

Illinois Department of Transportation
Bureau of Materials
QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS

April 17, 2020

This list supersedes the February 22, 2019 list.

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)
(Effective: November 1, 2008, Revised: January 1, 2017)

Standard Specifications for Road and Bridge Construction, Section 606 (Adopted: April 1, 2016)

Bridge Deck Microsilica Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Material Code 43515

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

The materials listed on pages 1 and 2 of this qualified product list are for use only with the:

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)*

Special Provision for Bridge Deck Microsilica Concrete Overlay (GBSP)**

Special Provision for Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP)**

Special Provision for Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP)**

ABC Polymer Industries/[FiberForce](#)
[545 Elm Street](#)
Helena, AL 35080
Phone: [724-475-1177](#)
Attn: Mr. R.C. Zellers Producer/Supplier
No. 6638-01
[www.abcpolymerindustries.com](#)
"FIBERFORCE 650" (1.5" length only)
Dosage Rate: 4.5 lb / yd³

"FIBERFORCE 1000 HP"
(2.0" length only)
Dosage Rate: 4 lb / yd³

BASF Corporation
(as manufactured by FabPro Polymers, Producer No. 6981-01)
23700 Chagrin Boulevard
Cleveland, OH 44122
Phone: 216-839-7500
Attn: Mr. [Richard Hubbard](#)
Supplier No. 4179-04
[www.masterbuilders.com](#)
"MASTERFIBER MAC MATRIX"
(2.1" length only)
Dosage Rate: 3 lb / yd³

The Euclid Chemical Company
19218 Redwood Road
Cleveland, OH 44110-2799
Phone: 800-321-7628
216-692-8305
Attn: Mr. Brian Lewis
Producer/Supplier No. 614-01
[www.euclidchemical.com](#)
"TUF-STRAND SF" (2.0" length only)
Dosage Rate: 4 lb / yd³

FORTA Corporation
(as manufactured by Bridon Cordage, Producer No. 6995-01)
100 Forta Drive
Grove City, PA 16127
Phone: 724-458-5221
800-245-0306
Attn: Mr. [Gerald Welch](#)
Supplier No. 6996-01
[www.forta-ferro.com](#)
"FORTA-FERRO ONE"
(2.25" length only)
Dosage Rate: 4 lb / yd³

List continued to the next page.

*Dosage rate as specified herein.

**Dosage rate as specified in special provision.

Illinois Department of Transportation
Bureau of Materials
QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS

April 17, 2020

This list supersedes the February 22, 2019 list.

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)
(Effective: November 1, 2008, Revised: January 1, 2017)

Standard Specifications for Road and Bridge Construction, Section 606 (Adopted: April 1, 2016)

Bridge Deck Microsilica Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Material Code 43515

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

The materials listed on pages 1 and 2 of this qualified product list are for use only with the:

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34).*

Special Provision for Bridge Deck Microsilica Concrete Overlay (GBSP)**

Special Provision for Bridge Deck High Reactivity Metakaolin (HRM) Concrete Overlay (GBSP)**

Special Provision for Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP)**

GCP Applied Technologies

(as manufactured by FabPro Polymers, Producer No.
6981-01)

62 Whittemore Drive

Cambridge, MA 02140-1692

Phone: 617-498-4816

Attn: [Mr. Robert Hoopes](#)

Supplier No. 767-01

www.graceconstruction.com

"STRUX 90/40" (1.55" length only)

Dosage Rate: 4 lb / yd³

*Dosage rate as specified herein.

**Dosage rate as specified in special provision

Illinois Department of Transportation
Bureau of Materials
QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS

April 17, 2020

This list supersedes the February 22, 2019 list.

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)
(Effective: November 1, 2008, Revised: January 1, 2017)

Standard Specifications for Road and Bridge Construction, Section 606 (Adopted: April 1, 2016)

Bridge Deck Microsilica Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Material Code 43523

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

The materials listed on pages 3 and 4 of this qualified product list are for use only with the:
Standard Specifications for Road and Bridge Construction, Section 606. (Adopted April 1, 2016)

ABC Polymer Industries/[FiberForce](#)

545 Elm Street
Helena, AL 35080
Phone: [724-699-7753](tel:724-699-7753)
[724-457-1177](tel:724-457-1177)

Attn: Mr. R.C. Zellers
Producer/Supplier No. 6638-01
www.abcpolymerindustries.com
"FIBERFORCE 150"

BASF Corporation
(as manufactured by FabPro Polymers, Producer No. 6981-01)

23700 Chagrin Boulevard
Cleveland, OH 44122
Phone: 216-839-7500

Attn: Mr. [Richard Hubbard](#)
Supplier No. 4179-04
www.basf-admixtures.com

"MASTERFIBER M35"
"MASTERFIBER M70"
"MASTERFIBER M100"
"MASTERFIBER F70" (0.75 inch length only)
"MASTERFIBER F100" (0.75 inch length only)

ICF Concrete Additives

(as manufactured by William Barnet and Son, Producer No. 6909-01)

150 Mt. Bethel Road, Building 2
Warren, NJ 07059

Phone: 201-482-8032
Attn: Mr. Michael Cook
Supplier No. 6982-01

www.icfmercantile.com

"ICF-AC 50" (12 mm(1/2") and 19mm (3/4") length only)

ICF Concrete Additives

(as manufactured by RadiciFibras, Producer No. 6897-01)

150 Mt. Bethel Road, Building 2
Warren, NJ 07059

Phone: 201-482-8032
Attn: Mr. Michael Cook
Supplier No. 6982-01

www.icfmercantile.com

"ICF-AC 60" (12 mm(1/2") and 19mm (3/4") length only)

Continued to next page.

Illinois Department of Transportation
Bureau of Materials
QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS

April 17, 2020

This list supersedes the February 22, 2019 list.

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)
(Effective: November 1, 2008, Revised: January 1, 2017)

Standard Specifications for Road and Bridge Construction, Section 606 (Adopted: April 1, 2016)

Bridge Deck Microsilica Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Material Code 43523

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

The materials listed on pages 3 and 4 of this qualified product list are for use only with the:
Standard Specifications for Road and Bridge Construction, Section 606. (Adopted April 1, 2016)

GCP Applied Technologies (as
manufactured by Bonar Nv, Producer No. 6980-
01)

62 Whittemore Drive
Cambridge, MA 02140-1692

Phone: 617-498-4816

Attn: [Mr. Robert Hoopes](#)

Supplier No. 767-01

www.graceconstruction.com

"SINTA M2219"

GCP Applied Technologies (as
manufactured by Propex, Producer No. 6312-02)

62 Whittemore Drive
Cambridge, MA 02140-1692

Phone: 617-498-4816

Attn: [Mr. Robert Hoopes](#)

Supplier No. 767-01

www.graceconstruction.com

"SINTA F19"

"SINTA M3019"

Illinois Department of Transportation
Bureau of Materials
QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS

April 17, 2020

This list supersedes the February 22, 2019 list.

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)
(Effective: November 1, 2008, Revised: January 1, 2017)

Standard Specifications for Road and Bridge Construction, Section 606 (Adopted: April 1, 2016)

Bridge Deck Microsilica Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

**Synthetic Fibers for use in Concrete Gutter, Curb, Median, and Paved Ditch
Submittal for Review and Approval**

A. Scope

The following guidelines are provided to clarify the submittal requirements and expedite the review process for approving synthetic fibers according to the Department's Standard Specification for Road and Bridge Construction, Section 606 Concrete Gutter, Curb, Median, and Paved Ditch.

B. Procedure

When submitting synthetic fibers to the Department:

The Manufacturer shall provide the following to the Department:

- The specific product brand name,
- Name and address of the company extruding the fiber,
- Zip top bag containing a small representative sample of the submitted product,
- Safety Data Sheet,
- Technical Data Sheet,
- Acknowledgement by Company ([Form BMPR 101](#)). If your company does not already have a product included on an IDOT QPL, please submit a signed copy of the company acknowledgement form with your product submittal,
- Contact person's name, title, address, email address, and phone number,
- A letter stating the subject material will not be changed without prior written notification to IDOT, and
- A letter stating the material complies with the following requirements from the Special Provision for Synthetic Fibers in Concrete Gutter, Curb, Median, and Paved Ditch (BDE):

Synthetic fibers shall be Type III according to ASTM C 1116. The synthetic fiber shall have a minimum length of 1/2 in. (13 mm) and a maximum length of 0.75 in. (19 mm).

The submittal information shall be sent to:

Melinda Winkelman
Illinois Department of Transportation
Bureau of Materials
126 East Ash Street
Springfield, IL 62704-4766

Any submittal provided without the above listed information will not be reviewed for approval. Any changes in the formulation outside the manufacturer's original parameters will necessitate a new submittal.

The manufacturer will be notified when the review is complete. For questions regarding the testing and approval process, contact Melinda Winkelman at 217-782-0117.

C. Recertification

Annual recertification of all synthetic fibers is required. During the last quarter of the calendar year, a recertification letter will be sent to the manufacturer. The recertification paperwork is due January the following year. For example, the recertification letter is mailed November [2020](#) and due by mid-January [2021](#).

Illinois Department of Transportation
Bureau of Materials
QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS

April 17, 2020

This list supersedes the February 22, 2019 list.

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)

(Effective: November 1, 2008, Revised: January 1, 2017)

Standard Specifications for Road and Bridge Construction, Section 606 (Adopted: April 1, 2016)

Bridge Deck Microsilica Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

**Synthetic Fibers for use in Portland Cement Concrete Inlay or Overlay
Submittal for Review and Approval**

A. Scope

The following guidelines are provided to clarify the submittal requirements and expedite the review process for approving synthetic fibers according to the Department's Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet #34).

B. Procedure

When submitting synthetic fibers to the Department:

First Phase of Submittal Process:

- The manufacturer shall select an Independent Laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete (required methods in ASTM C 1077). The lab shall be equipped to perform the Illinois Modified ASTM C 1609 test method on a submitted synthetic fiber product.
- Prior to the Independent Laboratory testing, the laboratory name, material sources, and mix design shall be submitted to the Department for approval.

Second Phase of Submittal Process:

The Manufacturer shall provide the following to the Department:

- The specific product brand name,
- Independent laboratory test results which show the product meets Department specifications,
 - Residual strength ratio
 - The test report shall contain the length of fibers used for testing.
- Name and address of the company extruding the fiber,
- Zip top bag containing a small representative sample of the submitted product,
- Safety Data Sheet,
- Technical Data Sheet,
- Contact person's name, title, address, email address, and phone number,
- A letter stating the subject material will not be changed without prior written notification to IDOT,
- A letter stating the material complies with the following requirements from the Special Provision for Portland Cement Concrete Inlay or Overlay (BDE):

Synthetic fibers shall be Type III according to ASTM C 1116. The synthetic fiber shall be a monofilament or bundled monofilament with a minimum length of 1.0 in. (25 mm) and a maximum length of 2 1/2 in. (63 mm) and shall have a maximum aspect ratio (length divided by the equivalent diameter of the fiber) of 150. The quantity of synthetic fiber(s) added to the concrete mixture shall be sufficient to have a residual strength ratio ($R_{150,3}$) of 20.0 percent according to Illinois Modified ASTM C 1609. The maximum dosage rate shall not exceed 5.0 lb/cu yd (3.0 kg/cu m), unless the manufacturer can demonstrate through a field demonstration that the concrete mixture will be workable and fiber clumping is not a problem as determined by the Engineer.

Illinois Department of Transportation
Bureau of Materials
QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS

April 17, 2020

This list supersedes the February 22, 2019 list.

Special Provision for Portland Cement Concrete Inlay or Overlay (Check Sheet 34)

(Effective: November 1, 2008, Revised: January 1, 2017)

Standard Specifications for Road and Bridge Construction, Section 606 (Adopted: April 1, 2016)

Bridge Deck Microsilica Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Bridge Deck Fly Ash or Ground Granulated Blast-Furnace Slag Concrete Overlay (GBSP) (Revised: [March 1, 2019](#))

Submittal for Review and Approval, continued

- Acknowledgement by Company ([Form Bmpr 101](#)). If your company does not already have a product included on an IDOT QPL, please submit a signed copy of the Acknowledgement by Company form with your product submittal.

The submittal information shall be sent to:

Melinda Winkelman
Illinois Department of Transportation
Bureau of Materials
126 East Ash Street
Springfield, IL 62704-4766

Any submittal provided without the above listed information will not be reviewed for approval. Any changes in the formulation outside the manufacturer's original parameters will necessitate a new submittal.

The manufacturer will be notified when the review is complete. For questions regarding the testing and approval process, contact Melinda Winkelman at 217-782-0117.

C. Recertification

Annual recertification of all synthetic fibers is required. During the last quarter of the calendar year, a recertification letter will be sent to the manufacturer. The recertification paperwork is due January the following year. For example, the recertification letter is mailed November [2020](#) and due by mid-January [2021](#).