

EUCO SOLUTIONS FOR CONCRETE REPAIR

Concrete repair can be organized into a variety of different categories based on repair strategy. Basically, these can be classified as structural, non-structural, cosmetic or joint repairs. Generally, there are two broad application or placement methods for any type of concrete repair. Typically, each type takes place as either a horizontal or a vertical/overhead application.

Selecting the proper material for concrete repairs can be difficult. There are so many considerations and each application must be analyzed based on the current conditions and what type and severity of exposure or service conditions are anticipated. Refer to the product charts for help in making the proper selection.

At times, either a horizontal or vertical/ overhead repair may require special considerations, such as improved adhesion, protection from corrosion, or application of a subsequent coating.

The Euclid Chemical Company manufactures a complete and comprehensive line of user-friendly concrete repair products that will fit the unique needs of your next indoor or outdoor project. The products, including coatings, bonding agents, corrosion inhibitors, sealants, adhesives, and cure and seals are complementary, enabling a system approach for concrete repair.

VERTICAL SURFACES

Patch and Repair

Cementitious Form and Pour/Pump

Eucocrete 4 – high performance repair material with extended working time is designed for any size indoor or outdoor, form and pour project.

Eucocrete Supreme 4 – polymer modified and user friendly, with an extended working time and integral corrosion inhibitor. Just add water to this one part rugged, form and pour repair mortar.

Tamms Form and Pour ♣ – shrinkage compensated concrete repair mortar, containing a corrosion inhibitor that incorporates smaller aggregate and can be placed at 3/4" to 3".

Cementitious Trowelable

<u>Eucopatch</u> – one component, easy-to-use, fast setting patch and repair mortar recommended for use on new concrete and existing masonry surfaces.

Tammscrete – one component, polymer modified cementitious finishing material used for achieving a smooth finish on precast, poured in place, tilt-up or other unfinished or damaged concrete surfaces.

<u>Verticoat</u> – versatile, two component, polymer modified cementitious mortar sets rapidly to allow quick, easy repairs.

Verticoat Supreme ♣ – tough, polymer modified, one component, easy to use cement based repair product formulated with a corrosion inhibitor, designed specifically for high performance and difficult to reach vertical and overhead applications.

Epoxy Trowelable

Aquaseal Gel – Two part epoxy protective coating designed for underwater applications on concrete and masonry surfaces.

Duralcrete Gel ♣ – a low odor, 100% solids epoxy compound with a non-sag, paste consistency.

VER

This syn

Flexolith Summer Grade (Gel) – 100% solids, low modulus, moisture insensitive epoxy binder for use in applications where stress relief and resistance to mechanical and thermal movements are required.

Sprayable

Eucoshot 4 – one component, silica fume modified, shotcrete repair product designed for application by dry shotcrete method (gunite) for interior or exterior repairs.

Tamms Spray Mortar 4 – sprayable mortar with fiber reinforcement and a corrosion inhibitor designed for low pressure application or hand troweled concrete repairs.

Rapid Set

Form and Pour

VersaSpeed 4 – Versatile, cementitious materials that can be placed in thicknesses ranging from 1/4" to 6" and can be coated with an epoxy coating in 4 hours.

Trowelable

Speed Crete Red Line – fast setting patching material may be "shaved" to desired shape and is designed to reach initial set in 8-10 minutes, final set within 20 minutes.

Speed Crete PM – ready-to-use, polymer modified, cement-based concrete and masonry patching compound requiring only potable water for mixing.

<u>Speed Plug</u> – quick setting hydraulic cement used to instantly stop running water or seepage leaks in masonry or concrete.

Speed Crete Blue Line – fast setting, underwater cement-based patching material designed for use without forming at a non-slump consistency.

Ероху

<u>Eucopoxy Injection Resin</u> – a 100% reactive, high modulus, moisture insensitive adhesive for numerous injection and sealing needs.

VERTICAL SURFACE CHART

This symbol A indicates product can contribute points toward the LEED certification of a building.

	PLACEMENT CATEGORY	PATCH AND REPAIR										SPRAYABLE			SPECIALTY				
	SPECIFICATION TYPE		CEMENTITIOUS FORM AND POUR/PUMP CEMENTITIOUS TROWELABLE						EP	OXY TROWELA	BLE			FORM AND POUR	TROWELABLE				EPOXY
PRODUCT NAME PRODUCT CHARACTERISTICS		Eucocrete	Eucocrete Supreme Corrosion Inhibitor, Latex and Microsilica Modified	Tamms Form and Pour	Eucopatch	Tammscrete	Verticoat	Verticoat Supreme Corrosion Inhibitor, Latex and Microsilica Modified	Aquaseal Gel 100% Solids, Underwater Applications	Duralcrete Gel Corrosion Inhibitor	Flexolith Summer Grade Gel Low Modulus, Resistance to Mechanical and Thermal Movements	Eucoshot High Pressure, Silica Fume Modified	Tamms Spray Mortar Low Pressure, Corrosion Inhibitor, Trowelable Fiber Reinforced	VersaSpeed High Early Strength, Coatable, Comes in a Longer Set Version - "LS"	Speed Crete Red Line Fast Setting, Can be "Shaved" to Desired Shape	Speed Crete PM Corrosion Inhibitor, Polymer Modified	Hydraulic Cement, Stops Running Water	Speed Crete Blue Line Underwater Patching Material, Rapid Set	Eucopoxy Injection Resin
		Microsilica Modified		Corrosion Inhibitor, Latex and Microsilica Modified	Versatile, Color Similar to Plain Concrete,	Polymer Modified, Color Controlled	Polymer Modified												Epoxy Resin for Structural Crack Repair
	Number of components	One	One	One	One	One	Two	One	Two	Two	Two	One	One	One	One	One	One	One	Two
Placement Information	Minimum Thickness, in. (mm)	1" (25.4)	1" (25.4)	3/4" (19)	1/16" (1.6)	Featheredge	1/8" (3.2)	1/4" (6.0)	1/4" (6.0)	1/4" (6.0)	1/4" (6.0)	1" (25.4)	3/8" (10.0)	1/4" (6.0)	3/4" (19)	Featheredge	3/4" (19)	3/4" (19)	N/A
	Maximum Thickness, in. (mm)	6" (152)	6" (152)	3" (76)	6" (152)	1/8-1/4" (3.2-6.0)	4" (102)	4" (102)	2" (51)	2" (51)	2" (51)	6" (152)	2" (51)	6" (152)	2" (51) extended	2.75" (70)	2"+ (51) UW	2"+ (51) UW	N/A
	Working Time, minutes*	60	120	.30	5 - 8	:20	10	30	30 - 35	:40	:40	180	30	N/A	:05	:12	:01	:03	26
	Initial Set, hr : minutes*	3:40	6:15	:35	:15	:25	:25	1:00	1:00	1:00	:45	3:40	1:00	:15 - :30	:08 - :10	:15	:01 - :03	:03 - :05	N/A
	Final Set, hr : minutes*	4:40	7:00	1:00	:30	:40	:40	2:30	4:00	4:00	4:00	4:40	2:00	:20 - :40	:20	:40	:05	:20	N/A
	OVERHEAD			~		~	>	~	~	~		~			~	~			~
	VERTICAL	~	~	~	~	~	>	~				>		~	~	~			~
ompatible w/ alvanic Anod	Sentinel GL & other es				•		~					~	~		•	~			
	Anchoring/Adhesives									✓								~	
	Bridge Repairs	•	~	~	~	~	~	-	~	✓	~	~	~	~		~		~	~
	Columns	•	-	~	~	•	>	~	~	~	~	>	~	>	~	~		~	~
	Curbs			•	~											~			
	Honeycomb Repair					>	>	~							~				
	Masonry Unit Repair				~		~	~							~	~			
Applications	Parking Structures	~	-	-	~	>	>	~	•	•	•	>	-	>		~			~
	Precast Panels				~	>							-		~				~
	Underwater Repairs								•								~		
	Walls			~			>	~			~	*	~				~	~	~
	Walls (Formed)	✓	~	~			>						~	>	~		~		
	Walls (Resurfacing)				~	~													
	Water Stop																~		

The Euclid Chemial Company



NCRETE REPAIR
MORTARS

^{*}Technical results develped under laboratory conditions at approximately mid 70 degree Fahrenheit range

HORIZONTAL SURFACES

Patch and Repair

Cementitious

<u>Tamms Thin Patch</u> – two component polymer modified, cement-based compound that is formulated for patching and repairing concrete from featheredge to 1".

Duraltop Fast Set ♣ – fast setting, two component, polymer reinforced, cementitious patch and repair mortar designed for horizontal concrete repairs.

Duraltop Flowable Mortar ♣ – two component, polymer modified, flowable, cementitious patch and repair mortar for hard-to-reach places.

Form and Pour/Pump

Eucocrete ♣ – high performance repair material with extended working time is designed for any size indoor or outdoor, form and pour project.

Eucocrete Supreme ♣ – polymer modified and user friendly, with an extended working time and integral corrosion inhibitor. Just add water to this one part, rugged, form and pour repair mortar.

Tamms Form and Pour ♣ - shrinkage compensated concrete repair mortar that contains a corrosion inhibitor, incorporates smaller aggregate, and can be placed at 3/4" to 3".

Ероху

EUCO 456S – epoxy resin system and a specially processed graded iron aggregate provides excellent adhesion, abrasion and impact resistance on floors with extra heavy duty traffic, and is ideal where exceptional strength and toughness are needed.

EUCO 456 – surfaces and resurfaces floor slabs of all types, restores worn and damaged floors to a uniform, high strength, wear resistant surface, resists many chemicals and provides superior protection against splash and spill chemical attack in combination with tough floor wear.

Overlayment

Cementitious

Concrete-Top Supreme ♣ – polymer modified deck repair mortar with integral corrosion inhibitor combats penetrating salts and water and offers superior resistance to freeze/ thaw damage for use at thicknesses of 3/8" to 2"

TammsPatch II ♣ – two component polymer reinforced, cementitious mortar and underlayment.

Thin-Top Supreme ♣ – durable water resistant overlay with a corrosion inhibitor delivers excellent resistance to freeze/thaw damage while forming a tenacious bond to concrete for toppings 1/16" to 3/8".

Ultra-Tex – thin cementitious decorative overlay that is formulated with liquid pigments and a template system to re-create the look of stone, slate or tile from an infinite array of color blends.

Underlayment

Self-Leveling

Super Flo-Top – flowable Portland cement-based underlayment that delivers, high early strength and can be pumped through standard equipment. It is recommended for uneven surfaces and has an extended open time while exhibiting excellent self-healing properties.

Flo-Top – free flowing compound specially designed for easy application over concrete floors as an unde layment for subsequent placement of floor coverings.

Rapid Set

Cementitious

Express Repair – cement-based, ready to use, patch and repair mortar with rapid strength gain.

VersaSpeed ♣ – for horizontal, trowe applications and form and pour proj ects requiring fast set, this versatile repair mortar can be open to traffic in as little as two hours from initial set and can be coated with an epoxy in as little as four hours.

Euco-Speed MP ♣ – magnesium phosphate patching mortar bonds tenaciously to properly prepared concrete and provides a durable patch which is resistant to damage from freeze/thaw cycling and deicing salt, formulated to deliver high early strength for fast turnaround projects even down to 0° F (-18° C).

Ероху

Dural Fast Set Epoxy LV ♣ - 100% solids, moisture insensitive epoxy resin compounds available in prepackaged single and dual componen cartridge kits.

Duralflex Fastpatch – 100% solids, low modulus, moisture insensitive epoxy repair kit provides excellent resistance to thermal and mechanical movement with a rapid cure that minimizes downtime.

HORIZONTAL SURFACE CHART

This symbol **★** indicates product can contribute points toward the LEED certification of a building.

PLACEM	PLACEMENT CATEGORY PATCH AND REPAIR							OVERLAYMENT				UNDERL	AYMENT	RAPID SET						
SPECIFICATION TYPE		CEMENTITIOUS			FORM AND POUR/PUMP			EPOXY		CEMENTITOUS				SELF-LEVELING		CEMENTITIOUS FORM AND POUR			EPOXY	
P	PRODUCT NAME		Duraltop Fast Set	Duraltop Flowable Mortar	Eucocrete	Eucocrete Supreme	Tamms Form and Pour	EUCO 456S	EUCO 456	Concrete-Top Supreme	TammsPatch II	Thin-Top Supreme	Ultra-Tex	Super Flo-Top	Flo-Top	Express Repair	VersaSpeed	Euco-Speed MP	Dural Fast Set Epoxy LV	Duralflex Fastpatch
PRODUCT CHARACTERISTICS		Polymer Modified	Corrosion Inhibitor, Polymer Modified	Corrosion Inhibitor, Polymer Modified	Microsilica Modified	Corrosion Inhibitor, Latex and Microsilica Modified	Corrosion Inhibitor, Latex and Microsilica Modified	High Impact & Abrasion Iron Aggregate	High Wear Resistant, Chemical Resistant	Corrosion Inhibitor, Latex and Microsilica Modified	Polymer Modified, USDA Compliant, Color Controlled	Corrosion Inhibitor, Latex and Microsilica Modified	Polymer Modified, Decorative Wear Surface	Portland Based	Wood Floor Compatible	Corrosion Inhibitor	High Early Strength, Coatable, Comes in a Longer Set Version - "LS"	Rapid Setting Magnesium Phosphate	100% Solids, High Modulus	100% Solids, Low Modulus
	Number of components	One	Two	Two	One	One	One	Two	Two	One	Two	One	Two	One	One	One	One	One	Two	Two
Placement Information	Minimum Thickness, in. (mm)	Featheredge	1/4" (6.0)	1/4" (6.0)	1" (25.4)	1" (25.4)	3/4" (19)	1/8" (3.0)	1/8" (3.0)	3/8" (10.0)	Featheredge	1/16" (1.6)	Skim	Featheredge	Featheredge	1/2" (13)	1/4" (6)	1/2" (13)	1/4" (6)	1/4" (6)
	Maximum Thickness, in. (mm)	1" (25.4) per lift	1" (25.4) per lift	1.5" (38) per lift	6" (152)	6" (152)	3" (76)	2" (50.0)	2" (51)	2" (51)	2.5 (64) extended	3/8" (10.0)	1/8" (3.0)	1" (25.4)	1" (25.4)	1.5" (38) extended	6" (152)	8" (203)	1" (25.4)	3" (76)
	Working Time, minutes *	25	15	30	60	120	.30	30 - 90	20 - 90	30	45	35	10 - 20	N/A	N/A	20	5 - 8	5	5	20 - 30
	Initial Set, hr:min. *	:30 - :50	:20	:30	3:40	6:15	:35	N/A	N/A	1:00	1:30 - 3:00	1:15	N/A	:45	1:00	:20 - :30	:23	:10	:08	3:00 - 4:00
	Final Set, hr:min *	1:00 - 2:00	:40	:60	4:40	7:00	1:00	N/A	N/A	2:30	4:00 - 5:00	3:00	N/A	1:15	1:30	1:00	:30	:18	:30	5:00
Compatible w/s Galvanic Anode	Sentinel GL and other es				•		~			~						•				
	Commercial Floors		~	~	~	~	~	~	~	~	~	~	-	~	~	✓	~	-		~
	Cracked, Spalled Concrete	~								~		~							~	
	Industrial Floors		•	~	~	>	~	•	•	~	~	*				•	~	,		~
	Loading Docks		~	•	~	~	~	~	•	~	~	~				✓	~	~	~	~
Applications	Multi-Unit Residential		•	•	~	~	~			~	~	~	~	~	~	•		~		~
-	Parking Decks		•	~	~	>	~			~	~	~				•	~	~	~	~
	Pavements, Ramps & Walkways	•			•	•	•	•	•	•	•	>	,			•	•	•	,	•
	Warehouse Floors		~	~	~	~	-	~	~	~	~	~				~	~	-	-	~

Company has served as a leading supplier to oncrete and masonry industry with over ngineered concrete admixtures and ction products marketed under the EUCON, Tamms, Dural, Speed Crete y'Di brand names. The Euclid Chemical ny's experienced field team is available port you and your projects using Euclid al solutions and products, which are ctured under the stringen ds of our ISO 9001:2000 ed quality system. For more tion, contact id Chemical Compa 321.7628, or log e web site at

For almost 100 years, The Euclid Chemical



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For additional product information refer to the product technical data sheet. *Technical results develoed under laboratory conditions at approximately mid 70 degree Fahrenheit range