





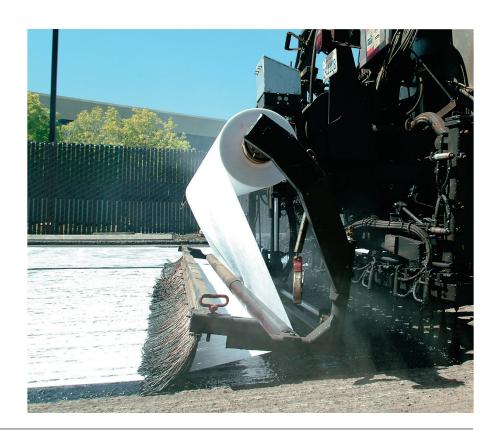
# TRUPAVE ENGINEERED PAVING MAT TRUE PERFORMANCE. TRUE PROTECTION.

# TRUPAVE™ DELIVERS ADDED PROTECTION FOR ANY PAVEMENT

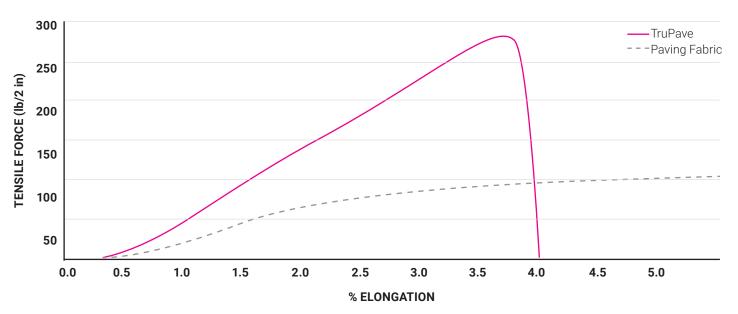
TruPave™ engineered paving mat from Owens Corning® is a pavement interlayer designed to create a moisture-resistant barrier, provide improved anti-cracking performance, and stand up to high-temperature hot-mix designs. And at the end of the pavement's life, it's millable and recyclable.

The result of these benefits? TruPave engineered paving mat can extend the performance of your pavement rehabilitation investment by up to 500 percent.

Highway, parking lot, runway, or driveway— TruPave engineered paving mat is designed to preserve and extend the life of any hot-mix asphalt concrete surface. It can also help reduce long-term maintenance and repaving costs.



# COMPARISON OF TRUPAVE® AND PAVING FABRICS IN ASPHALT: TENSILE STRENGTH



PAVING INTERLAYER MATERIAL	BREAKING LOAD (LB/2 IN)	% ELONGATION AT MAX LOAD	
TruPave Engineered Paving Mat	257	3.9	
Paving Fabric	185	35.7	

**NOTE:** Samples of TruPave engineered paving mat and a 4 oz/sq yd of typical polypropylene paving fabric were embedded in asphalt containing 65 percent-by-weight of a finely ground aggregate. Two-by-six-inch tensile specimens were broken in an Instron® tester, using a three-inch gage length and a crosshead speed of 2 in/min. The results of these tests are shown in the table and the accompanying graph above. Under these simulated pavement conditions, the TruPave engineered paving mat shows a nearly 40 percent greater ultimate strength than the polypropylene fabric. More important, the polypropylene fabric doesn't achieve its ultimate strength until it has undergone more than 35 percent elongation. Under the low elongations that would be encountered when a pavement is stressed, the graph shows that TruPave engineered paving mat carries two to three times the load of a typical polypropylene paving fabric.

### TIME-TESTED PERFORMANCE

Featured below are two examples of TruPave engineered paving mat's actual performance versus no pavement interlayer material. As you can see in both examples, the cracking stops at the point where TruPave has been installed.





Lakeland, FL: Installed February 2001 Soil Cement Base | Overlay over HMAC | Cracking stops at TruPave





Texarkana, AR: Installed December 2001 Unknown Base | Overlay over PCC | Cracking stops at TruPave

# DESIGNED WITH COST-SAVINGS IN MIND

The financial advantages are clear. TruPave engineered paving mat works to preserve the pavement surface and protect the pavement structure longer—which means less maintenance and lower costs for you. The product also remains stable under high-temperature hot-mix designs and will not shrink or melt.

There's no need to factor up your material requirements to allow for shrinkage or loss. Pavement with TruPave is millable and recyclable, perfect for inclusion in your Recycled Asphalt Product (RAP).

PROBLEM	SOLUTION
Reflective Cracking	Low elongation, high- modulus glass fiber
Moisture Damage	Mat combines with asphalt so as to form a low- permeability moisture barrier
Shrinking and Melting	Glass and polyester fibers are dimensionally stable up to 495°F
Inability to Mill and Recycle	Mills into small pieces and processes through a hot-mix recycling plant



TruPave engineered paving mat is easily milled and reused in asphalt mixes.

# EASY INSTALLATION. LOCAL SUPPORT.

On most projects, time is of the essence. TruPave engineered paving mat installs quickly and easily, even allowing you the choice to pave it over immediately or leave it open to traffic.

We offer support for you every step of the way—our objective being a quality, cost-effective installation on every job. Your local authorized TruPave engineered paving mat dealer is available to ensure a trouble-free installation and answer any questions you may have. Before starting each project, be sure to consult with your local dealer and follow the Owens Corning Installation Guidelines.

### PHYSICAL PROPERTIES OF TRUPAVE® ENGINEERED PAVING MAT

PROPERTY	TEST METHOD	UNITS	TYPICAL VALUE
Mass Per Unit Area	ASTM D5261	g/m² (oz/yd²)	136 (4.0)
Tensile Strength, MD	ASTM D5035*	N/50mm (lb/2in)	>200 (45)
Elongation at Max Load, MD	ASTM D5035*	%	<5
Tensile Strength, CD	ASTM D5035*	N/50mm (lb/2in)	>200 (45)
Elongation at Max Load, CD	ASTM D5035*	%	<5
Tensile Strength (bias angle) <sup>1</sup>	ASTM D5035 <sup>2</sup>	N/50mm (lb/2in)	>200 (45)
Melting Point	ASTM D276	°C (°F)	>230 (>446)
Asphalt Retention	ASTM D6140	gal/yd²	0.21
Shrinkage	Tex-616-J	%	0

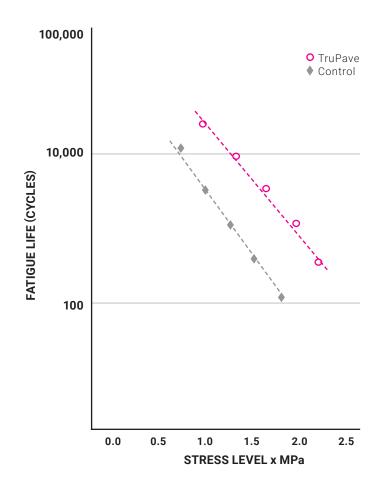
MD refers to machine or length direction of roll. CD refers to cross or width direction of roll. All mat manufacturing procedures conform to ISO (International Standards Organization) – 9002 Certified.

NOTE: Conditions for tensile strength measurements:

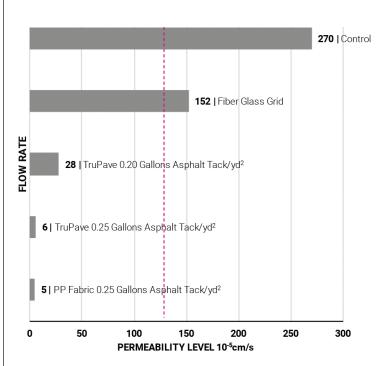
Sample width: 50mm Sample length: 250mm Gage length: 175mm Crosshead speed: 50mm/min

**NOTE:** Of the various ASTM test methods for testing tensile strength of paving mats, paving fabrics, and glass grids, none are fully suitable for comparing materials that are dissimilar in construction and materials. For example, under ASTM D4632, it is stated that "the grab test method does not provide all the information needed for all design applications, and other test methods should be used." Owens Corning utilizes ASTM D5035-95, also known as the cut-strip tensile test method, because TruPave exhibits less than 11% elongation. Unlike the grab method (ASTM D4632), with the cut-strip method, the entire width of the test specimen is clamped and falls within the stress field as the specimen is elongated. Neither method fully addresses performance in the pavement, and Owens Corning recommends that mats, fabrics, and grids be tested when embedded in asphalt.

# STRESS-CONTROLLED BEAM FATIGUE



### **MOISTURE FLOW COMPARISON**



<sup>\*</sup>ASTM D5053 is designed for materials that exhibit <11% elongation (ASTM D5035. Section 1.2).

<sup>1</sup> In paving applications, bias angle tensile strength can be a factor in mitigating multi-directional crack propagation.

<sup>2</sup> Modified test sample is cut on a 45° angle and tested according to ASTM D5035.



# **PERFECT FOR MAINTENANCE JOBS**

TruPave engineered paving mat is designed for use with a wide range of existing pavement conditions and maintenance objectives. Refer to the following chart for a summary of applications and uses, as based upon the existing pavement conditions.

## WHEN TO USE TRUPAVE® ENGINEERED PAVING MAT

RECOMMENDED APPLICATION	PAVEMENT CONDITION/BASE						
	VERY GOOD Minimal Cracking	GOOD Some Cracking	<b>FAIR</b> Moderate Cracking	POOR Severe Cracking	PORTLAND CONCRETE CEMENT STABLE SLABS	NEW CONSTRUCTION	
Spot Crack Repair					•	Leveling Course, Wearing Course	
Micro Surfacing						as Specified	
Chip Seal							
Mill, Leveling Course, Structural Overlay			•	•	•		
Mill & Structural Overlay			•	•	•		
Leveling Course, Structural Overlay			•	•	•		
Non-Structural Overlay (1.5" Minimum)		•	•	•	•		

All project conditions are different and present specific performance challenges. Owens Corning recommends consultation with a professional engineer and your local authorized TruPave engineered paving mat dealer prior to finalizing your specification.











For more information about the full family of TruPave engineered paving mat products, please contact your authorized Owens Corning TruPave dealer.

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