DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
SECTION: 07 24 00—EXTERIOR INSULATION AND FINISH SYSTEMS
SECTION: 07 24 19—WATER-DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM

REPORT HOLDER:

DRYVIT SYSTEMS, INC.

EVALUATION SUBJECT:

DRYVIT OUTSULATION® PLUS MD SYSTEM

“2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence”

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 24 00—Exterior Insulation and Finish Systems
Section: 07 24 19—Water-Drainage Exterior Insulation and Finish System

REPORT HOLDER:
DRYVIT SYSTEMS, INC.

EVALUATION SUBJECT:
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1.0 EVALUATION SCOPE
Compliance with the following codes:

- 2013 Abu Dhabi International Building Code (ADIBC)†

†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-1543 LABC and LARC Supplement.

Properties evaluated:

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>IBC CHAPTER</th>
<th>IRC CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior insulation and finish systems (EIFS)</td>
<td>14</td>
<td>R7</td>
</tr>
<tr>
<td>Weather resistance</td>
<td>14</td>
<td>R7</td>
</tr>
<tr>
<td>Fire-resistance-rated construction</td>
<td>7</td>
<td>R3</td>
</tr>
<tr>
<td>Special inspections</td>
<td>17</td>
<td>NA</td>
</tr>
<tr>
<td>Structural – transverse wind load resistance</td>
<td>16</td>
<td>R6</td>
</tr>
<tr>
<td>Types I-IV (noncombustible) construction</td>
<td>26</td>
<td>NA</td>
</tr>
<tr>
<td>Surface burning characteristics</td>
<td>26</td>
<td>R3</td>
</tr>
<tr>
<td>Ignition resistance</td>
<td>26</td>
<td>NA</td>
</tr>
</tbody>
</table>

2.0 USES
The Dryvit Outsulation® Plus MD System is an exterior insulation and finish system (EIFS) complying with 2018 IBC Section 1407 (2015, 2012 and 2009 IBC Section 1408) and IRC Section R703.9. The system complies as an EIFS with drainage in accordance with 2018 IBC Section 1407.4.1 (2015, 2012 and 2009 IBC Section 1408.4.1) and IRC Section R703.9.

The system may be used in fire-resistance-rated Type V construction, when installed in accordance with Section 4.6 of this report, and in Types I, II, III and IV construction when installed in accordance with Section 4.5 of this report.

3.0 DESCRIPTION

3.1 System Components:
See Table 1. The system consists of water-resistant coatings, expanded polystyrene (EPS) insulation board, basecoat, reinforcing mesh and finish.

3.2 Insulation Board:
Insulation boards must be one of the following:

a. EPS insulation board complying with ASTM C578, Type I, and ASTM E2430, produced by a molder with a current ICC-ES evaluation report. The board must be labeled in accordance with the applicable report.

b. EPS insulation board complying with ASTM C578, Type I, and ASTM E2430, produced by a molder who participates in an approved third-party quality-assurance program. The board must be labeled in accordance with the applicable code.

c. Foam-Control EPS boards, Type I-WSG, by AFM, as recognized in ICC-ES evaluation report ESR-1006.


e. BASF Neopor® Type I Rigid Foam Insulation Boards, as recognized in ICC-ES evaluation report ESR-3463.

EPS insulation board must have a flame-spread index of 25 or less and a smoke developed index of 450 or less when tested in accordance with ASTM E84 or UL 723.

3.3 Substrates:
Substrates must be one of the following:

- Gypsum sheathing board complying with ASTM C1396 or ASTM C1177. When used as part of a fire-resistive-rated assembly, the gypsum wallboard must be Type X with a minimum thickness of 1/8 inch (15.9 mm)

- Brick or concrete masonry complying with the code

- Concrete complying with the code


4. INSTALLATION

3.4 Sealants:
Sealants must comply with ASTM C920, Type S or M, minimum Grade NS, minimum Class 25 and Use O.

4.0 INSTALLATION

4.1 General:
The Dryvit Outsulation® Plus MD System must be installed in accordance with 2018 IBC Section 1407 (2015, 2012 and 2009 IBC Section 1408), IRC Section R703.9 and the manufacturer’s application instructions, specifications and installation details. These are available at:

http://www.dryvit.com/media/328345/ds218.pdf


4.2 Drainage:
Drainage is provided by applying Primus, Genesis, or Genesis DM adhesive in a vertical notched trowel configuration between the water-resistive barrier and the flat EPS insulation board.

4.3 Wind Design:
Table 2 describes specific assemblies for which test data has been submitted. Other assemblies may be considered for approval by local code officials based on testing and/or calculations of a qualified design professional.

4.4 Weather Protection:
The Dryvit Outsulation® Plus MD system complies with 2018 IBC Section 1402.2 (2015, 2012 and 2009 IBC Section 1403.2) and IRC Section R703.1.1.

4.5 Types I, II, III and IV Construction:
Table 3 describes assemblies using the Dryvit Outsulation® Plus MD system that are qualified for use in Types I through IV construction.

4.6 Fire-resistance-rated Construction Assemblies:
Table 4 describes assemblies using the Dryvit Outsulation® Plus MD system that are qualified for use in nonload-bearing and load-bearing fire-resistance-rated construction. In Type V construction, the Dryvit Outsulation® Plus MD system may be attached to the surface of combustible exterior fire-resistance-rated assemblies described in 2018, 2015 and 2012 IBC Table 721.1(2) [2009 IBC Table 720.1(2)] without changing the assigned hourly rating of the assembly. The exterior wall must have a minimum 10-foot (3048 mm) separation distance from adjacent construction.

4.7 Special Inspection:
For recognition under the IBC, special inspection of the Dryvit Backstop NT Texture or Dryvit Backstop NT Smooth water-resistive coatings must be conducted in accordance with 2018 and 2015 IBC Sections 1704.2 and 1705.16.1 (2012 IBC Sections 1704.2 and 1705.15.1 and 2009 IBC Sections 1704.1 and 1704.14.1). See the Dryvit Third Party Inspection Guidelines for Owners and General Contractors/Construction Managers.

5.0 CONDITIONS OF USE

The Dryvit Outsulation® Plus MD System 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 Installation must comply with this report, the manufacturer’s published application instructions, installation details and the applicable code. In the event of a conflict between the manufacturer’s instructions and this report, this report governs.

5.2 The insulation board must be separated from the building interior by a thermal barrier complying with the applicable code.

5.3 Installation must be by applicators listed by Dryvit Systems, Inc.

5.4 Termination of the system must not be less than 6 inches (152 mm) above finished grade, in accordance with 2018, 2015 and 2009 IBC Section 2603.8 (2012 IBC Section 2603.9) and IRC Section R318.4 and 2018, 2015 IRC Section R703.9.2 (2012 and 2009 IRC Section R703.9.4.1).

6.0 EVIDENCE SUBMITTED

6.1 Reports of tests in accordance with ASTM E2568 and ASTM E2570.

6.2 Data in accordance with the ICC-ES Acceptance Criteria for EIFS Clad Drainage Wall Assemblies (AC235), dated January 2015 (editorially revised April 2018).

6.3 Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Coatings Used as Water-resistive Barriers over Exterior Sheathing (AC212), dated February 2015 (editorially revised April 2018).

6.4 Reports of tests in accordance with NFPA 285 and NFPA 268.

7.0 IDENTIFICATION

7.1 Each container or package of the coating or reinforcing mesh used as part of the Dryvit Outsulation® Plus MD System must be labeled with the Dryvit Systems, Inc., name and address; the product name; lot or batch number; quantity of material; storage instructions; pot life; expiration date; and the evaluation report number (ESR-1543).

EPS insulation boards must be labeled with the manufacturer’s name; manufacturing address or plant identification; name of the inspection agency; and the current ICC-ES evaluation report number.

7.2 The report holder’s contact information is as follows:

DRYVIT SYSTEMS, INC.
ONE ENERGY WAY
WEST WARWICK, RHODE ISLAND 02893
(401) 822-4100
www.dryvit.com


5.4 Termination of the system must not be less than 6 inches (152 mm) above finished grade, in accordance with 2018, 2015 and 2009 IBC Section 2603.8 (2012 IBC Section 2603.9) and IRC Section R318.4 and 2018, 2015 IRC Section R703.9.2 (2012 and 2009 IRC Section R703.9.4.1).
### TABLE 1—COATING SYSTEM COMPONENTS

<table>
<thead>
<tr>
<th>System</th>
<th>Water-Resistive Barrier</th>
<th>Base Coat</th>
<th>Reinforcing Mesh</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryvit Outsulation® Plus MD System</td>
<td>Dryvit Backstop NT Texture or Dryvit NT Smooth</td>
<td>Primus, Genesis, or Genesis DM</td>
<td>Standard Reinforcing Mesh, Nominally 4.3 oz/yd² minimum²</td>
<td>DPR PMR</td>
</tr>
<tr>
<td></td>
<td>Dryvit Grid Tape</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Refer to Section 3.2 for insulation boards.  
²Higher weight meshes are permitted.

### TABLE 2—WIND LOAD DESIGN

<table>
<thead>
<tr>
<th>Framing Members</th>
<th>Max. Spacing (inches o.c.)</th>
<th>Substrate</th>
<th>Wind Load Capacity (Allowable)²³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type, Min. Depth (inches)</td>
<td>Type</td>
<td>Fastener Type</td>
<td>Max. Fastener Spacing (inches o.c.)</td>
</tr>
<tr>
<td>2x4 Wood ¹</td>
<td>16</td>
<td>Any sheathing noted in Section 3.3, min. 1/2&quot; thick</td>
<td>No. 6 self-drilling screws, 1 5/8&quot; long</td>
</tr>
<tr>
<td>2x6 Wood ¹</td>
<td>16</td>
<td>Glass mat-faced gypsum per ASTM C1177, min. 3/4&quot; thick</td>
<td>No. 6 self-drilling screws, 1 7/8&quot; long</td>
</tr>
<tr>
<td>2x6 Wood ¹</td>
<td>24</td>
<td>Glass mat-faced gypsum per ASTM C1177, min. 3/4&quot; thick</td>
<td>No. 6 self-drilling screws, 1 1/4&quot; long</td>
</tr>
<tr>
<td>3/8-inch-by No. 18 gage-steel</td>
<td>16</td>
<td>Glass mat-faced gypsum per ASTM C1177, min. 1/2&quot; thick</td>
<td>No. 6 self-drilling screws, 1 1/4&quot; long</td>
</tr>
<tr>
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<td>16</td>
<td>Glass mat-faced gypsum per ASTM C1177, min. 1/2&quot; thick</td>
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</tr>
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<td>No. 6 self-drilling screws, 1 1/4&quot; long</td>
</tr>
<tr>
<td>3/8-inch-by No. 18 gage-steel</td>
<td>16</td>
<td>Any sheathing noted in Section 3.3, min. 1/2&quot; thick</td>
<td>No. 6 self-drilling screws, 1 7/8&quot; long</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>Concrete/ Unglazed Brick/ Cement Plaster/ Concrete Masonry</td>
<td>NA</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm; 1 psf = 0.0479 kPa.  
¹Minimum nominal 2x4 wood framing, minimum specific gravity 0.43.  
²Maximum positive pressure is limited to the capacity of the framing and structural sheathing, or concrete, brick, concrete masonry or portland cement plaster substrate, determined in accordance with the applicable code.  
³Framing members must be designed to resist all positive and negative transverse design loads with a maximum allowable deflection of 1/240 of the span.
**TABLE 3—ASSEMBLIES FOR USE WITH TYPE I, II, III AND IV CONSTRUCTION**

<table>
<thead>
<tr>
<th>Framing Members</th>
<th>Interior Sheathing</th>
<th>Exterior Sheathing</th>
<th>Insulation Board</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Min. Depth (inch)</strong></td>
<td><strong>Min. Gage</strong></td>
<td><strong>Max. spacing (inch)</strong></td>
<td><strong>Type and Min. Thickness (inch)</strong></td>
</tr>
<tr>
<td>Steel Framing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 3/8</td>
<td>20 (0.033 inch)</td>
<td>16” o.c.</td>
<td>Min. 5/8” Type X gypsum wallboard complying with ASTM C36 or ASTM C1396</td>
</tr>
</tbody>
</table>

**Fire-retardant-treated Wood Studs**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2x4</td>
<td>N/A</td>
<td>24” o.c.</td>
<td>Min. 5/8” Type X gypsum wallboard complying with ASTM C36 or ASTM C1396</td>
<td>Minimum No. 8, corrosion-resistant steel, Type W, buglehead drywall screws</td>
<td>8” at board joints, 12” at intermediate framing</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm.

| Combustible content of the foam plastic must not exceed an average potential heat content of 6,000 Btu/ft² (68.2 MJ/m²) in every 20-square-foot wall area. |
| Floor levels must be blocked with 4-inch-thick (102 mm), 4 pcf (64.1 kg/m³) mineral-fiber insulation. |
| Fire-retardant treated wood studs must comply with IBC Section 2303.2. Fire-retardant-treated wood framing is acceptable in Types I, II, III or IV construction as permitted by Chapter 6 of the IBC. |

**TABLE 4—FIRE-RESISTANCE-RATED ASSEMBLIES**

### ONE-HOUR – NONLOADBEARING

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. spacing (inches o.c.)</th>
<th>Type and Min. Thickness (inch)</th>
<th>Fastener Type</th>
<th>Max. Fastener Spacing (inches o.c.)</th>
<th>Type and Min. Thickness (inch)</th>
<th>Fastener Type</th>
<th>Max. Fastener Spacing (inches o.c.)</th>
<th>Max. Thickness (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 3/4-inch-by No. 25 gage-steel</td>
<td>24</td>
<td>Min. 5 3/8” Type X gypsum wallboard complying with ASTM C36 or ASTM C1396</td>
<td>Minimum No. 6, 1 1/4-inch-long buglehead, self-drilling Type S screws</td>
<td>8” at board joints, 12” at intermediate framing</td>
<td>Min. 7/8” Type X gypsum wallboard complying with ASTM C36 or ASTM C1396</td>
<td>Minimum No. 8, 1 1/2-inch-long, self-drilling Type S screws</td>
<td>8” at board joints, 12” at intermediate framing</td>
<td>4</td>
</tr>
</tbody>
</table>

### TWO-HOUR – LOAD-BEARING

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. spacing (inches o.c.)</th>
<th>Type and Min. Thickness (inch)</th>
<th>Fastener Type</th>
<th>Max. Fastener Spacing (inches o.c.)</th>
<th>Type and Min. Thickness (inch)</th>
<th>Fastener Type</th>
<th>Max. Fastener Spacing (inches o.c.)</th>
<th>Max. Thickness (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x4 wood studs</td>
<td>16</td>
<td>(2) layers of min. 5/8” Type X gypsum wallboard complying with ASTM C36 or ASTM C1396</td>
<td>Layer 1: Minimum No. 8, 2-inch-long buglehead, Type W screws</td>
<td>Layer 1: Minimum No. 8, 2-inch-long buglehead, Type W screws</td>
<td>Layer 2: Minimum No. 8, 2 1/2-inch-long buglehead, Type W screws</td>
<td>Layer 1 and 2: Minimum No. 8, 2 1/2-inch-long buglehead, Type W screws</td>
<td>Layer 2: Minimum No. 8, 2 1/2-inch-long buglehead, Type W screws</td>
<td>Layer 1 and 2: 8” at board joints, 12” at intermediate framing</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm.

2Rated from both sides.
3Design stress reduced to 78 percent of the adjusted F’c and have a slenderness ratio of l/e of 33.
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that Dryvit Outsulation® Plus MD System, described in ICC-ES master evaluation report ESR-1543, has also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LABS).

Applicable code editions:
- 2017 City of Los Angeles Building Code (LABC)
- 2017 City of Los Angeles Residential Code (LARC)

2.0 CONCLUSIONS

The Dryvit Outsulation® Plus MD System, described in Sections 2.0 through 7.0 of the master evaluation report ESR-1543, complies with LABC Chapters 7, 14 and 26, and LARC Sections R316 and R703, and is subjected to the conditions of use described in this report.

3.0 CONDITIONS OF USE

The Dryvit Outsulation® Plus MD System described in this evaluation report must comply with all of the following conditions:

- All applicable sections in the master evaluation report ESR-1543.
- The design, installation, conditions of use and identification of the Dryvit Outsulation® Plus MD System are in accordance with the 2015 International Building Code® (2015 IBC) provisions noted in the master evaluation report ESR-1543.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.
- The Dryvit Outsulation® Plus MD System has not been evaluated under LABC Chapter 7A or LARC Section R337 for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland—Urban Interface Area.

This supplement expires concurrently with the master report, reissued March 2019.
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that Dryvit Outsulation® Plus MD System, recognized in ICC-ES master evaluation report ESR-1543, has also been evaluated for compliance with the codes noted below.

Applicable code editions:
- 2017 Florida Building Code—Building
- 2017 Florida Building Code—Residential

2.0 CONCLUSIONS

The Dryvit Outsulation® Plus MD System, described in Sections 2.0 through 7.0 of the master evaluation report ESR-1543, complies with the Florida Building Code—Building and Florida Building Code—Residential, provided the design and installation are in accordance with the 2015 International Building Code® provisions noted in the master report under the following condition:

Installation must meet the requirements of Section 1403.8 of the Florida Building Code—Building or Section R318.7 of the Florida Building Code—Residential, as applicable.

Use of the Dryvit Outsulation® Plus MD System for compliance with the High-Velocity Hurricane Zone provisions of the Florida Building Code—Building and the Florida Building Code—Residential has not been evaluated and is outside the scope of this evaluation report.

For products falling under Florida Rule 9N-3, verification that the report holder’s quality-assurance program is audited by a quality-assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official, when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, reissued March 2019.