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Legacy report on the 2000 International Building Code®, the BOCA® National Building Code/1999, the 1999 Standard Building Code®, the 1997 Uniform Building Code™, the 2000 International Residential Code®, the 2002 Accumulative Supplement to the International Codes™ and the 1998 International One and Two Family Dwelling Code®

DIVISION 07—THERMAL AND MOISTURE PROTECTION
Section 07270—Air Barriers

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LISTEE:

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1.0 SUBJECT

- 1.1 GreenGuard® Value Wrap Housewrap
1.2 GreenGuard® Classic Wrap Housewrap
1.2.1 Lowe's Housewrap
1.2.2 PINKWRAP® Housewrap
1.3 GreenGuard® Ultra Wrap Housewrap
1.4 GreenGuard® RainDrop Housewrap

2.0 PROPERTY FOR WHICH EVALUATION IS SOUGHT

- 2.1 Surface Burning Characteristics
2.2 Air Infiltration Barrier
2.3 Water-Resistive Barrier (Moisture Protection Barrier, Weather-Resistive Barrier, or Weather-Resistant Sheathing Paper), see section 3.4

3.0 DESCRIPTION

3.1 General

GreenGuard Housewraps are used as an air infiltration barrier and/or water-resistive barrier on the exterior side of exterior walls where combustible construction is permitted. The housewraps are roll type materials consisting of either a cross-woven polyolefin scrim with micro-sized pores or a non-perforated/non-woven polyolefin fabric combined with a polyolefin sheet (Ultra Wrap) for the transmission of moisture from inside the wall cavities.

3.1.1 GreenGuard® Value Wrap Housewrap is 0.008 inch (0.2 mm) thick with an average weight of 13 pounds (6 kg) per 1000 square feet (93 m²).

3.1.2 GreenGuard® Classic Wrap Housewrap is 0.008 inch (0.2 mm) thick with an average weight of 15 pounds (7 kg) per 1000 square feet (93 m²). GreenGuard® Classic Wrap Housewrap is also sold by Owens Corning as PINKWRAP® Housewrap and Lowe's Home Improvement Warehouse as Lowe's Housewrap. GreenGuard® Classic Wrap Housewrap is green in color, PINKWRAP® Housewrap is pink in color, and Lowe's Housewrap is white in color.

3.1.3 GreenGuard® Ultra Wrap Housewrap is a non-perforated and non-woven polyolefin fabric combined with a polyolefin sheet and is 0.008 inch (0.2 mm) thick with an average weight of 14 pounds (6 kg) per 1000 square feet (93 m²).

3.1.4 GreenGuard® RainDrop Housewrap is 0.018 inch (0.5 mm) thick with an average weight of 16 pounds (7 kg) per 1000 square feet (93 m²).

3.2 Surface Burning Characteristics

GreenGuard Housewraps demonstrated a flame spread index (FSI) of less than 25 and a smoke developed index (SDI) of less than 450 when tested under ASTM E 84.

3.3 Water Vapor Transmission

3.3.1 GreenGuard Value Wrap Housewrap demonstrated a water vapor transmission rating of 96 g/24hrs.m², or 14 U.S. Perms when tested under ASTM E 96, Desiccant Method A.

3.3.2 GreenGuard Classic Wrap Housewrap demonstrated a water vapor transmission rating of 81 g/24hrs.m², or 12 U.S. Perms when tested under ASTM E 96, Desiccant Method A.

3.3.3 GreenGuard Ultra Wrap Housewrap demonstrated a water vapor transmission rating of 494 g/24hrs.m², or 75 U.S. Perms when tested under ASTM E 96 Desiccant Method A.

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3.3.4 GreenGuard RainDrop Housewrap demonstrated a water vapor transmission rating of 73 g/24hrs.m², or 10 U.S. Perms when tested under ASTM E 96 Desiccant Method A.

3.4 Moisture Protection Barrier

GreenGuard® Housewraps were tested for water resistance, water vapor transmission, pliability, dry tensile strength, ultraviolet exposure, and accelerated aging. The testing demonstrated that the housewraps are permitted to be used as an acceptable alternative to the *Code* prescribed materials for use as a:

3.4.1 Water-Resistive Barrier, *International Building Code*, alternate to No. 15 asphalt felt, complying with ASTM D 226 for Type 1 Felt, as required in Sections 1404.2, 1403.2 IBC.

3.4.2 Moisture Protection Barrier, *Standard Building Code*, alternate to Type 15 felt, as required for wood framed wall construction in Section 2303.3 SBC.

3.4.3 Water-Resistive Barrier, *BOCA National Building Code*, alternate to No. 15 asphalt felt, complying with ASTM D 226 for Type 1 Felt, as required in Sections 1406.3.6 and 1404.3 BNBC.

3.4.4 Weather-Resistive Barrier, *Uniform Building Code*, alternate to asphalt-saturated rag felt, as required in Section 1402.1 UBC.

3.4.5 Weather-Resistant Sheathing Paper, *International One and Two Family Dwelling Code*, alternate to asphalt-saturated felt weighing not less than 14 pounds per 100 square feet (0.683 kg/m²), as required in Section 703.2 and Table 703.4 IOTFDC.

3.4.6 Weather-Resistant Sheathing Paper, *International Residential Code for One- and Two-Family Dwellings*, alternate to No. 15 asphalt felt, complying with ASTM D 226 for Type 1 Felt, as required in Sections R703.2, Table R703.4 and R703.9.1 IRC.

4.0 INSTALLATION

GreenGuard® Housewraps are installed on the exterior side of exterior walls over exterior sheathing or insulation. The printed side is installed facing to the outside.

GreenGuard® Housewraps are installed after wall framing is completed, and before or after windows and doors are installed. The roll is placed 24 inches (610 mm) from the corner and fastened using plastic cap nails, spaced a maximum of 16 inches (406 mm) or staples with minimum 1 inch (25 mm) crown spaced 12 inches (305 mm) on center and then unrolled around the building and fastened with nails or staples spaced as noted above. Fasteners shall penetrate at least 1/2 inch (13 mm) into nail base. A minimum of 6 inches (152 mm) overlap for the sheet in the horizontal and vertical dimension is recommended. The higher piece of housewrap on the wall shall lap over the lower piece. Horizontal and vertical joints are sealed with tape (Pactiv Contractor Tape or equivalent).

When applying over foam insulation boards, the fabric is fastened with nails or staples long enough to penetrate the insulation and grip framing studs.

GreenGuard® Housewraps shall be covered with an exterior wall finish complying with the applicable Code.

The manufacturer's published installation instructions and this report shall be strictly adhered to and a copy of these instructions shall be available at all times on the job site during installation.

The instructions within this report govern if there are any conflicts between the manufacturer's instructions and this report.

5.0 IDENTIFICATION

Each roll of GreenGuard® Housewrap and Lowe's Housewrap covered by this report shall be labeled with Pactiv Building Products' name/and or trademark, address, the product name, and this ICC-ES legacy report number (*NER-689*), for field identification.

Each roll of PINKWRAP® Housewrap covered by this report shall be labeled with Owens Corning's name/and or trademark, address, the product name, and this ICC-ES legacy report number (*NER-689*), for field identification.

6.0 EVIDENCE SUBMITTED

6.1 Manufacturer's descriptive literature, installation instructions, and specifications.

6.2 Test report on physical tests on housewrap materials, prepared by Radco, Project No. C-6982, Report No. RAD-2093c, dated April 1999, signed by Frank Quezada and Michael L. Zieman, P.E.

6.3 Test report on physical tests on GreenGuard Classic Wrap, prepared by Radco, Project No. C-8232(Rev), Report No. RAD-3011, dated April 2002, signed by Frank E. Quezada and Michael L. Zieman, P.E.

6.4 Test report on physical tests on GreenGuard Value Wrap, prepared by Radco, Project No. C-8232(Rev), Report No. RAD-3012, dated April 2002, signed by Frank E. Quezada and Michael L. Zieman, P.E.

6.5 Test report on physical tests on GreenGuard RainDrop Drainage Wrap, prepared by Radco, Project No. C-8448, Report No. RAD-3086, dated July 2002, signed by Frank E. Quezada and Michael L. Zieman, P.E.

6.6 Test report on housewrap material in accordance with ASTM E 84, prepared by Omega Point Laboratories, Report No. 8939-104572, dated March 11, 1999, signed by Guy A. Haby and William E. Fitch, P.E.

6.7 Test report on GreenGuard Water Drain/RainDrop material in accordance with ASTM E 84, prepared by Omega Point Laboratories, Report No. 16306-110640, dated February 12, 2002, signed by Guy A. Haby and William E. Fitch, P.E.

6.8 Test report on GreenGuard Classic Wrap in accordance with ASTM E 84, prepared by Omega Point Laboratories, Report No. 16306-111460, dated June 13, 2002, signed by Ernst Schmidt and William E. Fitch, P.E.

- 6.9 Test report on GreenGuard Value Wrap in accordance with ASTM E 84, prepared by Omega Point Laboratories, Report No. 16306-111461, dated June 17, 2002, signed by Ernst Schmidt and William E. Fitch, P.E.
- 6.10 Test report on Structural Integrity & Water Penetration Test on GreenGuard RainDrop Housewrap, prepared by Radco, Project No. C8915, Report No. RAD-3297, dated July 3, 2003, signed by Sanjay "Jay" Mishra and J. Donald Waldman, P.E.

7.0 CONDITIONS OF USE

The ICC-ES Subcommittee for the National Evaluation Service finds that the GreenGuard® Housewraps as described in this report comply with or are suitable alternates to that specified in the 2000 International Building Code®, the BOCA® *National Building Code* 1999, the 1999 *Standard Building Code*®, the 1997 *Uniform Building Code*™, the 2000 *International Residential Code*®, the 2002 *Accumulative Supplement to the International Codes*™ and the 1998 *International One and Two Family Dwelling Code*® subject to the following conditions:

- 7.1 GreenGuard® Value Wrap, Classic Wrap, and RainDrop™ Housewraps shall not be exposed to sunlight for more than 12 months. GreenGuard® Ultra Wrap Housewrap shall not be exposed to the sunlight for more than 4 months.
- 7.2 GreenGuard® Housewraps shall not be used as a roofing paper underlayment.
- 7.3 GreenGuard® Housewraps shall only be installed in exterior walls where combustible construction is permitted under the applicable Code.
- 7.4 GreenGuard® Housewraps shall be covered with an exterior wall finish complying with the applicable Code.
- 7.5 The thermal properties of GreenGuard® Housewraps is outside the scope of this report.
- 7.6 This report is subject to periodic re-examination. For information on the current status of this report, contact the ICC-ES.