



# PRODUCT DATA Emcrete II

**Non-Hazardous High-Impact Elastomeric Concrete Material**

A SIKA COMPANY

## Product Description

**Emcrete II** is a flexible, durable, high-impact elastomeric concrete material. It is a bio-based, non-hazardous, extremely-low VOC product primarily used as a component of an expansion joint assembly either to fill blockouts on each side of an expansion joint gap, to repair a damaged expansion joint gap edge, as an impact-absorbing backfill nosing, or as a fast curing patching material for potholes, or spalls on concrete roadways, bridges, sidewalks, etc. Emcrete II is comprised of a two-component polyurethane resin mixed with sand and aggregates.

## Features

- Trafficable surface
- Flexible impact resistant
- Compatible with extremes in temperatures
- Chemical resistant surfaces
- Wide range of adhesive applications
- Fast mixing and installation
- Affordable results

## Typical Uses

Some of the typical uses of Emcrete II within EMSEAL expansion joint systems are:

**Elastomeric Concrete** – To act as an elastomeric concrete where the possibility of spalling or cracking is a concern for standard concrete or where existing spalls or potholes in concrete roadways, bridges, sidewalks, etc. is required.

**Repair** – To repair spalled gap edges in high load-bearing applications. The spalled concrete must be cut out using industry standards for concrete repair. Once the gap edge has been cut and cleaned, the self-leveling Emcrete II can be poured to form a horizontal elastomeric gap edge that is more resistant to spalling and gap edge deterioration.

## Installation Summary

Substrates must be thoroughly dry and the temperature must be at least 45°F (8°C) and rising to install Emcrete II. The bonding surface should be in sound and good condition before prepping. Newly poured concrete must be full cured. The entire bonding surface is to be wire brushed and fully cleaned leaving no contaminants such as dirt, dust, oils, or other residue on any surface. Next, the area where Emcrete II will be poured should be fully prepped and formed.

The substrate is then primed with Sikadur®-32 Hi-Mod primer (which is shipped in addition to units of Emcrete II). Emcrete II is then mixed in accordance with the complete Installation Instructions in the pre-measured amounts provided.

Emcrete II is then poured into the forms where it will self-level and cure exothermically. It can be trowelled to ensure a consistent surface. The working time of Emcrete II is less than 10-minutes after mixing. Working time, and cure time, is longer in cool weather and shorter in hot weather.

Emcrete II reaches a hardness which allows forms to be pulled within 1 hour (temperatures between 60°- 80°F). If Emcrete II is installed in greater than 80°F, forms can be pulled as quickly as 30-45 mins after mixing. If Emcrete II is to be used in conjunction with EMSEAL's BEJS Joint System, forms can be pulled at 1 hr. and BEJS installed after light prep of the Emcrete II joint substrate.

Pedestrian & vehicular traffic (temperatures between 60°-80°F) Emcrete II can accept traffic within 2-hour after application.

## Supply

**Packaging** – Emcrete II Elastomeric Concrete kit is comprised of:

Part A Liquid (0.96 Gal.) per unit

Part B Liquid (0.53 Gal.) per unit

Part C Aggregate (57.8 lb) per unit

Kits are sold in groups of two units of each.

Installation requires additional Sikadur®-32 Hi-Mod primer.

**Kit Yield** – 1 Unit = 0.6 cubic-feet / 2 Units = 1.2 cubic-feet

**Storage** – Components have a storage shelf life of 1-year at 65° - 90°F)

## Physical Results

Elastomeric Concrete Properties	Test Method	Requirement
Compressive Strength	ASTM C579	Min. 2000 psi
Bond Shear Strength	ASTM C882	Min. 700 psi
Abrasion Resistance Wear Index	ASTM C501	Max. 1
Resilience	ASTM D695	Min. 70%
Durometer Hardness	ASTM D2240	Min. 50
Bond Strength to Concrete	ASTM C882	Min. 450 psi

### CAD & Guide Specs

Guide specifications and CAD details are available online at emseal.com or by contacting EMSEAL.

### Warranty

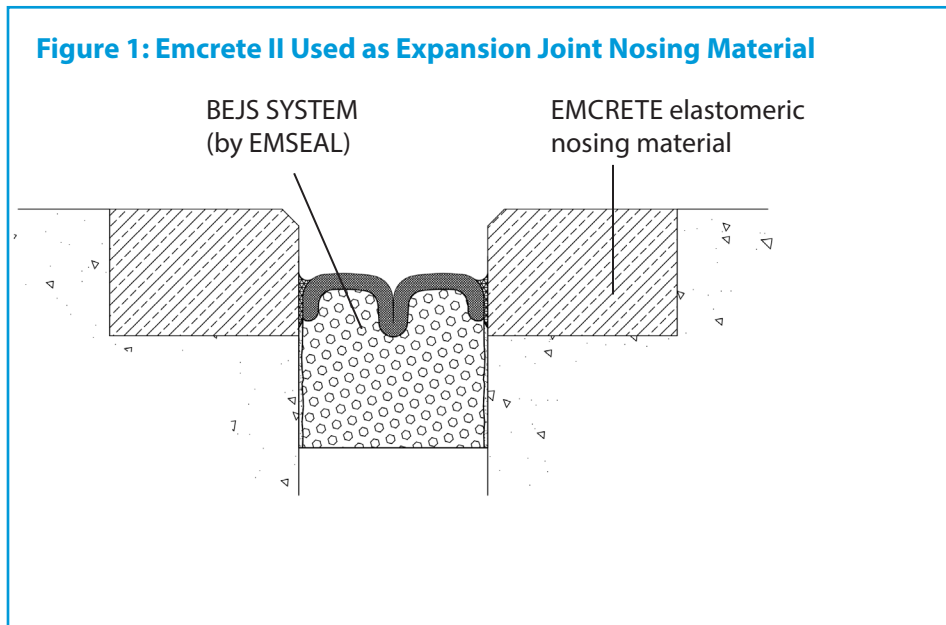
Standard or project-specific warranties are available from EMSEAL on request.

### Availability & Price

Emcrete is available for shipment internationally. Prices are available from local representatives and/or directly from the manufacturer. EMSEAL reserves the right to modify or withdraw any product without prior notice.

## Emcrete Applications

**Figure 1: Emcrete II Used as Expansion Joint Nosing Material**



**Figure 2: Emcrete II Used as Concrete Patching Material**

