

Technical Information Sheet

ISOGARD™ AK-RF Insulation Board

Packaging	Part Number
from 30 to 160 mm, 600mm x 1200mm, per bundle.	W9H22FXXXX2R
from 30 to 160 mm, 1200mm x 1200mm, per bundle.	W9H22FXXXX4R
from 30 to 160 mm, 1200mm x 2400mm, per bundle.	W9H22FXXXX8R

Note: Shrink-wrap packaging covering all 6 sides.

Description

The Elevate™ ISOGARD AK-RF insulation board for flat roofs consists of a closed-cell polyiso (PIR) foam core laminated on both sides to a gastight multi-layered aluminium complex. The board has been specifically developed for use underneath fully adhered Elevate single-ply membranes, but can also be applied underneath ballasted and mechanically anchored Elevate membranes. Please refer to the installation guidelines for more information about the use underneath Elevate and non-Elevate single-ply or bituminous membranes.

Preparation

Substrates must be dry, smooth, level, free from contamination and sufficiently strong to fix the roof build-up. Acceptable types of roof deck are in-situ poured concrete, pre-cast concrete elements with and without pressure layer (screed), lightweight concrete slabs, profiled metal decks, sandwich panels and wooden decks (timber, plywood, OSB).

Method of Application

ISOGARD AK-RF shall be neatly fitted to all roof penetrations and projections. No more boards shall be installed than can be covered with membrane and completed before the end of each day's work or before the onset of inclement weather.

ISOGARD AK-RF can be applied over existing as well as new roof surfaces and under ballasted, adhered or mechanically attached roofing membranes.

ISOGARD AK-RF must be installed using approved fasteners and plates or insulation adhesives. The number of fasteners per board needs to be determined based on a wind uplift calculation in accordance with local building codes and taking into account a minimum requirement by board size. They must be protected from moisture during storage and until the roofing membrane is installed.

Please refer to the Installation Guidelines for detailed information.

Characteristics

Properties	Standard EN 13165	Test method	Unit	Value
Declared thermal conductivity (λ_D)		EN 12667	W/mK	0.022
Compressive strength at 10% deformation	CS(10\Y)150	EN 826	kPa	≥ 150
Compressive strength at 2% deformation		EN 826	kPa	≥ 60
Tensile strength	TR80	EN 1607	kPa	≥ 80
Reaction to fire	Euroclass	EN 13501-1	-	E
Fire classification (end use)		EN 13501-1	-	B-s1 d0 (on steel deck)**
Water absorption – WL(T)		EN 12087	%	2
Closed cell content			%	> 90
Temperature resistance			°C	-20 to +90
PIR Index		Calculated	-	> 250

Product Offering*

Thickness	Ranging from 30 to 160 mm
Functional dimensions	Straight edges: 600 x 1200; 1200 x 1200; 1200 x 2400 mm Rebate edges: 585 x 1185; 1185 x 1185; 1185 x 2385 mm
Finishing	Flat boards with straight or rebate edges

Thermal Resistance

Thickness (mm)	R _D -Value (m ² K/W)	Thickness (mm)	R _D -Value (m ² K/W)
30	1,35	80	3.60
40	1,80	90	4.05
50	2,25	100	4.50
60	2,70	120	5.45
70	3,15	140	6.35
		160	7.25

Specification Compliance

- CE as per EN 13165:2012 + A2:2016
- Ozone Depleting Potential (ODP): 0
- Low Global Warming Potential
- Chlorine-free, Formaldehyde-free

* Please contact your local supplier for other thicknesses and availability.

** Please contact our technical services for additional information

Storage

Cool and dry. Store material in original unopened packaging in a dry area away from sources of physical damage or chemical contamination. Bundles need to be elevated above the water line to prevent moisture infiltration.

Shelf Life

Unlimited, if stored in the above-mentioned conditions.

Precautions

ISOGARD AK-RF is non-structural and non-load-bearing material. The finished roof assembly should be protected from excessive roof traffic with proper walkway materials. Keep insulation dry at all times. Keep the insulation boards away from fire, sparks and heated surfaces. Do not install over wet, damp or uneven substrates. Refer to Safe Use Instruction Sheet for more information. Information on application can be found in flat roof insulation guideline.

Disposal

The best disposal options include reuse, recycling, or energy recovery through incineration. Reuse is the most sustainable if the boards are in good condition. Best practices include minimizing waste, sorting materials, and using licensed disposal services. At the time of disposal, the ISOGARD AK-RF can be classified as non-hazardous waste.

Certifications and environmental information

- Production plant – ISO (International Standards Organisation)
 - ISO 9001:2015 – Quality Management
 - ISO 14001:2015 – Environmental Management
- National certifications
 - ATG
 - KOMO
- Environmental Product Declaration (EPD)
 - EPD-IVP-20240424-IBE1-EN
- Registration to environmental construction products databases
 - DGNB (German Sustainable Building Council)
 - EPBD (Belgium)
 - BCRG (Bureau Controle Registratie Gelijkwaardigheid, Netherlands)
- Interior air quality
 - Pure Life
 - A+

Note:

This document is meant only to highlight Elevate products and specifications based on latest knowledge and experience and is subject to change without notice. Above mentioned values are based on tested samples and may vary within applicable tolerances. For latest and complete product and detail information, please refer to the technical information posted on www.holcimelevate.com. Holcim Solutions and Products EMEA BV (“Holcim”) takes responsibility for furnishing quality materials which meet Holcim’s published product specifications. As neither Holcim itself nor its representatives practice architecture, Holcim offers no opinion on and expressly disclaims any responsibility for the soundness of any structure on which its products may be applied. The selection of the appropriate product and its correct application is the responsibility of the customer and not of Holcim. No Holcim Representative is authorized to vary this disclaimer.