## **TechCrete**<sup>TM</sup>

### The Flexible Solution for Concrete Repair







#### **Concrete Repair Products**

TechCrete is a hot-applied repair mastic sealant, aesthetically suitable in all concrete pavements, and is used in sealing wide cracks and joints, and repairing a large variety of pavement distresses

## For repair in a large variety of pavement distresses such as:

- Cracking (Corner breaks, longitudinal and transverse cracking)
- Joint deficiencies (Spalling of longitudinal and transverse joints)
- Surface defects (Map cracking and scaling, pop-outs)
- Miscellaneous deterioration (Blowups, faulting of transverse joints and cracks, lane-to-shoulder dropoff, lane-to-shoulder separation, and patch/patch deterioration)
- Bridge deck potholes and surface spalling



#### **Benefits of using TechCrete**



#### Resists cracking, delamination and spalling

TechCrete is made of a hot-applied polymer modified resin with unsurpassed adhesion so it resists delamination and cracking, does not shrink, and remains flexible during the expansion and contraction of the adjacent concrete surface in weather extremes.

#### **Flexible**

Rigid repair materials like cement, phosphate and epoxy products can prematurely fail because they are brittle, and their rigidness and different rates of expansion and contraction from the pavement can destroy the concrete surrounding the patch. TechCrete is flexible, strong and adheres to the pavement and so it moves with the pavement as it expands and contracts.

#### Supports heavy loads

Epoxy and cementitious materials can shatter under heavy loads and high impact, especially in very cold conditions. TechCrete has flexibility and high compression resistance to resist the impact of heavy truck traffic and airplanes (i.e. 747s) in extreme weather conditions.



Unlike other products that require regular maintenance, TechCrete provides a maintenance-free, long-lasting repair, saving time and money.

#### Improves ride quality

The flexible, heavy load-bearing characteristics of TechCrete provides a smooth ride for all vehicles saving money with less vehicular damage.

#### Provides a high friction surface to ensure driver safety

Safety is a priority for everyone, and TechCrete with appropriate surfacing aggregate provides a high-friction surface that promotes driver safety and reduces accidents.

#### Easily installed and generally is opened to traffic within an hour

TechCrete meltable bags are placed into the Patcher to melt providing a controlled, precision mixture for consistently superb monolithic results. Then TechCrete is poured into the distress, leveled and cooled generally within one hour. Using TechCrete reduces costs associated with incorrect product mixtures, installation errors and reduces the need to complete the project twice.

# Waterproofs PCC pavement and resists commonly used chemicals that destroy pavement such as silicone grease and de-icing agents like ethylene glycol, sodium chloride, trisodium phosphate and potassium acetate.



Mineta San Jose International Airport - Before Photo



Mineta San Jose International Airport - After Photo

#### **Choosing the best TechCrete** for your pavement repairs

PRODUCT	RECOMMENDED USE
TechCrete-R ("TC-R") Part Number 34952	Wide Cracks and Joints
Contains ideal pre-measured, pre-mixed combination of pro- prietary binder and fine aggregate designed to provide all the benefits of TechCrete.	TC-R is designed to treat wide cracks and joints with a minimum width of 1.5 inches (38 mm) and up to 4 inches (100 mm) wide and up to full-depth repairs.
TC-R contains smaller aggregate than TC-TBR and is used in shallow repairs where edge feathering is required.	Surface Defects and Miscellaneous Distresses
Strailow repairs where edge realthering is required.	TC-R is designed for treating most other distresses (spalls) as partial-depth repairs less than 0.75 inches (20 mm) deep.
TechCrete-TBR ("TC-TBR") Part Number 34953	Wide Cracks and Joints
Contains ideal pre-measured, pre-mixed combination of proprietary binder and aggregate designed to provide all the benefits of TechCrete.	TC-TBR is designed to treat wide cracks and joints greater than or equal to 2 inches (50 mm) wide and up to full-depth repairs.
TC-TBR contains larger aggregate than TC-R and is used in wider and deeper repairs - a minimum depth of 1.5 inches (38 mm) is required to install TC-TBR.	Surface Defects and Miscellaneous Distresses
	TC-TBR is designed for treating most other distresses as partial-depth repairs from 0.75 to 8 inches (20 to 200 mm) deep, recognizing that the minimum application depth is 1.5 inches (38 mm).
	For deeper repairs, while not required, TechCrete (both TC-R and TC-TBR) can be bulked with additional aggregate. Contact your Crafco Representative for specific details.

#### **TechCrete in the Field**

From coast to coast, in all types of climates and traffic conditions, TechCrete has been recognized as the flexible, superior repair material for repairing concrete highways, runways, and bridge deck surfaces.

> "The performance of Crafco's TechCrete on this and other Interstate segments has been outstanding. In my opinion the flexible partial depth repair materials are more durable than the rigid repair materials. Flexible repair materials should and will

> always be an option for use in our quest to preserve and extend concrete pavement



Dave Holmgren Before

life."

P.E. Utah Department of Transportation



Region One Pavement Engineer

I-15 MP 329-340 in Weber County, UT

#### **How to use TechCrete**



Clearly mark out the distressed area that needs to be treated.





Remove the defective pavement. This may involve saw-cutting, jackhammering, or milling to reach stable pavements.



Remove loose debris from the area. Clean and dry the area using a Crafco Hot Air Lance.



Immediately prime the entire repair area, including sides and bottom surfaces, with TechCrete Primer, without puddling the primer.



Heat and mix TechCrete in a Crafco Patcher, as per the directions in the TechCrete Installation Instructions. Pour melted TechCrete into the repair area.



Apply surfacing aggregate to the top layer of TechCrete after it has cooled according to the Installation Instructions.

NOTE: To ensure best results, be sure to follow all the detailed steps of the TechCrete Installation Instructions. You can obtain these from the Crafco website or from your Crafco representative.

©2016 Crafco, Inc. October #A1163