

TDS & Application Guide

Description

Barrier-Patch is a trowel grade, repair patch and finish skim coat which adheres exceptionally well to new and existing cement-based substrates. This unique formulation forms a strong chemical bond with Portland-based substrates and adheres well to plywood and S3 MRP barrier primer. While NOT a moisture barrier, this material can maintain its physical properties in high moisture conditions to 100RH, making it suitable for indoor and outdoor applications. This material has 30 minutes of working time, and cures quickly allowing return to service in just a few hours. Barrier-Patch allows application thicknesses from ultra-thin feathering to 1" and providing smooth transitions and fine finishing.

Features & Benefits

- Fast setting cure time with quick return to service
- Good working time of 30 minutes
- Trowel grade patch allows application thickness from 1" down to a feather finish
- Provides chemical bond to Portland concrete and cures hard in high moisture areas
- Compressive strength over 5000 psi within 24 hours and over 6000 psi at full cure

Applications as a patching cement

- Commercial floor patch & finish skim coat over existing concrete slabs
- To provide a smooth base for finished flooring

Product Details

Packaging	11.8-pound protective bags			
Color	Beige			
Shelf Life	12 months in unopened containers and humidity-controlled storage			
Set Time Guidelines		40°F	72°F	90°F
	Working Time	30 minutes	30 minutes	20 minutes
	Return to Service	4 hours	2 hours	1-2 hours
Mix Ratio by Volume	1-pint potable water per 11.8# bag			
Cure Time	Return to service in 2 hours depending on material thickness			
Application Temperature	Should be applied between 40°F and 90°F (see installation notes below)			
ASTM C109 / C39	Compressive Strength: 2 hours after placement: 1000psi; 24 hours: 5000psi; 7D: 6000psi			

Substrate Preparation

Target area substrate must be free of loose debris, dirt, dust, or anything that would act as a bond breaker at the interface. All surfaces must be saturated surface dry (SSD) but with no standing water, immediately prior to application.

Mixing Instructions

Do not split up bags, mix entire contents. Place all the specified mix water into a clean plastic bucket, and using a quad blade and an industrial grade electric drill (10 amp minimum and 750 rpm), mix using the following procedure:

- Pour ½ of the contents of the bag into the mix water in a 1 or 2-gallon pail. With the drill mixer, rapidly blend the water/powder mixture until you get a thin, uniform slurry.
- Quickly add in the remainder of the bag and continue to mix the product for approximately 3 minutes. While mixing, move the drill blade around in the pail sides to be sure all dry powders and clumps are integrated smoothly into the slurry.
- The goal of mixing is not just to wet the material but **dissolve** the chemical additives into the cement matrix.

Installation Notes

After mixing, pour the contents of the bucket onto the application area, use a trowel to scoop out contents that remain in the pail. Using a metal trowel, consolidate the wet patch cement into the area, ensuring good contact is made between the product and the target area surfaces. Extra time should be taken with areas with irregular edges to be sure full wet-out occurs. Finish the surface level with the grade of the surrounding surface, and do not allow the patch cement to cure above the level of the surrounding area.

This material exhibits sufficient body to allow ramping up to approximately 1" and down to a feather edge, in a single lift. Example can be using this method to join different floor heights. Set time will remain the same as specified above.

Foot traffic will be allowed after approximately 1-2 hours from installation but could be longer depending on ambient conditions.

Cautions/Limitation

Mix one bag at a time, and only use amount of water as specified on the bag instructions.

Clean Up

S3 Barrier-Patch while still wet, can be cleaned up with a scouring pad and warm soapy water (no solvents required). If allowed to set, then mechanical cleaning is required. Dispose of excess material in accordance with local, state, and federal regulations.

Storage

S3 Barrier-Patch should be stored in sealed bags, between temperatures 50-90°F. Do not allow to get wet and do not store subject to high humidity conditions.

Safety Precautions

HEALTH CONSIDERATIONS

As with all building materials, good hygienic habits must be observed, and the wearing of appropriate PPE to include clothing, gloves, and dust mask is advised. Before using any S3 Barrier Solutions, LLC. product, please read and follow the product Safety Data Sheet (SDS). Use this product only as directed. Keep out of the reach of Children.

FOR YOUR PROTECTION

The data, statements and recommendations set forth in this product information sheet are based on research and development work which has been carefully conducted by S3 Barrier Solutions, LLC. and we believe such data, statements and recommendations will serve as reliable guidelines. This product is subject to numerous uses under varying conditions over which we have no control, and accordingly, we do NOT warrant that this product is suitable for any use. Users are advised to test the product in advance to make certain it is suitable for their installation conditions and uses.

WARRANTY

All products manufactured by us are warranted to be first class material and free from defects in material and workmanship. Liability under this warranty is limited to the net purchase price of any such products proven defective, or, at our option to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL. THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS. THIS WARRANTY DOES NOT COVER DAMAGE DUE TO PHYSICAL IMPACTS, HYDROSTATIC PRESSURE, FORCE MAJURE, ACTS OF GOD, OR ANY OTHER CAUSE OUTSIDE OF S3 BARRIER SOLUTION, LLC. KNOWLEDGE.