1.0 EVALUATION SCOPE

Compliance with the following codes:
- 2013 Abu Dhabi International Building Code (ADIBC)†
- 2010 Los Angeles Department of Building and Safety (LADBS) No. 1905 of the 2009 IBC.

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

For evaluation for compliance with codes adopted by the Los Angeles Department of Building and Safety (LADBS), see ESR-1515 LABC Supplement.

Property evaluated:
- As set forth in Section 3.2 and 3.3 of the ICC-ES Acceptance Criteria for Chemical Admixtures Used in Concrete (AC198).

2.0 USES

Krystol Internal Membrane (KIM) is a chemical admixture used for the treatment of reinforced and plain concrete containing Portland cement. The admixture reduces the water demand for a given slump and retards the initial and final set times of concrete.

3.0 DESCRIPTION

The KIM admixture complies as a Type D (water-reducing and set-retarding) admixture in accordance with ASTM C494/C494M, with an extended set time. The dry cementitious admixture has an unlimited shelf life when stored in dry conditions in the original, unopened containers, unless otherwise printed on the packaging. Compatibility of KIM with other admixtures is beyond the scope of this report.

4.0 INSTALLATION

KIM admixture must be added to reinforced or plain concrete in accordance with Kryton’s published instructions that are packaged with the product. The admixture must be proportioned into the concrete mix at a rate of 2 percent by dry weight of cementitious materials, to a maximum of 13.5 pounds per cubic yard (8 kg/m³). Concrete mixtures must be proportioned in accordance with the applicable code. The expected water content must be reduced 5 to 10 percent, depending on slump requirement. The water-cement ratio must be maintained between 0.39 and 0.45. Water must be clean and free of deleterious amounts of acids, alkalis, or organic materials. The mixing time must be a minimum of 10 minutes. Concrete quality, mixing, and placing must be in accordance with ACI 318-14 for the 2018 and 2015 IBC (ACI 318-11 for the 2012 IBC and Section 1905 of the 2009 IBC), except as noted in this report. The minimum initial and final set times of KIM-treated concrete are expected to be 8 hours and 9 hours, respectively, prior to concrete finishing procedures and removal of framework. The exact set times will vary depending on the concrete mixture and environmental conditions. The initial and final set times of KIM-treated concrete must be at least one hour longer than that for untreated concrete. The project scheduling for labor and equipment allocation, finishing, curing, and form removal must be adjusted based on extended set times in accordance with the KIM Best Practices Guide, which specifies ACI 308R-01, Guide for Curing Concrete, for concrete curing and ACI 306R-88, Cold Weathering Concrete, for cold weather concreting.

5.0 CONDITIONS OF USE

The Krystol Internal Membrane described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Structural design of the concrete complies with the IBC.

5.2 The admixture used in concrete under the IBC is subject to prior approval by the registered design professional.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Chemical Admixtures Used in Concrete (AC198), dated January 2008 (editorially revised May 2018).

7.0 IDENTIFICATION

7.1 Krystol Internal Membrane (KIM) is packaged in 11- and 55-pound (5 and 25 kg) sealed pails and in 22- and 33-pound (10 and 15 kg) bags. The pails and bags of admixture are labeled with the Kryton International, Inc., name, address and contact information, the product name, the batch number, and the evaluation report number (ESR-1515).

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

KRYTON INTERNATIONAL, INC.
1645 EAST KENT AVENUE
VANCOUVER, BRITISH COLUMBIA V5P 2S8
CANADA
(604) 324-8280
www.kryton.com
info@kryton.com
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that the Kristol Internal Membrane (KIM), described in ICC-ES evaluation report ESR-1515, has also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:
- 2020 City of Los Angeles Building Code (LABC)

2.0 CONCLUSIONS

The Kristol Internal Membrane (KIM), described in Sections 2.0 through 7.0 of the evaluation report ESR-1515, complies with the LABC Chapter 19 and is subjected to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The Kristol Internal Membrane (KIM), described in this evaluation report supplement must comply with all of the following conditions:
- All applicable sections in the evaluation report ESR-1515.
- The design, installation, conditions of use and labeling are in accordance with the 2018 International Building Code® (IBC) provisions noted in the evaluation report ESR-1515.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapter 16, 17 and 19, as applicable.

This supplement expires concurrently with the evaluation report, reissued February 2020 and revised July 2020.