CREST CORMIX

TECHNICAL DATA SHEET / 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 ozone, UV, deicing chemicals and abrasives. Cures to being trafficable in 3 – 5 hours depending on temperature.

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)
- PART C Aggregate available in either COURSE or FINE grades.
  (COURSE used more for deep void or pothole filling/ FINE used for general expansion Joints)
- High load bearing capacity
- Excellent bond to steel, concrete & asphalt
- Impact resistant with high compressive strength
- Chemical & Oil resistance
- Easy to instal with early strength gain
- Flexible – 40% minimum elongation
- Trafficable 3 – 5 hours dependent on temperature
- Withstands extreme temperature changes
- Use as pourable 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/mm²
Shore Hardness with Aggregate	DIN 53505	50 D (1:1 Quartz Blend)
Tensile Strength	DIN 53455	8-10 N/mm²
Compressive Strength	ASTM D695	22.1 N/mm²
Youngs Modulus	DIN 53455	65-70 N/mm²
Elongation (Nil Part C Aggregate Blend)	DIN 53455	65% (Nil Aggregate)
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

Grinded Flat Finish

Grey Course Texture

Black Course Texture

CONSUMPTION

Approximately 80 complete 19.15 kg kits of ASHCON LW will yield 1 x metre³ 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. If moisture content is expected to be high, the substrate requires strong airflow drying / heat blowing to dry out affected areas. In the case where additional bonding/ or sealing against moisture in the substrate necessary use our Rapid Dry 1K SURFACER 1000 as an initial prime/ sealer 1st 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.

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 5–10-minute chemical induction period. After this 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 flowability into narrow joints or voids, you can dispense with the Part C Aggregate completely, providing a more viscous pourable liquid, or alternatively choose FINE aggregate blend (Part C). Consult with Crest Cormix for specific advice on choosing aggregate type.

(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 will find its own level once poured. ASHCON LW once cured leaves a FINE/ or COURSE finish on the surface, depending on type (FINE or COURSE) PART C aggregate chosen for use. 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 options both contain a filler granule, which rises to the top surface providing either a COURSE or FINE texture. Both surfaces assist with easier final grind in detailed expansion joint applications.

MATERIAL TESTING

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

STORAGE & SHELF LIFE

Do not allow to freeze. Sore 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.

QUALITY ASSURANCE

ISO 9001
BUREAU VERITAS
Certification

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