

**ADEKA** KM-String  
CORPORATION

Manufactured by Adeka Corporation  
Tokyo, Japan

Supplied by: **BoMetals, inc.**  
concrete and masonry accessories

800-862-4835  
www.bometals.com

PRODUCT DESCRIPTION:	
SIZE:	4mm to 30mm Sizes above 6mm by special order
PACKAGING:	Varies per size
PROPERTIES:	
Hardness	A33
Tensile Strength	6 MPa
Elongation	800%
Volume % Change	170% (approximately 3 times)
Vulcanization	Yes
Specific Gravity	1.18
Tested by press sheet of KM compound	
Property values are representative values and not specification values	

## GENERAL DESCRIPTION:

ADEKA ULTRASEAL® KM-STRING is a chemically modified natural rubber (vulcanized) product. The manufacturing process chemically bonds a hydrophilic agent to the rubber. This permits the seal to undergo controlled expansion when exposed to moisture. This expansion capability provides a "double locking" waterstop i.e. one from rubber's natural resilience and one from expansion pressure generated when it is exposed to water. It will expand approximately 3 times by volume. Any void, within the limits of the product's volume expansion coefficient, will be filled by the expansion of the KM when it is hydrated

Expansion occurs in all dimensions, diameter and length. Expansion will follow the direction of least resistance. The Volume Expansion Coefficient of 3 times indicates the material will increase 3 times by volume, not 3 times in size. Linear expansion coefficient is approximately 1.45.

KM-String has excellent durability and resistance to chemical contaminants. It can perform in a wide range of solutions such as seawater or cement water. The material does not contain any toxic substance or heavy metals and is environmentally safe.

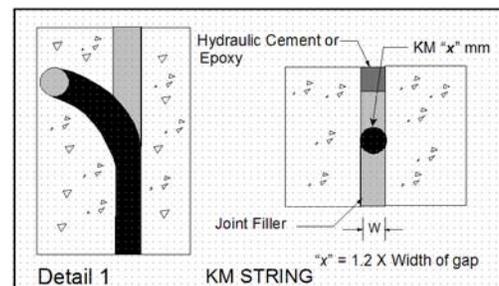
## BASIC USE:

KM-String is suitable for waterstopping existing joints of various sizes. The KM string size is determined by the size of the joint. The size selected must have a minimum diameter of 1.2 times the joint width. (See Detail No. 1). The string can be easily stretched and inserted into the joint gap with a backer rod insertion tool or a blunt instrument.

## INSTALLATION:

KM is an excellent waterstop for repairing leaks in sheet piles interlocks. The string size again should be a minimum of 1.2 times the width of the interlock gap. Stretch the string and force into the interlock area. This

can be done even if flowing water is present. The natural resilience of the rubber will stop the water and hold the KM in position until expansion has occurred. See detail 2.



## Hydrophilic string or rope - Stretch and insert



**STOP FLOWING WATER**

**NOTE:** The information contained herein is based on our present state of knowledge and is intended to provide general notes on Adeka Waterstops and their uses. Any recommendations or suggestions, which may be made, are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained in this publication shall be construed as a recommendation for any use that may infringe patent rights. Readers are cautioned to satisfy themselves as to the suitability of such goods for the purposes intended prior to use