

ICC-ES Evaluation Report

ESR-3021

Issued November 1, 2009

This report is subject to re-examination in one year.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 07—THERMAL AND MOISTURE PROTECTION
Section: 07305—Roofing Felt and Underlayment

REPORT HOLDER:

LEMMINKAINEN KATTO OY
PUUSEPANTIE 11 TUUSULA 04360
FINLAND
+358 207150 444
www.roofaquaguard.com
pertti.nurmi@lemminkainen.fi

EVALUATION SUBJECT:

ROOFAQUAGUARD UDLX ROOF UNDERLAYMENT

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)

Properties evaluated:

- Physical properties
- Water resistance

2.0 USES

RoofAquaGuard UDLX is a synthetic roofing underlayment for use as an alternative to ASTM D 226, Type I and Type II, roofing underlayments specified in Chapter 15 of the IBC and Chapter 9 of the IRC.

3.0 DESCRIPTION

RoofAquaGuard UDLX is a roofing underlayment comprised of a polypropylene (PP) nonwoven fiber felt cover which is bonded to a PP woven sheet. This PP woven sheet is then bonded to an ethylene-vinyl acetate layer on the bottom side. The underlayment has a nominal 20-mil thickness [0.02 inch (0.5 mm)], weighs 3.74 pounds per 100 square feet (185 g/m²) and is available in roll sizes up to 60 inches (1.52 m) wide and 200 feet (61 m) long.

4.0 DESIGN AND INSTALLATION

Installation must comply with the requirements of the applicable code, this report and the manufacturer's published installation instructions. The installation instructions must be available at the jobsite at all times during the installation.

Prior to application of the underlayment, the deck surface must be free of frost, dust and dirt, loose nails and other protrusions. Damaged sheathing must be replaced. The substrate must be clean and dry prior to installation. Minimum roof slope is 2:12 (16.67% slope). The underlayment is laid horizontally (parallel to the eave) with the print side up, and with 4-inch (102 mm) horizontal laps and 6-inch (152 mm) vertical laps. Overlaps must run with the flow of water in shingle fashion. The underlayment is attached to the roof deck with a minimum of No. 12 gage [0.109-inch shank diameter (2.77 mm)] corrosion-resistant steel or stainless steel nails having a minimum 3/8-inch-diameter (9.5 mm) head, with minimum 1-inch-diameter (25.4 mm) plastic caps. The fasteners are spaced 12 inches (305 mm) on center vertically and 14 inches (356 mm) on center horizontally, except in areas subject to basic wind speeds (3-second gust) in excess of 110 miles per hour (49 m/s), where the underlayment must be applied in accordance with IBC Section 1507.2.8.1 or IRC Section R905.2.7.2 for asphalt shingle roof coverings, or IRC Section R905.3.3.3 for concrete and clay tile roof coverings, as applicable. When battens or counterbattens are installed over the underlayment, the underlayment need only be preliminarily attached pending attachment of the battens or counterbattens.

In areas of the roof required to have an ice dam membrane under Chapter 15 of the IBC or Chapter 9 of the IRC, an approved ice dam membrane must be applied over the solid substrate in sufficient courses so that the underlayment extends up from the edge of the eave to a point at least 24 inches (610 mm) inside the exterior wall line. The roofing underlayment, in the field of the roof, overlaps the ice dam membrane.

Installation of an approved roof covering can proceed immediately following application of the roofing underlayment. The underlayment must be covered by the roof covering within the time period set forth in the report holder's published installation instructions. For reroofing applications, the same procedures apply after removal of the existing roof covering and roofing felts to expose the roof deck.

5.0 CONDITIONS OF USE

The RoofAquaGuard UDLX Roofing Underlayment 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 The underlayment must be installed in accordance with this report, the applicable code and the manufacturer's published installation instructions. In the event of a conflict between this report and the published installation instructions, this report governs.
- 5.2 Installation is limited to use on structures located in areas where nonclassified roof coverings are permitted. Where classified roof coverings are required, substantiating data must be provided to the code official for approval.
- 5.3 Installation is limited to roofs having a slope of 2:12 (16.67%) or greater.
- 5.4 Installation is limited to use with roof coverings that are mechanically fastened through the underlayment to the sheathing or rafters.
- 5.5 Installation is limited to roofs with ventilated attic spaces in accordance with the requirements of the applicable code.

5.6 RoofAquaGuard UDLX roofing underlayment is manufactured for Lemminkainen Katto OY, under a quality control program with inspections by Intertek Testing Services NA Ltd. (AA-691).

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Roof Underlayments (AC188), dated July 2007.

7.0 IDENTIFICATION

Each roll of RoofAquaGuard UDLX Roofing Underlayment is identified by a label bearing the following information: company name (Lemminkainen Katto Oy), manufacturing location, output roll number, the evaluation report number (ESR-3021), and the name of the inspection agency (Intertek Testing Services NA Ltd.).