embedded into the basecoat followed by the overcoat application of "Rapid Roof III" base coat "Equinox" base coat, applied or "Bench Mark" base coat at 1/2 gal./100-ft.

**Surfacing:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat or "Puma XL", applied at 1-1/2 gal./100-ft.

### Class A, B or C

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

**Incline:** 1/2

**Existing Roof System:** — Class A, B or C mineral surfaced asphalt felt or asphalt glass fiber felt system to maintain existing Classification.

**Primer:** — "Prime Time", applied at 1-gal./100-ft<sup>2</sup>.

**Base Coat:** — "Rapid Roof III" base coat, "Equinox" base coat or "Bench Mark" base coat, applied at 1-1/2 gal./100-ft<sup>2</sup> followed by 1 ply spunflex polyester embedded into wet basecoat followed by the overcoat application of "Rapid Roof III" base coat, "Equinox" base coat, or "Bench Mark" base coat applied at 1/2-gal./100-ft<sup>2</sup>.

**Surfacing:** — "Rapid Roof III", "Equinox" top coat, "Bench Mark" top coat or "Puma XL", applied at 1-1/2 gal./100-ft<sup>2</sup>.

## 2. Deck: NC

**Incline:** 1/2

**Existing Roof System:** — (To maintain existing Classifications) - Any Class A, B or C, uncoated, insulated or uninsulated, modified bitumen membrane or Type G3 mineral surfaced cap BUR system.

**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.

**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all membrane joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.

**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>

## 3. Deck: NC

**Incline:** See Note 1

**Existing Roof System:** — Any EPDM, Hypalon or CPA, single ply membrane system.

**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.

**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all membrane joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.

**Top Coat:** — "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup>

**Note 1:** — Classification (A, B or C) and maximum 2-in incline for membrane manufacturer's insulated or uninsulated Roof Covering Systems (TGFU) Certification.

## 4. Deck: NC

**Incline:** See Note 1

**Existing Roof System:** — Any TPO single ply membrane system.

**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.

**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all membrane joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.

**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>

**Note 1:** — Classification (A, B or C) and maximum incline will be the same as that of the existing insulated or uninsulated membrane roof covering system Classification, but not to exceed 3-1/2:12.

**5. Deck:** NC**Incline:** See Note 1**Existing Roof System:** — Any PVC or TPA single ply membrane system**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all membrane joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>**Note 1:** — Classification (A, B or C) and maximum incline will be the same as that of the existing insulated or uninsulated membrane roof covering system Classification, but not to exceed 2-1/2:12.**6. Deck:** NC**Incline:** 3-1/2, See Note 1**Existing Roof System:** — Any Class A, B or C, UL Classified metal panel system**Primer:** — "Encase" primer applied at a rate of 325-ft.<sup>2</sup>/1-gal.**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>**Note 1:** — Classification (A, B or C) and maximum incline will be the same as that of the existing metal panel system Classification, but not to exceed 3-1/2:12.**7. Deck:** C-15/32**Incline:** 1/2**Existing Roof System:** — (To maintain existing Classifications) - Any Class A, B or C, uncoated, insulated or uninsulated, modified bitumen membrane or Type G3 mineral surfaced cap BUR system.**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>**8. Deck:** C-15/32**Incline:** See Note 1**Existing Roof System:** — Any EPDM, Hypalon or CPA, single ply membrane system.**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.

**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>

**Note 1:** — Classification (A, B or C) and maximum 2:12 incline for membrane manufacturer's insulated or uninsulated Roof Covering Systems (TGFU) Certification.

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

**Incline:** See Note 1

**Existing Roof System:** — Any TPO single ply membrane system.

**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.

**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.

**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>

**Note 1:** — Classification (A, B or C) and maximum incline will be the same as that of the existing insulated or uninsulated membrane roof covering system Classification, but not to exceed 3-1/2 in. incline.

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

**Incline:** See Note 1

**Existing Roof System:** — Any PVC or TPA single ply membrane system.

**Primer:** — "Tack Coat" primer applied at a rate of 250 to 300-ft.<sup>2</sup>/1-gal.

**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all membrane joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.

**Top Coat:** — "Activate HS" applied at a rate of 1-gal/80-ft.<sup>2</sup>

**Surfacing:** — "Activate HS" applied at 2-gal./100-ft.<sup>2</sup>

**Note 1:** — Classification (A, B or C) and maximum incline will be the same as that of the existing insulated or uninsulated membrane roof covering system Classification, but not to exceed 2-1/2 in. slope.

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

**Incline:** 3-1/2, See Note 1

**Existing Roof System:** — Any Class A, B or C, UL Classified metal panel system.

**Primer:** — "Tack Coat" primer applied at a rate of 325-ft.<sup>2</sup>/1-gal.

**Reinforcement (Optional):** — 5-in. wide strip of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> to all joints and seams followed by 4-in. wide strip of 160-g/m<sup>2</sup> polyester fabric embedded into wet base coat followed by an application of "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup> over the polyester fabric.

**Top Coat:** — "Activate HS" applied at a rate of 1-gal./80-ft.<sup>2</sup>

**Note 1:** — Classification (A, B or C) and maximum incline will be the same as that of the existing metal panel system Classification, but not to exceed 3-1/2:12

## SINGLE PLY MEMBRANE SYSTEMS (CSPE)

### Class A - Ballasted

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

**Insulation:** — Polystyrene, glass fiber, perlite, isocyanurate, perlite/isocyanurate, or perlite/polyurethane composites any thickness, loose laid.

**Membrane:** — "Hy-Crown". (CSPE)

**Surfacing:** — River bottom stone (3/4 to 1-1/2 in. diameter) or concrete pavers at minimum 6-lbs/1-ft.<sup>2</sup>

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

**Slip Sheet (Optional):** — Minimum 15 mils fiber glass, laid loose or mechanically fastened.

**Membrane:** — "Hy-Crown". (CSPE)

**Surfacing:** — River bottom stone (3/4 to 1-1/2 in. diameter) or concrete pavers at minimum 10-lbs/ft.<sup>2</sup>

**Class A - Mechanically Fastened**

Unless otherwise indicated, the specified membrane is mechanically fastened to deck with screws and metal or plastic discs. The laps are hot air welded or sealed with "Hy-Crown Seaming Adhesive" at 200 lineal ft/gal. An approximately 1/4 in. diameter bead of "Hy-Crown Seaming Adhesive" is used to seal exposed seams.

Where Celotex "Hy-Tec" is used, Celotex "Hy-Tec" (Energy Lok) is an acceptable alternate.

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

**Barrier Board:** — Minimum 5/8-in. thick gypsum board, mechanically fastened.

**Insulation:** — Glass fiber 1-1/16 to 2-3/4 in. or perlite-3/4 to 3-in. mechanically fastened with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.

**Membrane:** — "Hy-Crown" (CSPE).

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

**Insulation:** — Wood fiber 1/2 to 1-in., glass fiber-3/4 to 1-1/16 in., Johns Manville "Fesco Foam" 1-5/8 to 3-1/4 in. or perlite-3/4 to 3 in.

**Membrane:** — "Hy-Crown" (CSPE).

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

**Slip Sheet:** — One layer M-394 underlayment, foil side down.

**Insulation:** — Perlite 3/4 to 4-in. mechanically fastened with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.

**Membrane:** — "Hy-Crown" (CSPE).

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

**Insulation:** — "Conklin Roof Insulation II", "Conklin Roof Insulation III" or "Conklin Roof Insulation Tapered" or Atlas Roofing Corp. "ACFoam II" or "ACFoam III", any thickness.

**Barrier Board (Optional):** — Minimum 1/2-in. thick gypsum board mechanically fastened with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.

**Membrane:** — "Hy-Crown" (CSPE).

5. Deleted.

6. Deck: C-15/32

**Incline:** 1-1/2

**Insulation:** — "Conklin Roof Insulation II", "Conklin Roof Insulation III" or "Conklin Roof Insulation Tapered" or Atlas Roofing Corp. "ACFoam II" or "ACFoam III", any thickness mechanically fastened with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.

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

**Membrane:** — "Hy-Crown" (CSPE).

7. Deck: NC

**Incline:** No limitation

**Insulation:** — "Conklin Roof Insulation II", "Conklin Roof Insulation III" or "Conklin Roof Insulation Tapered" or Atlas Roofing Corp. "ACFoam II" or "ACFoam III" or Rmax Operating LLC "Multi-Max", any thickness.

**Barrier Board:** — Minimum 1/2-in. gypsum board (minimum 6-in. offset of insulation joints).

**Membrane:** — "Hy-Crown" (CSPE).

8. Deck: NC

**Incline:** 1

**Insulation:** — Cellular concrete, gypsum concrete, vermiculite concrete, perlite concrete or concrete with all surface joints grouted on the exposed surface.

**Membrane:** — "Hy-Crown" (CSPE).

9. Deck: NC

**Incline:** 2

**Insulation:** — EPS/perlite or EPS/wood fiber (perlite or wood fiber must be 1-in. thick) any combination, any thickness of the following: A) Associated Foam "Perform 1" (uniform thickness EPS) field covered with 1 in. thick perlite or wood fiber; B) Associated Foam "Perform 2" (EPS/wood fiber or EPS/perlite, C) Associated Foam "Contour Taper Tile" (EPS/wood fiber, EPS/perlite or EPS field covered with 1-in. thick wood fiber or perlite).

**Membrane:** — "Hy-Crown" (CSPE)

10. Deleted.

11. Deck: C-15/32

**Incline:** 1/2

**Base Sheet:** — One or more plies Burke Industries "M-394", "M-426" slip sheet or Type G2 base sheet or Conklin "Hy-Crown Slip Sheet".

**Insulation:** — "Conklin Roof Insulation II", "Conklin Roof Insulation III" or "Conklin Roof Insulation Tapered" or Apache Building Products "White Line", Atlas Roofing Corp. "ACFoam II" or "ACFoam III", Johns Manville "ENRGY-2A", Firestone Building Products Co. LLC "ISO95-GW", minimum 1.4-in. thick, mechanically fastened in place.

**Membrane:** — "Hy-Crown" (CSPE).



**12. Deck:** NC**Incline:** 2**Base Sheet (Optional):** — One or more plies Type G2 base sheet.**Insulation:** — "Conklin Roof Insulation II", "Conklin Roof Insulation III" or "Conklin Roof Insulation Tapered" or Apache Building Products "White Line", Atlas Roofing Corp. "ACFoam II" or "ACFoam III", Johns Manville "ENRGY-2A", Firestone Building Products Co. LLC "ISO95-GW" or glass fiber, minimum 4-in. thick, mechanically fastened in place.**Membrane:** — "Hy-Crown" (CSPE).**13. Deck:** C-2-1/4 in. T&G**Incline:** Unlimited**Barrier Board:** — Minimum 5/8-in. thick UL Classified gypsum board, mechanically fastened.**Insulation (Optional):** — One or more layers glass fiber, 2 to 3-in. thick.**Membrane:** — "Hy-Crown" (CSPE).**14. Deck:** C-15/32**Incline:** 1-1/2**Insulation:** — EPS/perlite or EPS/wood fiber, 3/4 to 4-in. thick mechanically fastened with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.**Barrier Board:** — Minimum 5/8-in. thick gypsum board.**Membrane:** — "Hy-Crown" (CSPE).**15. Deck:** NC**Incline:** 1-1/2**Insulation:** — "Conklin Roof Insulation II", "Conklin Roof Insulation III" or "Conklin Roof Insulation Tapered" or Atlas Roofing Corp. "ACFoam II" or "ACFoam III", minimum 1-in. thick.**Membrane:** — "Hy-Crown" (CSPE).**16. Deck:** NC**Incline:** 1/2**Insulation:** — Celotex Building Products "Hy-Tek", any thickness.**Barrier Board (Optional) :** — Minimum 1/2-in. thick gypsum board mechanically fastened with all butt joints staggered a minimum of 6-in. from the insulation butt joints.**Membrane:** — "Hy-Crown" (CSPE).**17. Deck:** C-15/32**Incline:** 1**Insulation:** — Celotex Building Products "Hy-Tek", any thickness.**Barrier Board:** — Minimum 1/2-in. thick gypsum board.**Membrane:** — "Hy-Crown" (CSPE).**18. Deck:** NC**Incline:** 4-1/2**Insulation:** — Celotex Building Products "Hy-Tek", any thickness.**Barrier Board:** — Minimum 1/2-in. thick gypsum board mechanically fastened with all butt joints staggered a minimum of 6-in. from the insulation butt joints.**Membrane:** — "Hy-Crown" (CSPE).**19. Deck:** C-15/32**Incline:** 1/4

**Base Sheet:** — One or more plies Burke Industries "M-394", "M-426" slip sheet or Type G2 base sheet or Conklin "Hy-Crown Slip Sheet".

**Insulation:** — Celotex Building Products "Hy-Tec", "Hy-Tec II", "Energy Lok", "Top R-II", minimum 1.4-in. thick, mechanically fastened in place.

**Membrane:** — "Hy-Crown" (CSPE).

20. **Deck:** NC

**Incline:** 1-1/2

**Base Sheet (Optional):** — One or more plies Type G2 base sheet.

**Insulation:** — Celotex Building Products "Hy-Tec", "Hy-Tec II", "Energy Lok", "Top R-II", minimum 1.4 in. thick, mechanically fastened in place.

**Membrane:** — "Hy-Crown" (CSPE).

21. **Deck:** NC

**Incline:** 1

**Insulation:** — "Insulfoam EPS", "Insultaper", "Insulbarrier" or "R-Gard" any thickness and density.

**Slipsheet:** — Insulfoams Secure-Ply.

**Membrane:** — "Hy-Crown" (CSPE).

22. **Deck:** NC

**Incline:** 1/2

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

**Barrier Board (Optional):** — Minimum 1/2-in. thick gypsum board mechanically fastened with all butt joints staggered a minimum of 6-in. from the insulation butt joints.

**Membrane:** — "Hy-Crown" (CSPE).

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

**Incline:** 1

**Insulation:** — Rmax Operating LLC "Multi-Max", any thickness mechanically fastened with all butt joints staggered a minimum of 6-in. from the insulation butt joints

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

**Membrane:** — "Hy-Crown" (CSPE).

24. **Deck:** NC

**Incline:** 1-1/2

**Base Sheet (Optional):** — One or more plies Type G2 base sheet.

**Insulation:** — Rmax Operating LLC "Multi-Max", minimum 1.4-in. thick, mechanically fastened in place.

**Membrane:** — "Hy-Crown" (CSPE).

### **Class B - Mechanically Fastened**

1. **Deck:** NC

**Incline:** 1-1/2

**Insulation:** — Glass fiber 3/4 to 1-11/16 in., Johns Manville "Fesco/Foam" 1-5/8 to 3-1/4 in. thick, perlite 3/4 to 3-in. thick or wood fiber, 1/2 to 1-in. thick.

**Membrane:** — "Hy-Crown" (CSPE)

2. **Deleted.**

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

**Insulation:** — "Conklin Roof Insulation II", "Conklin Roof Insulation III" or "Conklin Roof Insulation Tapered" or Atlas Roofing Corp. "ACFoam II" or "ACFoam III" or Rmax Operating LLC "Multi-Max", maximum 4-in. thick.

**Membrane:** — "Hy-Crown" (CSPE).

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

**Insulation:** — Celotex "TheRmax Operating LLC Hy-Tek", maximum 4-in. thick.

**Membrane:** — "Hy-Crown" (CSPE).

**MAINTENANCE AND REPAIR****Class A**

Unless otherwise indicated "Hy-Crown" (CSPE) is mechanically fastened to deck with screws and metal or plastic discs. The laps are hot air welded or sealed with "Hy-Crown Seaming Adhesive" at 200 lineal ft./gal. Optionally, an approximately 1/4 in. diameter bead of "Hy-Crown Seaming Adhesive" may be used to seal exposed seams. Unless otherwise indicated in the systems described below, "Tack Coat" primer may be applied at 0.29 to 0.40 gal/100-ft.<sup>2</sup> directly over existing roof system.

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

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

**Insulation:** — One layer tapered EPS (1.0 to 1.5-lb/ft.<sup>3</sup>), any thickness.

**Barrier Board:** — Minimum 5/8-in. thick gypsum board, mechanically fastened to deck.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

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

**Existing Roof System:** — Four plies of asphalt organic or glass fiber felt hot mopped. Surfaces with gravel embedded in hot roofing asphalt. Covered with:

**Insulation:** — Atlas Roofing Corp. "ACFoam II" or "ACFoam III", minimum 1-in. thick.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

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

**Existing Roof System:** — Class A, B or C smooth or gravel surfaced BUR (gravel may be removed).

**Barrier Board:** — Minimum 5/8-in. thick UL Classified gypsum board.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

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

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

**Slip sheet:** — Atlas Roofing Corp. "FR-50", 15 mil.

**Insulation:** — Perlite, 3/4 to 3-in. thick

**Membrane:** — "Hy-Crown" (CSPE).

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

**Incline:** No Limitation

**Existing Deck:** — Class A, loose gravel removed, covered with:

**Insulation:** — 1-in. thick polyisocyanurate

**Barrier Board:** — Minimum 5/8-in. thick UL Classified gypsum board.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

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

**Incline:** 2-1/2

**Existing Deck:** — Class A or B built-up roof.

**Insulation:** — Any UL Classified polyisocyanurate board, minimum 1.2-in. thick

**Barrier Board:** — Minimum 5/8-in. thick gypsum board.

**Membrane:** — "Hy-Crown" (CSPE).

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

**Incline:** 1/4

**Existing Roof System:** — Class A smooth surfaced covered with:

**Insulation:** — Amoco Foam Products "AMOCOR PB6".

**Slip Sheet:** — One or more plies Type G2 base sheet, mechanically fastened in place.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

9. **Deck:** NC

**Incline:** 2

**Existing Roof System:** — BUR with loose gravel (gravel may be removed) covered with:

**Insulation (Optional):** — Perlite or tapered EPS, any thickness.

**Barrier Board:** — Minimum 1-in. thick wood fiber or minimum 1/2-in. thick gypsum.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

10. **Deck:** NC

**Incline:** Unlimited

**Existing Roof System:** — Smooth surface BUR covered with:

**Insulation (Optional):** — Perlite, EPS, any thickness.

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

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

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

**Incline:** 1

**Existing Roof System:** — Four plies of asphalt organic or glass fiber felt hot mopped. Surfaces with gravel embedded in hot roofing asphalt. Covered with:

**Insulation:** — Celotex "Hy-Tec", 1-in. thick minimum.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

12. **Deck:** NC

**Incline:** 1/2

**Existing Roof System:** — Class A, B or C built-up system, smooth surface cap sheet or graveled surface (gravel may be removed) or existing single-ply system.

**Insulation:** — Insulfoam R-Gard Types 1, VIII, II or IX or R-Gard Fanfold 1-in. maximum thick.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened or ballasted.

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

**Incline:** 1/2

**Existing Roof System:** — Class A, B or C built-up system, smooth surface cap sheet or graveled surface (gravel may be removed) or existing single-ply system.

**Insulation:** — Insulfoam R-Gard Types 1, VIII, II or IX or R-Gard Fanfold 1-in. maximum thick.

**Membrane:** — "Hy-Crown" (CSPE), ballasted.

**Surfacing:** — River bottom stone (3/4 in. to 1-1/3 in. diameter) at 900-lbs/100-ft.<sup>2</sup>

### Class B

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

**Incline:** 1

**Existing Deck:** — Base sheet nailed, two plies Type 15 felt or Type G1 or Type G2 ply sheet, hot mopped, surfaced with Type G2 ply sheet.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

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

**Incline:** 2

**Existing Roof System:** — Four plies of asphalt saturated organic or glass fiber felt, hot mopped, surfaced with gravel embedded in hot mopping asphalt (gravel is maintained at the Classified rate) covered with:

**Insulation:** — Minimum 1/2-in. thick wood/fiberboard.

**Membrane:** — "Hy-Crown" (CSPE), mechanically fastened.

### SINGLE PLY MEMBRANE SYSTEMS (CPA, TPA, PVC)

The "Flexion" membrane in the following Classifications may be produced between 40 and 80 mil gauges. Unless otherwise indicated, the insulation and membrane are mechanically fastened to the deck with screws and disks as per manufacturer's instructions.

#### Class A - Ballasted

1. **Deck:** NC

**Incline:** 3

**Insulation:** — a) Polystyrene, 2-in. thick maximum or b) Polyisocyanurate, any thickness, laid loosely.

**Membrane:** — "Flexion XL" or Cooley Inc. "C3-FB", 40 to 100-mil (TPA), laid loosely.

**Surfacing:** — River bottom stone (3/4 to 1-1/2 in. diameter) applied at 1000-lb/100-ft.<sup>2</sup> or concrete roof pavers.

#### Class A - Mechanically Fastened

1. **Deck:** NC

**Incline:** 3

**Insulation:** — One of the following, any thickness:

1. Apache Products "PYROX"

2. Firestone Building Products Co. LLC "ISO 95+GL"

3. Johns Manville "ENRGY 2"

4. Atlas Roofing Corp. "ACFoam II"

5. Atlas Roofing Corp. "ACFoam III"

**Membrane:** — "Flexion"

2. **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 DuraGuard™ Roofboard" or minimum 1/2-in. thick gypsum board, with all joints staggered a minimum of 6-in. from plywood roof deck joints.

**Membrane:** — "Flexion"

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

**Incline:** 1/2

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

**Insulation:** — Minimum 1.5-in. thick with all insulation butt joints staggered a minimum of 6- in. from the plywood roof deck butt joints

1. Apache Products "PYROX"

2. Firestone Building Products Co. LLC "ISO 95+GL"

3. Johns Manville "ENRGY 2"

4. Atlas Roofing Corp. "ACFoam II"

5. Atlas Roofing Corp. "ACFoam III"

6. Johns Manville "ISO 1"

**Membrane:** — "Flexion"

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

**Incline:** 1/2

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

**Membrane:** — "Flexion".

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

**Incline:** 1/2

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

**Insulation:** — Atlas Roofing Corp. "ACFoam III", minimum 1.5-in. thick with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.

**Membrane:** — "Flexion".

6. **Deck:** NC

**Incline:** 2-1/2

**Insulation:** — Celotex "Hy-Therm AP".

**Membrane:** — "Flexion".

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

**Incline:** 1/4

**Slip Sheet:** — Two layer Atlas Roofing Corp. "FR 50".

**Insulation:** — Celotex "Hy-Therm AP", minimum 1.5-in. thick with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.

**Membrane:** — "Flexion".

8. **Deck:** NC

**Incline:** 2-1/2

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

**Membrane:** — "Flexion".

9. **Deck:** NC

**Incline:** 2

**Barrier Board (Optional):** — Minimum 1/2 in., thick gypsum board mechanically fastened.

**Insulation:** — Apache Building Products "Pyrox White" or Johns Manville "ENRGY 2G", any thickness.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

10. **Deck:** NC

**Incline:** 1-1/2

**Barrier Board (Optional):** — Minimum 1/2 in., thick gypsum board mechanically fastened.

**Insulation:** — Rmax Operating LLC "Thermarof Plus-3" or Atlas Roofing Corp. "ACFoam II", "ACFoam III", any thickness.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

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

**Incline:** 3-1/2

**Insulation (Optional):** — Polyisocyanurate, extruded or expanded polystyrene, any thickness.

**Barrier Board:** — Minimum 1/2 in. thick gypsum wallboard or minimum 1/4 in. thick Georgia-Pacific Gypsum LLC "DensDeck® Roofboard" or "DensDeck Prime® Roofboard" or "DensDeck DuraGuard™ Roofboard" mechanically fastened with butt joints in the barrier board staggered a minimum of 6-in. from plywood roof deck butt joints.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

12. **Deck:** NC

**Incline:** 1/4

**Insulation:** — Minimum 1-in. thick polystyrene (1 to 2.5-lb/ft.<sup>3</sup>)

**Slip Sheet:** — Atlas Roofing Corp. "FR-10".

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

13. **Deck:** NC

**Incline:** 2-1/2

**Insulation:** — Celotex "Hy-Tec", 1-in. thick minimum.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**14. Deck: NC****Incline: 1**

**Insulation:** — Firestone Building Products "Iso 95+GL", Atlas Roofing Corp. "ACFoam II", "ACFoam III", any thickness.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**15. Deck: NC (Concrete)****Incline: 1**

**Insulating Concrete (Optional):** — Deck covered with one of the following insulating concretes (poured in place): Cellular, vermiculite, perlite, gypsum or structural.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**16. Deck: NC****Incline: 3-1/2**

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

**Barrier Board:** — Minimum 1/2-in. thick regular or water resistant wallboard

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**17. Deck: Structural Cement Fiber Unit****Incline: 2**

**Insulation (Optional):** — One of more of the following or combinations, any thickness: Atlas Roofing Corp. "ACFoam II", "ACFoam III", Johns Manville "ENRGY 2G".

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**18. Deck: Structural Cement Fiber Unit****Incline: 1/4**

**Insulation:** — Minimum 1-in. thick polystyrene (1 to 2.5-lb/ft.<sup>3</sup>)

**Slip Sheet:** — Atlas Roofing Corp. "FR-10"

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**19. Deck: NC****Incline: 2**

**Vapor Retarders (Not UL Classified):** — (1) 6 mil polyethylene (2) B F Goodrich "Permamate", (3) Johns Manville "Asbestogard", (4) Fortifiber "Pyro-Kure 600" or (5) Fortifiber "Vaporstop 298".

**Insulation:** — One or more of the following or combinations, any thickness: Atlas Roofing Corp. "ACFoam II", "ACFoam III" or Johns Manville "ENRGY 2G" or mineral wool insulation.

**Membrane:** — "Flexion XL" 40 to 100-mil (TPA).

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

**Insulation:** — Rmax Operating LLC "Thermarroof Plus-3" or "Multi-Max-3", any thickness.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

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



**Vapor Retarders (Not UL Classified):** — (1) 6 mil polyethylene (2) B F Goodrich "Permamate", (3) Johns Manville "Asbestogard", (4) Fortifiber "Pyro-Kure 600" or (5) Fortifiber "Vaporstop 298".

**Insulation:** — Rmax Operating LLC "Thermarroof Plus-3" or "Multi Max-3", any thickness.

**Membrane:** — "Flexion XL" 40 to 100-mil (TPA).

### Class B - Mechanically Fastened

1. **Deck:** NC

**Incline:** Unlimited

**Insulation:** — Polystyrene, any thickness.

**Slip Sheet:** — One ply Atlas Roofing Corp. "FR 50".

**Membrane:** — "Flexion".

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

**Incline:** 1/2

**Slip Sheet:** — One layer Atlas Roofing Corp. "FR 50".

**Membrane:** — "Flexion".

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

**Incline:** 1/2

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

**Membrane:** — "Flexion".

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

**Incline:** 1-1/2

**Barrier Board (Optional):** — Minimum 1/2 in., thick gypsum board mechanically fastened.

**Slip Sheet:** — Atlas Roofing "FR-50", mechanically fastened.

**Insulation:** — Apache Building Products "Pyrox White" minimum 2-in. thick mechanically fastened.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

5. **Deck:** NC

**Incline:** 1

**Base Sheet:** — Type G3, hot mopped or nailed.

**Insulation:** — Firestone Building Products "Iso-95+GL", Atlas Roofing Corp. "ACFoam II", "ACFoam III" or Johns Manville "ENRGY 2G", any thickness.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

### Class C - Mechanically Fastened

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

**Incline:** 1-1/2

**Barrier Board (Optional):** — Minimum 1/2 in. thick gypsum board mechanically fastened.

**Insulation:** — Apache Building Products "Pyrox White", Firestone Building Products "Iso 95+GL", Atlas Roofing Corp. "ACFoam I" or "ACFoam II", "ACFoam III", Johns Manville "UltraGard SP" or "ENRGY 2G", 1-1/2 in. thick minimum, mechanically fastened or hot mopped.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

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

**Barrier Board (Optional):** — Minimum 1/2-in., thick gypsum board mechanically fastened.

**Insulation/Slip Sheet:** — Polystyrene 1 to 4-in. thick covered with glass fiber slip sheet.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**3. Deck: C 1-1/2 T & G****Incline: 1**

**Cover Board:** — Minimum 3/8-in., thick plywood.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

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

**Barrier Board (Optional):** — Minimum 1/2 in. thick gypsum board, mechanically fastened.

**Insulation:** — Rmax Operating LLC "Multi-Max-3", 1-1/2 in. thick minimum, mechanically fastened or hot mopped.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**MAINTENANCE AND REPAIR SYSTEMS****Class A****1. Deck: C-15/32****Incline: 1**

**Existing Roof:** — Class A BUR covered with:

**Insulation:** — Minimum 1-in. thick Ipolyisocyanurate covered with 1/2 in. thick wood fiberboard.

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA), mechanically fastened.

**Class A, B or C****1. Deck: C-15/32****Incline: 2**

**Existing Roof System:** — Insulated or noninsulated cap sheet, Class A, B or C system to retain the existing Classification covered with:

**Membrane:** — "Flexion XL", 40 to 100-mil (TPA).

**SINGLE PLY MEMBRANE SYSTEMS (TPO)****Class A - Fully Adhered****1. Deck: NC****Incline: 1/2**

**Insulation:** — Johns Manville "ENRGY 3", any thickness.

**Membrane:** — "Outpost", 45 or 60 mil, fully adhered with Cooley Inc. "CRSI Bonding Adhesive C1006" applied at a rate of 1-gal./100-ft.<sup>2</sup>.

**Class B - Fully Adhered**

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

**Insulation:** — Johns Manville "ENRGY 3", any thickness.

**Membrane:** — "Outpost", 45 or 60 mil, fully adhered with Cooley Inc. "CRSI Bonding Adhesive C1006" applied at a rate of 1-gal./100-ft.<sup>2</sup>.

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

**Insulation:** — Johns Manville "ENRGY 3", any thickness.

**Membrane:** — "Outpost", 80 mil, fully adhered with Cooley Inc. "CRSI Bonding Adhesive C1006" applied at a rate of 1-gal./100-ft.<sup>2</sup>.

**Class A - Mechanically Fastened**

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

**Insulation:** — Hunter Panels "H-Shield", "H-Shield-WF" , any thickness.

**Membrane:** — "Outpost", 45 or 60 mil.

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

**Insulation (Optional):** — Atlas Roofing Corp. "ACFoam II", Apache Products "Apache White Line", or "Apache Pyrox", Hunter Panels "H-Shield", "H-Shield-WF" or Johns Manville "ENRGY 3" or "Barrier Board Plus", RhoFlex "Isocyanurate GL, GW or HF", Rmax Operating LLC. "Multi-Max-3", any thickness.

**Barrier Board:** — Minimum 1/2-in. thick gypsum board mechanically fastened with all butt joints staggered a minimum of 6-in. from the plywood roof deck butt joints.

**Membrane:** — "Outpost", 45 or 60 mil.

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

**Insulation:** — Johns Manville "ENRGY 3", any thickness.

**Membrane:** — "Outpost", 45 or 60 mil.

**Class B - Mechanically Fastened**

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

**Insulation:** — Johns Manville "ENRGY 3", any thickness.

**Membrane:** — "Outpost", 80 mil, mechanically fastened.

**SPRAY APPLIED FOAM AND COATING SYSTEMS****Class A**

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

**Foam:** — Premium Polymers "241 Series" or BASF Polyurethane Foam Enterprises L L C "FE-302" or "FE-303" or "FE-314", 2-in. thick.

**Base Coat:** — "Rapid Roof III" base coat or "Equinox" base coat, 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing:** — "Rapid Roof III" top coat or "Equinox" top coat, 1-1/2 gal/100-ft.<sup>2</sup>

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

**Foam:** — BASF Polyurethane Foam Enterprises L L C "ELASTOSPRAY 1409, 1270, 1270II, 1302, 1451, 1570, 1605, 1620 or 2001", 1 to 2-in. thick.

**Primer (Optional):** — "Prime Time", 225 ft/100-ft.<sup>2</sup>

**Base Coat:** — "Rapid Roof III" or "Equinox" base coat, 1-1/2 gal/100-ft.<sup>2</sup>

**Surfacing:** — "Rapid Roof III" or "Equinox" top coat, 1-1/2 gal/100-ft.<sup>2</sup>

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

**Foam:** — North Carolina Foam Industries "774", "583", "584-2.5, -2.8, -3", 2-in. thick.

**Base Coat:** — "Rapid Roof III" or "Equinox" base coat, 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing:** — "Rapid Roof III" or "Equinox" top coat, 1-1/2 gal/100-ft.<sup>2</sup>

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

**Foam:** — BASF Polyurethane Foam Enterprises L L C "FE302-2.5" or "FE-303" or "FE-314", or Premium Polymers "241 Series", 1 to 2-in.

**Base Coat:** — "Rapid Roof III" or "Equinox" base coat, 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing:** — "Rapid Roof III" or "Equinox" top coat, 1-1/2 gal./100-ft.<sup>2</sup>

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

**Foam:** — Stepan "Stepan Foam 9300 25/30 Series", or BASF Polyurethane Foam Enterprises L L C "FE-302 25/30" or "FE-303 25/30 " or "FE-314 25/30", 1 to 2-in. thick.

**Base Coat:** — One application "Bench Mark" base coat, 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing:** — One application "Bench Mark" top coat, 1-1/2 gal./100-ft.<sup>2</sup>

**6. Deck: NC** **Incline: 3-1/2**

**Foam:** — BASF Polyurethane Foam Enterprises L L C "FE 303", any thickness.

**Base Coat:** — "Rapid Roof III" or "Equinox" base coat, applied at 2-gal./100-ft.<sup>2</sup>

**Top Coat:** — "Rapid Roof III" or "Equinox" top coat, applied at 2-gal./100-ft.<sup>2</sup>

**7. Deck: NC** **Incline: 2**

**Foam:** — Hess Polyurethane "HPS 585" or "HPS 5100", any thickness.

**Coating:** — "Rapid Roof III", 3-gal./100-ft.<sup>2</sup>

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

**Foam:** — BASF Polyurethane Foam Enterprises L L C "FE 346 25/30" any thickness.

**Base Coat:** — "Prime Time Plus" at 1-1/2 gal/100-ft.<sup>2</sup>

**Top Coat:** — "Rapid Roof III" or "Equinox" top coat at 1-1/2 gal/100-ft.<sup>2</sup>.

9. **Deck:** NC

**Incline:** 2

**Foam:** — BASF Polyurethane Foam Enterprises L L C "FE348-3.0", any thickness.

**Coating:** — "PUMA" applied at 1.6 gal./100-ft.<sup>2</sup>

10. **Deck:** NC

**Incline:** 2-1/2

**Impact:** 4

**Foam:** — BASF Polyurethane Foam Enterprises L L C "FE348-2.8", 1 to 2-in. thick.

**Base Coat:** — One application "Bench Mark" base coat, 1-1/2 gal./100-ft.<sup>2</sup>

**Surfacing:** — One application "Puma XL", 1-1/2 gal./100-ft.<sup>2</sup>

11. **Deck:** NC

**Incline:** 1-1/2

**Foam:** — Dow Chemical "Voracor CY 3053", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/2 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/2 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.

12. **Deck:** NC

**Incline:** 1-1/2

**Foam:** — BASF Corp. "81272", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/2 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/2 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.

13. **Deck:** NC

**Incline:** 1-1/2

**Foam:** — Progressive Materials LLC "SF 4128", maximum 3-1/4 in. thick.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 40-lbs/100-ft.<sup>2</sup>.

14. **Deck:** NC

**Incline:** 1/4

**Foam:** — Progressive Materials LLC "SF 4128", maximum 3-1/4 in. thick.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS" applied at 3/4-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 60-lbs/100-ft.<sup>2</sup>.

15. **Deck:** NC

**Incline:** 1/4

**Foam:** — Progressive Materials LLC "SF 4128", maximum 3-1/4 in. thick.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 40-lbs/100-ft.<sup>2</sup>.

16. **Deck:** NC **Incline:** 1

**Foam:** — Progressive Materials LLC "SF 4128", maximum 3-1/4 in. thick.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Intermediate Coat:** — "Activate LS" applied at 3/4-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 40-lbs/100-ft.<sup>2</sup>.

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

**Foam:** — "SF 4228" or "SF 4230", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.

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

**Foam:** — BASF Corp. "FE348", "FE348-2.5", "FE348-2.7", "FE348-2.8", "FE348-3.0" or "SKYTITE 2.5", "SKYTITE 2.8," "SKYTITE 3.0" or "FE348-3.2", "ELASTOSPRAY 81255", "ELASTOSPRAY 81275", "ELASTOSPRAY 81285", "ELASTOSPRAY 81305", "ELASTOSPRAY 81325" and "ELASTOSPRAY ALPHA System", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.

19. **Deck:** NC **Incline:** 3-1/2

**Foam:** — Premium Spray Products "Premiseal 250, 280 or 300", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

20. **Deck:** NC **Incline:** Unlimited

**Foam:** — Premium Spray Products "Premiseal 250, 280 or 300", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.

21. **Deck:** NC **Incline:** 3-1/2

**Foam:** — Premium Spray Products "Premiseal 250, 280 or 300", any thickness.

**Base Coat:** — "Activate LS", 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS", 3/4-gal./100-ft.<sup>2</sup>.

22. **Deck:** NC

**Incline:** Unlimited

**Foam:** — Premium Spray Products "Premiseal 250, 280 or 300", any thickness.

**Base Coat:** — "Activate LS", 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS", 3/4-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.

23. **Deck:** NC

**Incline:** Unlimited

**Foam:** — Bayer Material Science LLC "S245-25/30," "Bayseal 2.5," "Bayseal 2.7," or "Bayseal 3.0" (product designation may be suffixed by "F," "S," "SS," "FW," or "W"), any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs./100-ft.<sup>2</sup>.

24. **Deck:** NC

**Incline:** Unlimited

**Foam:** — Bayer Material Science LLC 'S245-25/30,' "Bayseal 2.5," "Bayseal 2.7," or "Bayseal 3.0" (product designation may be suffixed by "F," "S," "SS," "FW," or "W"), any thickness.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS" applied at 3/4-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules at 35-lbs/100-ft.<sup>2</sup>.

25. **Deck:** NC

**Incline:** Unlimited

**Foam:** — Lapolla Industries Inc "LPA2500", "LPA2800", "LPA3000", "LPA2500", "LPA2800" or "LPA3000", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs./100-ft.<sup>2</sup>.

26. **Deck:** NC

**Incline:** 4

**Foam:** — Lapolla Industries Inc "LPA2500", "LPA2800", "LPA3000", "LPA2500", "LPA2800" or "LPA3000", any thickness.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS" applied at 3/4-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.

27. **Deck:** NC

**Incline:** Unlimited

**Foam:** — BASF Corp. "FE348", "FE348-2.5", "FE348-2.7", "FE348-2.8", "FE348-3.0", "FE348-3.2" or "SKYTITE 2.5", "SKYTITE 2.8," "SKYTITE 3.0" or "ELASTOSPRAY 81255", "ELASTOSPRAY 81275", "ELASTOSPRAY 81285", "ELASTOSPRAY 81305", "ELASTOSPRAY 81325" and "ELASTOSPRAY ALPHA System", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules at 30-lbs/100-ft.<sup>2</sup>.

28. **Deck:** NC

**Incline:** 4

**Foam:** — BASF Corp. "FE348", "FE348-2.5", "FE348-2.7", "FE348-2.8", "FE348-3.0", or "SKYTITE 2.5", "SKYTITE 2.8," "SKYTITE 3.0" or "FE348-3.2" "ELASTOSPRAY 81255", "ELASTOSPRAY 81275", "ELASTOSPRAY 81285", "ELASTOSPRAY 81305", "ELASTOSPRAY 81325" and "ELASTOSPRAY ALPHA System", any thickness.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 30-lbs/100-ft.<sup>2</sup>.

29. **Deck:** NC

**Incline:** Unlimited

**Foam:** — Progressive Materials LLC "SF 4228" or "SF 4230", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 30-lbs/100-ft.<sup>2</sup>.

30. **Deck:** NC

**Incline:** 4

**Foam:** — Progressive Materials LLC "SF 4228" or "SF 4230", any thickness.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 30-lbs/100-ft.<sup>2</sup>.

31. **Deck:** NC

**Incline:** Unlimited

**Foam:** — Progressive Materials LLC "SF 4325", "SF 4328" or "SF 4330", any thickness.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs./100-ft.<sup>2</sup>.

32. **Deck:** NC

**Incline:** 4

**Foam:** — Progressive Materials LLC "SF 4325", "SF 4328" or "SF 4330", any thickness.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS" applied at 3/4-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 35-lbs/100-ft.<sup>2</sup>.



**Class B****1. Deck: C-15/32****Incline: 1**

**Foam:** — BASF Corp. "FE348", "FE348-2.5", "FE348-2.7", "FE348-2.8", "FE348-3.0", "FE348-3.2", "SKYTITE 2.5", "SKYTITE 2.8," "SKYTITE 3.0" or "ELASTOSPRAY 81255", "ELASTOSPRAY 81275", "ELASTOSPRAY 81285", "ELASTOSPRAY 81305", "ELASTOSPRAY 81325" and "ELASTOSPRAY ALPHA System", minimum 1-in. thick.

**Base Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS" applied at 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 30-lbs/100-ft.<sup>2</sup>.

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

**Foam:** — BASF Corp. "FE348", "FE348-2.5", "FE348-2.7", "FE348-2.8", "FE348-3.0", "FE348-3.2" or "SKYTITE 2.5", "SKYTITE 2.8," "SKYTITE 3.0" or "ELASTOSPRAY 81255", "ELASTOSPRAY 81275", "ELASTOSPRAY 81285", "ELASTOSPRAY 81305", "ELASTOSPRAY 81325" and "ELASTOSPRAY ALPHA System", minimum 1-in. thick.

**Base Coat:** — "Activate HS", 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS", 1-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules at 30-lbs/100-ft.<sup>2</sup>.

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

**Foam:** — Progressive Materials LLC "SF 4228" or "SF 4230", minimum 1-in. thick.

**Base Coat:** — "Activate LS", 1-1/4 gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate LS", 1-1/4 gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules at 30-lbs/100-ft.<sup>2</sup>.

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

**Foam:** — Progressive Materials LLC "SF 4228" or "SF 4230", minimum 1-in. thick.

**Base Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Top Coat:** — "Activate HS" applied at 1-gal./100-ft.<sup>2</sup>.

**Surfacing:** — Granules applied at 30-lbs/100-ft.<sup>2</sup>.

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