WARNOCK-HERSEY FIRE RATINGS ON ROOF COVERING SYSTEMS

ECOLOGY ROOF SYSTEMS CORP. - Santa Ana, CA USA

CLASS 'A' Comb. Deck

Slope: 1:12 (AC-1)

- 1. Optional Glass fiber taped joints.
- 2. Optional Insulation Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, EPS/perlite composite.
- 3. *1-Ply "ERS-500", "ERS-500-4", "ERS-500-6", mechanically fastened or fully adhered with ASTM-D312 asphalt, hot mopped or ASTM-D3019 cold process adhesive.
- 4. *2-, 3-Plies "ERS-500", "ERS-500-4", "ERS-500-6", fully adhered with ASTM-D312 asphalt, hot mopped or ASTM-D3019 cold process adhesive each ply.
- 5. Coated with ASTM-D1227 asphalt emulsion with clay or aluminum pigment reflective additive applied at a minimum coverage rate of 3 gal./sq.

Comb. Deck

Slope: 1:12 (AC-2)

- 1. Optional Glass fiber taped joints.
- 2. Optional Insulation Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, EPS/perlite composite.
- 3. *1-Ply "ERS-500", "ERS-500-4", ERS-500-6", mechanically fastened or fully adhered with ASTM-D312 asphalt, hot mopped or ASTM-D3019 cold process adhesive.
- 4. *2-, 3-Plies "ERS-500", "ERS-500-4", "ERS-500-6", fully adhered with ASTM-D312 asphalt, hot mopped, or ASTM-D3019 cold process adhesive each ply.
- 5. "ERS-507" cap sheet, fully adhered with ASTM-D312 roofing asphalt, hot mopped or ASTM-D3019 cold process adhesive, each ply.
- 6. Optional Surfacing 3M Brand No. 11 roofing granules applied at a minimum coverage rate of 50 lbs./sq. OR Roofing gravel ballast at a minimum coverage rate of 400 lbs./sq.

Comb. Deck

Slope: 1/2:12 (AC-3)

- 1. Optional Glass fiber tapped joints.
- 2. Optional Insulation Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite board, EPS/perlite composite board.
- 3. *Optional 1-Ply "ERS-501" fully adhered with ASTM-D312 adhesive or "ERS-602", ERS-600" torch welded.
- 4. *1-, 2-Plies "ERS-500", "ERS-500-4", ERS-500-6", fully adhered with ASTM-D312 asphalt, hot mopped, or ASTM-D3019 cold process adhesive each ply.
- 5. "ERS-505", ERS-504" cap sheet, fully adhered with ASTM-D312 roofing asphalt, hot mopped or ASTM-D3019 cold process adhesive, each ply.

Comb. Deck

Slope: 1/2:12 (AC-4)

- 1. Optional Glass fiber taped joints.
- 2. Optional Insulation Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, EPS/perlite composite.
- 3. *1-Ply "ERS-500", "ERS-500-4", ERS-500-6", mechanically fastened or fully adhered with ASTM-D312 asphalt, hot mopped or ASTM-D3019 cold process adhesive.
- 4. *1-, 2-Plies "ERS-500", "ERS-500-4", "ERS-500-6", fully adhered with ASTM-D312 asphalt, hot mopped, or ASTM-D3019 cold process adhesive each ply.
- 5. *"ERS-507", fully adhered with ASTM-D312 roofing asphalt, hot mopped or ASTM-D3019 cold process adhesive, each ply.

Comb. Deck

Slope: Unlimited (AC-5)

- 1. Optional Insulation Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, EPS/perlite composite.
- 2. *1-Ply "ERS-500", "ERS-500-4", ERS-500-6", mechanically fastened or fully adhered with ASTM-D312 asphalt, hot mopped or ASTM-D3019 cold process adhesive.
- 3. *Optional 1-Ply "ERS-501", "ERS-602", "ERS-600", fully adhered with ASTM-D312 asphalt.
- 4. *1-Ply "ERS-703" cap sheet, fully adhered with ASTM-D312 roofing asphalt, hot mopped or torch welded.

Comb. Deck

Slope: 1/2:12 (AC-6)

- 1. Optional Insulation Wood fiber, glass fiber, phenolic, perlite, polyisocyanurate insulation.
- 2. 1-Ply ASTM-D4601 Type II base sheet mechanically fastened. Optional if insulation's are used.
- 3. 2-Plies ASTM-D2178 Type IV ply sheets, fully adhered with ASTM-D312 roofing asphalt, hot mopped.
- 4. "ERS-510", fully adhered with ASTM-D312 roofing asphalt, hot mopped.

Comb. Deck

Slope: 1/2:12 (AC-7)

- 1. Optional Glass fiber taped joints.
 - 2. Optional Insulation Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanurate, polyisocyanurate composite, EPS/perlite composite.
 - 3. *1-Ply "ERS-500", "ERS-500-4", "ERS-500-6" fully adhered with ASTM-D312 asphalt or ASTM-D3019 cold process adhesive.
 - 4. *1-, 2-Plies "ERS-500", "ERS-500-4", "ERS-500-6", fully adhered with ASTM-D312 asphalt, hot mopped, or ASTM-D3019 cold process adhesive each ply.
 - 5. Coated with ASTM-D1227 asphalt emulsion with clay or aluminum pigment reflective additive applied at a minimum coverage rate of 3 gal./sq.

Comb. Deck

Slope: 1/2:12 (AC-8)

- 1. 15/32" Plywood Deck. All open joints are covered by 50 mil. Glass fiber tape or 4" wide self-adhesive aluminium foil tape or one (1) Type II glass fiber base sheet (ASTM-D4601). If insulation (line 2), is used, tape is not required.
- 2. Optional Insulation Perlite, glass fiber, perlite/EPS composite, polyisocyanurate, perlite/urethane composites, wood fiber, any thickness.
- 3. 1-Ply Type II base sheet (ASTM-D4601), mechanically fastened.
- 4. Two or more layers of "ERS-310 Polyester" embedded in 3-1/2 gal./sq. of "ERS-200" or Type III emulsion asphalt (ASTM-D1227).
- 5. *"ERS-200" or Type III emulsion asphalt (ASTM-D1227), applied at a coverage rate of 3 gal./sq.
- 6. Surface with listed "ERS-White Top" applied at a coverage rate of 2 gal./sq.
- 7. Optional "3M No. 11 Granules" at a minimum of 50 lbs./sq.

Comb. Deck

Slope: 1/2:12 (AC-9)

- 1. Existing Roof System Class A, B, C, B.U.R. or modified bitumen systems with mineral or smooth surface.
- 2. Optional Insulation Perlite, glass fiber, perlite/EPS composite, polyisocyanurate, perlite/urethane composites, wood fiber, any thickness.
- 3. *One or more layers of "ERS-310 Polyester" embedded in 3-1/2 gal./sq. of "ERS-200" or Type III emulsion asphalt (ASTM-D1227).
- 4. *"ERS-200" or Type III emulsion asphalt (ASTM-D1227), applied at a coverage rate of 3 gal./sq.
- 5. Surface with listed "ERS-White Top" applied at a coverage rate of 2 gal./sq.
- 6. Optional "3M No. 11 Granules" at a minimum of 50 lbs./sq.

Comb. Deck

Slope: 1/2:12 (AC-10)

- 1. Existing Roof System Class A, B, C, B.U.R. or modified bitumen systems with mineral or smooth surface (the gravel should be removed). One ply Type II glass fiber base sheet (ASTM-D4601), & two plies of ply sheet (ASTM-D2178), must be included in the existing roof. One ply of ply sheet can be replaced by mineral granule surface cap sheet (ASTM-D3908).
- 2. Optional Insulation Perlite, glass fiber, perlite/EPS composite, polyisocyanurate, perlite/urethane composites, wood fiber, any thickness.
- 3. Optional 1-Ply Type II glass fiber sheet (ASTM-D4601).
- 4. *One or more layers of "ERS-310 Polyester" embedded in 3-1/2 gal./sq. of "ERS-200" or Type III emulsion asphalt (ASTM-D1227).
- 5. *"ERS-200" or Type III emulsion asphalt (ASTM-D1227), applied at a coverage rate of 3 gal./sq.
- 6. Surface with listed "ERS-White Top" applied at a coverage rate of 2 gal./sq.
- 7. Optional "3M No. 11 Granules" at a minimum of 50 lbs./sq.

Non-Comb. Deck Slope: 1/2:12 (AN-1)

- 1. Optional 1-Ply Type II glass fiber sheet (ASTM-D4601).
- 2. Optional Insulation Perlite, glass fiber, perlite/EPS composite, polyisocyanurate, perlite/urethane composites, wood fiber, any thickness.
- 3. *One or more layers of "ERS-310 Polyester" embedded in 3-1/2 gal./sq. of "ERS-200" or Type III emulsion asphalt (ASTM-D1227).
- 4. *"ERS-200" or Type III emulsion asphalt (ASTM-D1227), applied at a coverage rate of 3 gal./sq.
- 5. Surface with listed "ERS-White Top" applied at a coverage rate of 2 gal./sq.
- 6. Optional "3M No. 11 Granules" at a minimum of 50 lbs./sq.

CLASS 'B' Comb. Deck Slope: 1-1/2:12 (BC-1)

- 1. Optional Glass fiber taped joints.
- 2. Optional Insulation Minimum 1/2" thick, glass fiber, wood fiber, phenolic, perlite, polyisocyanrate, polyisocyanurate composite, EPS/perlite composite.
- 3. *1-Ply "ERS-500", "ERS-500-4", "ERS-500-6", mechanically fastened or fully adhered with ASTM-D312 asphalt, hot mopped or ASTM-D3019 cold process adhesive.
- 4. *1-, 2-Plies "ERS-500", "ERS-500-4", "ERS-500-6", fully adhered with ASTM-D312 asphalt, hot mopped or ASTM-D3019 cold process adhesive each ply.
- 5. "ERS-507" cap sheet, fully adhered with ASTM-D312 roofing asphalt, hot mopped or ASTM-D3019 adhesive.
- 6. Roofing gravel or crushed stone at a minimum coverage rate of 300 lbs./sq. is used as a surface over a flood coat of hot roofing asphalt.