Code Compliance Research Report
CCRR-0307

Issue Date: 10-29-2019
Revision Date: 10-09-2025
Renewal Date: 10-31-2026

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 25 00 – Water-Resistive Barriers
Section: 07 27 00 – Air Barriers
Section: 07 65 00 – Flexible Flashing

REPORT HOLDER:
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REPORT SUBJECT:
Tyvek® Fluid Applied WB+™

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, 2018 *International Building Code®* (IBC)
- 2024, 2021, 2018 *International Residential Code®* (IRC)
- 2024, 2021, 2018 *International Energy Conservation Code®* (IECC)
- 2023, 2020 *Florida Building Code*, excluding High-velocity Hurricane Zones (see Section 9)
- 2022 *California Building Code* (see Section 9)
- 2022 *California Residential Code* (see Section 9)
- 2022 *California Green Building Standards Code (CALGreen)* (see Section 9)

NOTE: This report references the latest version of the codes cited. Section numbers in earlier versions of the codes may differ.

1.2 *Tyvek® Fluid Applied WB+™* has been evaluated for the following properties (see Table 1):

- Physical Properties
- Water Resistance
- Surface Burning Characteristics
- Air Barrier

1.3 *Tyvek® Fluid Applied WB+™* has been evaluated for use as an alternative to the water-resistive barrier required in the Exception to IBC Section 2510.6 and IRC Section R703.7.3, and in Types I, II, III, IV and V construction as permitted in IBC Section 1402.5 when applied in accordance with section 5.0 of this report. See Table 1 for properties evaluated.

2.0 STATEMENT OF COMPLIANCE

Tyvek® Fluid Applied WB+™ complies with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

2.1 2024 IBC and IRC Evaluation Reports

The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 *Tyvek® Fluid Applied WB+™* is a fluid applied water-resistive coating based on a proprietary formulation. *Tyvek® Fluid Applied WB+™* is intended to be spray or roller applied in a single coat to achieve a 25-mil thickness. *Tyvek® Fluid Applied WB+™* has a shelf life of 12 months from the date of manufacture, when stored in a clean, dry environment at temperatures between 50°F and 80°F.

3.2 *Tyvek® Fluid Applied Flashing and Joint Compound+™* is a trowel applied, elastomeric flashing material, used to flash rough openings for windows and doors; fill seams, cracks, and holes in substrate; seal around penetrations; and treat joints and transitions.

4.0 PERFORMANCE CHARACTERISTICS

4.1 The coating material has a flame spread index of 25 or less and smoke-developed index of 450 or less when

tested at a maximum thickness of 25 mil in accordance with ASTM E84.

4.2 The coating material has an air permeance not exceeding 0.02 L/s·m^2 at 75 Pa when tested in accordance with ASTM E2178.

4.3 *Tyvek® Fluid Applied WB+™* has a water vapor transmission of 22 perms at 25 mil thickness when tested in accordance with ASTM E96, water method.

4.4 *Tyvek® Fluid Applied WB+™* may be installed in exterior walls of buildings of Types I, II, III, and IV construction complying with IBC 1402.6, when installed in assemblies as described below. Assemblies described below are based on data submitted to Intertek and does not exclude other constructions, when justified to the satisfaction of the building code.

4.4.1 NFPA 285 Assembly with Alpolic® /fr 4 mm ACM Panel. Components of the wall assembly are described in Table 2 and illustrated in Figure 1.

4.4.2 NFPA 285 Assembly with Alcoa Reynobond FR 6 mm ACM Panel. Components of the wall assembly are described in Table 2 and illustrated in Figure 2.

4.4.3 NFPA 285 Assembly with 4-inch Clay Brick Veneer. Components of the wall assembly are described in Table 2 and illustrated in Figure 3.

4.5 *Tyvek® Fluid Applied WB+™* has a VOC content of 50 g/L when evaluated in accordance with U.S. EPA Method 24.

5.0 INSTALLATION

5.1 *Tyvek® Fluid Applied WB+™* must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A current copy of the manufacturer's published installation instructions must be available on the jobsite during installation.

5.2 *Tyvek® Fluid Applied WB+™* is spray or roller applied in a single coat in a 25-mil wet coat. Thickness should be controlled by applying the appropriate volume over a marked area and by spot checking with a wet mil gauge. Integrate Tyvek® Fluid Applied WB+™ with through wall flashing and window/door flashing by overlapping the flashing with Tyvek® Fluid Applied WB+™ by a minimum of 2 inches.

Apply *Tyvek® Fluid Applied WB+™* to clean substrate, free of any substance that may affect the adhesion, such as frost, oil, grease, mold and efflorescence. Remove all dust, dirt and loose mortar from the substrate. CMU substrates should be free of holes and excess mortar. Fill all head and bed joints with mortar. Mortar joints should be struck flush.

5.3 Apply *Tyvek® Fluid Applied WB+™* when air and surface temperatures are above 25°F. Do not install once the ambient temperature exceeds 95°F, unless the application surface is shaded. The maximum surface temperature for application is 140°F.

5.4 Joints are treated by applying a bead of *Tyvek® Fluid Applied Flashing and Joint Compound+™* to both adjoining surfaces and spread material across transition seam to a width of approximately 2 inches. Apply a nominal 25 mil wet application of *Tyvek® Fluid Applied WB+™* across the sheathing joint.

5.5 *Tyvek® Fluid Applied WB+™* may not be used to bridge gaps greater than 1/8 inch.

5.6 *Tyvek® Fluid Applied WB+™* is recognized in this report for use with the following substrates: exterior gypsum sheathing complying with ASTM C1177**,** Plywood**,** Oriented Strand Board (OSB)**,** wood, treated wood, metal, Concrete**,** and Cement Masonry Units (CMU).

5.6.1 When applying *Tyvek® Fluid Applied WB+™* over wood-based substrates, the moisture content of the substrate shall be below 20%.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 *Tyvek® Fluid Applied WB+™* has not been evaluated for use in fire-resistance-rated construction.

6.3 *Tyvek® Fluid Applied WB+™* shall only be used for wall systems that include a continuous path for drainage allowing moisture that penetrates the façade to exit to the exterior.

6.4 *Tyvek® Fluid Applied WB+™* is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Manufacturer installation instructions

7.2 Reports of testing in accordance with the performance requirements of ICC-ES AC212, Acceptance Criteria for Water-Resistive Coating Used as Water-Resistive Barriers over Exterior Sheathing, approved February 2015.

7.3 Reports of testing in accordance with ASTM E84-21a, ASTM E96-21, ASTM E2178-21a, NFPA 285-23, and U.S. EPA Method 24.

8.0 IDENTIFICATION

The *Tyvek® Fluid Applied WB+™* is identified with the manufacturer's name (DuPont de Nemours, Inc), address, the product name (Tyvek® Fluid Applied WB+™), the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0307).

CODE COMPLIANCE
Intertek
CCRR-####

9.0 OTHER CODES

9.1 Florida Building Code

Tyvek® Fluid Applied WB+™, described in Sections 2.0 through 7.0 of this Research Report, complies with the 2023 and 2020 *Florida Building Code – Building* and *Florida Building Code – Residential*, subject to the following condition:

- Use of the *Tyvek® Fluid Applied WB+™* 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 Research Report.

Intertek is an approved evaluation entity and quality assurance entity pursuant to Florida Statute 553.842 – *Product Evaluation and Approval*

9.2 California Building Code and Residential Code

Tyvek® Fluid Applied WB+™, described in Sections 2.0 through 7.0 of this Research Report, complies with the 2022 *California Building Code* and *California Residential Code*, including CBC Chapter 7A and CRC Section R337.

9.3 California Green Building Standards Code (CALGreen)

Tyvek® Fluid Applied WB+™, described in Sections 2.0 through 7.0 of this Research Report, is recognized as a water-resistive barrier, thereby complying with the requirements of 2022 *California Green Building Standards Code* Sections 5.407.1 and 5.505.1.

Tyvek® Fluid Applied WB+™ has a VOC content not exceeding 50 g/L, thereby complying with the requirements of 2022 *California Green Building Standards Code* Sections 4.504.2.2 and 5.504.4.3, for a Building Envelope Coating.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

TABLE 1 – Properties Evaluated

PROPERTY	2024 IBC	2022 CBC Section	2023 FBC Section	2024 IRC	2023 FBC-Residential Section	2022 CRC Section	2024 IECC Section	2022 CALGreen Section
Alternative Materials	104.2.3	104.11	104.11	R104.2.2	R104.11	R104.11	--	101.8
Water-resistive barrier	1403.2 1407.4.1.1 2510.6	1403.2 1407.4.1.1 2510.6	1404.2 1408.4.1.1 2510.6	R703.2 R703.7.3 R703.9.2	R703.2 R703.7.3 R703.9.2	R703.2 R703.7.3 R703.9.2	--	5.407.1 5.505.1
Air Barrier		--	--	N1102.5.1	N1102.4.1	--	C402.6.2.3.1 C402.6.2.3.2 R402.5.1	--
Type I, II, III, IV, V Construction	1402.6	1402.5	1403.5		--	--	--	--
VOC Content		--	--		--	--	--	4.504.2.2 5.504.4.3

Note: Section numbers in earlier versions of the codes may differ

TABLE 2 – NFPA 285 Complying Walls

Wall Component	Materials
Alpolic® /fr 4 mm ACM Panel Figure 1	1. Interior surfaces of the window opening lined with Densglass Gold 2. Joints in interior gypsum sheathing are finished with 2-inch tape and treated with joint compound compliant to ASTM C475. 3. 4 in. thick, 4-pcf mineral wool installed within the stud cavities to fill the joint at each floor line, held in place with Z-clips. 4. Alpolic®/fr 4-mm ACM panels are installed over the exterior face with Crown Corr, Inc. CCI-1000-B Dry System aluminum extrusion system, consisting of aluminum “J” and “T” channels. 5. Window sill and jambs finished with 0.080-inch-thick aluminum flashing to cap the front and back edges of the window opening 6. Horizontal joints must be a minimum of 60 inches above any opening.
Alcoa Reynobond FR 6 mm ACM Panel Figure 2	1. Interior surfaces of the window opening lined with Densglass Gold 2. Joints in interior gypsum sheathing are finished with 2-inch tape and treated with joint compound compliant to ASTM C475. 3. 4 in. thick, 4-pcf mineral wool installed within the stud cavities to fill the joint at each floor line, held in place with Z-clips. 4. Reynobond FR 6 mm ACM panels installed with the Kovach KRS-225 system 5. Window sill and jambs finished with 0.080-inch-thick aluminum flashing to cap the front and back edges of the window opening 6. No vertical joints are permitted above any opening.
4-inch Clay Brick Veneer Figure 3	1. Interior surfaces of the window opening lined with Densglass Gold 2. Joints in interior gypsum sheathing are finished with 2-inch tape and treated with joint compound compliant to ASTM C475. 3. 4 in. thick, 4-pcf mineral wool installed within the stud cavities to fill the joint at each floor line, held in place with Z-clips. 4. 4 in. thick clay brick veneer constructed over the exterior face of the wall using Hohmann & Barnard, Inc. X-Seal Byna-Lok brick ties, with a nominal 2 in. air gap. 5. Window sill and jambs finished with 0.080-inch-thick aluminum flashing around the entire window opening perimeter, and 2 in. onto the face of both sides of the wall.

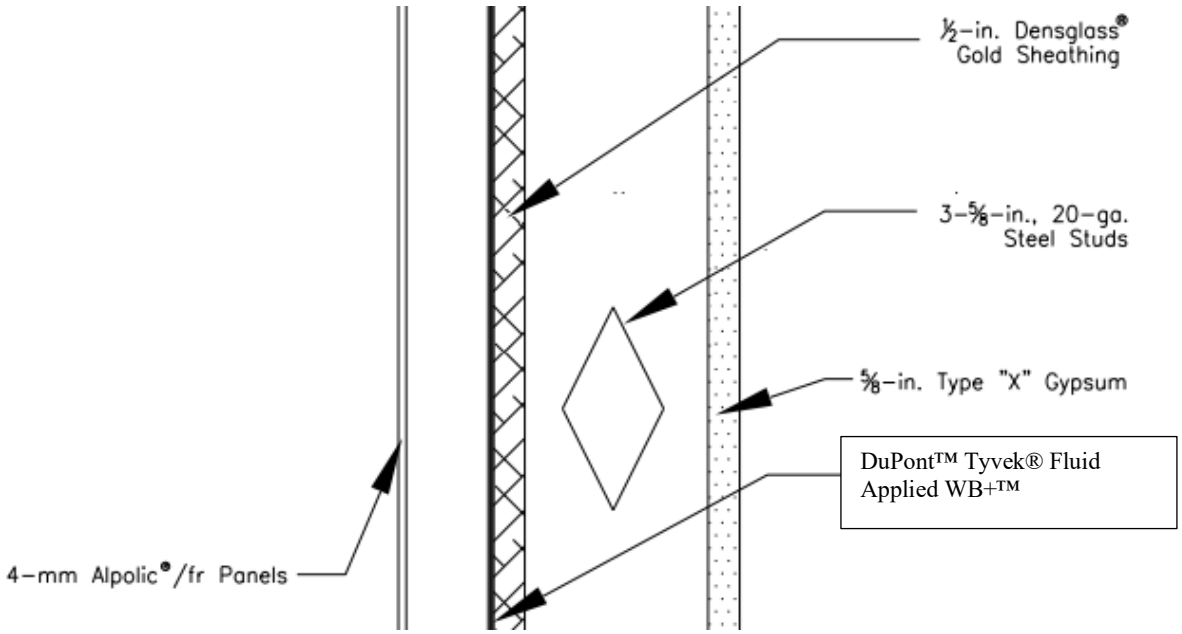

FIGURE 1 – NFPA 285 Assembly with Alpolic® /fr 4 mm ACM Panel

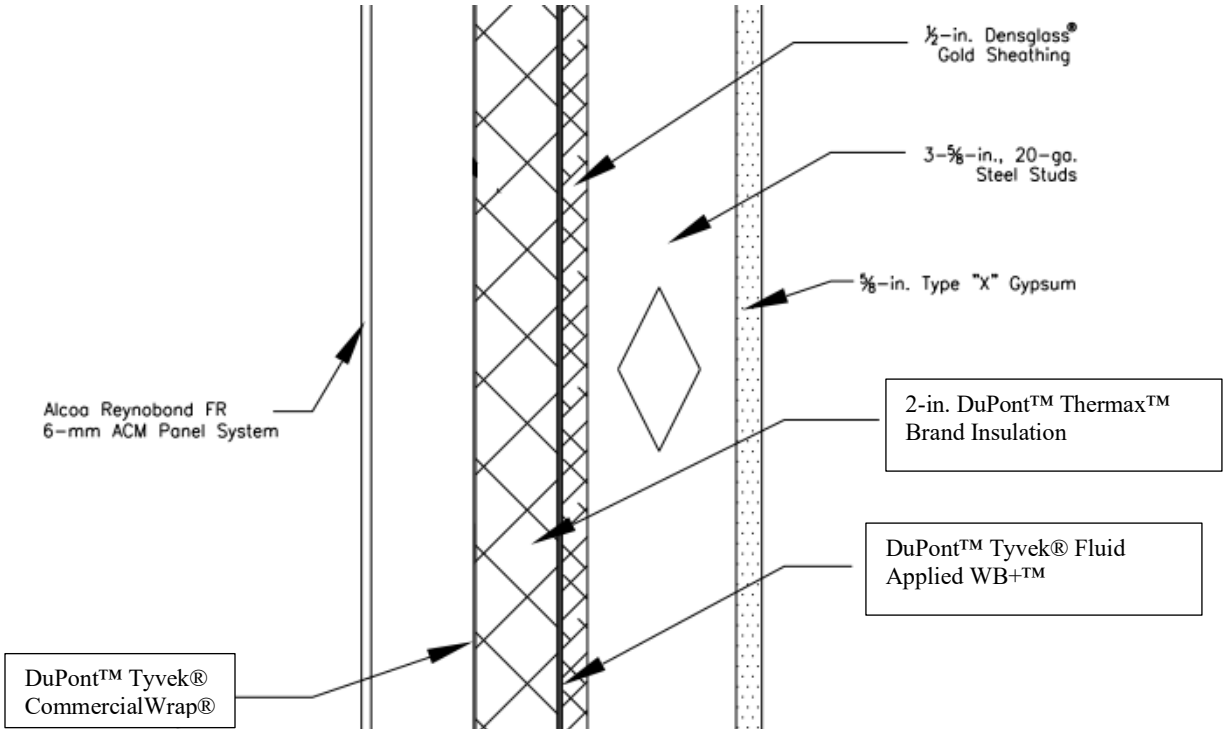

FIGURE 2 – NFPA 285 Assembly with Alcoa Reynobond FR 6 mm ACM Panel

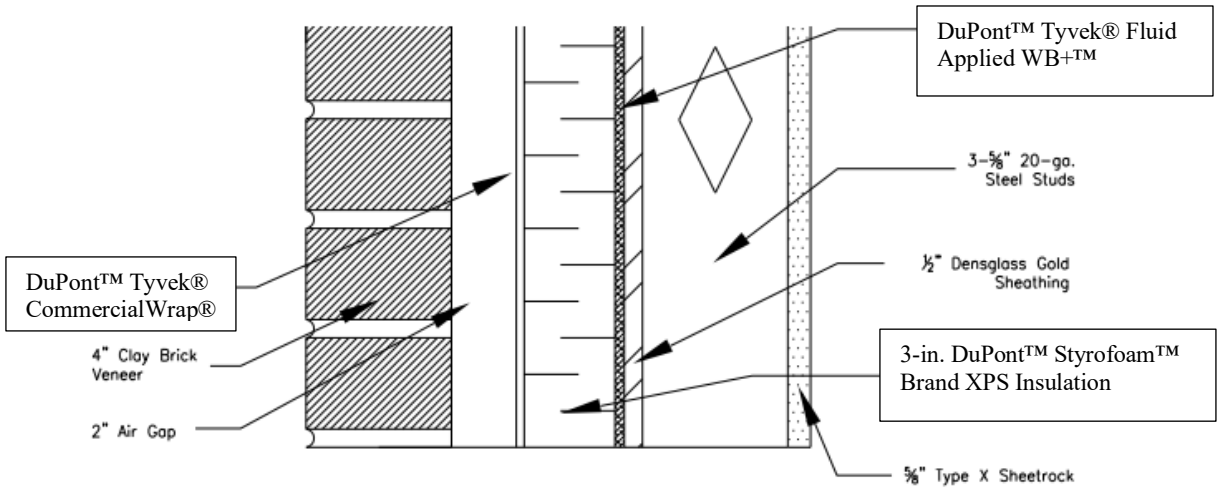

FIGURE 3 – NFPA 285 Assembly with 4-inch Clay Brick Veneer