

Commercial/Industrial Roofing Systems

# UL Listing: PVC Roofing Systems

# SINGLE PLY MEMBRANE ROOFING SYSTEMS (PVC)

Unless otherwise indicated, insulation is mechanically fastened to the roof deck with metal screws and metal discs. Seams are sealed with "Sealant".

An air/vapor retarder may be added on top of the deck, below the insulation, in any system listed below.

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

Unless otherwise indicated, "V2" series membrane (PVC) is an acceptable alternate to "SR" series membrane (PVC).

#### Class A – Ballasted (PVC)

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

#### Incline: 2

**Insulation:** Polystyrene, polyisocyanurate, polyurethane, kraft–faced glass fiber, perlite, wood fiber, gypsum board, any thickness, laid loosely.

**Slip Sheet (Optional):** Ametek "Microfoam" (not Classified), "UltraGard Slip Sheet 426" (not Classified) or glass fiber reinforced kraft paper.

Membrane: "SRB-50", "SRB-60" or "SRB-80" (PVC), laid loosely.

**Surfacing:** River bottom stone (1/2 to 2-1/2 in. diam) at 1000 lbs/sq min.

# 2. Deck: C-15/32

Incline: 1

**Insulation:** Kraft–faced glass fiber, 1/2 in. min, perlite, 3/4 in. min, polyisocyanurate, polyurethane, perlite/polyisocyanurate composite, perlite/polyurethane composite, any thickness or perlite, 3/4 in. min, over polystyrene or any UL Classified insulation, any thickness.

Slip Sheet (Optional): "Slip Sheet 426" (not Classified) or glass fiber reinforced kraft paper.

Membrane: "SRB-50", "SRB-60" or "SRB-80" (PVC), laid loosely.

**Surfacing:** River bottom stone (1/2 to 2-1/2 in. diam) at 1000 lbs/sq min.

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

# Incline: 2

**Insulation:** Dow Chemical USA "STYROFOAM RM", "PD", "SM", "TG", "STYRORIB", min 1 in. (As an alternate, insulation may be applied over the membrane; successive layers installed without attachment to the preceding layer).

Slip Sheet: Dry inorganic glass fiber mat or Lamtec "DN Flameguard".

Membrane: "SRB-50", "SRB-60" or "SRB-80" (PVC), laid loosely.

**Scrim (Optional/not Classified):** When insulation is applied on top of the membrane "Fabrene", International Paper "D–689", or Philips Fibers "Rufon", 2 oz/sq yd may be applied under and/or over the insulation.

**Surfacing:** River bottom stone (1/2 to 2-1/2 in. diam) 1000 lb/sq, or crushed stone (1/2 to 3/4 in.) at 900 lbs/sq min, or concrete blocks (10 lb/sq ft) spread not more than 1/8 in. apart, or

"STYROFOAM" panels surfaced with 3/8 in. (max) concrete mortar (panels to be abutted together).

#### 4. Deck: NC

Incline: 2

Slip Sheet (Optional): Ametek "Microfoam" (not Classified) or glass fiber reinforced kraft paper.

Membrane: "SRB-50", "SRB-60" or "SRB-80" (PVC), laid loosely.

**Surfacing:** River bottom stone (1/2 to 2-1/2 in. diam) at 1000 lbs/sq min.

#### 5. Deck: NC

# Incline: 2

**Insulation:** (Metal roof) Gypsum board, 3/8 in. min, perlite board, 1/2 in. min, cellular, gypsum, vermiculite or perlite concrete and "BASF EPS", any thickness (uniform thickness or tapered), laid loosely or mechanically fastened.

**Slip Sheet:** "Slip Sheet 426" (not Classified) or glass fiber reinforced kraft paper.

Membrane: "SRB-50", "SRB-60" or "SRB-80" (PVC), laid loosely.

**Surfacing:** River bottom stone (1/2 to 2-1/2 in. diam) at 1000 lbs/sq min.

## 6. Deck: NC

# Incline: 2

**Insulation:** OC "Foamular 154, 254 or 404", 1 to 8 in. (As an alternate, insulation may be applied over the membrane; successive layers installed without attachment to the preceding layer). **Slip Sheet:** Dry inorganic glass fiber mat or Lamtec "DN Flameguard".

Membrane: "SRB-50", "SRB-60" or "SRB-80" (PVC), laid loosely.

**Scrim (Optional/not Classified):** When insulation is applied on top of the membrane "Fabrene", International Paper "D–689", or Philips Fibers "Rufon", 2 oz/sq yd may be applied under and/or over the insulation.

**Surfacing:** Crushed stone, river bottom stone, (1/2 to 2-1/2 in. diam) at 1000 lbs/sq min or concrete blocks 10 lbs/sq ft min, spaced not more than 1/8 in. apart.

# Class B – Ballasted (PVC)

1. Deck: C-15/32

#### Incline: 3

Slip Sheet (Optional): Ametek "Microfoam" (not Classified) or dry glass fiber mat. Membrane: "SRB–50", "SRB–60" or "SRB–80" (PVC), laid loosely. Surfacing: River bottom stone (1/2 to 2–1/2 in. diam) at 900 lbs/sq min.

# Class A – Fully Adhered (PVC)

1. Deck: C-15/32

#### Incline: 1

**Barrier Board (Required For Combustible Deck):** 1/2 in. min thick gypsum board mechanically fastened with insulation fasteners (6 in. offset of gypsum board joints from plywood deck joints). **Insulation:** "E'NRG'Y 2", "ISO I" or "ISO Taper I", Atlas Roofing "ACFoam II" or 3/4 in. min wood fiberboard over EPS.

**Membrane:** "FAS–50", "FAS–60", "FAS–80", "SR–50", "SR–60" or "SR–80" (PVC), fully adhered with "UltraGard PVC Membrane Adhesive (Solvent–Based)", 2 gal/sq or "UltraGard PVC Membrane Adhesive (Latex–Based)", at 2–1/4 gal/sq.

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

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

**Incline:** 2

**Insulation:** 3/4 in. min wood fiberboard over EPS.

**Membrane:** "FAS-50", "FAS-60", "FAS-80", "SR-50", "SR-60" or "SR-80" (PVC), fully adhered to the insulation with "UltraGard PVC Membrane Adhesive (Solvent-Based)", 2 gal/sq or "UltraGard PVC Membrane Adhesive (Latex-Based)", at 2–1/4 gal/sq.

# 3. Deck: NC

# Incline: 1

**Insulation:** Johns Manville "E'NRG'Y–2", "ISO I" or "ISO Taper I", Atlas Roofing "ACFoam II" or 3/4 in. min wood fiberboard over EPS.

**Membrane:** "FAS–50", "FAS–60", "FAS–80", "SR–50", "SR–60", "SR–80" (PVC), fully adhered with "UltraGard PVC Membrane Adhesive (Solvent–Based)", 2 gal/sq or "UltraGard PVC

Membrane Adhesive (Latex-Based)", at 2-1/4 gal/sq.

## 4. Deck: NC

# Incline: 1

Insulation (Optional): Polystyrene or polyisocyanurate, any thickness. Barrier Board: 15/32 in. plywood or 7/16 in. oriented strand board. Membrane: "FAS-50", "FAS-60", "FAS-80", "SR-50", "SR-60" or "SR-80" (PVC) fully adhered with "UltraGard PVC Membrane Adhesive (Solvent–Based)", 2 gal/sq or "UltraGard PVC Membrane Adhesive (Latex–Based)", at 2–1/4 gal/sq.

# 5. Deleted.

# 6. Deck: NC

# Incline: 2

**Insulation:** Johns Manville "E'NRG'Y 2", "ISO I" or "ISO Taper I", 1 in. min. **Membrane:** "SR–50", "SR–60" or "SR–80", fully adhered with "UltraGard PVC Membrane Adhesive (Solvent–Based)", 2 gal/sq or "UltraGard PVC Membrane Adhesive (Latex–Based)", at 2–1/4 gal/sq.

# 7. Deleted.

8. Deck: NC

# **Incline:** 1–1/2

Insulation: Johns Manville "E'NRG'Y 2", "ISO I" or "ISO Taper I", 1 in. min.

**Membrane:** "FAS–60" or "FAS–80", adhered with "UltraGard PVC Membrane Adhesive (Solvent–Based)", 2 gal/sq or "UltraGard PVC Membrane Adhesive (Latex–Based)", at 2–1/4 gal/sq.

# 9. Deleted.

# 10. Deck: NC

# Incline: 2

**Insulation:** Johns Manville "E'NRG'Y 2", mechanically fastened, any thickness. **Membrane:** "SR–50", "SR–60" or "SR–80", fully adhered with "UltraGard PVC Membrane Adhesive (Solvent Based) ", 1 gal/60 sq ft.

# 11. Deck: NC

# Incline: 1/2

**Membrane:** "SR 50" or "SR 60" (PVC), adhered with "UltraGard PVC Membrane Adhesive (Latex Based)", 2–1/4 gal/sq.

# Class B – Fully Adhered (PVC)

1. Deck: NC

# Incline: 3

**Insulation:** Atlas Roofing "ACFoam II" or Apache "Apache White Line", any thickness. **Membrane:** "FAS–50", "FAS–60", "FAS–80", "SR–50", "SR–60" or "SR–80" (PVC), fully adhered with "UltraGard PVC Membrane Adhesive (Solvent–Based)", 2 gal/sq.

# 2. Deck: C-15/32

# Incline: Unlimited

**Insulation (Optional):** Any UL Classified (except EPS), any thickness, uniform or tapered. **Barrier Board:** G–P Gypsum Dens–Deck®, 1/4 in. thick min (butt joints of barrier board must be staggered a min of 6 in. from the deck butt joints; staggered joints not required for noncombustible roof decks).

**Membrane:** "SR–50", "SR–60" or "SR–80", fully adhered with "UltraGard PVC Membrane Adhesive (Solvent–Based)", 2 gal/sq.

# Class A – Mechanically Fastened (PVC)

Unless otherwise indicated, the membrane is mechanically fastened to the deck with one of the following methods: "SFS", "Disc Cap" or "Johns Manville Pre–Assembled Screw and Plate System" or "Johns Manville Spike" or "Johns Manville Steel, Wood, Concrete Screw" (plastic fasteners) limited to noncombustible decks. The PVC laps are solvent welded or hot air welded and a PVC sealant (not UL Classified) applied to the exposed seam (approximately 1/8 in. wide bead).

Slip Sheet: One of the following (as required below):

A.)Lamtec "DN Flameguard".

B.)Johns Manville "CTP".

**Insulation:** (1 in. min) One of the following:

A.) Apache/Slip Sheet (optional) — "Pyrox".

B.) Johns Manville/Slip sheet (optional) — "E'NRG'Y-2", "ISO I".

C.) Rmax/Slip sheet (optional) — "Multi-Max".

D.) OC "Foamular 150", "Foamular 250", in combination with Atlas Roofing "FR-10".

E.) Johns Manville "ISO I" or "ISO Taper I" /Slip sheet (optional).

Membrane: "SR-50", "SR-60" or "SR-80" (PVC). Incline: 1/2

## 2. Deck: C-15/32

**Insulation:** 1/2 in. gypsum board – (joint staggered a min of 6 in. with the joints in plywood); (optional) Branch River Foam 1.0 pcf EPS - 1/2 in. max. Slip Sheet (Optional when EPS is not used): 10 mil "Manniglas 1200". Membrane: "SR-50", "SR-60" or "SR-80" (PVC).

## 3. Deleted.

4. Deck: C-15/32

#### Incline: 1/2

**Barrier Board:** 1/2 in. min gypsum board, mechanically fastened (joints in gypsum board are staggered a min of 6 in. from the joints in the plywood).

The following insulations may be any thickness:

# **Insulation/Slip Sheet:**

A.)Johns Manville "Fiber Glass Roof Insulation" /Lamtec "DN Flameguard" .

B.)Perlite/(optional) Lamtec "DN Flameguard".

C.) Rmax "Multi-Max" /Lamtec "DN Flameguard".

D.) Atlas Roofing "ACFoam II" or Johns Manville "E'NRG'Y 1" or "ISO I" /(optional) Lamtec "DN Flameguard".

E.) OC "Foamular 150", "Foamular 250" or Dow Chemical "Styrofoam SM" Atlas Roofing "FR-10".

F.) Polyisocyanurate (1.0 min) covered by perlite (3/4 in. min)/(optional) Lamtec "DN Flameguard".

G.) BASF EPS (uniform thickness or tapered), covered with perlite (3/4 in. min)/(optional) Lamtec "DN Flameguard".

H.) ARCO Chemical "ARCOR MB" or "ARCOR FM-1", 1.6 in. min.

I.) Johns Manville "ISO I" /(optional) Lamtec "DN Flameguard".

Membrane: "SR-50""SR-60" or "SR-80" (PVC). 5. Deck: NC Incline: 1 Insulation: Arco Chemical "ARCOR MB" or "ARCOR FM-1", 1.6 in. min. Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 6. Deck: NC Incline: 1 **Insulation:** Polystyrene (uniform thickness or tapered), any thickness, covered with perlite, 3/4 in. min. Slip Sheet (Optional): Lamtec "DN Flameguard". Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 7. Deck: NC Incline: 1 **Barrier Board (Optional):** 1/2 in. min. gypsum board or 3/4 in. perlite, mechanically fastened. Insulation: Dow Chemical "Styrofoam SM, RM, TG or Grayboard", 1 in. min. Slip Sheet: 20 mil "Manniglas 1200" or 3/4 in. min. perlite with no slip sheet. Membrane: "SR-50", "SR-60" or "SR-80" (PVC), mechanically fastened. 8. Deck: NC Incline: 1 Insulation: Johns Manville "ISO I", "E'NRG'Y 2" or Rmax "Multi-Max" (1.0 min) Slip Sheet (Optional): Lamtec "DN Flameguard" or "CTP". Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 9. Deck: NC Incline: 1 Insulation: Atlas Roofing "ACFoam II" or Johns Manville "ISO II" (1 in. min), mechanically fastened or hot mopped. Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 10. Deck: NC Incline: 1 **Insulation (Optional):** Polyisocyanurate (1.0 min) **Insulation:** Perlite (3/4 in. min) Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 11. Deck: NC Incline: 1 Insulation (Optional): Polyisocyanurate, any thickness. Insulation (Optional): Polystyrene (uniform thickness or tapered), any thickness. Barrier Board: 3/4 in. min perlite. Slip Sheet (Optional): Lamtec "DN Flameguard" or "CTP". Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 12. Deck: C-15/32 **Incline:** 2 Barrier Board: 5/8 in. gypsum board, mechanically fastened with staggered joints 6 in. min from plywood joints. Insulation: Polyisocyanurate followed by 3/4 in. min perlite board. Slipsheet (Optional): Lamtec "DN Flameguard" or Johns Manville "CTP". Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 13. Deck: C-15/32 **Incline:** 2 **Barrier Board:** 1/2 in. gypsum board, joints staggered a min 6 in. from the plywood joints. Membrane: "SR-50", "SR-60" or "SR-80" (PVC). 14. Deck: NC Incline: 1 Insulation: Cellular concrete, gypsum concrete, vermiculite concrete, perlite concrete or structural concrete. Membrane: "SR-50", "SR-60", "SR-80", "Plus 50" or "Plus 60" (PVC). 15. Deck: NC **Incline:** 4 Insulation: One of the following or combinations of the following insulations any thickness, polyisocyanurate, polyisocyanurate/perlite composite, polyurethane/perlite composite, perlite, wood

fiberboard or fiber glass.		
	Johns Manville "Retro-Fit Board".	
<b>Membrane:</b> "SR–50", "SR–60" of		
16. <b>Deck:</b> NC	Incline: 1	
Insulation: Polystyrene, any thick		
<b>Insulation (Optional if slip sheet is used):</b> Polyisocyanurate, 1 in. min thickness.		
	yanurate is used): "Manniglas 1200" (20 mil min).	
17. Deck: NC	r " SR-80" (PVC), mechanically fastened. Incline: 1	
	Incline: 1	
<b>Insulation:</b> Perlite, 3/4 in. min. <b>Slin Sheet (Ontional):</b> I amtec "I	DN Flameguard" or Johns Manville "CTP".	
Membrane: "SR–50", "SR–60" (		
18. <b>Deck:</b> NC	Incline: 1	
<b>Insulation (Optional):</b> Polyisocy		
<b>Insulation:</b> Polystyrene, any thick	•	
	t is used): Polyisocyanurate, 1 in. min thickness.	
	vanurate is used): "Manniglas 1200" (20 mil min).	
	r " SR-80", mechanically fastened.	
19. <b>Deck:</b> C–15/32	Incline: 4	
<b>Barrier Board:</b> 5/8 in. gypsum board (joints staggered a min of 6 in. from the plywood deck joints).		
<b>Insulation (Optional):</b> Polyisocyanurate, any thickness.		
	Johns Manville "Retro–Fit Board".	
Membrane: "SR–50", "SR–60" of 20. Deck: Structural Cement–Fiber Unit+		
	I", Atlas Roofing "ACFoam II" or Rmax "Multi–Max" (1.0 in.	
min).	1, Auas Rooming ACroam II of Rinax Mulu-Max (1.0 m.	
	DN Flameguard" or Johns Manville "CTP".	
<b>Membrane:</b> "SR–50", "SR–60" of		
+Min 2 in. thick, Classified under	Structural Cement–Fiber Units (CIYT) Fire Resistance Directory.	
21. Deck: Structural Cement–Fiber Unit+	- Incline: 1/2	
<b>Membrane:</b> "SR-50", "SR-60",	"SR-80", "Plus 50" or "Plus 60" (PVC).	
+Min 2 in. thick, Classified under	Structural Cement–Fiber Units (CIYT) Fire Resistance Directory.	
22. <b>Deck:</b> NC	Incline: 3	

#### 22. Deck: NC

23. Deck: NC

#### Incline: 3

Insulation: Atlas Roofing "ACFoam II", "E'NRG'Y 2" or Johns Manville "ISO I" 1.0 in. min, mechanically fastened

Membrane: "SR-50", "SR-60", "SR-80" (PVC).

Incline: 1

**Incline:** 3

Insulation (Optional): Polyisocyanurate, polyurethane, 1 in. min.

Barrier Board: Wood fiber board, 1/2 in. min.

Slip Sheet (Optional): Lamtec "DN Flameguard" or Johns Manville "CTP" .

Membrane: "SR-50", "SR-60" or "SR-80" (PVC).

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

Insulation (Optional): Polystyrene, glass fiber, perlite, polyurethane, isocyanurate, perlite/isocyanurate or perlite polyurethane composites or Partek "Paroc Baseboard", any thickness, mechanically fastened.

**Barrier Board:** Partek "Paroc Capboard", 3/4 in. min with insulation joints staggered a min of 6 in. from the plywood deck joints (staggered joints not required for noncombustible deck), mechanically fastened.

Membrane: "SR-50", "SR-60" or "SR-80", mechanically fastened.

# 25. Deck: NC

**Insulation (Optional):** Polystyrene, glass fiber, perlite, polyurethane, isocyanurate,

Incline: 3

perlite/isocyanurate or perlite polyurethane composites or Partek "Paroc Baseboard", any thickness, mechanically fastened.

Barrier Board: Partek "Paroc Capboard", 3/4 in. min, mechanically fastened.

**Incline:** 4

Membrane: "SR–50", "SR–60" or "SR–80", mechanically fastened.

## 26. Deck: NC

**Barrier Board (Optional):** 1/2 in. min gypsum board.

Insulation (Optional): Polyisocyanurate, any thickness.

Barrier Board: 1/2 in. thick (min) Johns Manville "Retro-Fit Board".

Membrane: "SR-50", "SR-60" or "SR-80" (PVC).

#### 27. **Deck:** NC

Membrane: "Plus–50" or "Plus–60" (PVC).

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

#### Incline: Unlimited

**Incline:** Unlimited

**Insulation (Optional):** Polyisocyanurate, perlite, glass fiber, urethane, wood fiber, polystyrene, EPS, polyisocyanurate composite, urethane composite, mechanically fastened, any thickness. **Barrier Board:** G–P Gypsum Dens–Deck®, 1/4 in. thick. **Membrane:** One ply "SR–50", "SR–60", "SR–80", "VT–60" or "VT–80".

#### Class B – Mechanically Fastened (PVC)

#### 1. Deleted.

2. Deck: NC

#### **Incline:** 2–1/2

**Insulation:** Celotex "Hy–Tec" or "Energy–Lok", any thickness. **Membrane:** "SR–50", "SR–60" or "SR–80" (PVC).

# 3. Deck: C-15/32 Incline: 1/4

**Base Sheet:** Two layers Johns Manville Type G2 "GlasBase", nailed. **Slip Sheet:** Lamtec "DN Flameguard" (foil side up). **Membrane:** "SR-50", "SR-60" or "SR-80" (PVC).

#### 4. Deck: NC

Incline: 3

**Barrier Board:** For standing seam steel decks, 2 in. max perlite between the seams. **Insulation:** Atlas Roofing "ACFoam II" or Johns Manville "ISO I", any thickness. **Membrane:** "SR-50, " SR-60" or " SR-80" (PVC).

#### 5. Deck: NC

Incline: No Limitations

**Insulation:** Polyisocyanurate, any thickness.

Barrier Board: 1/2 in. thick Johns Manville "Retro-Fit Board".

Membrane: "SR-50", "SR-60" or "SR-80" (PVC).

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

# Incline: No Limitations

**Barrier Board (Optional for noncombustible decks):** 1/2 in. min gypsum board with 6 in. min staggered joints.

Insulation (Optional): Polyisocyanurate, any thickness.

Barrier Board: 1/2 in. thick min Johns Manville "Retro-Fit Board".

Membrane: "SR-50", "SR-60" or "SR-80" (PVC).

7. <b>Deck:</b> C–15/32	Incline: 1/4	
Base Sheet: Two plies Johns Manville Type G2 "GlasBase", nailed.		
Slip Sheet: Lamtec "DN Flameguard" (foil side up).		
Insulation: Atlas Roofing "ACFoam II", Celotex "Hy-Tec", "Hytec II" or Johns Manville "ISO I"		
(1.2  in. thick min).		
Membrane: "SR-50", "SR-60" or "SR-80" (PVC).		
8. <b>Deck:</b> NC	Incline: 4	
<b>Insulation:</b> Johns Manville "Fesco", mechanically fastened, $1-1/2$ in.		
Barrier Board: Johns Manville "Retro-Fit Board", 1/2 in thick.		
Membrane: "SR-50", "SR-60" or "SR-80", mechanically fastened.		
9. Deck: C-15/32	Incline: 1/2	
Slip Sheet: One or more layers Atlas Roofing "FR50".		
Membrane: "SR50", "SR60" or "SR80" (PVC), mechanically fastened.		
10. <b>Deck:</b> C-15/32	Incline: 1/2	
Insulation: 3 in. "E'NRG'Y 2" or two layers 1.5 "E'NRG'Y 2" with the first layer joints staggered a		
min of 6 in. from the plywo	od joints.	
Membrane: "SR50", "SR60" or "SR80" (PVC).		

#### **Class C – Mechanically Fastened (PVC)**

1. Deck: NC

# Incline: Unlimited

**Insulation:** Atlas Roofing "ACFoam II", "E'NRG'Y 2" or Johns Manville "ISO I", mechanically fastened, 1.0 in. min. **Membrane:** "SR–50", "SR–60" or "SR–80" (PVC).

#### MAINTENANCE AND REPAIR SYSTEMS (PVC)

#### Class A

1. Deck: NC

#### **Incline:** 1/2

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

**Barrier Board (Optional):** 1/2 in. thick (min) plywood. **Insulation/Slip Sheet:** (any thickness).

A.)Johns Manville "Fiber Glass Roof Insulation" /Lamtec "DN Flameguard" or 15 mil "Manniglas 1200".

B.)Perlite/(optional) Lamtec "DN Flameguard".

C.) Rmax "Multi-Max" or Johns Manville "ISO I" /Lamtec "DN Flameguard".

D.) Atlas Roofing "ACFoam II", "E'NRG'Y 2" or Johns Manville "ISO I" or "ISO I Taper I" /(optional) Lamtec "DN Flameguard".

E.) OC "Foamular 150", "Foamular 250" or Dow Chemical "Styrofoam SM" /20 mil "Manniglas 1200".

F.) Polyisocyanurate (1.O in. min.) covered by perlite (3/4 in. min)/(optional) Lamtec "DN Flameguard"

G.) BASF EPS (uniform thickness or tapered), covered with perlite (3/4 in. min)/(optional) Lamtec "DN Flameguard"

H.) ARCO Chemical "ARCOR MB" or "ARCOR FM-1", 1.6 in. min

I.) Johns Manville "ISO I", "E'NRG'Y 2" /(optional) Lamtec "DN Flameguard".

Membrane: "SR-50", "SR-60" or "SR-80" (PVC).

#### 2. Deck: NC

Incline: 3

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

**Barrier Board (Optional):** 1/2 in. thick (min) plywood.

**Insulation:** Atlas Roofing "ACFoam II", mechanically fastened or Johns Manville "ISO I", any thickness.

Membrane: "SR-50", "SR-60" or "SR-80", (PVC).

3. Deck: C-15/32

#### Incline: 1

**Existing Roof System:** Insulated or noninsulated cap sheet ,smooth or gravel surfaced bur (gravel may be removed from noncombustible decks) or PVC roof system, covered with: **Barrier Board:** 1/4 in. thick min G–P Gypsum Dens–Deck®.

Membrane: "SR-50", "SR-60" or "SR-80", (PVC).

#### **Class B**

1. Deck: C-15/32

#### Incline: 1

**Existing Roof System:** Insulated or noninsulated cap sheet smooth or gravel surfaced (loose gravel may be removed from noncombustible decks) Class B to retain the existing classification is covered with:

**Barrier Board:** 1/2 in. thick min Johns Manville "Retro–Fit Board".

Membrane: "SR-50", "SR-60" or "SR-80" (PVC), mechanically fastened.

2. Deck: C-15/32

#### Incline: 1

**Existing Roof System:** Insulated or noninsulated cap sheet, smooth or gravel surfaced BUR (gravel may be removed from noncombustible decks) or PVC Class B roof system to retain existing classification covered with:

**Barrier Board:** 1/2 in. thick min Johns Manville "Retro–Fit Board". **Membrane:** "SR–50", "SR–60" or "SR–80" (PVC).

#### Class A, B or C

1. Deck: C-15/32

#### Incline: 1

**Existing Roof System:** Class A, B or C insulated mineral surfaced cap sheet BUR to retain existing Classification when covered with:

Membrane: "Plus-50" or "Plus-60" (PVC), mechanically fastened.

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

Incline: 2

**Existing Roof System:** Class B or C insulated mineral surfaced cap sheet BUR to retain existing Classification when covered with:

Membrane: "Plus–50" or "Plus–60" (PVC).

# 3. Deleted.

4. Deck: C-15/32

# Incline: 1

Existing Roof System: Class A, B or C insulated (any thickness wood fiber, perlite,

polyisocyanurate, urethane or polystyrene with a slip sheet) "S-60" single ply membrane system to retain existing classification. Membrane may be sectioned to various dimensions or completely removed.

Polyester Fleece: One layer 2.5 oz/sq yd (max) polyester fleece.

Membrane: One ply "SR-50", "SR-60" or "SR-80" (PVC), mechanically fastened.

5. Deck: C-15/32

# Incline: 1

**Existing Roof System:** Class A, B or C insulated (any thickness wood fiber, perlite, polyisocyanurate, urethane or polystyrene with a slip sheet) "S–60" single ply membrane system installed over an existing BUR to retain existing classification. Membrane may be sectioned to various dimensions or completely removed.

Polyester Fleece: One layer 2.5 oz/sq yd (max) polyester fleece.

Membrane: One ply "SR-50", "SR-60" or "SR-80" (PVC), mechanically fastened.