ICC-ES Evaluation Report

ESR-1506

Reissued November 2023

This report also contains:

- CBC Supplement

Subject to renewal November 2024

DIVISION: 03 00 00 — CONCRETE **Section: 03 24 00 — Fibrous Reinforcing**	**REPORT HOLDER: GCP APPLIED TECHNOLOGIES INCORPORATED**	**EVALUATION SUBJECT: SINTA™ M2219**	

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012, 2009 and 2006 *International Building Code®* (IBC)
- 2015, 2012, 2009 and 2006 *International Residential Code®* (IRC)

Properties evaluated:

- Durability
- Crack control in concrete

2.0 USES

The fibers are used as an admixture for normal-weight concrete, to reduce plastic shrinkage and temperature cracking of structural plain concrete slabs on grade.

3.0 DESCRIPTION

Sinta™ M2219 are 100 percent polypropylene fibers. The fibers are 3.5 denier and $^{3}/_{4}$ inch (19 mm) long and are available in $^{1}/_{2}$-pound (0.23 kg) and 1-pound (0.45 kg) containers.

4.0 DESIGN AND INSTALLATION

Sinta™ M2219 must be blended into the concrete mix in accordance with the manufacturer's published instructions. A copy of these instructions must be available at all times on the jobsite during installation. Fibers are introduced into the mixer at a standard range of 0.5 pound per cubic yard to 1.0 pound per cubic yard (300 to 600 g/m^3) of concrete. Fibers are introduced into the mixer before, during and after charging and must be mixed a minimum of five minutes or 70 revolutions at mixing speed.

5.0 CONDITIONS OF USE:

The Sinta™ M2219 described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Design and construction of concrete utilizing Sinta™ M2219 must be in accordance with the requirements of the applicable codes and ACI 318, as applicable.

5.2 The fibers must be blended in accordance with the manufacturer's published instructions and Section 4.0 of this evaluation report. If there is a conflict between this report and the manufacturer's published installation instructions, this report governs.

5.3 The use of the fibers is limited to normal-weight concrete.

5.4 The fibers must not be used to replace any structural reinforcement. Structural reinforcement is described in Chapter 20 of 2014 ACI 318 (or Section 3.5 of 2011, 2008 and 2005 ACI 318).

5.5 For structural plain concrete, control joints, as required by Section 14.3.4 of ACI 318 (2014), or Section 22.3 of the ACI 318 (2011, 2008 and 2005), must be provided.

5.6 For reinforced concrete, structural reinforcement and shrinkage and temperature reinforcement must be provided in accordance with Section 24.4 of the ACI 318 (2014), or Section 7.12 of the ACI 318 (2011, 2008 and 2005).

5.7 Use of the fibers must be approved by the registered design professional, if applicable.

5.8 A batch or delivery ticket, signed by the weigh master, must be available to the code official upon request. The delivery ticket includes, in addition to the items noted in Section 16.1 of ASTM C94 (2015 IBC) or Section 14.1 of ASTM C94 (2012, 2009 and 2006 IBC), the type and amount of fibers added to the concrete mix.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Concrete with Synthetic Fibers (AC32), dated October 2003 (editorially revised March 2015).

7.0 IDENTIFICATION

7.1 Each container of Sinta™ M2219 is identified with the GCP Applied Technologies name and address, product trade name (Sinta™ M2219), use instructions and the evaluation report number (ESR-1506).

7.2 The report holder's contact information is the following:

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DIVISION: 03 00 00—CONCRETE
Section: 03 24 00—Fibrous Reinforcing

REPORT HOLDER:

GCP APPLIED TECHNOLOGIES INCORPORATED

EVALUATION SUBJECT:

SINTA™ M2219

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that SINTA™ M2219, described in ICC-ES evaluation report ESR-1506, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2016 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD)AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2016 *California Residential Code* (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The SINTA™ M2219, described in Sections 2.0 through 7.0 of the evaluation report ESR-1506, complies with CBC Chapter 19, provided the design and installation are in accordance with the 2015 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements CBC Chapter 19, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections of the CBC are beyond the scope of this supplement.

2.2 CRC:

The SINTA™ M2219, described in Sections 2.0 through 7.0 of the evaluation report ESR-1506, complies with the CRC, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued November 2023.