CAN/ULC-S716.2-12-R2018
(Reaffirmed 2018)

STANDARD FOR EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) - INSTALLATION OF EIFS COMPONENTS AND WATER RESISTIVE BARRIER

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Standard for Exterior Insulation and Finish Systems (EIFS) - Installation of EIFS Components and Water Resistive Barrier, CAN/ULC-S716.2-12-R2018

Second Edition, Dated December 2012

Summary of Topics

This revision of CAN/ULC-S716.2 is being issued to update the title page to reflect the reaffirmation of this Second Edition National Standard of Canada. No changes in requirements are involved.

The revised requirements are substantially in accordance with Proposal(s) on this subject dated March 11, 2017.

PLEASE NOTE THAT CERTAIN CODES MAY REFER TO A SUPERSEDED VERSION OF THIS STANDARD. IN THOSE INSTANCES, THE RELEVANT VERSIONS ARE AVAILABLE FOR PURCHASE.

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CAN/ULC-S716.2-12-R2018

STANDARD FOR EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) - INSTALLATION OF EIFS COMPONENTS AND WATER RESISTIVE BARRIER

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This list represents the membership at the time the Committee balloted on the final text of this edition. Since that time, changes in the membership may have occurred.

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STANDARD FOR EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) - INSTALLATION OF EIFS COMPONENTS AND WATER RESISTIVE BARRIER

PREFACE

This is the Second Edition of the Standard for Exterior Insulation and Finish Systems (EIFS) - Installation of EIFS Components and Water Resistive Barrier, CAN/ULC-S716.2.

This Edition of the Standard has been formally approved by the ULC Standards Committee on Thermal Insulation Materials and Systems.

This Standard has been developed in compliance with the requirements of Standards Council of Canada (SCC) for accreditation of a Standards Development Organization.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

Annex A, identified as informative, is for informational purposes only.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This Second Edition National Standard of Canada was based on the First Edition, and has now been reaffirmed.

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patent rights. ULC Standards shall not be held responsible for identifying any or all such patent rights.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

This CAN/ULC-S716.2 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com/canada.

This Standard is intended to be used for conformity assessment.

1 SCOPE

1.1 This Standard contains requirements for the installation of Exterior Insulation and Finish Systems (EIFS) that meet the material and system requirements of CAN/ULC-S716.1 and the design requirements of CAN/ULC-S716.3.

1.2 This standard applies to the installation of the EIFS components and to the installation of the water resistive barrier system. It does not apply to the installation of the substrate.

1.3 This standard applies to the installation of EIFS for the cladding of walls and, with the exception of decorative projections, does not apply to the installation of EIFS on horizontal surfaces exposed to direct precipitation.

1.4 This standard does not address the qualifications and skills that an EIFS installer should possess.

NOTE: An example of a document providing this type of information is the EIFS Quality Assurance Program Manual P200.

1.5 This standard does not address the structural design or integrity of the substrate to which the EIFS is to be attached.

1.6 The use of mechanical fasteners is outside the scope of this Standard, but is acceptable as a complement and/or as an alternate to adhesive for attachment where the substrate will not support adhesive attachment of the EIFS.

1.7 This document does not purport to address all the health and safety aspects associated with its use. Anyone using this Standard has the responsibility to consult the appropriate authorities and to establish health and safety practices, in conjunction with any existing applicable regulatory requirements, prior to its use.

2 REFERENCE PUBLICATIONS

2.1 The following referenced documents are indispensable for the application of this Standard. The referenced documents indicate the edition and/or revision of the document that shall be used with this Standard.

Documents Published by ULC Standards (prior to May, 2010, identified as Underwriters Laboratories of Canada)
171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada
Telephone: (613) 755-2729
www.ulc.ca/ulcstandards

• CAN/ULC-S710.1-11, Standard for Thermal Insulation – Bead-Applied One Component Polyurethane Air Sealant Foam, Part 1: Material Specification.

• CAN/ULC-S710.2-11, Standard for Thermal Insulation – Bead-Applied One Component Polyurethane Air Sealant Foam, Part 2: Installation.

• CAN/ULC-S716.1-12, Standard for Exterior Insulation and Finish Systems (EIFS) – Materials and Systems.

• CAN/ULC-S716.3-12, Standard for Exterior Insulation and Finish Systems (EIFS) – Design Application.

• CAN/ULC S773-09, Standard for Thermal Insulation Terminology.

Documents Published by EIFS Quality Assurance Program Inc. (EQI)
70 Leek Crescent, Richmond Hill, ON L4B 1H1 Canada
Telephone: (416) 499–4000
www.eifscouncil.org

• P200-01, Revision 0, 3rd Edition, EIFS Quality Assurance Program Manual.

3 TERMINOLOGY

3.1 Some terms used in this Standard are common to ULC Thermal Insulation Standards, and may be found in CAN/ULC-S773, Standard for Thermal Insulation Terminology (listed below with a CAN/ULC-S773 identifier). Additional definitions not listed in CAN/ULC-S773 but required for this Standard have also been listed below. Defined terms used in this Standard appear in italics throughout the text.

ADHESIVE — a product for adhering the *thermal insulation board* to the *substrate* or *water resistive barrier system*.

AESTHETIC REVEAL — a groove cut into the *thermal insulation board* for decorative purposes only.

BASE COAT — a polymer based coating, either *factory-blended* or *field-mixed*, applied directly to the *thermal insulation board*, fully *embedding* the *reinforcing mesh*. The *base coat* is the primary barrier to water penetration.

CURE — to develop the ultimate properties of an initial wet state material by a chemical reaction.

DRAINAGE CAVITY — a space between the *substrate* and the *thermal insulation board* that allows for the free drainage of water that penetrates the *EIFS*.

DRY — to develop the ultimate properties of an initial wet state material solely by evaporation of volatile ingredients.

EIFS CONTRACTOR — the legal entity (corporate or personal) that is responsible for the site installation of the *LA-WRB* and all materials and components that make up an *EIFS*.

NOTE: The *EIFS contractor* may or may not be responsible for installation of *transition membranes*.

EIFS MANUFACTURER — the producer of the materials and components forming a proprietary *EIFS*.

EIFS MOULDING — an insulation profile that is mounted on or incorporated into the *thermal insulation boards* and covered by the *EIFS lamina*.

EMBED — to press into and encapsulate the *reinforcing mesh* in the wet *base coat*.

EXPANSION JOINT — a joint designed to permit movement due to expansion and contraction of any part of the system (CAN/ULC-S773).

EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) — a wall cladding system comprised of *thermal insulation board*, an *adhesive* for attachment of the *thermal insulation board* to the *substrate*, a glass fibre *reinforcing mesh embedded* in a *base coat* on the face of the *thermal insulation board* and a *finish coat*.

FACTORY-BLENDED — any material that arrives from the manufacturer requiring no additions apart from water to produce the wet state material.

FIELD-MIXED — materials that are mixed in the field by combining two or more materials, other than, or in addition to, water.

FINISH COAT — the outermost coat applied over the *base coat*, which gives the *EIFS* its colour and texture, exclusive of sealers and paints.

FLASHING — continuous material(s) that stops the vertical flow of water within a wall assembly or system and directs the water, via gravity, to the exterior of the wall.

GEOMETRICALLY DEFINED DRAINAGE CAVITY (GDDC) — a space created between the *substrate* and *thermal insulation board* through the use of *thermal insulation board* that has a pattern cut or formed into its back surface.

LAMINA — a composite of *base coat*, *reinforcing mesh* and *finish coat*.

LIQUID APPLIED WATER RESISTIVE BARRIER (LA-WRB) — a fluid material applied by spray, roller or trowel, that dries to a membrane possessing low water absorption properties becoming a component of the *water resistive barrier system*.

MANUFACTURER'S INSTALLATION INSTRUCTIONS — written installation instructions provided by the *EIFS manufacturer* that include information that will assist in the correct use and installation of the materials and components that comprise their system.

POT-LIFE — the period of time during which a material maintains its workable properties after it has been mixed.

NOTE: *Pot-life* is a function of temperature, cement type and mixing practice. Higher temperatures and/or water deficient mixing will generally provide for a shorter *pot-life*.

REINFORCING MESH — a woven or non-woven glass fibre fabric component of the *EIFS* encapsulated in the *base coat* to strengthen the *EIFS*.

SUBSTRATE — the structural component supporting the *EIFS*, which is resistant to deterioration caused by water or is protected by a *water resistive barrier system*.

THERMAL INSULATION BOARD — a component that functions to reduce heat flow through the wall and serves as the surface to receive the *base coat*.

TRANSITION MEMBRANE — a component of the *water resistive barrier system* that maintains continuity of the *WRB* at joints and openings in the *substrate* that cannot be bridged with the *LA-WRB*.

WATER RESISTIVE BARRIER SYSTEM (WRB) — material(s) possessing low water absorption properties that are applied over *substrates* susceptible to water absorption to create a continuous surface that prevents water penetration into the wall assembly. The *WRB* is composed of the *LA-WRB* and *transition membranes*. The *WRB* is integrated with the *flashing*, which drains water to the exterior of the wall.

WRAP — to protect the exposed edges of *thermal insulation boards* by back-*wrapping*, edge-*wrapping* or pre-*wrapping*.