

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT MANUFACTURER: Stone Edge Surfaces	MANUFACTURER: Turley International Resources, LLC. (Parent Corp)
PRODUCT NAME: CPR – Concrete Patch and Repair	4322 South 80 th Street
	Mesa, AZ 85212 - USA
	TEL: 844-786-6333 E: info@stoneedgesurfaces.com
EMERGENCY: Call 911 or Emergency Services in your area/country	MEDICAL: Call 911 or Emergency Services in your area/country

PRODUCT COMPOSITION

Stone Edge Surfaces CPR—Concrete Patch and Repair is a high-performance polymer modified cementitious concrete patch and repair mix that does not require a Primer or Water Curing After Application. CPR is a ready to use, one component, “just-add-water” concrete patch and repair mix that dries a Light Gray color and comes in a 20 LB Pail or in a 50 lb. Bag. CPR is a High PSI (10,000+), No-Shrink, concrete patch and repair material used for general and structural concrete repair from feathered edge* (see cautions below) to 4”+ thick. CPR averages a 15 to 30-minute set time with structural strength in approximately 1 – 2 Hours. CPR can be troweled vertically, horizontally or overhead, and has superior bonding strength. All necessary ingredients are contained in the bag or pail, with water being added on site. Follow water suggestions on the packaging and do not over water product beyond a thin pancake or thick paint consistency. Product can be mixed thinner (runnier...like a thick paint consistency) for pouring from the mixing container into properly prepped low spots, cracks and for horizontal applications. Product can be mixed thicker like a very soft wet paste (or if mixed thin, let stand for 1 to 2 minutes while mixing occasionally and product will start to thicken) for use in repairing or rebuilding vertical concrete surfaces. NOTE: Surfaces must be moistened lightly with water prior to applying CPR with no pooled or standing water, just a lightly moistened surface. Use proper preparation on all concrete surfaces that CPR will be applied to. Proper prep includes, but is not limited to the removal of all grease, oil and any loose material or dirt. Pressure wash surfaces, and smooth concrete may need to be scored, etched or sanded prior to CPR application to allow CPR to bond thoroughly. **MIXING:** Use mechanical mixing apparatus, stir stick or trowel, but makes sure all dry product is thoroughly wetted and mixed. Water requirements will vary in your area but it is always best to start with less water and work up to the consistency you desire based on vertical or horizontal application. This is a hydrophobic mix, so add water in small amounts. Mix approximately 2.5 oz water per 1 LB of mix (1.5 -2 qt for 20 lb and 3.5 to 4.5 for 50 lb). **APPLICATION:** Trowel, Pour,

PRODUCT USES

Most Common Use (<i>Not a Complete List</i>)	Thickness	Best Finish	Why it's Better
- Commercial, Industrial and Residential Vertical Concrete Patching and Repairing of cracked and broken concrete areas. - Commercial, Industrial and Residential of light use horizontal cracked, spalled and broken concrete...See product precautions below for traffic areas. Use Stone Edge Surfaces Pro Bond for most horizontal concrete repairs. - Patching of vertical concrete holes, broken areas and bore holes, loading docks, columns, walls, fences, pillars, pilings, barriers, pool walls, etc. - Patching and repairing of horizontal concrete (see precautions below) driveways, patios, pool decks, walkways, sidewalks, etc. - Can be used in Commercial & Industrial, Grouting, Doweling and Anchoring. - Can be used as an underlayment patch for most overlays - Can be applied vertically at 1/8” - 1/4”, raked, and used as a scratch coat for concrete overlays, stucco, mortars, stone veneer, etc. - Can be broom finished, ground and polished - Can have colorants or stains added - Patching and re-drilling anchor holes - Underwater Patching of holes	Vertical Application Feather Thin to 4”+ deep. Horizontal Application Minimum of 1/8” to 4”+ Deep, No Feathering*.	Troweled Finish Ground Finish Polished Finish Broom Finish Scratch Coat Topped with an Overlay	- No Primer Required - No Water Curing after application - Can be Applied 4”+ Thick Without Cracking - Can be Applied Vertically, Horizontally or Over Head - Can be applied Feather Thin Vertically - Sets in 15 to 30 Minutes - Dries a Light Concrete Gray color - Gets Warm, Not Hot, during cure, and Does Not Affect Overlays. - Can be Applied Under Water - Can be Ground and Polished

PRODUCT CAUTIONS

- *Feathered Edge On Driving or Horizontal Surfaces: You must apply CPR thicker than feather thin in areas where vehicle traffic is present or there are hard wheeled vehicles such as forklifts, as any feathered thin concrete that is 10,000+ PSI has a tendency to chip or crack in traffic situations on feathered edges. When creating a feathered edge in traffic areas, you must grind or chamfer edges to at least 1/8” to 1/4” deep, so you do not create large thin areas that are expected to support heavy traffic. Follow ASTM recommendations where you may need to grind or create depth to allow for a thicker layer of product that can support heavy traffic weights.
- Feathered edges on Vertical Surfaces, as they do not have traffic weight concerns, can feather the edges of patched or repaired area to tie product into surrounding substrate.
- CPR sets in an average 15 to 30 minutes, so do not mix too much product before testing in your environment to determine actual working time.
- Substrate must be dampened with water, no standing or pooled water, just lightly moistened.
- CPR must be installed over a stable substrate using proper preparation and installation procedures. All loose materials, or materials that are likely to come loose, must be removed from substrate before product is applied to reduce the risk of delamination.
- All expansion/cut joints in the existing substrate must be honored. Extra joints may be added as deemed necessary by the installer.
- CPR is Walkable in 30 minutes to 2 hours and Drivable in 1 to 4 Hours depending on thickness applied.
- Hard wheeled forklift type vehicle traffic must wait 24 hours and you cannot have any feathered edges when applying to a driving surface.
- Wait 2 to 6 hours before applying overlays
- Primer is not required but can be used if desired and Primer must be wet when CPR is applied over it.

PRODUCT PHYSICAL PROPERTIES

ITEM	TESTED IN ACCORDANCE WITH:	DATA CURRENTLY AVAILABLE	
Compressive Strength:	ASTM C 39	7,575 psi – 24 Hrs X,xxx psi – 3 Days X,xxx psi – 7 Days 8,160 psi – 28 Days	
Flexural Strength:	ASTM C 78	720 psi	
Adhesion:	MIL-D-3134 Para. 3.7.14 (Shear from steel plate after 96 hours)	405 psi	
Water Absorption:	ASTM C 624	3.9%	
Indentation Characteristics:	(Steadily Applied Load) MIL-D-3134, Para. 4.7.4.2.1 (2000 lbs. on 1” steel ram imposed for 30 minutes)	.94%	
Indentation Characteristics:	(Impacted Load) MIL-D-3134, Para 4.7.3 (2 lb. Steel ball dropped from 8-foot height)	0.004” indent. No loosening or cracking.	
Tensile Strength:	ASTM C190	766 psi	
Resistance to Elevated Temperatures:	MIL-D-3134, Para. 4.7.5.1	No flow or Slip	
Abrasion Resistance:	ASTM C 779	.037 in”	
Coefficient of Thermal Expansion:	ASTM C531	6.8 E-04	
Electrical Conductivity:		Dielectric	
Flammability & Smoke ASTM E84-17 NFPA 255 UL 723	Flame Spread Index.	0	
	Smoke Development Index	0	
	Flame Spread Distance	0	
	Class Rating	A	
	Fuel Contribution Rate	0	
Slip Resistance:	(Coefficient of Sliding Friction) On smooth, non-textured finish with no sealer: NOTE: Slip Resistance is more related to the type of finish and sealers used, rather than the Product itself	Dry Leather	0.43
		Dry Rubber	0.59
		Wet Leather	0.68
		Wet Rubber	0.70
See SDS Sheet for Physical Properties and Safety Information			

PRODUCT BENEFITS

One Component Mix. No Liquid Polymers to add, Just add water on Job site.	No volatile organic compound emission
Reinforced With Latest, State Of The Art Polymers.	Contributes to USGBC credits under LEED rating system.
Product is a low Portland cement use using hydraulic cement as its base to lower carbon footprint.	Abrasion and wear resistant
Application to bonding and high early compression strength.	Low maintenance costs
Warranted bondability	Wide range of textures and colors
Moisture tolerant and breathable	Water clean up

PRODUCT CLEANABILITY

In general, the more aggressive the finished surface the greater the coefficient of friction and corresponding skid resistance, the more difficult to clean. The smoother the finished texture the easier the surface is to clean, but there is a loss of skid resistant properties. Cleaning and disinfecting compounds and cleaning techniques can affect the color, gloss, texture and performance of the product. As a precautionary step, Stone Edge Surfaces recommends that the end-user test their cleaning and disinfecting compounds on a small non-conspicuous area before use. Follow sealer manufacturer recommendations for maintenance and cleaning. Slip resistance is greatly affected by the sealers and texture used. Follow sealer manufacturer recommendations for slip resistance and prevention.

PRODUCT COVERAGE

Stone Edge Surfaces 50# Bag Mix Coverage Chart												Stone Edge Surfaces 20# Pail Coverage Chart											
CPR+ Concrete Patch & Repair Coverage sqft @												CPR+ Concrete Patch & Repair Coverage sqft @											
# of BAGS	1/32" Thick	1/16" Thick	1/8" Thick	3/16" Thick	1/4" Thick	3/8" Thick	1/2" Thick	3/4" Thick	1" Thick	1.5" Thick	2" Thick	# of PAILS	1/32" Thick	1/16" Thick	1/8" Thick	3/16" Thick	1/4" Thick	3/8" Thick	1/2" Thick	3/4" Thick	1" Thick	1.5" Thick	2" Thick
1	180	90	48	36	24	16	12	8	6	4	3	1	72	36	19	14	10	6	5	3	2	2	1

PRODUCT SHELF LIFE

If properly stored, the expected shelf life is 6 to 12 months. However, it is recommended that product be used as soon as possible after delivery. Rotate stock to use oldest inventory first. Store under roof and keep dry.

PRODUCT LIMITED WARRANTY

Limited Warranty: Stone Edge Surfaces, a division of Turley International Resources, LLC., (further known as manufacturer), products are warranted to be free of manufacturers defect in material and formulation for 90 days (the warranty period) from the date of purchase from manufacturer, when applied per manufacturer's instructions, and as provided specifically in the terms and conditions herein. TERMS: Upon verification of factory defect, manufacturer reserve the right, at its sole discretion, to replace the product purchased or refund the purchase price paid to the manufacturer. The refund amount will be based on the



TECHNICAL DATA SHEET

CPR—Concrete Patch and Repair

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Supersedes: All Previous TDS

most current product pricing at the time warranty coverage is approved. For Products to be deemed warrantable, they must be inspected and warranty approved by an authorized manufacturer representative. This Limited Warranty does not cover, nor is manufacturer responsible for, any project costs or delays, and no remedies will be made for loss and/or usage of fuel, labor, demolition, haul away, clean up, service, travel, transport, reapplication, parts, or any other costs in excess of the purchase price of the products paid to the manufacturer or use of resources resulting from a failure of a warrantable product. Warranty also does not cover products that have been modified, altered, improper mixing not in accordance with manufacturers guidelines or instructions, misused or used in a way not recommended by manufacturer, used after shelf life expiration, acts of God, adverse environmental conditions beyond manufacturers control, inadequate contractor skill level or quality of contractor workmanship, fading over time, improper prep of application area, chemical damage, unstable, cracking or shifting substrate causing product failure. Product replacement or refund of product purchase price from manufacturer are manufacturer's sole obligations under this limited warranty.