

ECO-FRIENDLY COST-EFFECTIVE PRODUCT FOR PRO-LONG SHINGLE ROOFS for RESIDENTIAL HOMES & COMMERCIAL BUILDINGS



Introduction

Terra Pave International, in conjunction with the University of Texas at Austin, has recently developed cost-effective, eco-friendly, polymer materials for constructing and maintaining roadways, parking lots, airfields, and roofs etc.

TPI is promoting sustainability and revolutionizing the field of pavement materials. TPI has developed many variations on their materials which are specifically engineered to address the many different types of distresses which occur in aging structures.

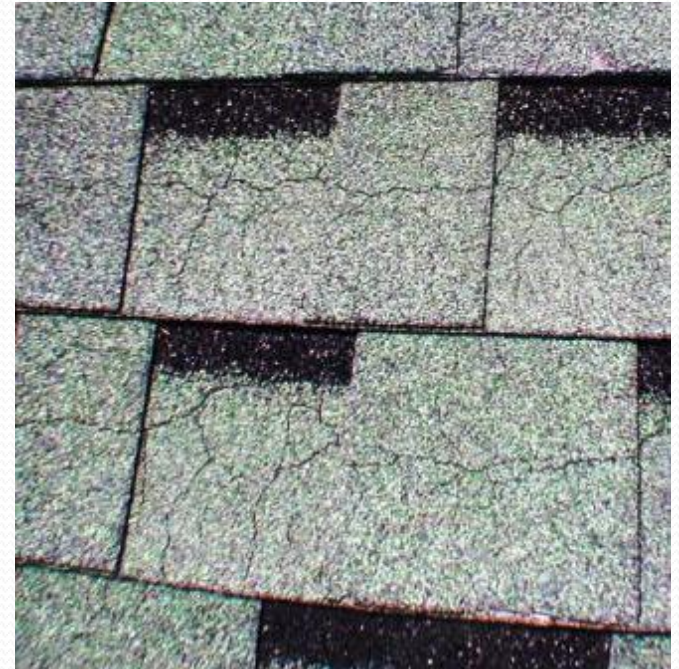
TPI's Materials

TPI's line of polymer sealant materials address most aspects of construction and maintenance, from the road base to the rooftops:

1. *New construction*
2. *Early maintenance/Pavement preservation*
3. *Reactive maintenance*
4. *Commercial / Residential Roofs*
5. *Unpaved roads*

Terra Roof

- Terra Roof is an excellent, economical solution for sealing asphalt shingle roofs. Terra Roof can be used for metal or concrete roofs as well.
- Untreated shingles weather over time, especially in areas of intense heat and sunlight. This process leads to numerous problems, including cracks and shingle loss, which necessitate costly re-roofing efforts.



Terra Roof from UT Austin

- #1 rated water based polymer materials in multiple experimental trials
- Cutting-edge technology
- Clear, proven superiority in research results
- Low to no environmental impact compared with competitor products
- Developed and patented at the University of Texas at Austin
- Exclusive license from UT
- UT research accredited by the Texas Department of Transportation
- Published research results in many publications.



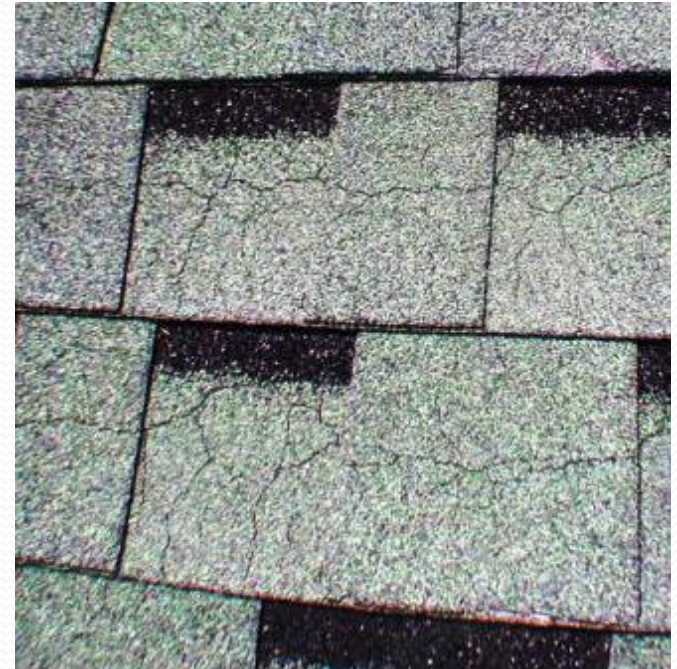
Terra Roof

- Stops degradation
- Seals and weatherproofs the shingles
- Cold-applied
- Faster Curing
- Greater Strength
- No VOCs
- Non-flammable
- Reflects sunlight and provides insulation
- Reduces energy costs
- Delays the need for drastic re-roofing efforts by several years.



Terra Roof

- Polymer-based emulsion
- Non-petroleum-based product
- Evaporates only water during the curing process
- Environmentally friendly
- Does not contain solvents or cause damage to shingles or roof surface
- Protects against
 - aging
 - wind damage
 - water infiltration
 - mold/mildew growth



Terra Roof

- Improves the quality of worn asphalt shingles by preventing their deterioration
- Extends the service life of shingles significantly reducing maintenance costs over time
- No special equipment or handling procedures needed
- Strength and Elasticity of the products can be adjusted based on needs
- High performance
- Long service life



Prep-work for Application

- Simply apply TR onto the shingles using a paint brush or roller. This process is simple and fast, particularly when compared to costly, time-consuming re-roofing efforts.
- If possible, before using TR, it is important to clean and dry the roof thoroughly – this is best accomplished by washing the roof with water and detergent, rinsing it with water, and allowing it to dry.
- For best results, apply TR at the beginning of the roof's service life.



Terra Roof - Application

- Most of the roof types, especially tar or asphalt based shingles, are compatible with Terra Roof.
- Terra Roof is for sealing the leaking cracks and gaps typically smaller than 1/16”.
- The bigger cracks and gaps needed to be treated before the application of TR.



Preparation of Terra Roof

- Prepare a mixture of TR and water as 1 part TR and 2 parts water.
- Application rate is typically 0.1 gallon of concentrated TR per square foot. It can vary depending on the shingles or roof surface.
- For application, any paint application materials, brush, roller etc. can be used.

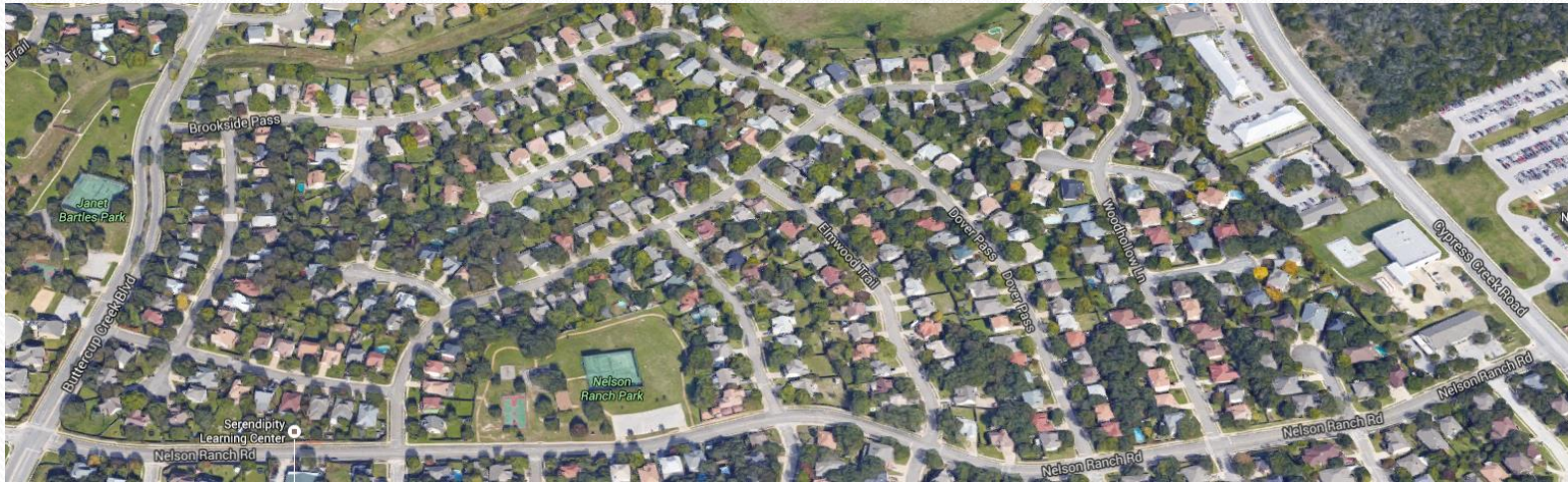
Application Procedure

- Apply in 2 passes. After the first application wait for drying, hand or visual check will be enough
- During the application, over-coat the roof or application area completely with enough product to form a good film without running off



Marketing Strategies

- Choosing a target neighborhood of 10-15 years of aged houses
- Visiting door-to-door and distributing flyers and small shingle samples coated with TR
- Bulk mailing trifold/postcard is another option
- More than 5 years performance, offering 3 years warranty



Conclusion

From soil stabilization to roof sealing, Terra Pave International's line of eco-friendly, polymer/water-based coating and paving materials provide solutions to a wide variety of construction and maintenance challenges.

For more information about TPI's products or projects, please feel free to contact:

David Pham

Ecological Estates LLC

dpham@ecoestates.us

<http://www.ecoestates.us>