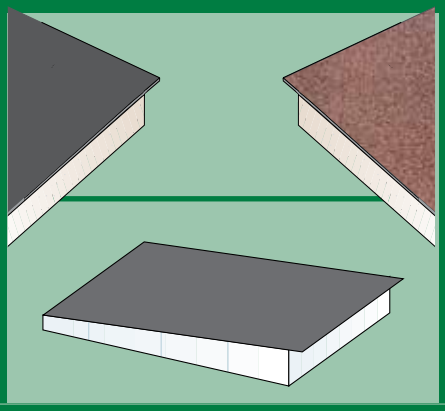
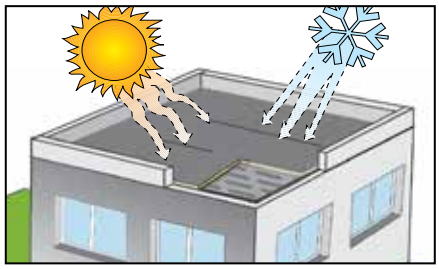


ISOBASE
ISOBASE TEGOLA
ISOINCLINED PSE

PREFABRICATED THERMAL INSULATION COUPLED WITH WATERPROOF MEMBRANE

GRANTS *LEED* CREDITS

1 PROBLEM



HOW TO THERMALLY INSULATE ROOFS AND EXPEDITE LAYING OPERATIONS ALSO ON HEAT-SENSITIVE INSULATORS

ISOBASE and **ISOINCLINED** thermal insulators reduce laying operations as they are pre-coupled to a polymer-distilled bitumen waterproofing membrane and are both predisposed for coupling on heat-sensitive expanded polystyrene insulation.

2 SOLUTION

The top face of **ISOBASE** constant depth thermal insulation panels is already coupled with a polymer-distilled bitumen membrane, with overlap edging on two sides so that the membranes can be overlapped between adjacent elements.
The insulation is produced in four versions:

- Self-extinguishing sintered expanded polystyrene
- Self-extinguishing extruded expanded polystyrene
- Self-extinguishing sintered expanded polystyrene with added graphite
- Continuously laminated self-extinguishing expanded polyurethane
- Polyiso foam.

The coupled waterproof membrane can:

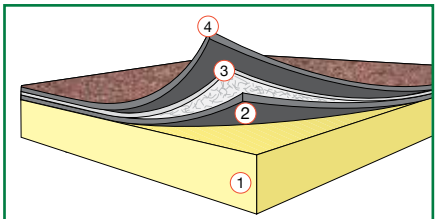
- be reinforced with glass mat
- be reinforced with “non-woven” polyester fabric, stabilised with fibreglass, without “shrinkage”

ISOBASE TEGOLA is produced specifically for undertile insulation. In this case the five types of insulation are bonded to a polyester-reinforced waterproof membrane coated with slate chippings.

ISOINCLINED is an expanded polystyrene panel of variable thickness because the top face, coupled with the membrane, is inclined. It can be coupled with membranes reinforced with fibreglass mat and also with membranes reinforced with non-woven polyester fabric. In both panels, the coupling between the membrane and the insulation is obtained at high temperature.

ISOBASE and **ISOINCLINED**, which are suitable for insulating and waterproofing the roofs of buildings, combine waterproofing and insulation in a single product and reduce site work. They are compatible with polymer-distilled bitumen waterproofing coatings and with multi-layer bitumen coatings.
The on-site bonding of subsequent layers is made easy thanks to the very thick polymer-distilled bitumen membrane with high adhesive power. Therefore, the waterproofing layer can be left visible, the wind won’t detach it, the gravel ballasting layer is no longer necessary and light structures not designed to bear excessive loads can easily be waterproofed.

ISOBASE TEGOLA is the version designed to solve the problems of under-tile waterproofing and thermal insulation.
It can be produced with all five types of insulation. The top waterproof membrane consists of polymer-bitumen reinforced with “non-woven” polyester fabric stabilised with fibreglass.
The visible face of the membrane is treated with slate mineral chippings hot bonded at a temperature of 180°C, with the exception of a slate-free lateral strip protected with a strip of Flamina film to be flame melted to seal the joint.
The mineral coating serves as an anti-slip surface and provides solid anchorage for cement mortar when tiles are laid directly on the insulation.
Once a seamless joint is obtained with the edge or with the flame-sealed connecting strips, you immediately obtain a waterproof, resistant surface. This surface will protect the work against sudden rain and enables the tile layer to be laid very quickly.



1. Insulation panel
2. Distilled bitumen polymer.
3. Reinforcement
4. Polymer-distilled bitumen with hot-bonded slate chippings

ISOBASE TEGOLA guarantees efficient heat insulation and reliable waterproofing protection even in the case of shifted or broken tiles.

For the laying systems, please consult our specific technical documentation (see technical specifications no. 7).

METHOD OF USE

In addition to the traditional bonding and mechanical securing systems used in the waterproofing sector, **ISOBASE** can be flame secured on the following innovative INDEX membranes:

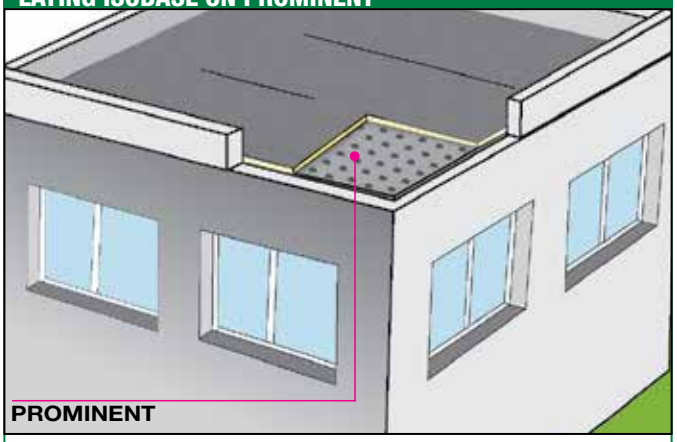
- PROMINENT
- TECTENE BV STRIP
- SELFTENE BV BIADESIVO (BIADHESIVE)

PROMINENT is used to lay heat-resistant **ISOBASE** panels, such as **ISOBASE PUR** and **ISOBASE THERMOPLUS**, while for **ISOBASE PSE**, **ISOBASE PSE GRAPHITE** and **ISOBASE PSE/EX** the TECTENE BV STRIP product will be used.

Flame-gluing on special INDEX membranes allows easy laying even on pitched roofs with considerable savings in transport costs and laying times.

You no longer have to wait for the bitumen to melt in the boiler and there's no need to transport either oxidised bitumen or the boiler. By using a roll of the special new vapour barriers - PROMINENT and TECTENE BV STRIP - you simultaneously obtain both vapour tightness and bonding of the heat insulation.

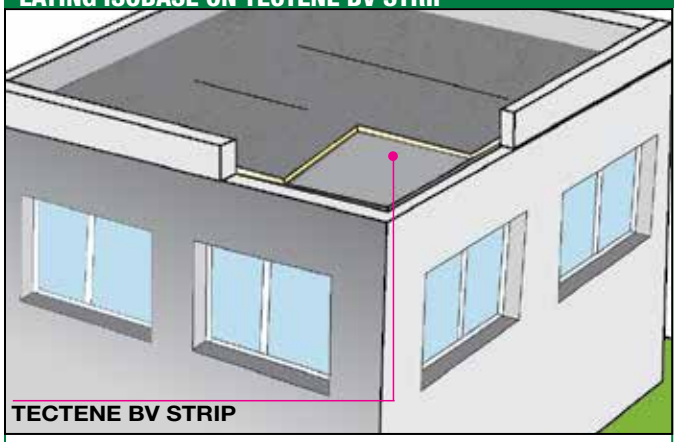
LAYING ISOBASE ON PROMINENT



SYSTEM SUITABLE FOR THE FOLLOWING TYPES OF ISOBASE

- ISOBASE PUR and ISOBASE TEGOLA PUR
- ISOBASE THERMOPLUS and ISOBASE TEGOLA THERMOPLUS

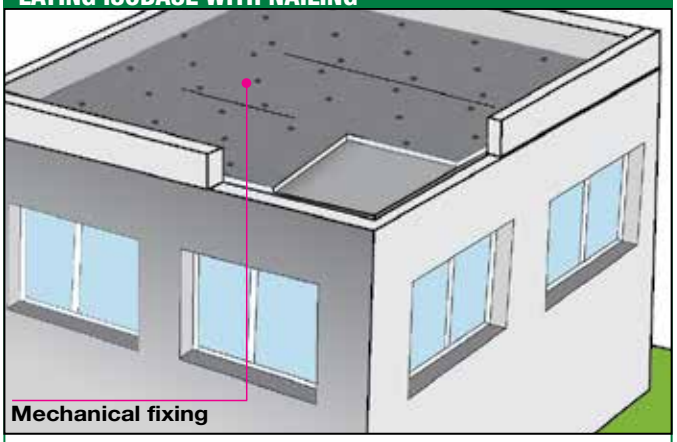
LAYING ISOBASE ON TECTENE BV STRIP



SYSTEM SUITABLE FOR THE FOLLOWING TYPES OF ISOBASE

- IOSOBASE PSE and ISOBASE TEGOLA PSE
- ISOBASE PSE/EX and ISOBASE TEGOLA PSE/EX on flat roofs
- ISOBASE PSE GRAPHITE and ISOBASE TEGOLA PSE GRAPHITE

LAYING ISOBASE WITH NAILING

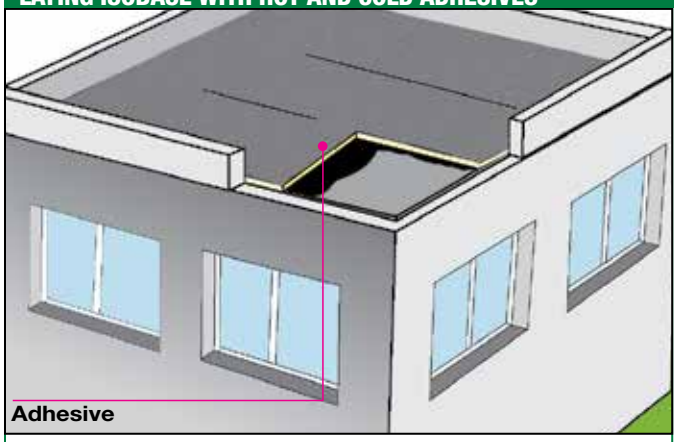


SYSTEM SUITABLE FOR THE FOLLOWING TYPES OF ISOBASE

- ISOBASE PSE and ISOBASE TEGOLA PSE
- ISOBASE PSE/EX and ISOBASE TEGOLA PSE/EX
- ISOBASE PSE GRAPHITE and ISOBASE TEGOLA PSE GRAPHITE

- ISOBASE PUR and ISOBASE TEGOLA PUR
- ISOBASE THERMOPLUS and ISOBASE TEGOLA THERMOPLUS

LAYING ISOBASE WITH HOT AND COLD ADHESIVES



SYSTEM SUITABLE FOR THE FOLLOWING TYPES OF ISOBASE

- ISOBASE PUR and ISOBASE ISOBASE PUR
- ISOBASE THERMOPLUS and ISOBASE TEGOLA THERMOPLUS

in hot-state with melted oxidised bitumen

- ISOBASE PUR and ISOBASE TEGOLA PUR
- ISOBASE PSE GRAPHITE and ISOBASE TEGOLA PSE GRAPHITE
- ISOBASE PSE and ISOBASE TEGOLA PSE
- ISOBASE PSE/EX and ISOBASE TEGOLA PSE/EX
- ISOBASE THERMOPLUS and ISOBASE TEGOLA THERMOPLUS

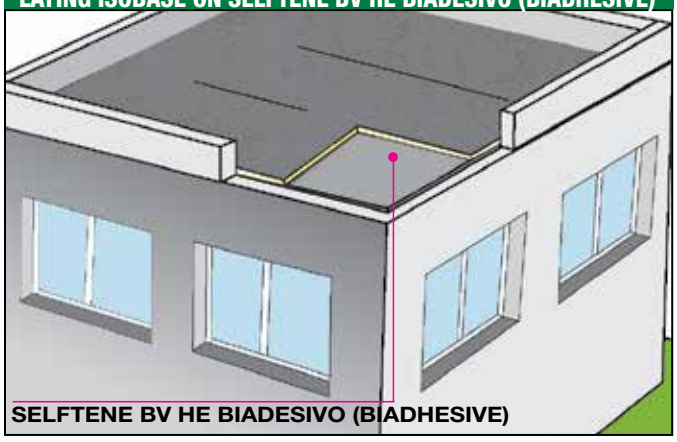
in cold-state on surface with MASTICOLL

The use of SELFTENE BV BIADESIVO offers another possibility: the self-adhesive vapour barrier membrane on which the insulating panels can be glued by simple pressure without using other materials.

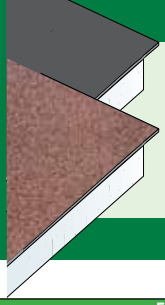
Hot bitumen, adhesives or flames are no longer used. Simply remove the silicone-coated film protecting the upper face of the membrane and press the insulating panel on it.

It is a suitable solution to fix all types of **ISOBASE**.

LAYING ISOBASE ON SELFTENE BV HE BIADESIVO (BIADHESIVE)



ISOBASE PSE



Marking

CE

Reference standard
EN13163

ISOBASE TEGOLA PSE

CHARACTERISTICS				ENVIRONRMENTAL							METHOD OF USE			
THERMAL INSULATION	ACOUSTIC INSULATION	WATERPROOF	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	APPLY BY MECHANICAL FIXING	APPLY BY COLD ADHESIVE	LAYING WITH TECTENE BV STRIP	LAYING WITH SELFTENE BV HE

DESCRIPTION

ISOBASE PSE is a panel of uniform thickness, made of self-extinguishing sintered expanded polystyrene coupled hot to a waterproofing membrane in polymer-distilled bitumen with side and head overlaps. The flame can thus be used on the top surface without burning the insulator.

ISOBASE PSE offers strong insulation, is very flexible, resistant to compression and can be used both under exposed coverings and under heavy protection. It offers good dimensional stability. Also in the case of damp it undergoes negligible dimensional changes because it absorbs very little water.

ISOBASE PSE is resistant to compression. It is made of high density expanded polystyrene, type 120 can be used under terraces which will be walked on. The type 80 type should be used under visible surfaces.

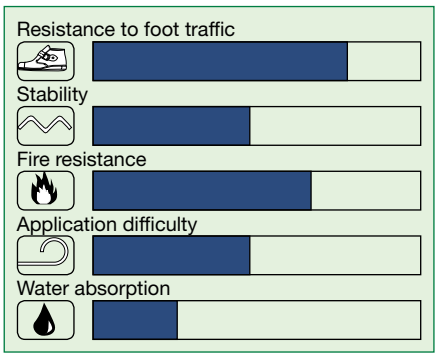
Sintered expanded polystyrene is an inexpensive insulation product that has been tested for years on roofs; it is prefabricated by joining it with the waterproof membrane, reducing its sensitivity to the heat of the flame used to lay the waterproof covering, saving on insulation and laying costs.

ISOBASE PSE may be bonded to the substrate with the traditional system of spreading sufficiently cooled molten oxidised bitumen or with the cold bituminous adhesive MASTICOLL in case the application is under heavy protection, while it must be nailed if the layers include an exposed covering. The innovative flame-gluing system on the multipurpose vapour barrier TECTENE BV STRIP is more recent (further information on laying the insulation material can be consulted in the technical documents of INDEX).

After securing the insulation on the laying surface and accurately lining up the elements, the overlapping edges should be flame bonded. Subsequently the second waterproofing layer is flame bonded onto the surface astride the sealing strips.

ISOBASE TEGOLA PSE is the version self-protected with mineral slate, designed for under-tile laying.

Panel size:
- 1 000×1 000 cm
- 2 000×1 000 cm



CERTIFICATION

"Güteschutzgemeinschaft hartschaum"

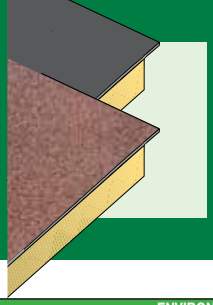
Certificate of conformity to EN 13163

TECHNICAL CHARACTERISTICS

	Regulation	ISOBASE PSE 80											ISOBASE PSE 120										
Intended use		- for all uses -											- for all uses -										
Designation code	**EN 13163**	EPS-EN 13163-T(2)-L(3)-W(3)-S(5)-P(30)-DS(N)5-BS125-CS(10)80											EPS-EN 13163-T(2)-L(3)-W(3)-S(5)-P(10)-DS(N)5-BS170-CS(10)120										
Compression strength 10% compression	**EN 826**	≥80 KPa [CS(10)80]											≥120 KPa [CS(10)120]										
Dimensional stability 48 h at 23°C at 90% R.H.	**EN 1604**	±0.5% [DS(N)5]											±0.5% [DS(N)5]										
Bending strength	**EN 12089**	≥125 KPa [BS125]											≥170 KPa [BS170]										
Perpendicular tensile strength of faces		–											–										
Thermal conductivity λ	**EN 12667**	0.037 W/mK											0.035 W/mK										
Thickness **T(1)** (mm)		**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**	**120**	**140**	**160**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**	**120**	**140**	**160**
Thermal resistance R_D(m²K/W)		0.82	1.09	1.36	1.63	1.90	2.17	2.44	2.71	3.26	3.80	4.34	0.87	1.16	1.44	1.73	2.01	2.30	2.58	2.87	3.44	4.01	4.58
Thermal capacity (KJ/K·m²)		0.65	0.86	1.09	1.30	1.51	1.73	1.94	2.16	2.60	3.02	3.46	0.79	1.06	1.32	1.58	1.85	2.11	2.38	2.64	3.17	3.70	4.22
Water absorption in the long term	**EN 12087**	<5%											<5%										
Water vapour transmission	**EN 12086**	μ = 30÷70											μ = 30÷70										
Reaction to fire	**EN 13501-1**	Euroclass E_{d2}											Euroclass E_{d2}										
Specific characteristics of the polymer-distilled bitumen membrane																							
Impermeability	**EN 1928-B**	60 kPa											60 kPa										
Permeability to vapour	**EN 1931**	μ = 20,000											μ = 20,000										
Thermal conductivity		0.2 W/mK											0.2 W/mK										
Type		**V2**	**V3**	**P3**	**P4**	**MIN P3.5**		**MIN P4.0**		**MIN P4.5**			**V2**	**V3**	**P3**	**P4**	**MIN P3.5**		**MIN P4.0**		**MIN P4.5**		
Thermal capacity (KJ/K·m²)		2.60	3.90	3.90	5.20	4.20		4.80		5.40			2.60	3.90	3.90	5.20	4.20		4.80		5.40		

Acoustic insulation index. Acoustic absorption index. Impact noise transmission index. Durability of reaction to fire, thermal resistance, compression resistance. **NPD**

ISOBASE PSE/EX



Marking

CE

Reference standard
EN13164

ISOBASE TEGOLA PSE/EX

CHARACTERISTICS				ENVIRONRMENTAL							METHOD OF USE			
THERMAL INSULATION	ACOUSTIC INSULATION	WATERPROOF	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	APPLY BY MECHANICAL FIXING	APPLY BY COLD ADHESIVE	LAYING WITH TECTENE BV STRIP	LAYING WITH SELFTENE BV HE

DESCRIPTION

ISOBASE PSE/EX is a panel of uniform thickness, made of single layer self-extinguishing extruded expanded polystyrene coupled hot to a waterproofing membrane in polymer-distilled bitumen with side and head overlaps. The flame can thus be used on the top surface without burning the insulator.

ISOBASE PSE/EX is economical because it has a high specific thermal resistance and compared to other insulation products, it can be used in thinner layers. It offers good dimensional stability. Also in the case of damp it undergoes negligible dimensional changes because it absorbs very little water.

ISOBASE PSE/EX is extremely resistant to compression. It is made of high density extruded polystyrene and is ideal for use under terraces which will be walked on, driven over or ballasted with gravel.

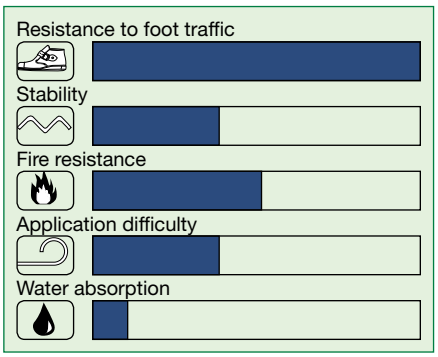
It is prefabricated by joining it with the waterproof membrane, reducing its sensitivity to the heat of the flame used to lay the waterproof covering, saving on insulation and laying costs.

ISOBASE PSE/EX may be bonded to the substrate with the traditional system of spreading sufficiently cooled molten oxidised bitumen or with the cold bituminous adhesive MASTICOLL in case the application is under heavy protection, while it must be nailed if the layers include an exposed covering. The innovative flame-gluing system on the multipurpose vapour barrier TECTENE BV STRIP is more recent (further information on laying the insulation material can be consulted in the technical documents of INDEX).

After securing the insulation on the laying surface and accurately lining up the elements, the overlapping edges should be flame bonded. Subsequently the second waterproofing layer is flame bonded onto the surface astride the sealing strips.

ISOBASE TEGOLA PSE/EX is the version self-protected with mineral slate, designed for under-tile laying.

Panel size:
- 1 200×1 000 cm
- 1 800×1 000 cm
- 2 400×1 000 cm



CERTIFICATION

"Güteschutzgemeinschaft hartschaum"

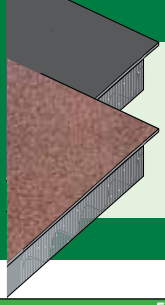
Certificate of conformity to EN 13164

TECHNICAL CHARACTERISTICS

	Regulation	ISOBASE PSE/EX						
Intended use		- for all uses -						
Designation code	**EN 13164**	XPS EN13164-T(2)-DS(TH)-CS(10/Y)250-TR200-WL(T)1,5						
Compression strength 10% compression	**EN 826**	≥250 KPa [CS(10/Y)250]						
Dimensional stability 48 h at 23°C at 90% R.H.	**EN 1604**	DS(TH)						
Bending strength	**EN 12089**	–						
Perpendicular tensile strength of faces		≥200 KPa [TR200]						
Thermal conductivity λ	**EN 12667**	0.033 W/mK		0.034 W/mK		0.036 W/mK		
Thickness **T(2)** (mm)		**30**	**40**	**50**	**60**	**80**	**100**	**120**
Thermal resistance R_D(m²K/W)		0.92	1.22	1.48	1.78	2.23	2.79	3.35
Thermal capacity (KJ/K·m²)		1.15	1.54	1.92	2.30	3.07	3.84	4.61
Long term water absorption by immersion	**EN 12087**	≤1.5% [WL(T)1.5]						
Water vapour transmission	**EN 12086**	μ = 80						
Reaction to fire	**EN 13501-1**	Euroclass E_{d2}						
Specific characteristics of the polymer-distilled bitumen membrane								
Impermeability	**EN 1928-B**	60 kPa						
Permeability to vapour	**EN 1931**	μ = 20,000						
Thermal conductivity		0.2 W/mK						
Type		**V2**	**V3**	**P3**	**P4**	**MIN P3.5**	**MIN P4.0**	**MIN P4.5**
Thermal capacity (KJ/K·m²)		2.60	3.90	3.90	5.20	4.20	4.80	5.40

Acoustic insulation index. Acoustic absorption index. Impact noise transmission index. Durability of reaction to fire, thermal resistance, compression resistance. **NPD**

ISOBASE PSE GRAPHITE



Marking

CE

Reference standard
EN13163

ISOBASE TEGOLA PSE GRAPHITE

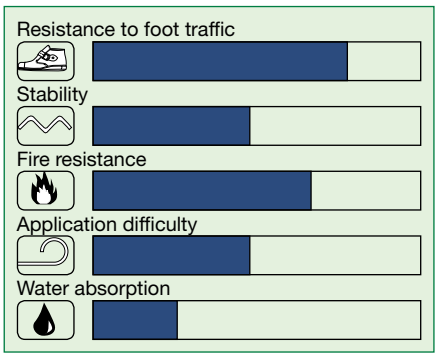
CHARACTERISTICS				ENVIRONRMENTAL							METHOD OF USE			
THERMAL INSULATION	ACOUSTIC INSULATION	WATERPROOF	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	APPLY BY MECHANICAL FIXING	APPLY BY COLD ADHESIVE	LAYING WITH TECTENE BV STRIP	LAYING WITH SELFTENE BV HE

DESCRIPTION

ISOBASE PSE GRAPHITE is a panel of uniform thickness, made of self-extinguishing sintered expanded polystyrene with added graphite, coupled hot to a waterproofing membrane in polymer-distilled bitumen with side and head overlaps. The flame can thus be used on the top surface without burning the insulator.
ISOBASE PSE GRAPHITE offers strong insulation, is very flexible, resistant to compression and can be used both under exposed coverings and under heavy protection. It offers good dimensional stability. Also in the case of damp it undergoes negligible dimensional changes because it absorbs very little water.
ISOBASE PSE GRAPHITE is resistant to compression, is made from high density expanded polystyrene and can be applied on terraces to be walked on.
Sintered expanded polystyrene is an inexpensive insulation product that has been tested for years on roofs; it is prefabricated by joining it with the waterproof membrane, reducing its sensitivity to the heat of the flame used to lay the waterproof covering, saving on insulation and laying costs.
ISOBASE PSE GRAPHITE may be bonded to the substrate with the traditional system of spreading sufficiently cooled molten oxidised bitumen or with the cold bituminous adhesive MASTICOLL in case the application is under heavy protection, while it must be nailed if the layers include an exposed covering. The innovative flame-gluing system on the multipurpose vapour barrier TECTENE BV STRIP is more recent (further information on laying the insulation material can be consulted in the technical documents of INDEX).
After securing the insulation on the laying surface and accurately lining up the elements, the overlapping edges should be flame bonded. Subsequently the second waterproofing layer is flame bonded onto the surface astride the sealing strips.

ISOBASE TEGOLA PSE GRAPHITE is the version self-protected with mineral slate, designed for under-tile laying.

Panel size:
- 1 000×1 000 cm
- 2 000×1 000 cm



CERTIFICATION

“Güteschutzgemeinschaft hartschaum”

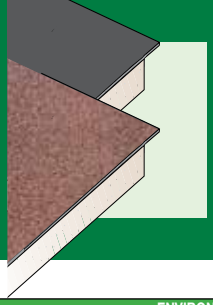
Certificate of conformity to EN 13163

TECHNICAL CHARACTERISTICS

	Regulation	ISOBASE PSE GRAPHITE												
Intended use		- for all uses -												
Designation code	**EN 13163**	EPS-EN 13163-T(2)-L(3)-W(3)-S(5)-P(30)-DS(N)2-BS170-CS(10)100												
Compression strength 10% compression	**EN 826**	≥100 KPa [CS(10)100]												
Dimensional stability 48 h at 23°C at 90% R.H.	**EN 1604**	±0.5% [DS(N)5]												
Bending strength	**EN 12089**	≥125 KPa [BS125]												
Perpendicular tensile strength of faces		–												
Thermal conductivity λ	**EN 12667**	0.031 W/mK												
Thickness **T(1)** (mm)		**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**	**110**	**120**	**140**	**160**
Thermal resistance R_D(m²K/W)		0.66	0.98	1.30	1.63	1.95	2.27	2.59	2.92	3.24	3.56	3.88	4.53	5.17
Thermal capacity (KJ/K·m²)		0.46	0.68	0.91	1.14	1.37	1.60	1.82	2.05	2.28	2.51	2.74	3.19	3.65
Long term water absorption by immersion	**EN 12087**	<5%												
Water vapour transmission	**EN 12086**	μ = 30÷70												
Reaction to fire	**EN 13501-1**	Euroclass E_{d2}												
Specific characteristics of the polymer-distilled bitumen membrane														
Impermeability	**EN 1928-B**	60 kPa												
Permeability to vapour	**EN 1931**	μ = 20,000												
Thermal conductivity		0.2 W/mK												
Type		**V2**	**V3**	**P3**	**P4**	**MIN P3.5**		**MIN P4.0**		**MIN P4.5**				
Thermal capacity (KJ/K·m²)		2.60	3.90	3.90	5.20	4.20		4.80		5.40				

Acoustic insulation index. Acoustic absorption index. Impact noise transmission index. Durability of reaction to fire, thermal resistance, compression resistance. **NPD**

ISOBASE
• PUR BIPAPER
• PUR BIGLASS



Marking

CE

Reference standard
EN13165

ISOBASE TEGOLA
• PUR BIPAPER
• PUR BIGLASS

CARATTERISTICHE			ENVIRONRMENTAL							MODALITÀ D'IMPIEGO			
ISOLANTE TERMICO	ISOLANTE ACUSTICO	IMPERMEABILE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	APPLICAZIONE CON CHIODI	APPLICAZIONE CON ADESIVO A FREDDO	APPLICAZIONE CON BITUME OSSIDATO FUSO	APPLICAZIONE CON PROMINENT

DESCRIPTION

ISOBASE PUR is a panel of uniform thickness, made of self-extinguishing polyurethane foam, rolled continuously between two fibreglass mats in the version **ISOBASE PUR BIPAPER** or between two polythene coated glass mat layers in the version **ISOBASE PUR BIGLASS**, coupled hot to a waterproofing membrane in polymer-distilled bitumen with side and head overlaps. A flame can thus be used on the top surface without burning the insulator.

ISOBASE PUR, given the same thickness, has the highest thermal resistance that, in this respect, puts it at the top of the range of products available.

ISOBASE PUR is resistant to compression as it is made from high density foam, and can be applied on terraces to be walked on.

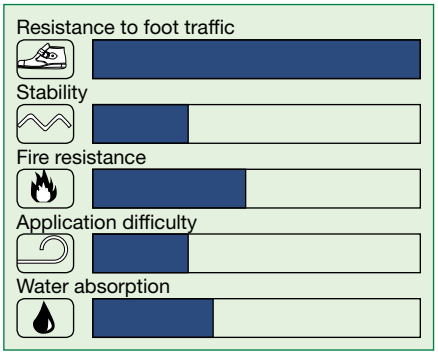
The polyurethane foam of **ISOBASE PUR** is heat-resistant (+100°C) and for short periods it can withstand peaks of 250°C. This makes it the insulator of choice to be flame-glued in awkward conditions of steep pitching or in similar situations. It may be bonded to the substrate with the traditional system, on a spreading of oxidised bitumen or with the cold bituminous adhesive MASTICOLL or, more conveniently, with the innovative flame laying system on the multipurpose vapour barrier PROMINENT, which is to be preferred especially on pitched roofs. Mechanical fixing is preferable when applying on timber or fretted metal decks (further information on laying the insulation material can be consulted in the technical documents of INDEX).

After securing the insulation on the laying surface and accurately lining up the elements, the overlapping edges should be flame bonded. Subsequently the second waterproofing layer is flame bonded onto the surface astride the sealing strips.

ISOBASE TEGOLA PUR is the version self-protected with mineral slate, designed for under-tile laying.

Panel size:
- 1 200×1 000 cm
- 2 400×1 000 cm

(*) Thicknesses 60, 80, 100 and 120 mm are only available with fibreglass mat finish.



CERTIFICATION

"Güteschutzgemeinschaft hartschaum"

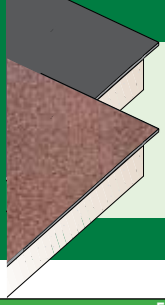
Certificate of conformity to EN 13165

TECHNICAL CHARACTERISTICS

	Regulation	ISOBASE PUR						
Intended use		- for all uses -						
Designation code	**EN 13164**	PUR EN13165-T(2)-DS(TH)2-CS(10/Y)150-TR40						
Compression strength 10% compression	**EN 826**	≥150 KPa [CS(10/Y)150]						
Dimensional stability 48 h at 23°C at 90% R.H.	**EN 1604**	DS(TH)2						
Bending strength	**EN 12089**	–						
Perpendicular tensile strength of faces		≥40 KPa [TR40]						
Thermal conductivity λ	**EN 12667**	0.028 W/mK				0.026 W/mK		
Thickness **T(2)** (mm)		**30**	**40**	**50**	**60 (*)**	**80 (*)**	**100 (*)**	**120 (*)**
Thermal resistance R_D(m²K/W)		1.08	1.44	1.80	2.16	3.09	3.86	4.63
Thermal capacity (KJ/K·m²)		1.34	1.79	2.24	2.69	3.58	4.48	5.37
Long term water absorption by immersion	**EN 12087**	<2%						
Water vapour transmission	**EN 12086**	μ = 100						
Reaction to fire	**EN 13501-1**	Euroclass F						
Specific characteristics of the polymer-distilled bitumen membrane								
Impermeability	**EN 1928-B**	60 kPa						
Permeability to vapour	**EN 1931**	μ = 20,000						
Thermal conductivity		0.2 W/mK						
Type		**V2**	**V3**	**P3**	**P4**	**MIN P3.5**	**MIN P4.0**	**MIN P4.5**
Thermal capacity (KJ/K·m²)		2.60	3.90	3.90	5.20	4.20	4.80	5.40

Acoustic insulation index. Acoustic absorption index. Impact noise transmission index. Durability of reaction to fire, thermal resistance, compression resistance. **NPD**
(*) available only for bitumen fibreglass mat finish.

ISOBASE THERMOPLUS PUR



Marking

CE

Reference standard
EN13165

ISOBASE TEGOLA THERMOPLUS PUR

CARATTERISTICHE			ENVIRONRMENTAL							MODALITÀ D'IMPIEGO			
ISOLANTE TERMICO	ISOLANTE ACUSTICO	IMPERMEABILE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	APPLICAZIONE CON CHIODI	APPLICAZIONE CON ADESIVO A FREDDO	APPLICAZIONE CON BITUME OSSIDATO FUSO	APPLICAZIONE CON PROMINENT

DESCRIPTION

ISOBASE THERMOPLUS PUR is a sandwich panel of uniform thickness consisting of an insulating component made of polyiso foam, expanded without using CFC or HCFC, coated on both faces with a Duotwin® coating, coupled hot to a waterproof membrane based on polymer-distilled bitumen with side and head overlaps. A flame can thus be used on the top surface without burning the insulator.

ISOBASE THERMOPLUS PUR is very resistant to heat transmission, making it particularly suitable to obtain a high thermal resistance also with limited thickness.

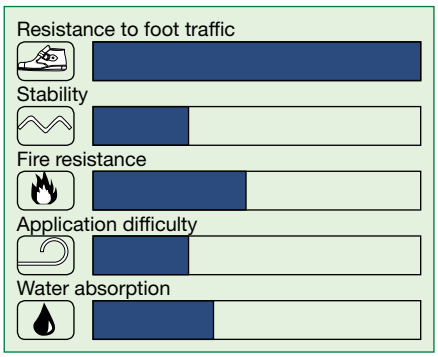
ISOBASE PUR is compression resistant, can be used under exposed coverings and coverings weighted down with heavy protection.

The polyiso foam is highly insulating and resists prolonged temperatures of up to 100 C and for short periods it can withstand peaks of 250°C. This makes it the insulator of choice to be flame-glued in awkward conditions of steep pitching or in similar situations. It may be bonded to the substrate with the traditional system, on a spreading of oxidised bitumen or with the cold bituminous adhesive MASTICOLL or, more conveniently, with the innovative flame laying system on the multipurpose vapour barrier PROMINENT, which is to be preferred especially on pitched roofs. Mechanical fixing is preferable when applying on timber or fretted metal decks (further information on laying the insulation material can be consulted in the technical documents of INDEX).

After securing the insulation on the laying surface and accurately lining up the elements, the overlapping edges should be flame bonded. Subsequently the second waterproofing layer is flame bonded onto the surface astride the sealing strips.

ISOBASE TEGOLA THERMOPLUS PUR is the version self-protected with mineral slate, designed for under-tile laying.

Panel size: 1 200×1 000 cm



CERTIFICATION

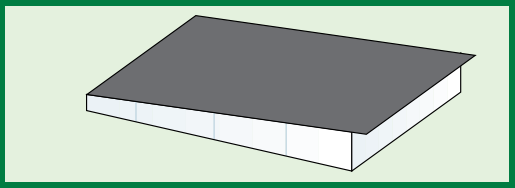
"Güteschutzgemeinschaft hartschaum"

Certificate of conformity to EN 13165

TECHNICAL CHARACTERISTICS

	Regulation	ISOBASE THERMOPLUS PUR					
Intended use		- for all uses -					
Designation code	**EN 13164**	PUR EN13165-T(2)-DS(TH)2-CS(10/Y)130-TR40					
Compression strength 10% compression	**EN 826**	≥130 KPa 【CS(10/Y)130】					
Dimensional stability 48 h at 23°C at 90% R.H.	**EN 1604**	DS(TH)2					
Bending strength	**EN 12089**	–					
Perpendicular tensile strength of faces		–					
Thermal conductivity λ	**EN 12667**	0.023 W/mK					
Thickness **T(2)** (mm)		**40**	**50**	**60**	**80**	**100**	**120**
Thermal resistance R_D(m²K/W)		1.75	2.15	2.60	3.45	4.35	5.20
Thermal capacity (KJ/K·m²)		1.79	2.24	2.69	3.58	4.48	5.37
Long term water absorption by immersion	**EN 12087**	<1%					
Water vapour transmission	**EN 12086**	μ = 148					
Reaction to fire	**EN 13501-1**	Euroclass F					
Specific characteristics of the polymer-distilled bitumen membrane							
Impermeability	**EN 1928-B**	60 kPa					
Permeability to vapour	**EN 1931**	μ = 20,000					
Thermal conductivity		0.2 W/mK					
Type		**V2**	**V3**	**P3**	**P4**	**MIN P3.5**	**MIN P4.0**	**MIN P4.5**
Thermal capacity (KJ/K·m²)		2.60	3.90	3.90	5.20	4.20	4.80	5.40

Acoustic insulation index. Acoustic absorption index. Impact noise transmission index. Durability of reaction to fire, thermal resistance, compression resistance. **NPD**



Marking

CE

Reference standard
EN13163

ISOINCLINED PSE

CHARACTERISTICS				ENVIRONRMENTAL							METHOD OF USE			
THERMAL INSULATION	ACOUSTIC INSULATION	WATERPROOF	REACTION TO FIRE	ECO GREEN	ASBESTOS FREE	TAR FREE	CHLORINE FREE	RECYCLABLE	NON DANGEROUS WASTE	EXHAUSTED OIL FREE	APPLY BY MECHANICAL FIXING	APPLY BY COLD ADHESIVE	LAYING WITH TECTENE BV STRIP	LAYING WITH SELFTENE BV HE

DESCRIPTION

ISOINCLINED PSE is a multifunction panel of variable thickness, coupled hot to a waterproofing membrane in polymer-distilled bitumen, reinforced with glass-fibre mat or with "non-woven" polyester stabilised with glass fibre with side and head overlaps. A flame can thus be used on the top surface without burning the insulator.
It integrates the thermal insulation properties of sintered expanded polystyrene, acting as an inclined layer obtained with the special shape of the panel of variable thickness with the top face inclined.
ISOINCLINED PSE is used in both new builds or renovation jobs. In the first case, its choice is dictated by the need to form an inclined layer without excessively loading the structure with concrete slabs, which are heavier even if lightened concrete is used. In renovation jobs, it is often more convenient to redesign the profile of a flat roof, with dips that generate permanent puddles, by applying a light panel that can remain under an exposed covering.
ISOINCLINED PSE may be bonded to the substrate with the traditional system of spreading sufficiently cooled molten oxidised bitumen or with the cold bituminous adhesive MASTICOLL in case the application is under heavy protection, while it must be nailed if the layers include an exposed covering. The innovative flame-gluing system on the multipurpose vapour barrier TECTENE BV STRIP is more recent (further information on laying the insulation material can be consulted in the technical documents of INDEX).

Panel size: variable, based on the surfaces to be insulated.

The material is manufactured on request, in which case the following information is required:
• Lay-out of the covering with the following indications:
- Measurements
- Position of drains
- Ridge
• Type of sintered expanded polystyrene
• Minimum thickness and maximum thickness
• Type of membrane to be coupled

ATTENTION. Pitches lower than 1% do not guarantee the correct drainage of water.

index
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