

2. Test Debris Description and Quantification

Approximately ten pounds of typical roof debris was collected and hand mixed in a large wheelbarrow. A sample was removed from the mix and sieved to remove the fine debris. The material which did not pass a ½" sieve was sorted by type of material. The fractions were weighed and the weights recorded. The components of the debris were recombined and dried in an oven at 180°F to a constant weight to determine the moisture content. The slope of 2:12 inches was assessed as a worst case condition.

Material	Description of size		Weight In grams	Percentage of mix
Leaves	Largest dimension between	1" and 9" inches	138.4 g	10%
Bark	Ranging in width between Ranging in length between	1/4 and 1 inch 1/4 and 4 inches	230.3 g	17%
Twigs	Ranging in diameter between Ranging in length between	1/16 and 1/2 inch 1-1/2 and 14 inches	232.7 g	17%
Pine Needles	Ranging in length between	1-1/2 and 10 inches	219.2 g	16%
Mix of leaves, bark, twigs, and pine needles.		Passing 1/2" sieve	540.2 g	40%
Debris mix moisture content		12%	Total weight 1360.8 g 3 lbs.	100%

3. Dry Debris Trapping Test

The objective of this test was to determine if the gutter cover product would retain any dry debris passing over it in a normal wind blow off environment.

Dry Debris was gently blown from roof as follows:

An electric leaf blower supplying 25 mph wind at 12 feet from nozzle was used as the simulated wind source. The blow off wind speed was determined by operating the leaf blower and measuring the resultant air velocity at a distance of 12 feet from the nozzle. A Dwyer No. 16D, U-tube, equipped with a Dwyer pitot tube, was used to measure air velocity pressure in inches of water and then converted to MPH. The pitot tube measurement indicated 0.3 inches of water column, which converts to 25 MPH.

GTP-009-02-03

PRI Accreditations: IAS-ES TL-189; State of Florida TST 1556; Metro-Dade 03-0515.04; CRRC

The test results, opinions, or interpretations are based on the material supplied by the client. This report is for the exclusive use of stated client. No reproduction or facsimile in any form can be made without the client's permission. This report shall not be reproduced except in full without the written approval of this laboratory. PRI Asphalt Technologies, inc. assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report

Test conditions:

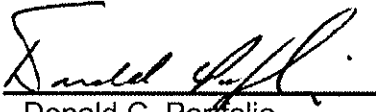
Air temperature: 78° F
Wind: Still.

Three pounds of the debris mix, at 12% moisture, was uniformly applied to the test deck. Debris blow off was accomplished with the leaf blower held 12 feet from the ridge of the test deck and aimed down slope towards the gutter cover being tested. The deck was swept with air until the debris was removed. After completing the blow off, the Leaf Terminator® unit was examined for debris.

Results:

45 grams of leaves twigs and pine needles remained on the Leaf Terminator® cover with no material in the gutter.

Signed: 
Gary H. Griswold
Testing Services Manager

Approved: 
Donald C. Portfolio
Vice President

Date: 05/17/2005

Date: 05/17/2005

GTP-009-02-03

PRI Accreditations: IAS-ES TL-189; State of Florida TST 1556; Metro-Dade 03-0515.04; CRRC

The test results, opinions, or interpretations are based on the material supplied by the client. This report is for the exclusive use of stated client. No reproduction or facsimile in any form can be made without the client's permission. This report shall not be reproduced except in full without the written approval of this laboratory. PRI Asphalt Technologies, inc. assumes no responsibility nor makes a performance or warranty statement for this material or products and processes containing this material in connection with this report