



# ACRYLASTIC 9000

## HIGH-PERFORMANCE ELASTOMERIC



## WATERPROOF ROOF SYSTEM

## SYSTEM DESCRIPTION

Davlin's roofing system is a permanent, waterproof, liquid applied system, designed to go over existing and new roofing substrates. Due to its light weight, the system can be applied over existing tar & gravel or built-up roofs without having to tear off. This can save building owners a lot of money on tear off costs. Our system is based on superior patented technology that has a proven track record since 1983. Davlin's proprietary formulation ensures complete U.V. stability, long-standing weatherability and can be easily applied by both professional roofers and do-it-yourselfers. Davlin's Acrylastic Roof System also provides energy savings. Using a highly reflective top coat reduces the overall thermal load on a building thereby reducing the amount of energy used to cool the building.

**Reflective System:** 1 Top Coat - Minimum DFT 8 mils

**Minimum System:** 1 Coat Acrylastic 900, 1 Top Coat - Min. DFT 16 mils

**5 Year System:** 2 Coats Acrylastic 900, 1 Top Coat - Min. DFT 22 mils

**10 Year System:** 3 Coats Acrylastic 900, 1 Top Coat - Min. DFT 37 mils

## SYSTEM USES

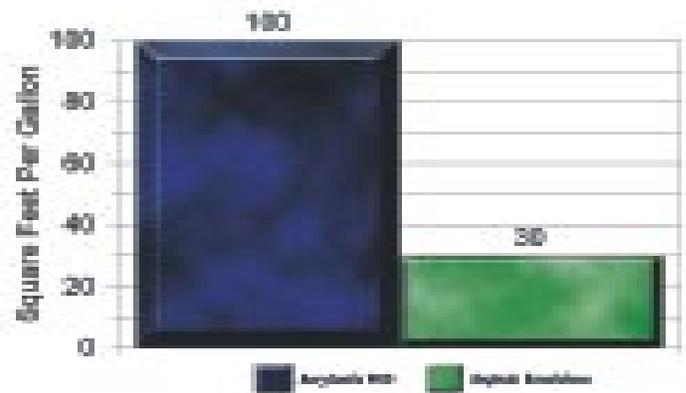
The Acrylastic Roof System is designed to provide a waterproof, weatherproof and U.V. reflective roof membrane over new or existing roof surfaces. It is especially recommended for use over:

- ☐ Tar and Gravel
- ☐ BUR, Smooth Surfaced Modified Bitumen
- ☐ Hot-Mopped, Asphalt Cut-Back or Emulsion
- ☐ Mineral Surface Capsheets, Granulated Modified Bitumen
- ☐ Galvanized Metal and Pre-Cast Concrete
- ☐ Directly over Plywood or Below-Tiles

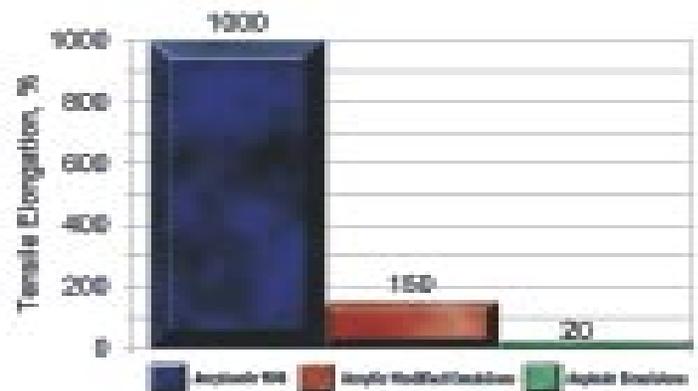
## SYSTEM ADVANTAGES

- ☐ Virtually eliminates the need to tear off existing roof.
  - ☐ Drastically reduces overall cost of re-roofing.
  - ☐ 5 & 10 Year Warranties guarantee system performance.
- ☐ Superior reflectivity reduces thermal fluctuations and loads.
  - ☐ Creates savings on cooling costs.
  - ☐ Reducing thermal shock increases the life span of roof.
- ☐ 1 gl. of Acrylastic 900 does more than 3 gls. of asphalt emulsions.
  - ☐ More coating for your money, cuts down application costs.
- ☐ Superior flexibility and elongation at 1000%.
  - ☐ Much higher than modified asphalt emulsions at 150%.
- ☐ Extremely tough, has highest tensile strength in its class at 800 p.s.i.
  - ☐ Much tougher than asphalt emulsions at 30 p.s.i.
- ☐ Superior waterproofing, forms a vapor barrier at 0.6 perms.
  - ☐ Waterproofs over 3 times more than asphalt emulsions.
  - ☐ Minimizes problems in ponded areas.
- ☐ Superior adhesion to substrate, sticks like epoxy glue.
- ☐ Unlike other asphalt coatings, Acrylastic Asphalt 900 is U.V. resistant.
- ☐ Easy application with airless, conventional air, roller or brush.
  - ☐ It's as easy as rolling on paint.
- ☐ Water-base for easy clean-up and low odor.
- ☐ High solids therefore low shrinkage, less does more.

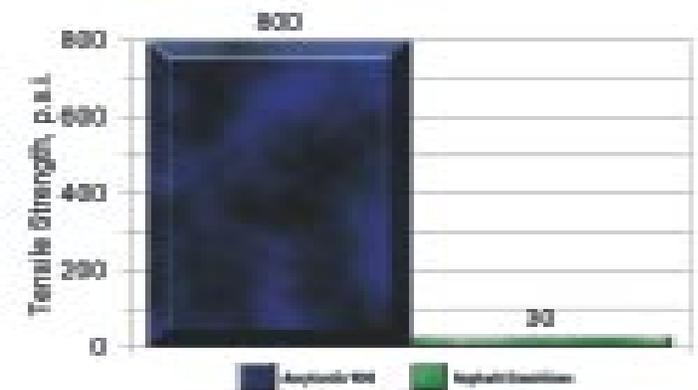
## SUPERIOR PERFORMANCE



## SUPERIOR FLEXIBILITY



## SUPERIOR STRENGTH



## STEP 1 SURFACE PREPARATION

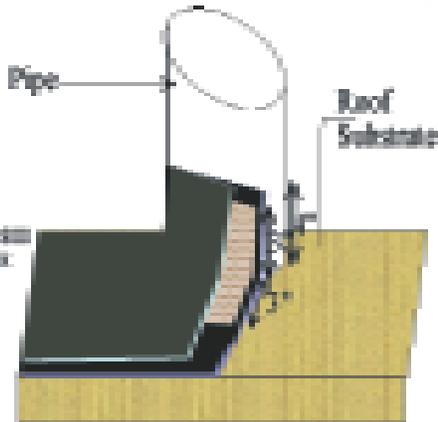
Thoroughly clean entire roof surface of all dust, dirt, oil and any other loose material. Remove all heavy oxidation. On metal roofs, remove oil, grease with neutral detergent or emulsion cleaner. Then use zinc treatment such as Galvaprep® or equivalent or blast lightly with fine abrasive. All rusty areas must be spot primed with a rust inhibitive primer. Test any old coating for adequate adhesion. Cut a cross hatch section of the coating like this: #. Stick a piece of duct tape firmly over that section and remove it. If any coating comes off when tape is removed the coating must be removed. Thoroughly check entire roof surface. Whenever possible (except in areas subject to water leakage) scrubbing the roof or high pressure water blasting with soap and water is recommended. Remove all gravel/rock. When washing is not possible, thoroughly vacuum the roof. The appearance of cap sheets can be misleading. On the surface, the cap may appear to be clean, yet between the granules of sand are buried a heavy buildup of dirt. This dirt must be removed. Remember, if you don't clean the surface, the coating will adhere to the dirt, not the roof. Will the dirt adhere to the roof?

## STEP 2 FLASHING-CRACKS-SEAMS

**Flashings:** Use a three course method over flashing details. First apply Acrylastic 900 by brush or roller 4" up flashing and 4" over roof. While coating is still wet, embed 6" polyester sheeting into coating 3" up flashing and 3" onto roof. Back roll another coat of Acrylastic 900 over area.

### Flashing Detail

-  Acrylastic 900 4" up pipe and over 4" over deck
-  6" Polyester sheeting 3" up pipe and 3" onto deck
-  Back roll coat of Acrylastic 900 4" up pipe and 4" over deck



**Cracks:** Cracks that 1/16" or smaller can be bridged with Acrylastic 900, no special treatment is necessary. Cracks larger than 1/16" will need special treatment.

**CRACK OPTION 1:** Treat cracks as a seam that needs repair applying 4"-6" wide polyester tape into first coat of Acrylastic 900 (see step 3) extending 2"-3" either side of crack and then back roll. Allow to dry.

**CRACK OPTION 2:** Fill cracks with Acrylastic 910 mastic before applying Acrylastic 900. Allow 4-8 hours to dry.

**Seams:** Seams in metal roofs that are loose or are susceptible to movement; seams in modified or BUR or Cap roofs that are splitting; seams in new plywood substrate will all need special treatment. When applying the first coat of Acrylastic 900 (see step 3) imbed 4"-6" wide polyester tape into wet coating extending 2"-3" over center of seam that needs treatment, then back roll over taped area. Allow to dry.

**Leaking Roofs:** Determine if there are presently any leaks in the roof membrane. If there are, Acrylastic Asphalt 900 must be used in conjunction with an open weave polyester sheeting over areas where there has been leaks. It is also recommended to cover entire roof with polyester sheeting since it is nearly impossible to pinpoint the exact area that has leaked or to know where the water has traveled too within the substrate.

**Why polyester sheeting?** Whenever applying a liquid applied waterproof coating over a roof system saturated with water, that water will remain trapped. During the warm summer months, this trapped water will migrate upward to the surface and attempt to escape. Pressure, in the form of water vapor, will push on the elastomeric coating causing blisters to form. With the sheeting, this blistering is drastically reduced. A word of caution! Many people assume that if the roof is allowed to "dry out" during the spring and summer months, by fall the water within the roof system will have evaporated. Don't count on it. Such water will remain in the roofing system for years.

Embed 18"-36" wide polyester sheeting into first coat of Acrylastic 900 (see step 3) while it is still wet. Overlap sheet by 4". **Caution:** Acrylastic 900 dries fast, especially in warm, windy weather, so be careful to do small areas at a time to assure that the coating is still wet enough to embed the polyester sheeting.

**Blistering:** Blisters can be a normal occurrence on any coating system. Although, blisters are not aesthetically pleasing they scarcely diminish the performance of the system. If blisters occur, they can be fixed by cutting them open and spreading out more coating over that area.

## STEP 3 APPLY ACRYLASTIC 900

### Reflective System over Existing Roofs:

Apply 1 coat of Acrylastic 900 Gray or 510 at 1 gallon per square, 16 wet mils DFT 10 mils. Allow 1-4 hours to dry. Dry time is defined as the amount of time required for the coating to form a film to such a degree that when one's thumb is pressed firmly to the coating, none of the coating will adhere to the thumb. This is called "Rule of Thumb Test." See top coat section below for more application details.

(The Reflective System is not designed for waterproofing.)

### Minimum Waterproof System over Existing Roofs:

Apply 1 coat of Acrylastic 900 at 1 gallon per square, DFT 10 mils. Allow 1-4 hours to dry. Use "Rule of Thumb Test."

### 5 Year Waterproof System over Existing Roofs:

Apply 1 coat of Acrylastic 900 at a rate of .75 gallons per square, 12 wet mils. Allow 1-4 hours to dry. Use "Rule of Thumb Test." Apply a second coat of Acrylastic 900 at a rate of .75 gallons per square. Allow to dry.

If surface and roof temperatures are between 50 - 70°F then Acrylastic 900 may be applied in 1 thick coat at a rate of 1.5 gallons per square, 24 wet mils. Do not attempt to apply Acrylastic 900 in thick coats when temperatures are above 70°F since this could cause coating to skin over quickly on top while underneath coating remains wet, resulting in blisters.

### 10 Year Waterproof System over Existing or New Roofs:

Apply 1 Coat of Acrylastic 900 at 1 gallon per square, 16 wet mils. Allow 1-4 hours to dry. Use "Rule of Thumb Test." Apply a second coat of Acrylastic 900 at 1 gallon per square. Allow to dry. Apply a third coat of Acrylastic 900 at 1 gallon per square and allow to dry.

If surface and roof temperatures are between 50 - 70°F then Acrylastic 900 may be applied in 2 thick coats at a rate of 1.5 gallons per square, 24 wet mils. Do not attempt to apply Acrylastic 900 in thick coats when temperatures are above 70°F since this could cause coating to skin over quickly on top while underneath coating remains wet. This could result in blistering.

## STEP 4 APPLY TOP COAT

Before applying top coat check roof for shiny appearance which can be caused from a "soapy" material leaching out from base coat. This may happen if fog or dew is evident from previous night. This shiny material is basically like a soap and needs to be washed off before applying top coat. After washing off, mop up or soak up any puddles of water before applying top coats. It is okay if the roof is slightly damp.

Apply top coat at a rate of 1 gallon per 100 square feet, 16 wet mils. Allow to dry.

After a day or two, if there has been over night fog or dew, check for any brownish stains on roof. This is not the Acrylastic 900 bleeding through, it is the same soapy substance that can leach out of coatings when not fully cured and exposed to overnight moisture. If there are brownish stains or puddles rinse them off thoroughly. These chemicals can congregate or pool in low spots on the roof in concentrated forms these soapy chemicals can damage coating. These chemicals are not dangerous and are comparable to household soaps and detergents.

## PRODUCT INFORMATION

### ACRYLASTIC ..... 900, 900G, 510

Finish .....	Flat, Flat, Low-Sheen
Color .....	Black, Gray, White or Custom
Components .....	1
Curing Mechanism .....	Air Dry
Coats .....	1-3, 1, 1
Dry Film Thickness (DFT) per coat, mils .....	10, 9, 8
Recommended System DFT, mils .....	9-37
Coverage per coat per 100 sq. ft. ....	1 gallon
VOC, grams per liter .....	64, 60, 6
Flash Point (SETA) .....	> 215 °F
Packaging .....	1, 5, 55 Gal.
Availability .....	Shipped Nationally & Internationally
Tensile strength, p.s.i. .... (ASTM D2370, 1 in./min.)	800, 1000, 1400
Tensile elongation % at break .....	1000, 800, 2100 (ASTM D2370, 1 in./min.)
Moisture vapor transmission, perms .....	0.6, 0.9, 1.2 @ 20 mils DFT (ASTM E96, Proc. B)
Adhesion, concrete p.s.i. .... (ASTM D413)	400, 350, 350 (substrate failure)
Viscosity (Stormer K.U.) 100-120 (ASTM D562)	
Solids, % minimum by volume .....	60-65, 60, 60 (ASTM D2597)
Solids, % minimum by weight .....	60-65, (ASTM D2369)
Salt-spray resistance .....	no rusting (ASTM D1654)
Alkali resistance .....	no effect (Fed. Spec. TT-C-555B, GSA ex. 1)
Heat Stability (160° F, for 10 days) .....	no viscosity change (Fed. Std. 141 [6051])
Resistance to wind-driven rain > 100 mph .....	no wt. gain (Fed. Spec TT-C-555B, 4.4.7 min. 95 mph req.)
Resistance to ponded water .....	no blisters (see note 1) no film degradation
Accelerated weathering @ 5000 hrs., 900 .....	slight chalking sheen loss and degradation
Acc. weath. @ 5000 hrs., 900G, 510 .....	no chalking, nosheen loss, no degradation

## APPLICATION SYSTEM

Primer/Base Coat .....	<i>Acrylastic 900</i>
Top Coat .....	<i>Acrylastic 900Gray, Acrylastic 510</i>

## APPLICATION EQUIPMENT

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed for proper spray characteristics.

**Airless:** Standard equipment such as Graco Bulldog Hydra Spray 30 or 45:1 pump with a 0.025- 0.031 inch reversible fluid tip.

**Conventional:** Industrial equipment such as Binks 11:1 Saturn pump or equivalent with air control cut-off, a material hose 3/4 inch ID minimum and an air hose 1/2 inch ID and 50-75 p.s.i. air pressure minimum. Heavy mastic spray gun such as Binks 7E2 with 1/4 inch fluid tip or larger and slotted nozzle.

**Brush or Roller:** Suitable for waterborne coating. Multiple coats may be required to achieve specified DFT. Roller nap will vary according to texture of substrate, typically a 3/4" nap will work.

## APPLICATION PROCEDURE

- Flush all equipment with water before use.
- Stir Acrylastic thoroughly until uniformly blended. Avoid excessive mixing to prevent air entrapment.
- Spray application:** Apply a wet coat in even, parallel passes, overlap each pass 50 percent to avoid holidays, bare areas and pinholes. Cross spray at right angles to first pass. Porous concrete will require more than one pass.
- Roller application:** Apply a wet coat in even, parallel passes, overlap each pass 50 percent to avoid holidays, bare areas and pinholes. Level any air bubbles with a brush. Cross roll at right angles to first pass.
- Drying time to re-coat @70°F (21°C)  
 minimum ..... dry through (4 - 8 hours)  
 maximum ..... none
- On rough surfaces back roll first coat to ensure that coating is pushed deep into surface. Spray or roll second coat at right angle to first.
- Clean equipment with water or water and detergent immediately after use.

## APPLICATION CONDITIONS

- Temperature air and surface: ..... 45° - 100°F, 7° - 38°C
- Do not apply at temperatures below 45°F nor during, or 24 hours preceding, inclement weather: including rain, fog, mist, or freezing temperatures.

## WARRANTY INFORMATION

- Limited warranties are available subject to certain terms and restrictions contact your Davlin representative at (800)709-5919 for warranty information.

The information, ratings and opinions stated above are, to the best of our knowledge, accurate, representing the results of laboratory and field evaluation. It is presented in good faith to assist the user in determining whether our products are suitable for his application. Since the user's application and other requirements are not known by us or are beyond our control, no warranty or guarantee as to results is hereby made or implied by Davlin Coatings, Inc.

## Davlin Coatings, Inc.

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