

# GreenGuard®

## GG40-LG XPS Insulation Board

### Submittal

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Job Reference

Job Name

Job Location

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Submitted By

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Submitted By

Date

Phone

Date

Phone

### Introduction

Kingspan GreenGuard® GG40-LG XPS Insulation Board comprises closed-cell extruded polystyrene (XPS) with a minimum compressive strength of 40 psi. GG40-LG has a formulation resulting in a GWP of less than 50. It has high water resistance and R-value of 5.0 per inch of thickness. It is available in a plain square edge board or a drainage channel board.

### Application

For use as general purpose insulation for roofing, wall and foundation applications requiring 40 psi minimum compressive strength.

- Blowing agent blend GWP of less than 50
- R-value of 5.0 per inch of thickness
- Meets ASTM C578 Type VI requirements
- Excellent for high load floor and roofing systems, ice rinks, roadways as well as plaza and parking decks

GreenGuard® XPS is not recommended for exterior wall applications over 6 stories tall. Contact Kingspan for approved applications.

### Compliance

Where sold, compliant with state HFC regulations.  
Intertek CCRR 1021;  
UL Listings- R11183;  
Miami-Dade County, FL.

### Warranty

Thermal Warranties available. Contact your Kingspan representative for copies or contact Kingspan Insulation LLC, 800-241-4402 for additional information, or visit [www.kingspaninsulation.us](http://www.kingspaninsulation.us) or [www.kingspaninsulation.ca](http://www.kingspaninsulation.ca)

# GreenGuard®

## GG40-LG XPS Insulation Board

### Handling & Storage

When stored outdoors, XPS should be protected from exposure to direct sunlight using the original packaging or an opaque, light-colored tarp. XPS that has been unwrapped should be covered or rewrapped. XPS left exposed should be covered within 60 days to minimize UV damage. Once the exposed XPS is covered, the damage stops and is limited to the thin layer of cells on the surface that was exposed to the UV. XPS cells below the UV exposed surface layer are generally undamaged and the XPS overall performance remains intact.

**WARNING:** This product is combustible. A protective barrier or 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® GG40-LG XPS Insulation Board 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. For detailed safe handling and safety information, refer to product SDS.

Kingspan GreenGuard GG40-LG XPS Insulation board is free of HFC 134a.

This product 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 ½" gypsum wallboard or equivalent, should be applied between this product 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.

**WARNING:** Do not stand on or otherwise support your weight on this product unless it is fully supported by a load bearing surface.

Product Data		
Property	Test Method	Value
General		
Nominal Thickness (in)		2, 3, 4
Nominal Board Width (ft)		2/4
Nominal Board Length (ft)		8
Edge Profile		Square Channeled
Property Type	ASTM C578	VI
Compressive Strength, Min. (psi@10% deflection)	ASTM D1621	40
Water Absorption, Max. (% by volume)	ASTM C272	0.3
Water Vapor Permeance, Max (perm)	ASTM E96 (Desiccant Method)	1.1
Density, Min. (lb/ft³)	ASTM C303	1.8
Service Temperature, Max. (°F)		165
Thermal		
Thermal Resistance, R-value¹ (°F·ft²·hr/Btu per in thick)	ASTM C518 (@75°F Mean Temperature)	5.0
Thermal Conductivity, k-value (Btu-in/hr-ft²·°F)	ASTM C518 (@75°F Mean Temperature)	0.2
Fire & Smoke		
Flame Spread² Smoke Developed²	ASTM E84 / UL723	25 (Class A) 140

¹ R-values listed are based on 2" aged product at 75°F mean temperature in accordance with FTC rule (16 CFR, Part 460) and the testing requirements of ASTM C578.

² These numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by this material under actual fire conditions. All applicable building codes must be followed.

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

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Please scan the QR code for the most recent product information.

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kingspan-green-guard-gg40-lg-submittal-en-us-v2.2

Version 2.2 - 11/2023

