IKO FM APPROVED SYSTEMS





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FM Global

FM (Factory Mutual) Global is one of the world's largest insurers, providing coverage for buildings among other assets.

FM Global is an American company headquartered in Boston, with offices worldwide including in Amsterdam and Brussels. FM Global focuses on damage prevention and imposes strict requirements regarding, for instance, fire resistance and wind load, which influence insurability.
An FM Approved system is not a quality mark.

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FM Approval and Roofnav

Manufacturers can have their products or systems tested by FM Global. If they meet FM Global's requirements, they are certified with an FM Approval.

Approved products or systems are listed in FM Global's database, RoofNav, where each system receives a unique assembly number.

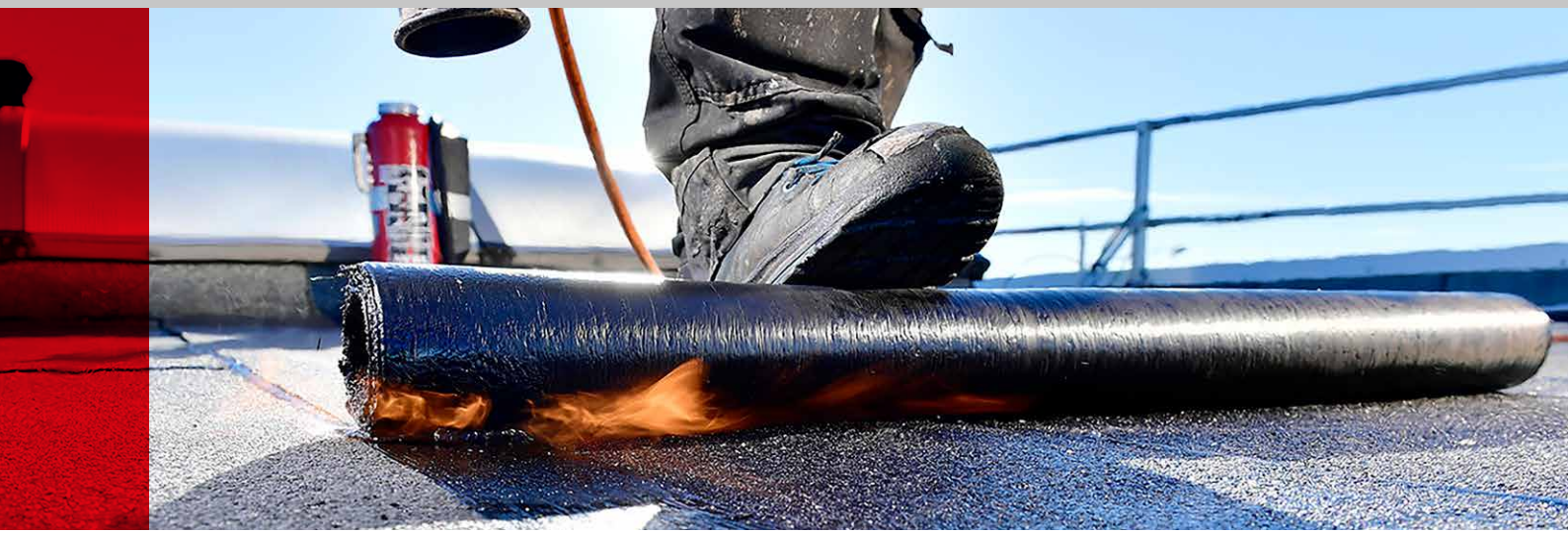
Clients can use this database to find suitable systems. If a client assembles a roof using FM listed products that haven't been tested together, FM Global will NOT issue insurance for that assembly, even if all components are approved individually.

RoofNav includes wind load requirements, but national wind load regulations take precedence over RoofNav specifications

Assembly Details

1. Cap Ply	
IKO nv	IKO powergum 470K24
Securement (Sheet Lap)	
Generic	torched
2. Securement (Cover) from 1. Cap Ply to 3. Base Sheet	
Generic	torched
3. Base Sheet	
IKO nv	IKO base Tecno APP F/FL
Securement (Sheet Lap)	
Generic	torched
4. Securement (Base Sheet) from 3. Base Sheet to 7. (Deck) Structural Concrete	
SSSP16141	
- OMG	OMG 2 in. Barbed Plate
- OMG	OMG #14 Heavy Duty
5. Insulation (Board Stock)	
IKO Europe	IKO enertherm ALU
IKO Europe	IKO enertherm ALU F4
IKO Europe	IKO enertherm ALU FB
IKO Europe	IKO enertherm ALU TAP
6. Vapor Retarder	
Generic	polyethylene (6 mil (0.006 in., 0.15 mml)
IIKO Europe	IKO shield ALU/SA
IKO Industries Ltd	ArmourGard Vapour Retardant
Tremco CPG Inc	Tremco AVC Max
None	
7. (Deck) Structural Concrete	

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Certificate of Compliance

A Certificate of Compliance serves as evidence that a product or system is listed in RoofNav.

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Certificate of Compliance

This certificate is issued for the following:

IKO enerthem ALU F4, IKO shield ALU/SA

Prepared for:

IKO Europe
D'Herbouvillekaai 80
Antwerpen, B2020
Belgium

FM Approvals Class: 4470

Approval Identification: 3063555 Approval Granted: 1/20/2020

To verify the availability of the Approved product, please refer to www.roofnav.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in RoofNav, an online resource of FM Approvals.

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FM Approvals
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IKO FM Approved systems

Two-layer bitumen

Assembly	Top layer	Base layer	Insulation	Fastener	Vapour barrier	Substrate
231700-49729-0	**- IKO powergum 470K24 DG** **- IKO powergum 470K24 wit**	**IKO base** **Tecno APP F/L**	**- Enertherm ALU F4 SP** **- Enertherm ALU** **- Enertherm ALU TAP**	**DVP-DF-51N** **DFDS 60**	**PE 0,2 mm-** **IKO shield ALU**	**Beton**

Assembly	Top layer	Base layer	Insulation	Fastener	Vapour barrier	Substrate
231377-49729	**- IKO powergum 470K24 DG** **- IKO powergum 470K24 wit**	**IKO base** **Tecno APP F/L**	**- Enertherm ALU F4 SP** **- Enertherm ALU** **- Enertherm ALU TAP**	**DVP-DF-51N** **DFDS 55**	**PE 0,2 mm-** **IKO shield ALU**	**Staal**

Single-layer bitumen

Assembly	Top layer	Insulation	Fastener	Vapour barrier	Substrate
231702-0-0	**IKO powerflex** **MONO 3 MB**	**- Enertherm ALU F4 SP** **- Enertherm ALU** **- Enertherm ALU TAP**	**DVP-DF-51N** **DFDS 60**	**PE 0,2 mm-** **IKO shield ALU**	**Beton**

Assembly	Top layer	Insulation	Fastener	Vapour barrier	Substrate
231701	**IKO powerflex** **MONO 3 MB**	**- Enertherm ALU F4 SP** **- Enertherm ALU** **- Enertherm ALU TAP**	**DVP-DF-51N** **DFDS 55**	**PE 0,2 mm-** **IKO shield ALU**	**Staal**

Single-layer PVC

Assembly	Top layer	Insulation	Fastener	Vapour barrier	Substrate
456075	**IKO Armourplan SM,** **1.2 / 1.5 / 1.8**	**- Enertherm ALU F4 SP** **- Enertherm ALU** **- Enertherm ALU TAP**	**Eurofast TRP-S 45**	**PE 0,2 mm-** **IKO shield ALU**	**Staal**

Assembly	Top layer	Insulation	Fastener	Vapour barrier	Substrate
442692	**IKO Armourplan SM,** **1.2 / 1.5 / 1.8**	**- Enertherm ALU F4 SP** **- Enertherm ALU** **- Enertherm ALU TAP**	**Guardian RB48** **Guardian BS-4,8**	**PE 0,2 mm-** **IKO shield ALU**	**Staal**

Assembly	Top layer	Insulation	Fastener	Vapour barrier	Substrate
442693-0-0	**IKO Armourplan SM,** **1.2 / 1.5 / 1.8**	**- Enertherm ALU F4 SP** **- Enertherm ALU** **- Enertherm ALU TAP**	**Guardian RB48** **Guardian CS-6.1**	**PE 0,2 mm-** **IKO shield ALU**	**Beton**



IKO enertherm in an FM system

There are limitations regarding the thicknesses and dimensions of Enertherm PIR ALU, Enertherm PIR ALU TAP, and Enertherm PIR ALU F4 in an FM system. The minimum thickness must be 50 mm, maximum thickness 152 mm, and the maximum total build-up thickness is 250 mm. Panel dimensions for Enertherm PIR ALU and PIR ALU F4: 2400 x 1200 mm and 1200 x 600 mm. Panel dimensions for Enertherm PIR ALU TAP: 1200 x 1200 mm.

Product Detail Report	
Company:	IKO Europe
Trade Name:	IKO enertherm ALU
Country:	Netherlands
Document Link:	(none)
Assemblies:	31
Comments	none

Approved Uses	
Insulation (Board Stock)	
Material:	polyisocyanurate/polyurethane
Board Profile:	Flat
Board Sizes:	600.000 x 1200.00 mm 1200.00 x 1200.00 mm 1200.00 x 2400.00 mm
Top Facers:	aluminium foil
Bottom Facers:	aluminium foil
Min Density:	0.0000 kg/m^3
Min Thickness:	50.0000 mm
Max Thickness:	152.0000 mm
Assemblies:	31
Comments:	max. thickness in multiple layers is 9.8 in. (250 mm)

Product Detail Report	
Company:	IKO Europe
Trade Name:	IKO enertherm ALU F4
Country:	Netherlands
Document Link:	(none)
Assemblies:	31
Comments	none

Approved Uses	
Insulation (Board Stock)	
Material:	polyisocyanurate/polyurethane
Board Profile:	Flat
Board Sizes:	600.000 x 1200.00 mm 1200.00 x 1200.00 mm
Top Facers:	aluminium foil
Bottom Facers:	aluminium foil
Min Density:	0.0000 kg/m^3
Min Thickness:	50.0000 mm
Max Thickness:	152.0000 mm
Assemblies:	31
Comments:	max. thickness in multiple layers is 9.8 in. (250 mm)

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Product Detail Report	
Company:	IKO Europe
Trade Name:	IKO enertherm ALU TAP
Country:	Netherlands
Document Link:	(none)
Assemblies:	31
Comments	none

Approved Uses	
Insulation (Board Stock)	
Material:	polyisocyanurate/polyurethane
Board Profile:	Flat
Board Sizes:	1200.00 x 1200.00 mm 1200.00 x 2400.00 mm
Top Facers:	aluminium foil
Bottom Facers:	aluminium foil
Min Density:	0.0000 kg/m^3
Min Thickness:	50.0000 mm
Max Thickness:	122.0000 mm
Assemblies:	31
Comments:	max. thickness in multiple layers is 9.8 in. (250 mm)

Other IKO products in FM

IKO Innovi TPO is FM Approved at the product level only, not suitable for complete assemblies in Europe. It can be used in FM-approved component systems (e.g., with IKO Enertherm ALU), but no insurance will be issued by FM Global.

IKO base V3 APP T/F FM 10m is listed as a base layer only and must not be mechanically fastened.



Fasteners

All IKO assemblies are mechanically fastened systems. Tested and approved combinations with Eurofast and Guardian fasteners must be used in certified assemblies.
For non-FM insured projects, alternative fasteners may be used to meet local building codes.

Eurofast FM approved fasteners

- Eurofast DVP-EFB-51NS
- Eurofast DVP EFZK8240D
- Eurofast EDS-B-48
- Eurofast EDS-BZT-48
- Eurofast EFHD-63
- Eurofast TLK-45
- EurofastTLK-75
- Eurofast TRPB-45
- Eurofast TRPS-45

Guardian FM approved bevestigers

- Guardian BS 4,8 screw
- Guardian BS 6,1 screw
- Guardian DBT 4,8-A screw
- Guardian PS 4,8 screw
- Guardian R48 + BS 4,8 tule & screw combi
- Guardian R75 + BS 4,8 tule & screw combi
- Guardian RB 48 + BS 4,8 tule & screw combi
- Guardian RB 48 + PS 4,8 tule & screw combi
- Guardian RS 48 + BS 4,8 tule & screw combi
- Guardian CS 6,1 screw
- Guardian R 48 + CS 6,1 tule & screw combi
- Guardian R75 + CS 6,1 tule & screw combi
- Guardian RB 48 + CS 6,1 tule & screw combi

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Additional Information

- IKO enertherm PIR ALU F4 SP and IKO enertherm ALU are available in thicknesses 50 mm to 152 mm, with a maximum of 250 mm. The boards are available in dimensions of 2400 × 1200 mm and 1200 × 600 mm.
- ALU TAP is available from 50 mm to 120 mm.
- IKO Armourplan PVC can be used in both grey and white.
- IKO Armourplan PVC is available in widths of 1.60 m and 1.06 m.
- No deviations from the specified roofing membranes, insulation products or system configurations are permitted.
- If FM Approved certification at product level is required, the same IKO products mentioned above apply. IKO base V3 T/F FM 10 m and IKO powerflex MONO 3 MB are not standard stock items.
- These rolls are only manufactured on a project-specific basis. Please contact your IKO account manager for further information.

Several assemblies are listed in the FM Approvals documentation in which IKO products form part of the assembly, but the complete system does not consist exclusively of IKO products.

For more information about these assemblies and IKO FM Approved systems, please contact your IKO account manager.

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