



GreenGuard® Fanfold Underlayment

INSTALLATION GUIDE

General Information

Kingspan GreenGuard® Siding Underlayment can be used as a water-resistive barrier in lieu of housewraps and building paper. *Kingspan GreenGuard® Siding Underlayment* is recognized for use as a water-resistive barrier in Intertek CCRR-1022 when it is installed in accordance with the following guidelines.

Compliance

Intertek CCRR 1021;
CA BEARHFTI Lic. No. TB 1334;
Florida Product Approval – No. FL14164;
CCMC 12722-L;
MN Dept. of Energy – Chapter 7640;
UL LLC® – See Classification Certificate A183.

Handling & Storage

When stored outdoors, all product should be protected from exposure to direct sunlight using the original packaging or an opaque, light-colored tarp. Material that has been unwrapped should be covered or rewrapped.

WARNING: *Kingspan GreenGuard® Siding Underlayment* is combustible. A protective barrier or a thermal barrier is required as specified in the appropriate building code. Protect it from exposure to open flame or other ignition sources during shipping, storage and installation.

Health & Safety

Kingspan GreenGuard® Siding Underlayment is made of synthetic materials that are generally recognized as not providing a food source for insects, fungus, mold, or mildew. It should always be properly installed and stored.

Kingspan GreenGuard® Siding Underlayment should not be used as an exposed interior surface in buildings where people can be expected to be present. An approved fire protection barrier, such as 1/2" gypsum wallboard or equivalent, should be applied between these products and the interior of such buildings. Fire and building codes should be followed.

All assemblies should be evaluated for effectiveness and location of vapor retarders to avoid condensation and subsequent damage to structures (ASHRAE Handbook of Fundamentals). Since foam sheathings are non-structural, they must be installed over adequately braced framing in accordance with local building codes.

Review this Installation Guide prior to installation.

Refer to the Safety Data Sheets for the products referred to in this Installation Guide for additional information.

Preparation

Verify that substrate is flat, dry, and free of foreign material that will damage the *Kingspan GreenGuard® Siding Underlayment*. Beginning of installation means installer accepts the existing conditions.

Installation

Install *Kingspan GreenGuard® Siding Underlayment* directly over old siding using galvanized or aluminum roofing nails, with nails spaced about 2' apart. If the existing siding is damaged, remove it and install *Kingspan GreenGuard® Siding Underlayment* directly to the substrate.

Install the new siding material over *Kingspan GreenGuard® Siding Underlayment* in accordance with the siding manufacturer's installation instructions.

Care should be taken when installing *Kingspan GreenGuard® Siding Underlayment*. It must be adequately fastened so that the entire board lays completely flat against the existing siding material or sheathing. Avoid over driving fasteners, since this will crush the insulation, resulting in a wavy appearance of the finished exterior wall. Additional R-value (a system R-value) can be obtained when using reflective *Kingspan GreenGuard® Siding Underlayment* (i.e. XFP14, XFP38, FP1450, FQ250 or FQ350) by either installing it with the reflective surface next to lapped siding having uniform air-spaces at each lap or by installing 1/2" thick wood furring strips spaced 2' apart and attaching the underlayment with the reflective surface next to the furring strips to create a reflective air-space.

Installation as a Water-Resistive Barrier (WRB)

Installation over Existing Siding when Re-siding

When installing **Kingspan GreenGuard®** Siding Underlayment over an existing exterior wall, and the existing siding will not be removed, the existing wall assembly is already providing weather protection. Since there are no code provisions that require that an additional WRB be installed over an existing wall, **Kingspan GreenGuard®** Siding Underlayment can be installed using steps 1 through 3 as described below.

Installation on Walls with Existing Siding Removed when Re-siding

During the re-siding of walls where there is no housewrap or building paper covering the wood sheathing, **Kingspan GreenGuard®** Siding Underlayment can be used in lieu of the code-required WRB when it is installed as described below.

Step 1

Begin by unfolding several feet of the **Kingspan GreenGuard®** Siding Underlayment bundle and aligning the product with the bottom edge of the wood sheathing at the bottom of the wall.

Step 2

Attach **Kingspan GreenGuard®** Siding Underlayment using common roofing nails spaced 2' on center around the perimeter of the wall and along vertical framing members. Nails should penetrate the framing member a minimum of $\frac{3}{4}$ ". Care must be taken not to overdrive nails, since this may result in moisture leakage in areas where the damage extends completely through the product. Damaged areas should be repaired using tape, e.g. **Kingspan GreenGuard®** Custom or Standard Seam Tape.

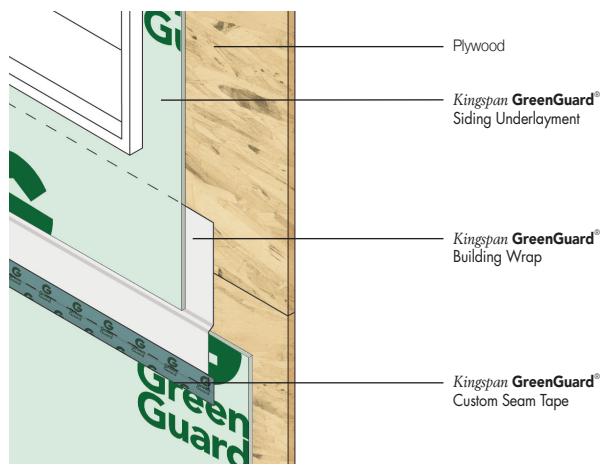
Step 3

Trim **Kingspan GreenGuard®** Siding Underlayment to fit around doors, windows and other wall penetrations so that gaps are minimized. Gaps larger than $\frac{1}{8}$ " should be sealed using tape, e.g. **Kingspan GreenGuard®** Custom Seam Tape, silicone sealant complying with ASTM C 920, Type S, Grade NS, Class 25 or an expanding spray foam sealant complying with AAMA 8 12. Many common sealants are compatible with **Kingspan GreenGuard®** Siding Underlayment.

Go to www.kingspaninsulation.us and download Technical Bulletin #11 from the Product Literature menu.

Step 4

All vertical and horizontal seams must be sealed using tape, e.g. **Kingspan GreenGuard®** Custom or Standard Seam Tape, or flashing, e.g. **Kingspan GreenGuard®** Flashing (minimum 2" wide strips). As an alternative, a 'Z-furring' horizontal seam treatment may be constructed using 16" wide strips of **Kingspan GreenGuard®** Building Wrap sealed to the **Kingspan GreenGuard®** Siding Underlayment as shown above right.



Step 5

Install flashing, e.g. **Kingspan GreenGuard®** Flashing, at window openings, as described in the '**Kingspan GreenGuard®** Building Wrap Installation Guide for Residential & Light Commercial Applications', with **Kingspan GreenGuard®** Siding Underlayment taking the place of **Kingspan GreenGuard®** Building Wrap.

For more information on specific building product recommendations and product data, contact your Kingspan Insulation LLC representative.

For the most current installation guidelines and compliance information go to www.kingspaninsulation.us.

Kingspan Insulation LLC believes the information and recommendations herein to be accurate and reliable. However, since use conditions are not within its control, Kingspan Insulation LLC does not guarantee results from use of such products or other information herein and disclaims all liability from any resulting damage or loss. No warranty, express or implied, is given as to the merchantability, fitness for particular purpose, or otherwise with respect to the products referred to.



Kingspan Insulation LLC

2100 RiverEdge Parkway, Suite 175, Atlanta, Georgia 30328
info@kingspaninsulation.us

1-800-241-4402

www.kingspaninsulation.us

www.kingspaninsulation.ca

* Kingspan, the G Device and the Lion Device are Registered Trademarks of the Kingspan Group plc in the US, Canada and other countries. All rights reserved.

* GreenGuard is a Registered Trademark of the Kingspan Group plc in the US. All rights reserved.