Code Compliance Research Report
CCRR-0581

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Renewal Date: 01-31-2026

DIVISION: 07 00 00 – Thermal and Moisture Protection
Section: 07 21 00 – Thermal Insulation

REPORT HOLDER:
Nu-Wool Co., LLC
2472 Port Sheldon St.
Jenison, MI 49428
616-69-0100
www.nuwool.com

REPORT SUBJECT:
Nu Cell Spray-applied Cellulosic Insulation

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)

NOTE: This report references the most recent Code editions cited. Section numbers in earlier editions may differ.

1.2 Nu Cell cellulosic insulation has been evaluated for the following properties (see Table 1):

- Physical properties
- Flame spread characteristics

1.3 Nu Cell cellulosic insulation has been evaluated for the following uses (see Table 1):

- Concealed and exposed insulation in accordance with IBC Section 720 and IRC Section 302.10, including exposed use in attic floors under IBC Section 720.3.1 and IRC Section R302.10.4

2.0 STATEMENT OF COMPLIANCE

Nu Cell cellulosic insulation 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 6.0.

3.0 DESCRIPTION

3.1 Nu Cell Spray-applied Cellulosic Insulation: Nu Cell insulation is a spray-applied cellulosic insulation. The cellulosic insulation is mixed in the field with adhesive and is sprayed onto the receiving surface. The sprayed insulation has a nominal density of 2.9 pcf.

3.2 Adhesive: The adhesive is Great Lakes Adhesive GL7075-FR manufactured by Evans Adhesives Corp.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Physical Properties: The spray-applied cellulosic insulation complies with ASTM C1149, Type I.

4.2 Flame Spread Characteristics: The spray-applied cellulosic insulation has a flame-spread index no greater than 25 and a smoke developed index no greater than 50 when tested in accordance with ASTM E84.

4.3 Thermal Resistance: The spray-applied cellulosic insulation has a thermal resistance of 3.7 $hr \cdot ft^2 \cdot °F/Btu$ at a nominal 1-inch thickness.

4.4 Critical Radiant Flux: When tested in accordance with ASTM E970, the insulation demonstrated a critical radiant flux of not less than 0.12 W/m^2.

5.0 INSTALLATION

5.1 General: Nu Cell spray-applied cellulosic insulation must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

5.2 Application: The adhesive is mixed with tap water at a ratio of 1:4. The adhesive must be mixed thoroughly with a drill and mixing arm attachment. The cellulosic insulation is blown and the adhesive is pneumatically conveyed to a spray nozzle where mixing occurs with typical spray pressure of 300 psi. The insulation may be applied to a maximum nominal thickness of 3.3 inches.

The spray-applied cellulosic insulation may be used in concealed and exposed locations permitted by IBC Section 720 and IRC Section R302.10, including use as exposed insulation on attic floors in accordance with IBC Section 720.3.1 and IRC Section R302.10.4.

When installation is above or adjacent to recessed luminaires or other heat-producing fixtures, installation must be in accordance with CPSC 16 CFR 1404, IRC Sections E4003.2 and E4004, and NFPA 70 (NEC) Section 410.116. A permanent barrier is necessary to maintain a 3-inch clearance between the item and the insulation, unless the recessed luminaire is identified as Type IC and is listed in accordance with the applicable code for direct contact with insulation, or the heat-producing element is listed for zero clearance to combustibles. The insulation is limited to areas where the temperature will not exceed 194°F in accordance with IRC Section E4003.2.

Nu Cell insulation may be used within a plenum in accordance with IMC Section 602.3.10.

On vertical surfaces and the underside of roof framing in attics, Nu Cell spray-applied cellulosic insulation may be used as an ignition barrier over foam plastic insulation, in accordance with IRC Section R303.5.3, Item 3.7.

The calculated fire-resistance rating of wood stud walls is increased by 15 minutes when Nu Cell insulation is applied to completely fill the stud spaces, in accordance with IBC Table 722.6.2(5).

The insulation may be installed in Types I and II construction as permitted in IBC Section 603.1(2).

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 The Nu Cell Cellulosic Insulation may not exceed a nominal installed thickness of 3.3 inches.

6.3 Jobsite certification and labeling of the insulation must comply with IRC Section N1101.10 and IECC Sections C303.1 or R303.1, as applicable.

6.4 The Nu Cell Cellulosic Insulation is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Reports of tests in accordance with ASTM C1149, ASTM E970, and CPSC 16 CFR Parts 1209 and 1404.

7.2 Intertek Listing Report "Nu Cell Spray-applied Cellulosic Insulation", on the Intertek Directory of Building Products.

8.0 IDENTIFICATION

The Nu Cell Cellulose Insulation is identified with the manufacturer's name (Nu-Wool Co., LLC), the product name (Nu Cell), the Intertek Mark as shown below, the Intertek Control Number and the Code Compliance Research Report number (CCRR-0581).

The adhesive is identified by the manufacturer's name (Evans Adhesive Corp), and the product name (Great Lakes Adhesive GL7075-FR).

9.0 OTHER CODES

This section is not applicable.

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	Applicable Code Sections		
	2024 IBC	2024 IRC	2024 IECC
Physical properties	720.6	302.10.3	NA
Flame spread characteristics	720.2 720.3	302.10.1	NA
Thermal resistance	NA	N1101.10.4 N1102.1.4	C303.1 C402.1 R303.1 R402.1