

# **LUCAS** *Coatings & Mastics for the Roofing Trade*

**R. M. Lucas Co. 3211 S. Wood St. Chicago, IL 60608 (773) 523-4300 rmlucas.com**

## **PRODUCT DATA BULLETIN**

### **#766 MODIFIED BITUMEN CEMENT - TROWEL GRADE**

#### **PURPOSE**

Lucas #766 is designed as a cold process inter-ply adhesive for SBS modified bitumen single ply membranes. Cold process adhesives eliminate the need for hazardous torches and hot asphalt kettles. Lucas Elastomeric Modified Bitumen Adhesives are easy to apply with minimal equipment, effort, and cost.

#### **PRODUCT DESCRIPTION**

Lucas #766 Elastomeric Modified Bitumen cement is manufactured from refined asphalts, SBS polymers, a special solvent blend, and non-asbestos reinforcing fibers. The special solvents contained in this product helps to create an extremely strong and durable cohesive bond between the substrate and the modified bitumen membrane. In addition, the elastomeric, rubber-like, qualities and excellent low temperature flexibility of Lucas #766 permit the cement to elongate and recover during extreme building movement and rapid changes in temperature. Elastomeric adhesives also allow peel and shear stresses to be distributed over a larger area of the roof than the point at which they are encountered. #766 Trowel Grade is designed for adhering SBS modified bitumen membranes to flashings and other vertical surfaces. Although it was designed as an adhesive, #766 can be used for flashing around vents, pipes, skylights and other roof penetrations as well as for patching high movement areas on SBS and asphalt built-up roos. In such exposed applications SBS modified adhesives, like all SBS membranes, must be protected with a coating or mineral granules.

#### **APPLICATION**

Lucas Elastomeric Modified Bitumen Cement should only be applied to surfaces that are sound, clean, and dry. Temperatures should be a minimum of 40° F and there should be no threat of rain. The adhesive may thicken in cold weather. To improve cold weather applicability store the adhesives in a warm place prior to use. Apply directly from the can; do not thin. The SBS modified bitumen sheets should preferably be cut into sections less than 20 ft. in length and allowed to relax and flatten out before being installed. All laps should be a minimum of 4 inches wide. All laps should be rolled with a weighted roller and end laps should be weighted to insure a proper bond. A bead of adhesive should be evident at all seams. The adhesive may be left open for a short time before the modified roll is imbedded to allow some of the solvent to evaporate and improve the initial bond. This time period will vary significantly with weather conditions. Equipment and foot traffic should not be permitted on the new roof until the adhesive has fully cured in order to prevent voids or blisters from forming at pressure points. Lucas #766 should be applied evenly at a rate of 2 - 4 gallons per 100 sq. ft. (1/32 to 1/16 of an inch thick), depending upon the absorbency of the substrate. It may be applied with either pointed or notched trowel . Excessive rates of application may damage the membrane and prolong curing time. Consult the modified bitumen manufacturer if more than one coat of adhesive is to be used in any roof system. Cure time will be between 24 and 48 hours. The strength of the adhesive will continue to increase beyond this initial bonding period. Clean up with mineral spirits.

## CAUTION

Combustible mixture, keep away from open flames. Do not heat or store above 100° F. Avoid prolonged contact with skin and inhalation of solvent fumes. Keep out of reach of children. Do not take internally. If swallowed, do not induce vomiting. Contact medical personnel immediately.

### #766 SPECIFICATION

Applicable ASTM Specifications:	D-4586, D-3019
Viscosity ASTM D-217	225-350 @ 77 ° (25 ° C)
Recommended Rate of Application	2 to 4 gal. per 100 sq. ft. (1/32 to 1/16 of an inch thick)
%Asphalt	39 min.
%Solids	53 min.
% Non-volatile ASTM D-2823	66 max.
% Mineral Filler Content.	7 min.
Weight per gallon	8.0 lbs
Elongation ASTM D-412	300%*
Recovery (nominal)	95%
Shear strength ASTM D-3019	26+ lbs. per sq. inch* **
Peel strength ASTM D-1876	10 lbs. per sq. inch*
Low Temperature Flexibility	ASTM 2822 Passes
Flash Point	+100°F (38.7 ° C)
Container Sizes	1 & 5 gallon, 1/10 gal. tubes

\* Tests conducted by an independent laboratory with a high strength SBS modified bitumen sheet as the substrate for shear and peel testing. Test results furnished on request.

\*\* All 5 specimens tested broke as a result of substrate failure rather than lap shear failure of the adhesive.

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