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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About Us

US SPEC

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.

Oldcastle APG
US MIX

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 - Pikes Peak Lot at Denver International Airport, Denver, CO

Maxcure Wax White - Pikes Peak Lot at Denver International Airport, Denver, CO

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.

Bridge Construction

US SPEC Post-Tension Grouts

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 – Nalley Valley Interchange, Tacoma, WA

NA Grout and NA-100 – Dresbach Bridge over the Mississippi River, La Crosse, WI

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

NA Grout – Pine Lane Bridge, Parker, CO

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 being pumped onto a precast bridge deck – Casper, WY

MP Grout being pumped onto a precast bridge deck – Casper, WY

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

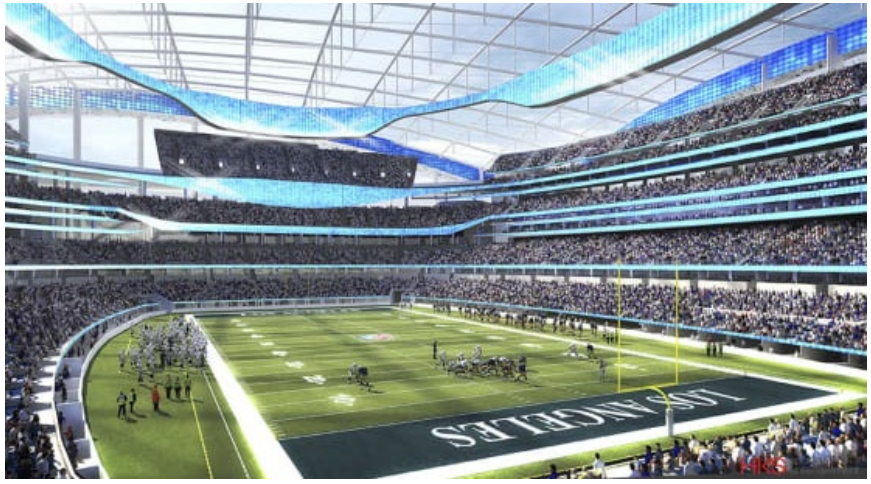
MP Grout used to grout precast columns – Vail, CO

Post-Tension Structures

US SPEC Post-Tension Grouts

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 and NA-100 - LA RAMS Stadium, Los Angeles, CA



NA Grout and NA-100 - LA RAMS Stadium, Los Angeles, CA

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

Post Tension Water Tank - California

Sound Walls and Median Barriers

US SPEC Vertical Resurfacing Products

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.

Median barriers where curing compounds would be used

3-2-1
Textured, Cementitious Resurfacing Coating

LISO
Untextured, Cementitious Smoothing Patch

AQUACOAT
Cementitious Water-Resistant Coating

3-2-1 aesthetic repair – Denver, CO

Liso cosmetic repairs – Lone Tree, CO

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

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.

Transpatch Concrete bridge deck repair – Bowling Green, OH

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

Transpatch road repairs – Utah DOT

Transpatch Concrete sawcut repair – Bowling Green, OH

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.

STR Mortar CI – I70 over Clear Creek, CO

V/O Patch CI concrete repairs – Littleton, CO

STR Mortar CI used under Everett Pier – Everett, WA

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

Quickset concrete pipe repair – Los Angeles, CA

Hydraulic Cement concrete repair – Anaheim, 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 repairs on a loading dock – Denver, CO

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.

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

Quickset curb repairs – Canon City, CO

Soil Nails and Wall Stabilization

US SPEC Rock Anchoring

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.

Landslide repair using soil nails

RA GROUT

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

Standards: ASTM C1107

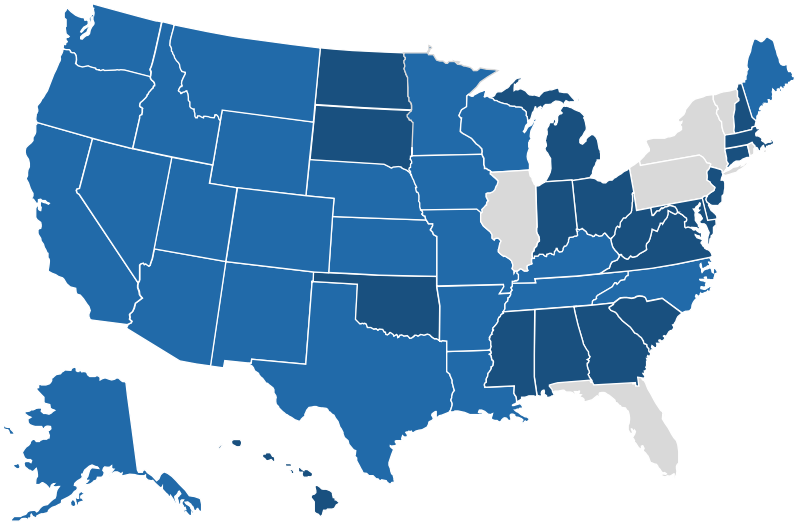
Foundation repair using soil nails

US SPEC DOT Approvals

US SPEC

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

ALASKA
RA Grout

ARIZONA
GP Grout
MP Grout
Transpatch
Maxcure Wax White*
Transpatch Concrete
STR Mortar CI
Polypatch FR
V/O Patch CI
H2
Quickset
R3
Transpatch EXT

ARKANSAS
Darragh Non-Shrink Grout
Maxcure Wax White

CALIFORNIA
HUB All Patch
CT Wax White*
Transpatch Concrete
STR Mortar CI

COLORADO
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 Resin White
Maxcure Wax White
RA Grout
Dura
Quickset
R3
Transpatch EXT
HE Grout
EG Grout

IDAHO
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

INDIANA
Transpatch Concrete

IOWA
MP Grout
GP Grout
NA Grout
NA-100
RA Grout
Transpatch Concrete

KANSAS
GP Grout
MP Grout
HE Grout
Transpatch Concrete
PAMS 701 White

KENTUCKY
RA Grout
RWB Liberty Grout
RWB Patriot Grout
Transpatch Concrete

LOUISIANA
NA Grout
MP Grout
Slickote
GP Grout
Transpatch Concrete

MAINE
RA Grout

MINNESOTA
GP Grout
MP Grout
Polypatch FR
Transpatch
AMS 3754 Clear*
AMS 3754 White*
Transpatch Concrete
STR Mortar CI
Transpatch EXT
HE Grout
EG Grout

MISSOURI
MP Grout
GP Grout
Transpatch Concrete

MONTANA
Maxcure Resin White
Maxcure Resin Clear w/ Dye

NEBRASKA
Polypatch FR
Transpatch
Maxcure Wax White*
MP Grout
GP Grout
RA Grout
STR Mortar CI
Transpatch Concrete
V/O Patch CI
Quickset
TP Mortar
H2
R3
Transpatch EXT
HE Grout
EG Grout

NEVADA
STR Mortar CI
Transpatch Concrete
AMS 3754 White
Maxcure Resin Clear
Maxcure Wax White
Transpatch
Quickset
R3
Transpatch EXT

NEW MEXICO
GP Grout
MP Grout
Polypatch FR
STR Mortar CI
Transpatch
Ezkote Green
Slickote
NA Grout
COkote
NA-100
Transpatch Conrete
Dura
Multi-55
Acrylcoat
Monofilm
HE Grout
EG Grout
3-2-1
RA Grout

NORTH CAROLINA
NA Grout
RA Grout
NA-100

OHIO
RWB Liberty Grout
RWB Patriot Grout
Transpatch Concrete

OREGON
GP Grout
MP Grout
Quickset
STR Mortar CI
Transpatch
Acrylcoat
NA Grout
TP Mortar
Polypatch FR
Transpatch Concrete
R3
Transpatch EXT
RA Grout
Dura
NA-100
V/O Patch CI
HE Grout
EG Grout

TENNESSEE
NA Grout
NA-100
Transpatch Concrete

TEXAS
NA Grout
Transpatch Concrete
Monofilm ER
NA-100
STR Mortar CI

UTAH
GP Grout
MP Grout
RA Grout
Transpatch Concrete
Transpatch
Roca 1315
R3
HE Grout
Maxcure Resin Clear 1-D
EG Grout
STR Mortar CI
ICS Precision Grout

WASHINGTON
GP Grout
MP Grout
NA Grout
Quickset
EG Grout

WISCONSIN
AMS 3754 White*
MP Grout
GP Grout

WYOMING
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

Approved per batch

Standards, Specifications and Evaluations

US SPEC designs products to meet various standards and specifications set forth by AASHTO, ASTM, PTI and AASHTO's NTPEP Program.

American Association of State Highway Transportation Officials (AASHTO)

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

ASTM C1107 Standard Specification for Dry, Hydraulic-Cement Grout (Non-Shrink):

- 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.

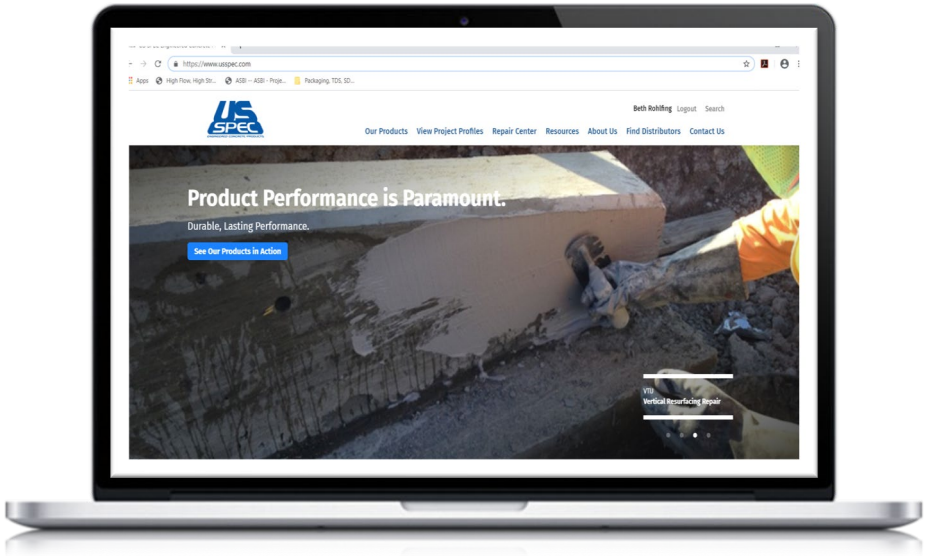
NTPEP is a public-private partnership that prevents duplication of efforts among the 52 State Departments of Transportation.

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)

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

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

- Acrylcoat
- Dura
- Multi-55

RESTORATION & REPAIR

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

- 3-2-1
- Aquacoat
- Dense Top
- Dense Top LR
- Fibered Bedding Mix
- Flow-Top HD
- Gopatch
- H2
- Hydraulic Cement
- Liso
- MS Gunnite
- Multipurpose Thinset
- Mortar
- Polypatch FR
- Quickset
- R3
- SLU
- STR Mortar CI
- TP Mortar
- Transpatch
- Transpatch Concrete
- Transpatch EXT
- V/O Patch CI
- VTU Resurfacer

FORM RELEASE

No ASTM

- Cokote
- Ezkote Green
- Slickote

CONCRETE CURING

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

- AMS-3754 White
- Maxcure Resin Clear
- Maxcure Resin Clear 1-D
- Maxcure Resin White
- Maxcure Wax White
- Monofilm ER
- PAMS 701 White

CONCRETE SEALING & FLOOR TREATMENTS

ASTM C1315 Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing & Sealing

- BRS-25
- CS-25-1315
- CS-30-1315
- Hydrasheen
- Hydrasheen 30%
- Permalith
- Permasil
- PWR
- Roca 1315

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