US SPEC

APPLICATION GUIDE

- Grouting & Anchoring
- Restoration & Repair
- Bonding Agents & Admixtures
- Form Releases
- Sealers & Floor Treatments
- Concrete Curing

Oldcastle APG | US MIX
A CRH COMPANY

US SPEC Product Line

Grouting & Anchoring

ASTM C1107 Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)

- EG Grout
- FS Grout
- GP Grout
- HE Grout
- MP Grout
- RA Grout

PT Grouts

PTI M55.1-19 Specification for Grouting of Post-Tensioned Structures

- NA-100
- NA Grout

Restoration & Repair

ASTM C928 Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs

- 3-2-1
- Fibered Bedding Mix
- Hydraulic Cement
- Liso
- MS Gunite
- Quickset
- SC Concrete
- SLU
- STR Mortar CI
- TP Mortar
- Transpatch
- Transpatch Concrete
- V/O Patch CI

Bonding Agents & Admixtures

ASTM C1059 Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete

- Acrylcoat
- Dura
- Multi-55

Form Releases

No ASTM

- Cokote
- Ezkote Green
- TKote

Concrete Sealing & Floor Treatments

ASTM C309/AASHTO 148 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C1315 Standard Specifications for Liquid Membrane Forming Curing Compounds and Curing and Sealing Compounds

- BRS-25
- CS-25-1315
- Dense Top LR
- Hydrasheen
- Hydrasheen 30%
- Roca 1315

Concrete Curing

ASTM C309/AASHTO 148 Standard Specification for Liquid Membrane Forming Compounds for Curing Concrete

- AMS-3754
- Maxcure Resin Clear
- Maxcure Resin White
- Maxcure Wax White
- Monofilm ER
- PAMS 701 White

Miscellaneous

No ASTM

- Monofilm

Visit us Online

www.usspec.com

Product Resources

Easy to find information for all the US SPEC products including technical data sheets, safety data sheets (SDS), product calculators, dot approvals and more.

Projects

Updated project profiles detailing jobs around the country where US SPEC product were used.

Repair Center

Our repair center highlights how US SPEC products are being used in the field.

DOT & NTPEP Approvals Across the United States

Each state has its own specifications and process of evaluation. Visit our website for the most current list of approvals. NTPEP is the National Transportation Product Evaluation Program that evaluates products for use in highway and bridge construction.

ABOUT US

US SPEC is the construction chemicals division of US MIX, acquired by Oldcastle APG in 2020. Since 2000 US SPEC has manufactured concrete repair materials. US SPEC is located in Denver, CO.

US SPEC products are professionally engineered concrete repair products, tested under ASTM methods and specifications and used in a variety of applications. All US SPEC repair products are a consistent color match to existing concrete.

US SPEC
ENGINEERED CONCRETE PRODUCTS

CONTENTS

Grouting and Anchoring

AGGREGATE GROUTS

EG GROUT *High Flow, Non-Shrink, Non Corrosive Grout*	GP GROUT *High Strength, Non-Shrink, Non Corrosive Grout*	MP GROUT *High Flow, High Strength, Non-Shrink, Non Corrosive Grout*	HE GROUT *High Early Strength, Non-Shrink Grout*
USES EG Grout is ideal for a wide variety of applications: • Machinery Grouting: Machinery bases, compressors, punch presses, generators • Structural Grouting: Steel columns, precast columns, crane rails, beams • Anchoring: Guard rails, sign posts, dowels, rods, bolts, post-tension anchors	**USES** GP Grout is ideal for a wide variety of applications: • Machinery Grouting: Machinery bases, compressors, punch presses, generators • Structural Grouting: Steel columns, precast columns, crane rails, beams • Anchoring: Guard rails, sign posts, dowels, rods, bolts, post-tension anchor heads	**USES** MP Grout is ideal for a wide variety of applications: • Precision Grouting: Machinery bases, compressors, punch presses, generators • Structural Grouting: Steel columns, precast columns, crane rails, beams • Underwater Grouting: Form and pump applications • Anchoring: Guard rails, sign posts, dowels, rods, bolts • Pumping Applications: Excellent flowability	**USES** HE Grout is ideal for a wide variety of applications: • Precision Grouting: Machinery bases, compressors, punch presses, generators • Structural Grouting: Steel columns, precast columns, crane rails, beams • Anchoring: Guard rails, sign posts, dowels, rods, bolts • Pumping Applications: Excellent flowability
BENEFITS • Versatile: Suitable for plastic and fluid consistencies • Strength: Attains high compressive strengths at specified water ratios • Thixotropic: High flow restored by agitation • Non-Corrosive: Will not rust • Security: Maximum, uniform bearing support • Performance: Joins, supports and anchors	**BENEFITS** • Workability: Meets standards through a wide range of consistencies • Thixotropic: High flow restored by agitation • Non-Corrosive: Will not rust • Cost Effective: Extendable • Strength: Attains high compressive strengths at specified water ratios • Economical: Good performance and low cost • Performance: Joins, supports and anchors • Hardens free of bleeding or segregation	**BENEFITS** • Versatile: Plastic or fluid consistency • Cost effective: Extendable • Strength: Attains high compressive strengths at specified water ratios • Thixotropic: High flow restored by agitation • Non-Corrosive: Will not rust • Security: Maximum, uniform bearing support • Performance: Joins, supports and anchors • Hardens free of bleeding or segregation	**BENEFITS** • Cost effective: Extendable • Strength: Attains high compressive strengths at specified water ratio • Thixotropic: High flow restored by agitation • Security: Maximum, uniform bearing support • Non-Metallic/Non-Corrosive: Will not rust • Hardens free of bleeding or segregation
STANDARDS ASTM C1107 CRD C621	**STANDARDS** ASTM C1107 CRD C621	**STANDARDS** ASTM C1107 CRD C621	**STANDARDS** ASTM C1107 CRD C621
COMPRESSIVE STR. ***(fluid - plastic)*** 2,000 - 3,300 psi (1 day) 7,000 - 7,500 psi (28 day)	**COMPRESSIVE STR.** ***(fluid - plastic)*** 2,200 - 3,700 psi (1 day) 7,500 - 9,000 psi (28 day)	**COMPRESSIVE STR.** ***(fluid - plastic)*** 3,700 - 4,800 psi (1 day) 8,000 - 10,000 psi (28 day)	**COMPRESSIVE STR.** 4,800 psi (1 day) 12,500 psi (28 day)
APPLICATION THICKNESS 1-3" Neat Up to 8" Extended	**APPLICATION THICKNESS** 1-3" Neat Up to 8" Extended	**APPLICATION THICKNESS** 1-3" Neat Up to 8" Extended	**APPLICATION THICKNESS** 1-3" Neat Up to 8" Extended
RATE OF SET *(plastic-fluid)* Working: :50 - 3:00 Initial: 1:20 - 4:00 Final: 4:00 - 6:00	**RATE OF SET *(plastic-fluid)*** Working: :45 - 1:45 Initial: 2:00 - 4:00 Final: 3:30 - 5:30	**RATE OF SET *(plastic-fluid)*** Working: :40 - 2:30 Initial: 1:09 - 3:30 Final: 2:15 - 5:30	**RATE OF SET** Working: :30 Initial: 1:00 Final: 2:00
CONSISTENCY Plastic - Fluid	**CONSISTENCY** Plastic - Fluid	**CONSISTENCY** Plastic - Fluid	**CONSISTENCY** Flowable
COVERAGE/YIELD 0.43 ft^3	**COVERAGE/YIELD** 0.43 ft^3	**COVERAGE/YIELD** 0.43 ft^3	**COVERAGE/YIELD** 0.43 ft^3

NON-AGGREGATE GROUTS

FS GROUT *High Flow, Fast Setting, Non-Shrink Grout*	RA GROUT *High Flow, Non-Aggregate, Non-Shrink Anchoring Grout*	NA GROUT *High Flow, Non-Aggregate, Non-Shrink PT Grout*	NA-100 *High Flow, Bleed Resistant, Non-Aggregate, Non-Shrink PT Grout*
USES FS Grout is ideal for a wide variety of applications that require a short turnaround time: • Precision Grouting: Machinery bases, compressors, punch presses, generators • Structural Grouting: Steel columns, precast columns, crane rails, beams • Anchoring: Guard rails, sign posts, dowels, rods, bolts	**USES** RA Grout is ideal for a wide variety of applications: • Grouting of tight clearances between precast segments, beams, columns, fissures and cracks in rocks • Anchor bolts, soil nails, rock and ground anchors, dowels and rods where sanded grouts restrict complete encapsulation • Pumping applications and maximizing anchorages	**USES** NA Grout is ideal for a wide variety of applications: • Grouting of tight clearances between precast segments, beams and columns in contact with stressed steel tendons or cables • Pumping applications in areas around tensioned cables and tendons to encapsulate and maximize anchorage	**USES** NA-100 is ideal for a wide variety of applications that: • Vertical and horizontal post-tension grouting of stressed steel to provide complete encapsulation and protection from corrosion • Grouting of tight clearances between precast segments, beams and columns in contact with stressed steel tendons or cables
BENEFITS • Versatile: Suitable for plastic and fluid consistencies • Fast Setting: Achieves high early strengths • Strength: Attains high compressive strengths at specified water ratios • Thixotropic: High flow restored by agitation • Non-Corrosive: Will not rust • Security: Maximum, uniform bearing support • Performance: Joins, supports and anchors • Low temperature placement	**BENEFITS** • Extreme fluidity: Can be pumped into areas that are virtually inaccessible with standard non-shrink grouts • Working time: Extended for maximum pumping range • Strength: Attains high compressive strengths at specified water ratios • Thixotropic: High flow restored by agitation • Corrosion Protection: Encapsulates tendons, bolts or bars to protect from corrosion	**BENEFITS** • Extreme fluidity: Can be pumped into areas that are virtually inaccessible with standard C1107 non-shrink grouts • Working time: Extended for maximum pumping range • Strength: Attains high compressive strengths at specified water ratios • Thixotropic: High flow restored by agitation • Corrosion Protection: Encapsulates tendons, bolts or bars to protect from corrosion • Bleed Characteristics: Less than 2% bleed when tested at 30 psi per ASTM C1741 via PTI M55.1-19, Section 4.4.6.2	**BENEFITS** • Extreme fluidity: Can be pumped into areas that are virtually inaccessible with standard C1107 non-shrink grouts • Working time: Extended for maximum pumping range • Strength: Attains high compressive strengths at specified water ratios • Thixotropic: High flow restored by agitation • Corrosion Protection: Encapsulates tendons, bolts or bars to protect from corrosion • Zero Bleed: When tested to 100 psi per ASTM C1741 via PTI M55.1-t19, Section 4.4.6.2
STANDARDS ASTM C1107 CRD C621	**STANDARDS** ASTM C1107 CRD C621	**STANDARDS** PTI M55.1-19	**STANDARDS** PTI M55.1-19
COMPRESSIVE STR. ***(fluid - plastic)*** 3,000 - 4,000 psi (1 day) 8,000 - 10,000 psi (28 day)	**COMPRESSIVE STR.** 4,500 psi (1 day) 12,000 psi (28 day)	**COMPRESSIVE STR.** 7,000 psi (7 day) 10,000 psi (28 day)	**COMPRESSIVE STR.** 7,000 psi (7 day) 10,000 psi (28 day)
APPLICATION THICKNESS 1-3" Neat Up to 8" Extended	**APPLICATION THICKNESS** NA	**APPLICATION THICKNESS** NA	**APPLICATION THICKNESS** NA
RATE OF SET *(plastic-fluid)* Working: :10 - :30 Initial: :15 - :45 Final: :25 - 1:00	**RATE OF SET** Working: 2:30 Set: 8:00	**RATE OF SET** Working: 2:30 Set: 8:00	**RATE OF SET** Working: 4:00 Set: 8:30
CONSISTENCY Flowable - Fluid	**CONSISTENCY** Fluid	**CONSISTENCY** Fluid	**CONSISTENCY** Fluid
COVERAGE/YIELD 0.43 ft^3	**COVERAGE/YIELD** 0.53 ft^3	**COVERAGE/YIELD** 0.53 ft^3	**COVERAGE/YIELD** 0.53 ft^3

Restoration and Repair Products

HORIZONTAL SAWCUT			FORM & POUR	HORIZONTAL RESURFACING	
SC CONCRETE *Rapid Setting Concrete*	**TRANSPATCH CONCRETE** *Rapid Setting Concrete*	**TRANSPATCH** *Rapid Setting Repair Mortar*	**STR MORTAR CI** *Flowable, Shrinkage Compensated Structural Repair Mortar*	**TP MORTAR** *Polymer-Modified, Feather-to-1" Repair Mortar*	**SLU** *Cementitious Self-Leveling Floor Underlayment*
USES SC Concrete is ideal for a wide variety of concrete repairs: • Highways • Bridge decks • Pavements • Airport runways • Warehouse floors • Industrial plants	**USES** Transpatch Concrete is ideal for a wide variety of concrete repairs: • Highways • Bridge decks • Pavements • Airport runways • Warehouse floors • Industrial plants	**USES** Transpatch is ideal for a wide variety of concrete repairs: • Highways • Bridge decks • Pavements • Airport runways • Warehouse floors • Industrial plants	**USES** STR Mortar CI is ideal for a wide variety of formed concrete repairs: • Vertical form and cast-in-place flatwork • Tunnels • Grouted pre-placed aggregate • Piers, docks and dams • Form and pump • Fully contained form applications	**USES** TP Mortar is ideal for a wide variety of concrete surface repairs: • Precast concrete products, tilt-up panels, curbs, steps, columns, sidewalks, drive-ways, concrete walls • Patch repair mortar for spalled and older concrete • Fill in pits, voids and defects in concrete and masonry	**USES** SLU is ideal for creating a level surface in interior applications: • Offices, schools and other areas that will require carpet, tile, coatings or wearing surfaces • Warehouse and light industrial renovation projects • Rough or uneven surfaces that need leveling
BENEFITS • Resilient: Withstands freeze/thaw cycles and corrosive elements • Rapid Set: High early strength, open to traffic in as little as 1 hour • Performance: Excellent compressive strengths	**BENEFITS** • Resilient: Withstands freeze/thaw cycles and corrosive elements • Rapid Set: High early strength, open to traffic in as little as 1 hour • Performance: Excellent compressive strengths	**BENEFITS** • Resilient: Withstands freeze/thaw cycles and corrosive elements • Rapid Set: High early strength, open to traffic in as little as 1 hour • Performance: Excellent compressive strengths	**BENEFITS** • Resistant: Withstands freeze/thaw damage and de-icer scaling • Workability: Slow setting, excellent pumpability • Performance: Excellent compressive, bond and flexural strengths • Low Permeability: Reduces the potential for corrosion • Corrosion Inhibitor: Effectively reduces corrosion rate of steel reinforcement	**BENEFITS** • Thermal expansion similar to concrete • Color: Consistent color match for concrete • Interior and exterior applications • Dry polymer modified: Just add water • Non-corrosive: Will not rust	**BENEFITS** • Ease of Use: Eliminates troweling • Cost Effective: Saves hand-applied labor • Versatile: Rehabilitates, repairs and resurfaces • Adhesion: Polymer modified for increased adhesion to concrete surfaces
STANDARDS ASTM C928 R3	**STANDARDS** ASTM C928 R3	**STANDARDS** ASTM C928 R3	**STANDARDS** ASTM C928 R2	**STANDARDS** NA	**STANDARDS** NA
COMPRESSIVE STR. 3,000 psi (3 hr) 6,000 psi (28 day)	**COMPRESSIVE STR.** 3,100 psi (3 hr) 6,500 psi (28 day)	**COMPRESSIVE STR.** 3,500 psi (3 hr) 7,000 psi (28 day)	**COMPRESSIVE STR.** 2,500 psi (3 hr) 9,000 psi (28 day)	**COMPRESSIVE STR.** 2,500 psi (1 day) 5,000 psi (28 day)	**COMPRESSIVE STR.** 2,000 psi (1 day) 3,000 psi (28 day)
APPLICATION THICKNESS 1" - 8"	**APPLICATION THICKNESS** 1" - 8"	**APPLICATION THICKNESS** Featheredge - 3" Up to 8" Extended	**APPLICATION THICKNESS** 1" - 3" Up to 8" Extended	**APPLICATION THICKNESS** Featheredge - 1" Up to 4" Extended	**APPLICATION THICKNESS** Featheredge - 1" Up to 2" Extended
RATE OF SET Working: :10 Initial: :20 Final: :30	**RATE OF SET** Working: :12 Initial: :25 Final: :45	**RATE OF SET** Working: :30 Initial: :40 Final: :55	**RATE OF SET** Working: :40 Initial: 1:00 Final: 1:45	**RATE OF SET** Working: :30 Initial: :50 Final: 1:20	**RATE OF SET** Self Leveling: :20 Working Time: :30 Initial: :50 Final: 1:30
SURFACE OPEN TO USE 1 Hour	**SURFACE OPEN TO USE** 1 Hour	**SURFACE OPEN TO USE** 1 Hour	**SURFACE OPEN TO USE** 3 Hours	**SURFACE OPEN TO USE** 10-12 hours	**SURFACE OPEN TO USE** Install floor coverings in 24 hours
COVERAGE/YIELD 0.50 ft^3	**COVERAGE/YIELD** 0.50 ft^3	**COVERAGE/YIELD** 0.43 ft^3	**COVERAGE/YIELD** 0.43 ft^3	**COVERAGE/YIELD** 0.43 ft^3	**COVERAGE/YIELD** 0.43 ft^3

VERTICAL RESURFACING

VOIDS & DEFECTS

3-2-1 *Cementitious Resurfacing Coating*	LISO *Cementitious Smoothing Patch*	HYDRAULIC CEMENT *Rapid-Setting Hydraulic Patch*	MS GUNITE *Microsilica Reinforced Gunite*	QUICKSET *Rapid Setting Repair Patch*	V/O PATCH CI *One-Component, Polymer-Modified Repair Patch*
USES 3-2-1 is ideal for a wide variety of concrete repairs: • Resurfacing, rubbing and finishing of precast and tilt-up concrete products • Cementitious rub for defective concrete formwork • Refinish old, vertical, concrete surfaces • Bridge beams, wing walls, abutments, columns and structural surface repair • Fill in pits, voids and defects in concrete, masonry, plaster, sheetrock or wood	**USES** Liso is ideal for a wide variety of concrete repairs: • Resurfacing, rubbing and finishing of precast and tilt-up concrete products • Cementitious rub for defective concrete formwork • Refinish old, vertical, concrete surfaces • Fill in pits, voids, chipped edges and defects in concrete and masonry	**USES** Hydraulic Cement is ideal for applications to stop the seepage of water through cracks and faults in concrete and masonry structures: • Dams, basements, swimming pools, manholes • Cisterns, water tanks, underground electric vaults • Elevator pits, mines, tunnels, sewers, culverts • Water pipe joints • Any situation requiring a fast, durable long lasting repair	**USES** MS Gunite is ideal for use on: • Rock stabilization projects • Pool construction • Parking decks • Tunnels • Dam repair • Retaining walls • Bridge structures • Water treatment plants • Piers and docks	**USES** Quickset is ideal for a wide variety of concrete surface repairs: • Precast concrete products • Tilt-up panels • Curbs • Steps • Columns • Sidewalks	**USES** V/O Patch CI is ideal for a wide variety of vertical and overhead concrete repairs: • Parking structures • Bridge structures • Docks and piers • Tunnels • Vertical precast concrete products • Tilt-up panels • Columns • Concrete walls
BENEFITS • Durable: Contains no gypsum • Color: Consistent color match for concrete • Resistant: Withstands wearing • Adhesion: Polymer modified for increased adhesion so paints and coatings bond easily • Smooth: Maintains moisture for easy finishing • Non-corrosive and non-metallic	**BENEFITS** • Color: Consistent light gray color match for concrete • Adhesion: Polymer-modified for increased adhesion so paints and coatings bond easily • Smooth: Maintains moisture for easy finishing • Self-Curing: Paint or seal as soon as dry	**BENEFITS** • Durable: Provides lifetime repairs • Color: Consistent color match for concrete • Resistant: Withstands freeze/thaw cycles • Fast Setting: Sets in 3 to 5 minutes • Performance: Instantly stops seepage • Vertical and overhead applications	**BENEFITS** • Durable: Provides long lasting repairs • Vertical and overhead applications • Resistant: Withstands freeze/thaw cycles • Impermeable: Improved resistance to chloride intrusion • Performance: Reduced rebound allows for thicker layers in one lift • Quality: Reduces sagging and slouching • Non-corrosive, non-metallic	**BENEFITS** • Resistant: Withstands freeze/thaw cycles • Versatile: Horizontal, vertical and overhead • Performance: Excellent flexural, tensile and compressive strengths	**BENEFITS** • Resistant: Withstands freeze/thaw cycles • Versatile: Horizontal, vertical and overhead • Performance: Excellent flexural, tensile and compressive strengths • Corrosion Inhibitor: Effectively reduces corrosion rate of steel reinforcement • Low Permeability: Reduces potential for corrosion
STANDARDS NA	**STANDARDS** NA	**STANDARDS** NA	**STANDARDS** NA	**STANDARDS** ASTM C928 R3	**STANDARDS** ASTM C928 R2
COMPRESSIVE STR. 1,100 psi (1 day) 4,000 psi (28 day)	**COMPRESSIVE STR.** 800 psi (1 day) 1,500 psi (28 day)	**COMPRESSIVE STR.** 2,000 psi (1 day) 5,500 psi (28 day)	**COMPRESSIVE STR.** 1,800 psi (1 day) 5,200 psi (28 day)	**COMPRESSIVE STR.** 3,000 psi (3 hr) 7,000 psi (28 day)	**COMPRESSIVE STR.** 2,000 psi (3 hr) 5,500 psi (28 day)
APPLICATION THICKNESS Featheredge - 1/8”	**APPLICATION THICKNESS** Featheredge - 1/2”	**APPLICATION THICKNESS** NA	**APPLICATION THICKNESS** NA	**APPLICATION THICKNESS** 1/8” - 2”	**APPLICATION THICKNESS** 1/8” - 2”
RATE OF SET Working: 1:30 Initial: 3:00 Final: 5:00	**RATE OF SET** Working: 1:20 Initial: 4:00 Final: 6:25	**RATE OF SET** Working: :01 Initial: :03 Final: :05	**RATE OF SET** NA	**RATE OF SET** Working: :24 Initial: :37 Final: :50	**RATE OF SET** Working Time: :20 Initial: :30 Final: :45
COVERAGE/YIELD 0.43 ft³	**COVERAGE/YIELD** 0.43 ft³	**COVERAGE/YIELD** 0.43 ft³	**COVERAGE/YIELD** 0.43 ft³ 6 ft² at 1/2” thickness	**COVERAGE/YIELD** 0.43 ft³	**COVERAGE/YIELD** 0.43 ft³

Bonding Agents and Admixtures; Form Releases

BONDING AGENTS & ADMIXTURES

FORM RELEASES

ACRYLCOAT *Acrylic Latex Bonding Agent and Admixture*	DURA *Bonding Agent and Admixture*	MULTI-55 *One Time Re-Emulsifiable Bonding Agent*	COKOTE *Multi-Use, Reactive Form Release*	EZKOTE GREEN *Multi-Use, Non-Petroleum, Reactive Form Release*	TKOTE *Multi-Use, Reactive Form Release*
USES Acrylcoat is ideal for bonding new concrete to new concrete or new concrete to old concrete and can be used with cementitious compounds: • Patching materials • Grouts • Masonry coatings • Stucco coatings • Masonry mortars	**USES** Dura is ideal for bonding new concrete to new concrete or new concrete to old concrete and can be used with cementitious compounds: • Patching materials • Grouts • Masonry coatings • Stuccos coatings • Masonry mortars	**USES** Multi-55 is an ideal primer for use with US SPEC SLU or other cementitious compounds: • Portland or gypsum cement underlayments • Patches • Mortars • Coatings • Will bond to concrete, masonry and brick	**USES** COkote can be used for a variety of applications: • Forms: Wood, BB plyform, aluminum, plastic and steel • Protect Equipment: Buckets, hoists, paving machines, and aluminum and steel windows	**USES** Ezkote Green can be used for a variety of applications: • Forms: Wood, BB plyform, aluminum, plastic and steel • Protect Equipment: Buckets, hoists, paving machines, and aluminum and steel windows	**USES** TKote can be used for a variety of applications: • Forms: Wood, BB plyform, aluminum, plastic and steel • Protect Equipment: Buckets, hoists, paving machines, and aluminum and steel windows
BENEFITS • Durable: Increase tensile strength, flexural strength and chemical resistance over non-modified mortars • Curing: Increase water retention properties • Excellent Bonding Agent: Superior adhesion properties • Freeze/Thaw Resistance: Increased resistance to dramatic climatic changes	**BENEFITS** • Durable: Increase tensile strength, flexural strength and chemical resistance over non-modified mortars • Curing: Increase water retention properties • Excellent Bonding Agent: Superior adhesion properties • Freeze/Thaw Resistance: Increased resistance to dramatic climatic changes	**BENEFITS** • Versatile: Bridges gap between acrylic and PVA products • Excellent Bonding Agent: Superior adhesion properties • Can be used when there is a delay of up to seven days prior to application of top coat • Water-Based: Low odor, VOC compliant and easy clean-up • Consistent: Strict Quality Control testing and standards	**BENEFITS** • Contributes to LEED EQ Credit 4.2 • Clean: Cuts stripping time • Pre-Blended: Ready to use • Non-Staining: Will not discolor concrete • Performance: Increases life span of wood forms by waterproofing and protecting; reduces maintenance of metal forms by acting as a rust inhibitor • Efficient: Excellent coverage rate • Cost Effective: Reduces clean up time • Easy Application: Brush, spray or roller • Long lasting form life • Economical: One coat coverage	**BENEFITS** • Contributes to LEED EQ Credit 4.2 and MR Credit 6.0 • Clean: Cuts stripping time • Organic: No petroleum, low odor • Non-Staining: Will not discolor concrete • Performance: Increases life span of wood forms by waterproofing and protecting; reduces maintenance of metal forms by acting as a rust inhibitor • Efficient: Excellent coverage rate • Cost Effective: Reduces clean up time • Easy Application: Brush, spray or roller • Long lasting form life • Economical: One coat coverage	**BENEFITS** • Contributes to LEED EQ Credit 4.2 • Clean: Cuts stripping time • Non-Staining: Will not discolor concrete • Performance: Waterproofs wood and protects metal • Efficient: Excellent coverage rate • Cost Effective: Reduces clean up time • Easy Application: Brush, spray or roller • Long lasting form life • Economical: One coat coverage
STANDARDS ASTM C1059, Type I and II	**STANDARDS** ASTM C1059, Type I and II	**STANDARDS** ASTM C1059 Type I and II	**STANDARDS** Corps of Engineers Specification CW03101, Section 2.1.2	**STANDARDS** Corps of Engineers Specification CW03101, Section 2.1.2.	**STANDARDS** Corps of Engineers Specification CW03101, Section 2.1.2.
COVERAGE 300 ft²/gal when diluted 1:1	**COVERAGE** 300 ft²/gal when diluted 1:1	**COVERAGE** Primer: 500 - 600 ft²/gal when diluted 2:1 Bonding Agent: 300 ft²/gal when diluted 1:1	**COVERAGE** Aluminum, plastic, steel: 2000 ft²/gal Medium density plywood: 1500 ft²/gal BB grade plyform: 1000 ft²/gal Dimensional lumber: 1000 ft²/gal	**COVERAGE** Aluminum, plastic, steel: 2000 ft²/gal Medium density plywood: 1500 ft²/gal BB grade plyform: 1000 ft²/gal Dimensional lumber: 1000 ft²/gal	**COVERAGE** Aluminum, plastic, steel: 2000 ft²/gal Medium density plywood: 1500 ft²/gal BB grade plyform: 1000 ft²/gal Dimensional lumber: 1000 ft²/gal
VOC <10 g/L	**VOC** <10 g/L	**VOC** <10 g/L	**VOC** <100 g/L	**VOC** <100 g/L	**VOC** <100 g/L
DRY TIME 25 min at 70°F	**DRY TIME** 20 min at 70°F	**DRY TIME** 30 min at 70°F	**DRY TIME** NA	**DRY TIME** NA	**DRY TIME** NA

Sealers and Floor Treatments

WATER BASED CURES & SEALERS			SOLVENT BASED		FLOOR HARDENER
HYDRASHEEN *Water-Based Acrylic Cure and Seal*	**HYDRASHEEN 30%** *Water-Based Acrylic Cure and Seal*	**ROCA 1315** *Water-Based, Natural Finish, Anti-Blushing Cure and Seal*	**CS-25-1315** *UV Stable, Exempt Solvent-Based Acrylic Cure & Seal (25% Solids)*	**BRS-25** *High Gloss, Exempt Solvent Based Sealer (25% Solids)*	**DENSE TOP LR** *Light Reflective, Non-Metallic, Quartz Aggregate Floor Hardener*
USES Hydrasheen is ideal for curing and sealing applications: • Walls • Commercial floors • Basements • Garages • Hospitals • Industrial floors • Pavements • Parking decks	**USES** Hydrasheen 30% is ideal for curing and sealing applications: • Walls • Commercial floors • Basements • Garages • Hospitals • Industrial floors • Pavements • Parking decks	**USES** Roca 1315 is ideal for curing and sealing applications: • Concrete • Masonry • Stone • Brick • Stucco	**USES** CS-25-1315 is ideal for curing and sealing applications: • Walls • Commercial floors • Basements • Garages • Hospitals • Industrial floors • Pavements • Parking decks	**USES** BRS-25 is ideal for curing and sealing applications: • Exposed aggregate • Precast concrete • Mortar, stone and rock face • Decorative concrete • Tilt-up	**USES** Dense Top LR is designed for application over interior and exterior floors subject to impact and abrasion from forklift traffic or heavy usage: • Cold storage facilities, distribution facilities, warehouses, water treatment facilities and other high traffic areas • Restaurants • Service garages • Shopping malls • Hospitals • Driveways • Theaters
BENEFITS • Contributes to LEED EQ Credit 4.2 • Water-Based: Low odor • Clean-up with water • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength compared to untreated concrete	**BENEFITS** • Contributes to LEED EQ Credit 4.2 • Water-Based: Low odor • Ultra-Violet Stable: Non-yellowing • Clean-up with water • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength compared to untreated concrete	**BENEFITS** • Contributes to LEED EQ Credit 4.2 • Water-Based: Low odor • Anti-Blushing Performance • Fast Drying • Ultra-Violet Stable: Non-yellowing • Clean-up with water • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength compared to untreated concrete	**BENEFITS** • Exempt Solvent-Based: Non-freezable • Ultra-Violet Stable: Non-yellowing • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength compared to untreated concrete	**BENEFITS** • Exempt Solvent-Based: Non-freezable • Ultra-Violet Stable: Non-yellowing • Resists mildew and surface staining • Inhibits efflorescence • Inhibits attack by airborne contaminants	**BENEFITS** • Density: Three times that of normal concrete • Hardens: Increases abrasion resistance of normal concrete by >25% • Impermeable: Improved resistance to oils, grease, antifreeze and many other chemicals • Non-rusting: Can be sued in exterior, moist or wet environments • Quality: Precision blending of specialty graded components • Consistent: Strict Quality Control testing and standards
STANDARDS ASTM C309 Type 1, Class A and B	**STANDARDS** ASTM C309 Type 1, Class A and B	**STANDARDS** ASTM C309 Type 1, Class A and B; ASTM C1315 Type 1, Class A	**STANDARDS** ASTM C309 Type 1, Class A and B; ASTM C1315 Type 1, Class A	**STANDARDS** ASTM C309 Type 1, Class A and B; ASTM C1315 Type 1, Class A	**STANDARDS** NA
COVERAGE Curing: 200–300 ft²/gal Sealing: 200–400 ft²/gal Second Coat: 400–600 ft²/gal	**COVERAGE** Curing: 200–300 ft²/gal Sealing: 200–400 ft²/gal Second Coat: 400–600 ft²/gal	**COVERAGE** Curing: 200–300 ft²/gal Sealing: 200–400 ft²/gal Second Coat: 400–600 ft²/gal	**COVERAGE** Curing: 300–400 ft²/gal Sealing: 300–400 ft²/gal Second Coat: 400–600 ft²/gal	**COVERAGE** Exposed Aggregate: 200–400 ft²/gal Concrete: 200–400 ft²/gal Brick: 200–400 ft²/gal Plaster, Stone, Tile: 200–400 ft²/gal Second Coat: 400–600 ft²/gal	**COVERAGE** Light Duty: 75 lb (34.0 kg) per 100 ft² Medium Duty: 100 lb (45.4 kg) per 100 ft² Heavy Duty: 125 lb (56.7 kg) per 100 ft² Light Reflective: 150 lb (68.0 kg) per 100 ft²
VOC <100 g/L	**VOC** <100 g/L	**VOC** <100 g/L	**VOC** <350 g/L	**VOC** <350 g/L	**VOC** NA
DRY TIME 2-3 hrs at 70°F	**DRY TIME** 2-3 hrs at 70°F	**DRY TIME** 2-3 hrs at 70°F	**DRY TIME** 1 hr at 70°F	**DRY TIME** 1 hr at 70°F	**DRY TIME** NA
APPEARANCE Low Gloss	**APPEARANCE** Medium Gloss	**APPEARANCE** Natural Finish	**APPEARANCE** Medium Gloss	**APPEARANCE** High Gloss	

Concrete Curing; Miscellaneous

CLEAR CURES	WHITE PIGMENTED CURES				MISCELLANEOUS
MAXCURE RESIN CLEAR *Water-Emulsion, Dissipating Resin Curing Compound*	**MAXCURE WAX WHITE** *Water-Emulsion, Wax-Based Curing Compound*	**MAXCURE RESIN WHITE** *Water-Emulsion, Dissipating Resin Curing Compound*	**PAMS 701 WHITE** *Water-Emulsion, AMS Resin Curing Compound*	**AMS 3754 WHITE** *Water-Emulsion, AMS Resin Curing Compound*	**MONOFILM ER** *Evaporation Control, Monomolecular Film*
USES Maxcure Resin Clear is ideal for curing horizontal and vertical concrete surfaces: • Walls • Floors • Structures • Wing walls • Barriers • Abutments • Retaining walls • Bridge decks • Piers • Sidewalks • Curbs and gutters	**USES** Maxcure Wax White is ideal for curing concrete that will be exposed to the sun: • Bridge decks • Piers • Highways • Pavement slabs • Airport runways • Parking decks • Sidewalks • Ramps • Curbs and gutters	**USES** Maxcure Resin White is ideal for curing concrete that will be exposed to the sun: • Bridge decks • Piers • Highways • Pavement slabs • Airport runways • Parking decks • Sidewalks • Ramps • Curbs and gutters	**USES** PAMS 701 White is ideal for curing concrete that will be exposed to the sun: • Bridge decks • Piers • Highways • Pavement slabs • Airport runways • Parking decks • Sidewalks • Ramps • Curbs and gutters	**USES** AMS 3754 White is ideal for curing concrete that will be exposed to the sun: • Bridge decks • Piers • Highways • Pavement slabs • Airport runways • Parking decks • Sidewalks • Ramps • Curbs and gutters	**USES** Monofilm ER is ideal for use when the concrete surface moisture loss is in excess of the bleed rate of the concrete: • Pouring concrete flatwork • Floors • Highways • Pavements • Toppings • Parking decks • Dry shake flooring • Modified concrete
BENEFITS • Contributes to LEED EQ Credit 4.2 • Water-Based: Low odor • Clean-up with water • Approved by many state DOTs • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete Strength: Increases compressive and tensile strength over untreated concrete • Will not permanently discolor colored concrete	**BENEFITS** • Contributes to LEED EQ Credit 4.2 • Water-Based: Low odor • Clean-up with water • Approved by many state DOTs • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength over untreated concrete • Will not permanently discolor colored concrete	**BENEFITS** • Contributes to LEED EQ Credit 4.2 • Water-Based: Low odor • Clean-up with water • Approved by many state DOTs • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength over untreated concrete • Will not permanently discolor colored concrete	**BENEFITS** • Water-Based: Low odor • Clean-up with water • Approved by many state DOTs • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength over untreated concrete • Will not permanently discolor colored concrete	**BENEFITS** • Water-Based: Low odor • Clean-up with water • Approved by many state DOTs • Minimizes thermal cracking, dusting and defects • Performance: Produces hard, dense concrete • Strength: Increases compressive and tensile strength over untreated concrete • Will not permanently discolor colored concrete	**BENEFITS** • Reduces surface moisture loss to improve concrete quality during high wind, low humidity, direct sunlight and heated indoor conditions. • Labor Savings: Less finishers needed • Can aid in eliminating shrinkage cracking, checking and crusting of freshly poured concrete • Lower water ratio in mix designs • Eliminates the need for additional mix water as an aid for moisture loss during the finishing process • Will not affect the adhesion of curing compounds or subsequent coatings
STANDARDS ASTM C309 Type 1, Class A and B; AASHTO M148	**STANDARDS** ASTM C309 Type 2, Class A; AASHTO M148, CRD 300-90	**STANDARDS** ASTM C309 Type 2, Class A and B; AASHTO M148	**STANDARDS** ASTM C309 Type 2, Class A and B; AASHTO M148; Wyoming DOT 701	**STANDARDS** ASTM C309 Type 2, Class A and B; Minnesota DOT 3754	**STANDARDS** NA
COVERAGE Approx 200 ft²/gal	**COVERAGE** Approx 200 ft²/gal	**COVERAGE** Approx 200 ft²/gal	**COVERAGE** Approx 200 ft²/gal	**COVERAGE** Approx 200 ft²/gal	**COVERAGE** Concentrated: 200–400 ft²/gal Diluted: 2,000–4,000 ft²/gal
VOC <100 g/L	**VOC** <100 g/L	**VOC** <100 g/L	**VOC** <200 g/L	**VOC** <200 g/L	**VOC** <10 g/L
DRY TIME 2 hrs at 70°F	**DRY TIME** 1 hr at 70°F	**DRY TIME** 2 hrs at 70°F	**DRY TIME** 1.5 hrs at 70°F	**DRY TIME** 1.5 hrs at 70°F	**DRY TIME** NA
APPEARANCE Clear	**APPEARANCE** White	**APPEARANCE** White	**APPEARANCE** White	**APPEARANCE** White	**APPEARANCE** NA

Concrete Repair Guide

Use this guide to identify the surface profile of your concrete. CSP 1 being the indicator for a nearly smooth floor and CSP 10 indicative of an extremely rough floor. The range of variation will depend on strength, composition, aggregate and finish. CSP 1-4 not recommended with cement based products.

Ideal Applications
- Sealers 0-3 mils

Desired Finish Profile: 27 mils
- Wire brush
- Acid etch

Methods
Tennant scrubber with wire heads or chemical stripper

Ideal Applications
- Sealers 0-3 mils
- Thin films 4-10 mils

Desired Finish Profile: 32 mils
- Diamond grind

Methods
Grinder with 30 grit metal-bond tooling

Ideal Applications
- Thin films 4-10 mils
- High-build coatings 10-40 mils

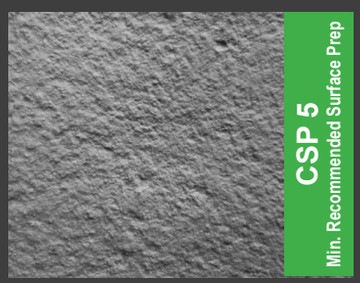
Desired Finish Profile: 38 mils
- Fine erase
- Diamond shave
- Light blast

Methods
Grinder with PCDs or shot blaster

Ideal Applications
- High-build coatings 10-40 mils
- Self-leveling toppings 50 mils - 1/8”

Desired Finish Profile: 50 mils
- Med erase
- Very fine strip/scrape
- Light/med blast

Methods
Floor grinder with bush hammers,



Ideal Applications
- High-build coatings 10-40 mils
- Self leveling toppings 50 mils - 1/8”
- Polymer overlays 1/8” - 1/4”
- Concrete overlays & repair materials 1/4” +

Desired Finish Profile: 66 mils
- Coarse erase
- Fine scarify
- Med blast
- Fine strip/scrape

Methods
Floor grinder with bush hammers, shot blaster or scarifier

Ideal Applications
- Self-leveling toppings 50 mils - 1/8”
- Polymer overlays 1/8” - 1/4”
- Concrete overlays & repair materials 1/4” +

Desired Finish Profile: 125 mils
- Med scarify
- Med-heavy blast
- Med strip/scrape

Methods
Shot blaster or scarifier

Ideal Applications
- Polymer overlays 1/8” - 1/4”
- Concrete overlays & repair materials 1/4” +

Desired Finish Profile: 175 mils
- Med-coarse scarify
- Med-heavy blast
- Med-coarse strip/scrape

Methods
Shot blaster or scarifier

Ideal Applications
- Polymer overlays 1/8” - 1/4”

Desired Finish Profile: 210 mils
- Coarse scarify
- Coarse scabble
- Fine plane

Methods
Scarifier or scabbler

Ideal Applications
- Polymer overlays 1/8” - 1/4”

Desired Finish Profile: 214 mils
- Very coarse scarify
- Medium plane

Methods
Scarifier

Ideal Applications
- Concrete overlays and repair materials 1/4” +

Desired Finish Profile: >250 mils
- Coarse plane

Methods
Scarifier

*Please review the US SPEC data sheets for detailed surface preparation instructions. They are available online at www.usspec.com.

US SPEC
112 South Santa Fe Drive
Denver, CO 80223
303-778-7227

www.usspec.com

2024