

## Trumbull®

ACOUSTIC

FOAM

NSULATION

PIPE

ROOFING



PERMAMOP<sup>®</sup> ASPHALT WHEN YOUR WORK GETS THIS KIND OF EXPOSURE...



# YOU NEED AN ASPHALT THAT CAN TAKE THE HEAT



PERMAMOP<sup>®</sup> AVAILABLE IN LOW-FUMING 100 & 167 POUND CONTAINERS



Low-fuming technology reduces 90% of the fumes.

#### WEATHERING CYCLES

PERMAMOP ASPHALT			193
TYPE II ASPHALT		120	
TYPE III ASPHALT	98	3	
TYPE IV ASPHALT	90		
PermaMop modified asp conventional asphalts.	halt weathers up t	to twice as long as	



PERMAMOP ASPHALT	_	-	_	-	7.0	
TYPE I ASPHALT						10.0
TYPE II ASPHALT			3.0			
TYPE III ASPHALT		2.5				
TYPE IV ASPHALT	1.5					
PermaMop modified	asphalt i	s twice	as ductile a	as most	asphalts.	



#### SOFTENING POINTS(°F)

PERMAMOP ASPHALT				215-235			
TYPE IV ASPHALT				210-225			
TYPE III ASPHALT			185-205				
TYPE II ASPHALT		158-176					
TYPE I ASPHALT	135-151						
A high softening point helps <i>PermaMop</i> modified asphalt resist flowing and slippage.							

C

STANDARD

PERMAMOP

### MOTHER NATURE DOESN'T TAKE EXCUSES. GOOD THING YOU WON'T NEED ANY.

No matter who you're working for, Mother Nature has the final say on how good a roof really is. And she'll make her mark on every job you'll ever touch. Sweltering heat. Driving rain. Wind. Sleet. Snow. Hail. Your crew knows what she can dish out. Because up on the roof, they're face-to-face with the elements every day. But after they're gone, the roof is left to fend for itself. And that's when the real test begins.

*PermaMop*<sup>®</sup> low-fuming modified roofing asphalt stays tough and stays put longer than ordinary asphalt. On any slope. In any weather. No excuses. With performance that beats conventional asphalt by a landslide.

## HERE'S PROOF.

The ASTM D4798 Accelerated Weathering Test Method measures how much wear and tear asphalt can take by subjecting it to the same cycles of sunlight, temperature extremes, oxidation and water runoff that cause a roof to age. Most asphalts survive about 70 to 120 cycles—the equivalent of 15 to 25 years of wear. But *PermaMop* modified asphalt hangs tough through 193 cycles—that's actually double what most normal asphalts would do, and provides up to 15 extra roof years from the asphalt itself. (See Chart A.)

### Like the fountain of youth for your roof.

We all know things get less flexible with age. Muscles get stiffer, skin gets slacker, and asphalt cracks. In fact, after only five years, most built-up roofs (BUR) start to show their age, cracking and "alligatoring" as a result of weather-related stress and strain. But *PermaMop* modified asphalt is twice as ductile as Type II, III and IV asphalts, so it stays smoother, longer. (See Chart B.) Its superior ductility means *PermaMop* modified asphalt expands and contracts with normal room temperature changes to resist the cracks that let in moisture and accelerate the aging process. And unlike coal-tar pitch, it doesn't get brittle when the weather gets cold. So whether you're putting on a brand-new roof or giving a facelift to an older one, *PermaMop* modified asphalt is the best way to get the most out of it.

## TAKE TO THE SLOPES WITHOUT SLIPPING.

When the hot sun meets a steeply sloped roof, your asphalt is on the line. Use Type I or II asphalt on a sloped roof and you might just find your hard work slipping in the sun. Use Type III or IV asphalts and you run the risk of dropback ruining the batch.

With *PermaMop* modified asphalt, you get the advantage of a Type IV softening point combined with a Type II EquiViscous Temperature (EVT). With a softening point of over 230°F, it resists flowing and stays where it was mopped—standing up to heat that makes other asphalts weak in the knees. Plus, a recommended EVT that's typically 75°F lower than Type IV asphalt, and at these lower temperatures, less chance of dropback. (See Chart C.)

## THE NO-FAULT ASPHALT.

Its low EVT means *PermaMop* modified asphalt reaches its optimum application temperature faster and with less fuel, saving you valuable time and money. And since there's a greater difference between its EVT and its flashpoint, there's less chance of overheating and kettle fires compared to Type II, III and IV asphalts.

Not only is *PermaMop* modified asphalt safer and more cost-effective to work with, it's convenient, too. You can use the same kettle or tanker you use for ordinary asphalt—just make sure you drain it first. (Once you start using *PermaMop* modified asphalt, you probably won't use the conventional kind again anyway.)

#### ALL YOU NEED FOR ANY JOB. ANYTIME. ANYWHERE.

Best of all, *PermaMop* modified asphalt is the only kind you need for all BUR specifications. Combining the best performance characteristics of all standard asphalt types into one, it can handle any slope (from 0"/foot and up) and withstand the infinite variety of weather conditions Mother Nature can whip up. So there's no need to inventory or transport multiple asphalt types for different slope and flashing conditions. And no chance of costly mix-ups. What's more, because *PermaMop* is low-fuming, you can use it for sensitive jobs just about anywhere.

With Owens Corning's *Trumbull* asphalt, you get what you need, when you need it. Our 20 manufacturing locations are geared for 24-hour, 7-days-a-week operations, up to 365-days-a-year, with nationwide delivery to put premium *Trumbull* asphalt products at your job site–anytime, anywhere.



www.trumbullasphalt.com 1-800-GET-PINK

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	Тур	e I	Тур	be II	Тур	be III	Тур	e IV	Test Methods
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
SOFTENING POINT (°F)	135	151	158	176	185	205	210	225	ASTM D36
FLASH POINT (°F)	500	-	500	-	500	-	500	-	ASTM D92
PENETRATION, UNITS:									
@ 32°F	3	-	6	-	6	-	6	-	ASTM D5
@ 77°F	18	60	18	40	15	35	12	25	
@ 115°F	90	180	-	100	-	90	-	75	
DUCTILITY									
@ 77°F, cm	10.0	-	3.0	-	2.5	-	1.5	-	ASTM D113
SOLUBILITY IN TRICHLOROETHYLENE %	99	-	99	-	99	-	99		ASTM D2042

Asphalts shall be homogenous and free of water and shall conform to these physical properties.

#### Typical Physical Characteristics for Trumbull® Asphalt

	Туре І	Type II	Type III	Type IV	PermaMop <sup>®</sup>	
	Min. Max.					
SOFTENING POINT (°F)	140 145	165 175	195 205	210 225	215 235	
PENETRATION, UNITS:						
@ 32°F	15	12	10	8	12	
@ 77°F	20 35	18 30	16 24	13 22	18	
FLASH POINT (°F)						
Min.	525	525	525	525	525	
Typical	575	575	575	575	575	
DUCTILITY						
@ 77°F, cm	13	4.0	3.0	2.0	7.0	
TYPICAL APPLICATION TEMPERATURE FOR HAND-MOPPING						
EVT* @ 125 CPS ± 25°F	350	375	420	445	375	
FOR MACHINE SPREADER						
EVI * @ 75 CPS ± 25°F	370	395	450	475	395	

\*Note: EquiViscous Temperature (EVT), is the temperature at which the liquidity of the asphalt gives the contractor the best opportunity of achieving interply moppings in the 25 pounds-per-square range. The viscosity, and consequently the temperature, is different for hand-mopping versus machineapplication. *Trumbull* asphalt typically has EVTs in the indicated range for this product. For specific EVTs for a product from a particular *Trumbull* plant, check our Web site: www.trumbullasphalt.com or call 1-800-323-8301.



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