US SPEC DOT and Infrastructure Products
Products Used in the Construction and Repair of America’s Infrastructure

APPLICATIONS
• Concrete Paving
• Bridge Construction
• Post-Tension Structures
• Sound Walls and Median Barriers
• Bridge and Roadway Repair
• Manholes and Concrete Pipe
• Curb and Gutter
• Soil Nails and Wall Stabilization
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US SPEC is the construction chemicals division of US MIX, newly acquired by Oldcastle APG. Since 2000 US SPEC has manufactured concrete repair materials with locations in Denver, CO and Fontana, CA. 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.
Concrete Paving
US SPEC Curing Compounds

Spray applied compounds that form a membrane film on the surface of concrete that optimize water retention for maximum concrete hydration and compressive strength. The white pigment is used to increase reflectance properties. Reflectance reduces surface temperature, thus minimizing vapor pressure and moisture loss.

MAXCURE WAX WHITE
Water-Emulsion, Wax-Based Curing Compound
Standards: ASTM C309 Type II, Class A, AASHTO M148

MAXCURE RESIN WHITE
Water-Emulsion, Dissipating Resin Curing Compound
Standards: ASTM C309 Type II, Class A & B, AASHTO M148

AMS 3754 WHITE
Water-Emulsion, AMS Resin Curing Compound
Standards: ASTM C309 Type II, Class A & B, AASHTO M148

PAMS 701 WHITE
Water-Emulsion, AMS Resin Curing Compound
Standards: ASTM C309 Type II, Class A & B, AASHTO M148
NTPEP: Report #CCC-2018-02-008

MONOFILM ER
Concentrated monomolecular film designed to reduce rapid moisture loss from the surface prior to the curing application. Concrete will remain easier to finish and exhibit a higher resistance to shrinkage cracking and carbonation than untreated concrete.
Grouts used for post-tension ducts to provide complete encapsulation and protection from corrosion. These products provide maximum flow, shrinkage compensation and extended working times in aggregate-free formulations where clearances are minimal. They are non-metallic and non-corrosive.

**NA GROUT**
*High Flow, Non-Aggregate, Non-Shrink PT Grout*

**Standards:** PTI M55.1-12

**NA-100**
*High Flow, Bleed Resistant, Non-Aggregate, Non-Shrink PT Grout*

**Standards:** PTI M55.1-12
Bridge Construction
US SPEC Non-Shrink Grouts

Grouts used for setting bridge components. These products are designed to provide high flexural and compressive strength performance from plastic to fluid consistencies. They are non-metallic, non-shrink, non-corrosive and contain no added chlorides. They harden free of bleeding, segregation and shrinkage.

**MP GROUT**
High Flow, High Strength, Non-Shrink, Non-Corrosive Grout
*Standards*: ASTM C1107

**GP Grout**
High Strength, Non-Shrink, Non-Corrosive Grout
*Standards*: ASTM C1107

**HE GROUT**
High Early Strength, Non-Shrink Grout
*Standards*: ASTM C1107

**FS GROUT**
High Flow, Fast Setting, Non-Shrink Grout
*Standards*: ASTM C1107
Grouts used for post-tension ducts to provide complete encapsulation and protection from corrosion. These products provide maximum flow, shrinkage compensation and extended working times in aggregate-free formulations where clearances are minimal. They are non-metallic and non-corrosive.

**NA GROUT**
*High Flow, Non-Aggregate, Non-Shrink PT Grout*
**Standards:** PTI M55.1-12

**NA-100**
*High Flow, Bleed Resistant, Non-Aggregate, Non-Shrink PT Grout*
**Standards:** PTI M55.1-12
Patching and smoothing materials for thin surface repairs, coating and restoration applications. These products exhibit superior workability by maintaining a smooth, creamy consistency for easy troweling, rubbing or spreading. They have superior bond strength and contain no gypsum.

**3-2-1**
Textured, Cementitious Resurfacing Coating

**LISO**
Untextured, Cementitious Smoothing Patch

**AQUACOAT**
Cementitious Water-Resistant Coating

**Associated Products (Curing Compounds):**

**MAXCURE WAX WHITE**
Water-Emulsion, Wax-Based Curing Compound

*Standards:* ASTM C309 Type II, Class A, AASHTO M148

**MAXCURE RESIN WHITE**
Water-Emulsion, Dissipating Resin Curing Compound

*Standards:* ASTM C309 Type II, Class A & B, AASHTO M148
Rapid setting, rapid hardening patching materials that exhibit excellent flexural properties, shear bond strength and compressive strength. These products offer superior resistance to deicing salts, petroleum products and other chemicals prevalent on concrete roadways. They will not rust or corrode reinforcing steel under moist, humid conditions.

**Horizontal Sawcut:**

**TRANSPATCH**
Rapid Setting Repair Mortar
*Standards: ASTM C928 R3*

**TRANSPATCH EXT**
Rapid Setting Repair Mortar
*Standards: ASTM C928 R2*

**TRANSPATCH CONCRETE**
Rapid Setting Concrete
*Standards: ASTM C928 R3*
*NTPEP: Report #RSCP-2017-01-001*

**POLYPATCH FR**
Polymer-Modified, Fiber Reinforced Repair Mortar
*Standards: ASTM C928 R3*
Bridge and Roadway Repair
US SPEC Horizontal Sawcut, Trowel Applied and Form and Pour Repair Products

Rapid setting, rapid hardening patching materials that exhibit excellent flexural properties, shear bond strength and compressive strength. These products offer superior resistance to deicing salts, petroleum products and other chemicals prevalent on concrete roadways. They will not rust or corrode reinforcing steel under moist, humid conditions.

Trowel Applied:
R3
*High Performance, Rapid Setting Repair Patch*
**Standards:** ASTM C928 R3

V/O Patch CI
*One-Component, Polymer Modified Repair Patch with Integral Corrosion Inhibitor*
**Standards:** ASTM C928 R2

Form and Pour:
STR MORTAR CI
*Flowable, Shrinkage Compensated Structural Repair Mortar with Integral Corrosion Inhibitor*
**Standards:** ASTM C928 R2
Manholes and Concrete Pipe
US SPEC General Purpose M&C Products

Gopatch manhole repair – Los Angeles, CA

Hydraulic Cement concrete repair – Anaheim, CA

Quickset concrete pipe repair – Los Angeles, CA

GOPATCH
Rapid Setting Repair Patch

QUICKSET
Rapid Setting Repair Patch
Standards: ASTM C928 R2

HYDRAULIC CEMENT
Rapid-Setting Hydraulic Patch
Curb and Gutter
US SPEC General Purpose C&G Products

**QUICKSET**
Rapid Setting Repair Patch
*Standards:* ASTM C928 R2

**COKOTE**
Multi-Use, Reactive Form Release

**CS-25-1315**
UV Stable, Exempt Solvent-Based Acrylic Cure & Seal (25% Solids)
*Standards:* ASTM C309 Type 1, Class A and B; AASHTO M148; ASTM C1315 Type 1, Class A

**MAXCURE WAX WHITE**
Water-Emulsion, Wax-Based Curing Compound
*Standards:* ASTM C309 Type II, Class A, AASHTO M148

**MONOFILM ER**
Concentrated monomolecular film designed to reduce rapid moisture loss from the surface prior to the curing application. Concrete will remain easier to finish and exhibit a higher resistance to shrinkage cracking and carbonation than untreated concrete.

Quickset repairs on a loading dock – Denver, CO

Maxcure Wax White curing city sidewalks and curbs – Denver, CO

Quickset curb repairs – Canon City, CO
Soil nails are geotechnical elements used to support structures such as warehouses, bridges and roadways. They are also used to stabilize slopes and weak soils. Soil nails are installed to restrain a structure’s movement and hold it firmly in place on load-bearing soil or hold soil firmly in place after excavation. US SPEC’s RA Grout is preferred over cement and water for it’s extended working time and rapid strength gain. It meets ASTM C1107 which means it will have a small amount of expansion when pumped into holes and will create a firm hold. RA Grout can be pumped extended distances, often up mountainsides.

**RA GROUT**

*High Flow, Non-Aggregate, Non-Shrink Anchoring Grout*

**Standards:** ASTM C1107
US SPEC DOT Approvals

DOT Approvals

US SPEC actively pursues DOT approvals across the country. Each state has its own requirements. Please contact US SPEC for current DOT requirements and approvals in your state.

States with DOT approvals
States with approval on a job-by-job basis
DOT Approval List
As of May 2020

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<tr>
<th>STATE</th>
<th>Grouts</th>
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<tr>
<td>IDAHO</td>
<td>MP Grout, Polypatch FR, Transpatch, NA Grout, V/O Patch CI, Transpatch Concrete, Transpatch EXT, H2, RA Grout, GP Grout, HE Grout, EG Grout, R3, Quickset, STR Mortar CI</td>
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<tr>
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<td>STR Mortar CI, Transpatch Concrete</td>
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<tr>
<td>COLORADO</td>
<td>GP Grout, MP Grout, H2, STR Mortar CI, Transpatch Concrete, Transpatch, V/O Patch CI, Acrylcoat, Maxcure Resin Clear, Maxcure Resin Clear 1-D, Maxcure Wax White, Maxcure Wax White, RA Grout, Dura, Quickset</td>
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<tr>
<td>KANSAS</td>
<td>GP Grout, MP Grout, HE Grout, Transpatch Concrete, PAMS 701 White</td>
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<td>KENTUCKY</td>
<td>RA Grout, RWB Liberty Grout</td>
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<tr>
<td>LOUISIANA</td>
<td>NA Grout, MP Grout, Slickote, GP Grout, Transpatch Concrete</td>
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<tr>
<td>MONTANA</td>
<td>Maxcure Resin White, Maxcure Resin Clear w/ Dye</td>
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<td>MEXICO</td>
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<td>NEVADA</td>
<td>STR Mortar CI, Transpatch Concrete, AMS 3754 White, Maxcure Resin Clear, Maxcure Wax White, Transpatch, Quicksset, R3, Transpatch EXT</td>
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<td>GP Grout, MP Grout, Polypatch FR, Transpatch, Ezkote Green, Slickote, NA Grout, COkote, NA-100, Transpatch Concrete, Dura, Multi-55, Acrylcoat, Monofilm, HE Grout, EG Grout</td>
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<td>UTAH</td>
<td>GP Grout, MP Grout, NA Grout, Quickset, EG Grout</td>
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<td>AMS 3754 White*, MP Grout</td>
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<td>WYOMING</td>
<td>Polypatch FR, Transpatch, PAMS 701 White, AMS 3754 White, CS-25-1315, CS-30-1315, Transpatch Concrete, STR Mortar CI, MP Grout, Maxcure Wax White</td>
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*Approved per batch
US SPEC designs products to meet various standards and specifications set forth by AASHTO, ASTM, PTI and AASHTO’s NTPEP Program.

AASHTO is a federal, nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. It represents all transportation modes including air, highways, public transportation, active transportation, rail and water. Its primary goal is to foster the development, operation and maintenance of an integrated national transportation system.

AASHTO works to educate the public and key decision makers about the critical role that transportation plays in securing a good quality of life and sound economy for our nation. AASHTO serves as a liaison between state departments of transportation and the Federal government. AASHTO is an international leader in setting technical standards for all phases of highway system development. Standards are issued for design, construction of highways and bridges, materials and many other technical areas.

AASHTO M148 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete:
- Maxcure Wax White
- Maxcure Resin White
- AMS 3754
- PAMS 701 White
- CS-25-1315

ASTM International

Committed to serving global societal needs, ASTM International positively impacts public health and safety, consumer confidence and overall quality of life. We integrate consensus standards – developed with our international membership of volunteer technical experts – and innovative services to improve lives... helping our world work better.

Organized in 1898, ASTM International is one of the world’s largest international standards developing organizations. Defined and set by us, ASTM standards improve the lives of millions every day. Combined with our innovative business services, they enhance performance and help everyone have confidence in the things they buy and use – from the toy in a child’s hand to the aircraft overhead. By understanding commercial needs and consumer priorities, we touch every part of everyday life.

ASTM C309 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete:
- Maxcure Wax White
- Maxcure Resin White
- AMS 3754
- PAMS 701 White
- CS-25-1315

ASTM C928 Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs:
- Transpatch
- Transpatch Concrete
- Transpatch EXT
- Polypatch FR
- R3
- V/O Patch CI
- Quickset
- STR Mortar CI

- GP Grout
- MP Grout
- RA Grout
- HE Grout
- FS Grout
Standards, Specifications and Evaluations

Post-Tensioning Institute (PTI)

Post-tensioning is a method of reinforcing (strengthening) concrete or other materials with high-strength steel strands or bars, typically referred to as tendons. PTI envisions a future in which post-tensioning is the first choice for reinforcing all structures. PTI will promote and advance the post-tensioning industry through education and technical leadership.

The PTI M55.1-12 guide specification provides minimum requirements for the selection design and installation of cementitious grouts and ducts for steel post-tensioned systems used in concrete construction.

PTI M55.1-12 Specification for Grouting of Post-Tensioned Structures:
- NA Grout
- NA-100

National Transportation Products Evaluation Program (NTPEP)

AASHTO’s NTPEP is a national evaluation and auditing program for manufactured products. It assists states with their coordinated evaluations of a wide array of highway safety products, maintenance products and construction materials.

Product evaluation provides single source testing of common products used by DOTs. Facility auditing provides quality management system reviews and on-site inspection of plants. These products must be manufactured to AASHTO standards.

NTPEP is a public-private partnership that prevents duplication of efforts among the 52 State Departments of Transportation.

US SPEC NTPEP Evaluated Products:
- Transpatch Concrete – NTPEP Report #RSCP-2017-01-001
- PAMS 701 White – NTPEP Report #CCC-2018-02-008
Website

Resource for Everything US SPEC

Product Resources
Easy to find technical information, data sheet and SDS downloads, product calculators, dot approvals and more

Repair Center
Every month we highlight how US SPEC products are being used in the field.

Projects
Updated project profiles detailing jobs around the country where US SPEC products are used.
## US SPEC Product Line

### GROUTING & ANCHORING
ASTM C1107 Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Non-Shrink)

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<th>Anchoring Cement</th>
<th>HE Grout</th>
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<td>MP Grout</td>
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<tr>
<td>FS Grout</td>
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<td>GP Grout</td>
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### RESTORATION & REPAIR
ASTM C928 Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repairs

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### PT GROUTS
PTI M55.1-12 Specification for Grouting of Post-Tensioned Structures

| NA-100         | NA - Grout |

### BONDING AGENTS & ADMIXTURES
ASTM C1059 Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete

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### FORM RELEASE
No ASTM

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### CONCRETE CURING
ASTM C309/AASHTO M148 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete

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<td>Monofilm ER</td>
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<td>Maxcure Resin White</td>
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### CONCRETE SEALING & FLOOR TREATMENTS
ASTM C1315 Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing & Sealing

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<td>Hydrasheen</td>
<td>Roca 1315</td>
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<td>Hydrasheen 30%</td>
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