



# 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.





## 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

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



## Certificate of Compliance

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

	<h3>Certificate of Compliance</h3>
	<p>This certificate is issued for the following:</p>
	<p>IKO enerthem ALU F4, IKO shield ALU/SA</p>
	<p>Prepared for:</p>
	<p>IKO Europe D'Herbouvillekaai 80 Antwerpen, B2020 Belgium</p>
	<p>FM Approvals Class: 4470</p>
	<p>Approval Identification: 3063555      Approval Granted: 1/20/2020</p>
	<p>To verify the availability of the Approved product, please refer to <a href="http://www.roofnav.com">www.roofnav.com</a></p>
	<p>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.</p>
	
	<p>Phillip J. Smith VP - Manager of Materials FM Approvals 1151 Boston-Providence Turnpike Norwood, MA 02062</p>
 <p>Member of the FM Global Group</p>	

## 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

<b>Company:</b>	IKO Europe
<b>Trade Name:</b>	IKO enertherm ALU
<b>Country:</b>	Netherlands
<b>Document Link:</b>	(none)
<b>Assemblies:</b>	31
<b>Comments</b>	none

### Approved Uses

#### Insulation (Board Stock)

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

### Product Detail Report

<b>Company:</b>	IKO Europe
<b>Trade Name:</b>	IKO enertherm ALU F4
<b>Country:</b>	Netherlands
<b>Document Link:</b>	(none)
<b>Assemblies:</b>	31
<b>Comments</b>	none

### Approved Uses

#### Insulation (Board Stock)

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



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

Approved Uses	
<b>Insulation (Board Stock)</b>	
<b>Material:</b>	polyisocyanurate/polyurethane
<b>Board Profile:</b>	Flat
<b>Board Sizes:</b>	1200.00 x 1200.00 mm 1200.00 x 2400.00 mm
<b>Top Facers:</b>	aluminium foil
<b>Bottom Facers:</b>	aluminium foil
<b>Min Density:</b>	0.0000 kg/m <sup>3</sup>
<b>Min Thickness:</b>	50.0000 mm
<b>Max Thickness:</b>	122.0000 mm
<b>Assemblies:</b>	31
<b>Comments:</b>	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
- Eurofast TLK-75
- Eurofast TRPB-45
- Eurofast TRPS-45

### Guardian FM approved bevestigings

- 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

## Additional Information

- Enertherm ALU F4 SP and ALU: min 50 mm, max 152 mm, total max 250 mm
- ALU TAP: min 50 mm, max 120 mm
- Armourplan PVC: grey or white, max FM width 1.50 m
- No deviations in membranes, insulation, or systems allowed
- IKO base V3 T/F FM 10m and IKO powerflex MONO 3 MB are project-only products
- Some assemblies include IKO products but are not exclusively IKO systems

For more information, contact your IKO account manager.