



**TECHNICAL DATA  
&  
APPLICATION  
GUIDELINES**



# **ASHCON LW**

**Elastomeric Concrete**

**Expansion Joint**

**Header / Nosing**

**Flexible Concrete & Asphalt Repair**



## DESCRIPTION

ASHCON LW is a three -component polyurethane based flexible concrete for use in construction environments. Fully mixed ASHCON LW self-levels as a sealant / mortar repair in new or aged concrete expansion joints and asphalt crack repair. Bonds tenaciously to expansion joint, creating a flexible but hard system to resist the influence of water (providing full waterproof joint membrane). ASHCON LW will absorb and disperse the traffic impact loads, make the system flexible and prevent it from breaking when loads are raised suddenly. ASHCON LW is resistant to deicing chemicals and abrasives. Cures to being traffic able in 3 – 5 hours depending on temperature. Consult CREST CORMIX for faster curing methods.

## RECOMMENDED USES & FEATURES

- ✚ As a filling material and binder for various expansion joint systems
- ✚ As repair filling material for new or existing concrete surfaces
- ✚ Fast Repair for Road, Airport Taxiways, Highways and Bridges
- ✚ A pourable sealant & water- tight membrane (with or without Part C Aggregate)
- ✚ High load bearing capacity with excellent bond to steel, concrete & asphalt (available in black or grey)
- ✚ Impact resistant with high compressive strength
- ✚ Chemical & Oil resistance
- ✚ Easy to install with early strength gain
- ✚ Flexible – 40% minimum elongation (65% Elongation when blended aggregate not added)
- ✚ Traffic-able 3 – 5 hours dependent on temperature
- ✚ Withstands extreme temperature changes
- ✚ Use as pour-able water- tight sealant in gaps and joints (with or without Part C Aggregate)

## PROPERTIES

Shore Hardness	DIN 53505	38-40 D
Adhesion Strength	D4541 (To Concrete)	3.2N/mm <sup>2</sup>
Shore Hardness with Aggregate	DIN 53505	50 D (1:1 Quartz Blend)
Tensile Strength	DIN 53455	8-10 N/mm <sup>2</sup>
Compressive Strength	ASTM D695	22.1 N/mm <sup>2</sup>
Youngs Modulus	DIN 53455	65-70 N/mm <sup>2</sup>
Elongation (Nil Part C Aggregate Blend)	DIN 53455	65% (Nil Aggregate Blend used)
Elongation (with Part C Aggregate Blend)	DIN 53455	43% (1:1 by weight with Part C Aggregate Blend)
Tear Propagation	DIN 53515	21 KN/ m
Taber Abrasion Resistance	DIN 53754	110-115 mg
Water Vapour Transmission	E96-05 (B)	0.015g/ (m.hr) - 0.36g/ (m.24hr)
Water Absorption	AS 3558.1	≤1.00%

## REACTION PROFILE at 25 Deg C

Recommended Mixing Time: 4 minutes

Working Time: 20-25 minute

Initial Gel: 30-40 minutes

Gel time to service: 3-4 hours

Full Cure: 7 days

Mix Ratio by Volume = 3:1 (3 x part POLYOL/ 1 x part MDI)

## Typical Liquid Properties at 25°C

Viscosity (Brookfield @ 25°C)  
Part A Polyol 4,300 cPs  
Part B MDI ISO – 200 cPs  
Specific Gravity @ 25°C:  
Part A Polyol – 1.06  
Part B MDI – 1.23

## COLOUR / TEXTURE

Grey Texture



Grinded Flat Finish

Black Texture



## CONSUMPTION

Approximately 80 complete 19.15 kg kits of ASHCON LW will yield 1 x metre<sup>3</sup> of elastomeric concrete.

## SUBSTRATE PREPARATION & MIXING

Important: ASHCON LW is **moisture sensitive**. Do not install product unless cure can achieve at least 2 hours before rainfall. Do not install below 10°C or in a **wet environment & damp substrate**. Ensure any moisture present in substrate is less than 4%. If moisture content is above 4% then hot air blasting needs to be carried out to remove excess moisture from the substrate. Cut out all damaged spalled concrete/ or asphalt to leave a clean dust free dry exposed aggregate surface, ensuring there is no contamination. The edges of repair must be cut at right angles and full depth of the repair. New concrete should be at least 14 days old. Sandblasting is the preferred method of surface preparation, failing this you will need to use correct cut off & grinding discs (designed for concrete). No primer is required, when the concrete or asphalt surface is prepared clean and roughened and of course dry (less than 4% moisture). Utilising moisture probe meters should be used to ensure below 4% moisture content. In the case where additional bonding/ or sealing against moisture in the substrate necessary use our Rapid Dry 1K SURFACER 1000 as an initial primer/ sealer 1<sup>st</sup> coat to substrate. The use of 1k SURFACER 1000 (moisture cure 1k pre-polymer) is a primer/sealer and bonding agent preventing any inherent moisture in the substrate (concrete or asphalt) interfacing with ASHCON LW. If ASHCON LW is exposed to UV, dis-colouration will occur in time. We would recommend a broadcasting of sand over the joint /or repair (within 20min) to provide a non-skid surface and long term concrete lookalike finish. Consult CREST CORMIX for other options.



**MIXING** Product needs to be mixed with a sturdy drill and sturdy mixer head (see example Pic). Supplied Kit makes up 20 Litres mixed volume with combined 3 x components). Using drill and spiral mixing paddle, add 2.5 kg PART B MDI component directly into 20 Litre Pail containing the 6.65kg PART A POLYOL grey/ or black component. Mix the two A & B components together in (20 Litre Pail) for a minimum 4 minutes, ensuring a uniform homogeneous mixture is achieved. Put aside for a 10-minute chemical induction period. After this 10-minute induction period, slowly add the Part C Aggregate into the same 20 Litre Pail. Do not add all Part C at once. Stir slowly to achieve a thorough even mixture ready for pouring/ placement. (The 20 litre Pail will accommodate all three components). It is also important to mix supplied kit components in full, rather than mixing partial volumes of reduced mixes. For flow-ability into narrow joints or voids, you can dispense with the Part C Aggregate completely, providing a more viscous pour-able liquid. Consult with Crest Cormix for specific advice if repair exposed to UV light.

**(Note: Correct mixing of this Polyurethane Elastomeric is important. Seek clarification specific to your application.)**

## **MATERIAL PLACEMENT**

Once mixed, the ASHCON LW should immediately be poured from the Pail / or directly from a pouring funnel into the repair area. ASHCON LW is self-levelling, however if deep voids or large areas to be filled you may utilise a notched trowel or mixing stick to direct/ push material into corners, etc. This will also assist in removal of surface gas/air bubbles. Ultimately the material is self-levelling and will find its own level once poured. The surface finish can be left as is/ or in the case with expansion joint filling you can grind/sand (next day) the top surface to level of surrounding concrete. The aggregate option contains a filler granule, which rises to the top surface assisting final grind (if grinding preferred option). If Filling sloped (non-level surfaces), you can leave mixed material in pail for added induction (10min), prior to pouring. Care is required, please consult CREST CORMIX for adoption of this technique.

## **MATERIAL TESTING**

Consult CREST CORMIX directly for any additional specific product testing requirement.

## **STORAGE & SHELF LIFE**

Do not allow to freeze. Store in dry shaded area between 10- 35 Deg C in original un-opened containers. The Shelf Life is 12 months minimum, when stored correctly in original containers.

## **CLEAN UP**

Use CREST GP Thinner or GUNWASH solvents to clean up stirrers, trowels. Do NOT add any reducer/thinner to any ASHCON LW Part or mixed components. Solvent addition to the product will damage the chemical cross linking & result in a product failure. Note: When cleaning stirrers and trowels between mixes, always ensure they are dried with soft rags to avoid cross contamination of solvent in further mixtures.

## **POT LIFE/ WORKABILITY**

ASHCON LW has a pot-life when mixed of approximately 40 minutes at 23-25 Deg C.

## **HEALTH & SAFETY**

Wear Protective clothing, goggles, nitrile gloves and PS2 Dust mask when mixing this 3x component product. If in contact with eyes wash out immediately with water & seek medical attention. Fatal if taken internally. Refer to individual SDS (Safety Data Sheet) available on request from Crest Cormix.

**Proudly Manufactured in Australia by;**

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## **DISCLAIMER**

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, varying substrate moisture, curing, crushing procedures etc ..

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