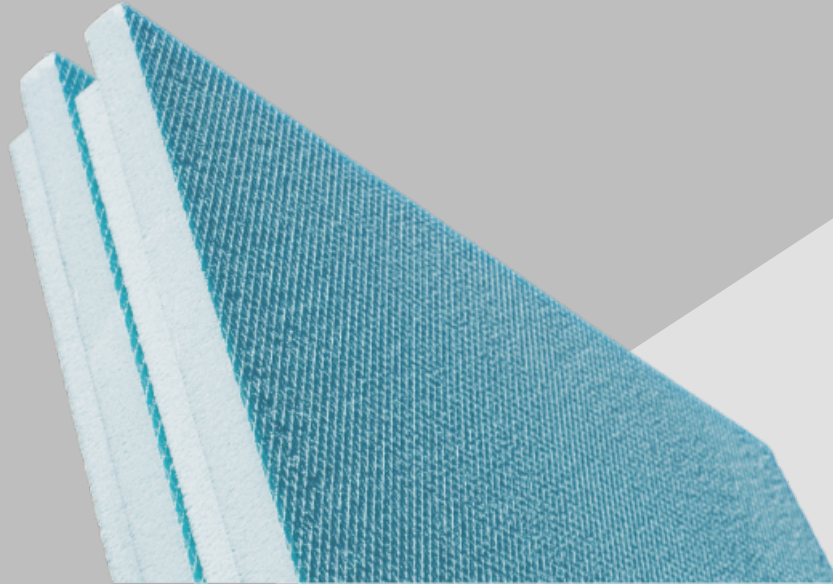


ROCKAL XPS FOAM



The process of extruding foamed polystyrene results in a material with uniformly small, closed cells, a smooth 'skin' and an unrivalled set of properties which make it the choice of consultants in a wide range of demanding insulation applications.

The following properties makes Extruded Polystyrene an ideal choice for thermal insulation:

MOISTURE RESISTANCE

The superior moisture resistance and very low vapour permeability of extruded polystyrene insulation provides outstanding benefits for most construction and engineering applications

CHEMICAL RESISTANCE

XPS is resistant to many common chemicals such as: acids, bases, water and water-based paints, alcohol and alcohol-based paints, brine or salt water, cement and mortars, asphalt, etc

SURFACE FINISH

- Smooth

- Rough or rough with line

R-VALUE

The ability of an insulation to resist heat flow. The higher the R-value, the greater the insulating power. XPS has excellent long term R-value and proven

MECHANICAL PROPERTIES

High and uniform compressive strength.

ENVIRONMENTAL

High and uniform compressive strength.

TECHNICAL

Hot Climate:

In hot conditions, the greatest source of heat flow is solar radiation.

The aim is to reduce the flow of heat inside the building.

Cold Climate:

In cold conditions, the main aim is to reduce heat flow out of the building, to keep living space warm.



ROCKAL XPS

ITS DIVIDED ACCORDING ITS SHAPE TO:

A – NORMAL (N)



Length = 1235 mm - 1250 mm (±3)
 Width = 600 mm (±3)
 Thickness = (20, 25, 30, 40, 50, 60up to 100) mm

B – SHIPLAP (SL)



Length = 1235 mm - 1250 mm (±3)
 Width = 600 mm (±3)
 Thickness = (30, 40, 50up to 100) mm



SEALVERGE
 Shielding Tomorrow's Structures

FLAMMABILITY: All items can be produced by using Non-flammable gas as blowing agent and Flame Retardant Additives.

TYPICAL DATA SHEET ROCKAL XPS FOAM INSULATION BOARDS

.NO	Properties	Test Method	ROCKAL FOAM
1	Density (Kg/m ³)	ASTM D 1621 ASTM C 165	28-31
2	الموصلية الحرارية .Thermal Conductivity (K), max (W/m.K)	ASTM C 518	0.031
3	Compressive Strength at 10 % deflection, (min.(kPa	ASTM D 1621 ASTM C 165	250
4	قوة الانحناء .Flexural Strength, min (kPa)	,ASTM C203 ,Method I Procedure B	300
5	Water Absorption by Submersion, min (% Volume)	ASTM D 2842	0.3
6	نفاذية بخار الماء .Water Vapor Permeance, max (Perm/inch)	ASTM C 355 ASTM E 96	1.1
7	Dimensional Stability .Change in dimension), max) (%)	ASTM D 2126	2
8	مؤشر الأكسجين .Oxygen Index, min (% Volume)	ASTM D 2863	24
9	Fire Classification according to,standard method for Surface Burning Characteristics of Building Material under designation	CE	Class E
10	التصنيف Classification Type	ASTM C 578	IX

HANDLING, STORAGE & USAGE CONDITIONS.

Don't load heavy objects on the stacked product.

XPS Foam Board should be stored in a cool, dry and well-ventilated place.

The shelf life of unopened XPS board is six months, while in the rainy season it is only three months.

Keep Fire (source of ignition), heat source, chemical solvent far away from XPS Foam Board.

Avoid exposure to sunlight, rain, wind and avoid any other mechanical damage. XPS Foam Board is not resistant to UV, so it can' be exposed in especially not to be exposed to sunlight.

XPS Foam Board should not be left on the site to exposed to UV -rays prolonged sunlight (more than 1 hour specially on higher than 350C) as this will result in surface degradation. When stored more than a month, it needs to regularly flip boards to prevent caking.

Using reflective light-coloured canvas to cover XPS boards is recommended when the storage time is long.

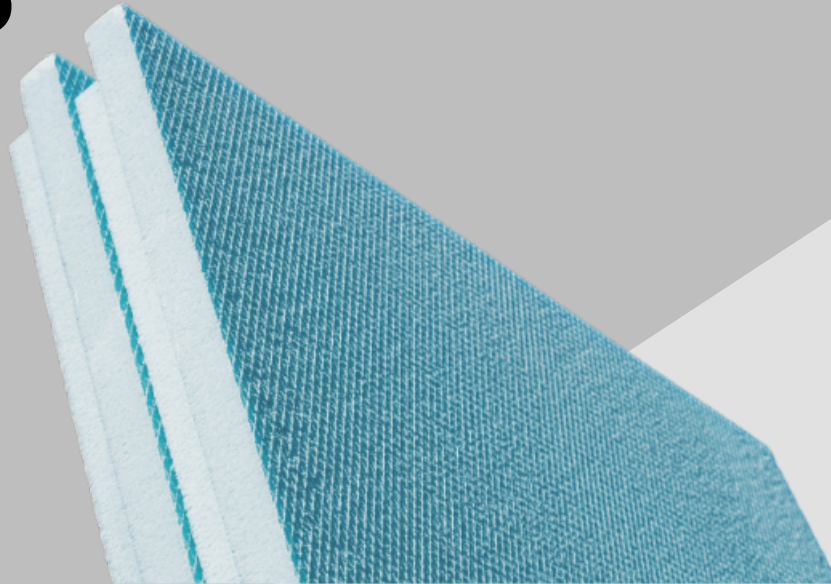


ROCKAL XPS IS FOLLOWING THE ASTM C 578 & EN 13164.

We reserve the possibility to change, without warning, the technical characteristics in order to make the product more responding to the application requirements.

The information in this Technical Data Sheet is given to the best of our knowledge. However, as the product is often used under conditions beyond our control, we cannot guarantee but the product itself.

ROCKAL XPS FOAM PLUS



The process of extruding foamed polystyrene results in a material with uniformly small, closed cells, a smooth 'skin' and an unrivalled set of properties which make it the choice of consultants in a wide range of demanding insulation applications.

The following properties makes Extruded Polystyrene an ideal choice for thermal insulation:

MOISTURE RESISTANCE

The superior moisture resistance and very low vapour permeability of extruded polystyrene insulation provides outstanding benefits for most construction and engineering applications

CHEMICAL RESISTANCE

XPS is resistant to many common chemicals such as: acids, bases, water and water-based paints, alcohol and alcohol-based paints, brine or salt water, cement and mortars, asphalt, etc

SURFACE FINISH

- Smooth

- Rough or rough with line

R-VALUE

The ability of an insulation to resist heat flow. The higher the R-value, the greater the insulating power. XPS has excellent long term R-value and proven

MECHANICAL PROPERTIES

High and uniform compressive strength.

ENVIRONMENTAL

High and uniform compressive strength.

TECHNICAL

Hot Climate:

In hot conditions, the greatest source of heat flow is solar radiation.

The aim is to reduce the flow of heat inside the building.

Cold Climate:

In cold conditions, the main aim is to reduce heat flow out of the building, to keep living space warm.



ROCKAL XPS

ITS DIVIDED ACCORDING ITS SHAPE TO:

A – NORMAL (N)



Length = 1235 mm - 1250 mm (±3)
Width = 600 mm (±3)
Thickness = (20, 25, 30, 40, 50, 60up to 100) mm

B – SHIPLAP (SL)



Length = 1235 mm - 1250 mm (±3)
Width = 600 mm (±3)
Thickness = (30, 40, 50up to 100) mm

FLAMMABILITY: All items can be produced by using Non-flammable gas as blowing agent and Flame Retardant Additives.

TYPICAL DATA SHEET ROCKAL XPS FOAM INSULATION BOARDS

.NO	Properties	Test Method	ROCKAL FOAM Plus
1	الكثافة ,Density (Kg/m ³)	ASTM D 1621 ASTM C 165	32-36
2	الموصلية الحرارية ,Thermal Conductivity (K), max (W/m.K)	ASTM C 518	0.029
3	اجهاد الضغط عند 10% ترخيم Compressive Strength at 10 % deflection, min.(kPa)	ASTM D 1621 ASTM C 165	414
4	قوة الانحناء ,Flexural Strength, min (kPa)	,ASTM C203 ,Method I Procedure B	414
5	امتصاص الماء ,Water Absorption by Submersion, min (% Volume)	ASTM D 2842	0.3
6	نفذية بخار الماء ,Water Vapor Permeance, max (Perm/inch)	ASTM C 355 ASTM E 96	1.1
7	ثبات الأبعاد Dimensional Stability .max ,(Change in dimension) (%)	ASTM D 2126	2
8	مؤشر الأكسجين ,Oxygen Index, min (% Volume)	ASTM D 2863	24
9	خواص الاحتراق Fire Classification according to,standard method for Surface Burning Characteristics of Building Material under designation	CE	Class E
10	التصنيف Classification Type	ASTM C 578	VI

HANDLING, STORAGE & USAGE CONDITIONS.

Don't load heavy objects on the stacked product.

XPS Foam Board should be stored in a cool, dry and well-ventilated place.

The shelf life of unopened XPS board is six months, while in the rainy season it is only three months.

Keep Fire (source of ignition), heat source, chemical solvent far away from XPS Foam Board.

Avoid exposure to sunlight, rain, wind and avoid any other mechanical damage. XPS Foam Board is not resistant to UV, so it can' be exposed in especially not to be exposed to sunlight.

XPS Foam Board should not be left on the site to exposed to UV -rays prolonged sunlight (more than 1 hour specially on higher than 350C) as this will result in surface degradation. When stored more than a month, it needs to regularly flip boards to prevent caking.

Using reflective light-coloured canvas to cover XPS boards is recommended when the storage time is long.

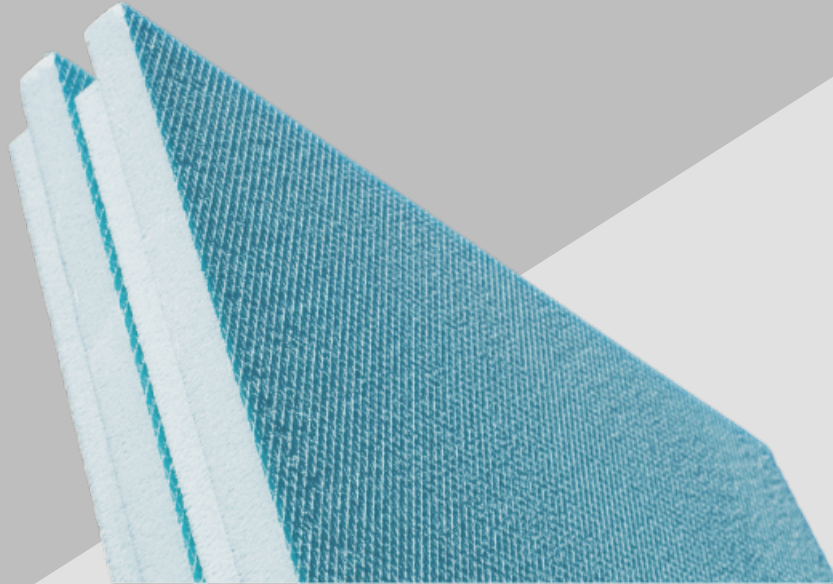


ROCKAL XPS IS FOLLOWING THE ASTM C 578 & EN 13164.

We reserve the possibility to change, without warning, the technical characteristics in order to make the product more responding to the application requirements.

The information in this Technical Data Sheet is given to the best of our knowledge. However, as the product is often used under conditions beyond our control, we cannot guarantee but the product itself.

ROCKAL XPS FOAM STANDARD



The process of extruding foamed polystyrene results in a material with uniformly small, closed cells, a smooth 'skin' and an unrivalled set of properties which make it the choice of consultants in a wide range of demanding insulation applications.

The following properties makes Extruded Polystyrene an ideal choice for thermal insulation:

MOISTURE RESISTANCE

The superior moisture resistance and very low vapour permeability of extruded polystyrene insulation provides outstanding benefits for most construction and engineering applications

CHEMICAL RESISTANCE

XPS is resistant to many common chemicals such as: acids, bases, water and water-based paints, alcohol and alcohol-based paints, brine or salt water, cement and mortars, asphalt, etc

SURFACE FINISH

- Smooth

- Rough or rough with line

R-VALUE

The ability of an insulation to resist heat flow. The higher the R-value, the greater the insulating power. XPS has excellent long term R-value and proven

MECHANICAL PROPERTIES

High and uniform compressive strength.

ENVIRONMENTAL

High and uniform compressive strength.

TECHNICAL

Hot Climate:

In hot conditions, the greatest source of heat flow is solar radiation.

The aim is to reduce the flow of heat inside the building.

Cold Climate:

In cold conditions, the main aim is to reduce heat flow out of the building, to keep living space warm.



ROCKAL XPS

ITS DIVIDED ACCORDING ITS SHAPE TO:



SEALVERGE
Shielding Tomorrow's Structures

A – NORMAL (N)



Length = 1235 mm - 1250 mm (± 3)
Width = 600 mm (± 3)
Thickness = (20 , 25 , 30 , 40 , 50 , 60up to 100) mm

B – SHIPLAP (SL)



Length = 1235 mm - 1250 mm (± 3)
Width = 600 mm (± 3)
Thickness = (30 , 40 , 50up to 100) mm

FLAMMABILITY: All items can be produced by using Non-flammable gas as blowing agent and Flame Retardant Additives.

TYPICAL DATA SHEET ROCKAL XPS FOAM INSULATION BOARDS

.NO	Properties	Test Method	ROCKAL FOAM Standard
1	,Density (Kg/m ³)	ASTM D 1621 ASTM C 165	36
2	الموصلية الحرارية ,Thermal Conductivity (K), max (W/m.K)	ASTM C 518	0.028
3	Compressive Strength at 10 % deflection, (min.(kPa)	ASTM D 1621 ASTM C 165	414
4	قوة الانحناء ,Flexural Strength, min (kPa)	,ASTM C203 ,Method I Procedure B	400
5	,Water Absorption by Submersion, min (% Volume)	ASTM D 2842	0.3
6	نفاذية بخار الماء ,Water Vapor Permeance, max (Perm/inch)	ASTM C 355 ASTM E 96	1.1
7	Dimensional Stability ,Change in dimension), max) (%)	ASTM D 2126	2
8	مؤشر الأكسجين ,Oxygen Index, min (% Volume)	ASTM D 2863	24
9	Fire Classification according to,standard method for Surface Burning Characteristics of Building Material under designation	CE	Class E
10	التصنيف Classification Type	ASTM C 578	VII

HANDLING, STORAGE & USAGE CONDITIONS.

Don't load heavy objects on the stacked product.

XPS Foam Board should be stored in a cool, dry and well-ventilated place.

The shelf life of unopened XPS board is six months, while in the rainy season it is only three months.

Keep Fire (source of ignition), heat source, chemical solvent far away from XPS Foam Board.

Avoid exposure to sunlight, rain, wind and avoid any other mechanical damage. XPS Foam Board is not resistant to UV, so it can' be exposed in especially not to be exposed to sunlight.

XPS Foam Board should not be left on the site to exposed to UV -rays prolonged sunlight (more than 1 hour specially on higher than 350C) as this will result in surface degradation. When stored more than a month, it needs to regularly flip boards to prevent caking.

Using reflective light-coloured canvas to cover XPS boards is recommended when the storage time is long.

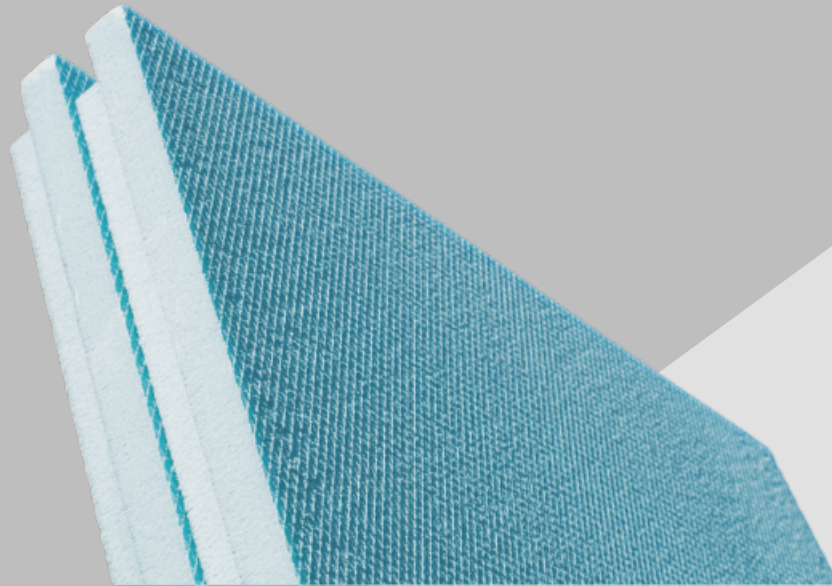


ROCKAL XPS IS FOLLOWING THE ASTM C 578 & EN 13164.

We reserve the possibility to change, without warning, the technical characteristics in order to make the product more responding to the application requirements.

The information in this Technical Data Sheet is given to the best of our knowledge. However, as the product is often used under conditions beyond our control, we cannot guarantee but the product itself.

ROCKAL XPS FOAM PRO



The process of extruding foamed polystyrene results in a material with uniformly small, closed cells, a smooth 'skin' and an unrivalled set of properties which make it the choice of consultants in a wide range of demanding insulation applications.

The following properties makes Extruded Polystyrene an ideal choice for thermal insulation:

MOISTURE RESISTANCE

The superior moisture resistance and very low vapour permeability of extruded polystyrene insulation provides outstanding benefits for most construction and engineering applications

CHEMICAL RESISTANCE

XPS is resistant to many common chemicals such as: acids, bases, water and water-based paints, alcohol and alcohol-based paints, brine or salt water, cement and mortars, asphalt, etc

SURFACE FINISH

- Smooth

- Rough or rough with line

R-VALUE

The ability of an insulation to resist heat flow. The higher the R-value, the greater the insulating power. XPS has excellent long term R-value and proven

MECHANICAL PROPERTIES

High and uniform compressive strength.

ENVIRONMENTAL

High and uniform compressive strength.

TECHNICAL

Hot Climate:

In hot conditions, the greatest source of heat flow is solar radiation.

The aim is to reduce the flow of heat inside the building.

Cold Climate:

In cold conditions, the main aim is to reduce heat flow out of the building, to keep living space warm.



ROCKAL XPS FOAM PRO

ITS DIVIDED ACCORDING ITS SHAPE TO:



SEALVERGE
Shielding Tomorrow's Structures

A – NORMAL (N)



Length = 1235 mm - 1250 mm (±3)
Width = 600 mm (±3)
Thickness = (20 , 25 , 30 , 40 , 50 , 60up to 100) mm

B – SHIPLAP (SL)



Length = 1235 mm - 1250 mm (±3)
Width = 600 mm (±3)
Thickness = (30 , 40 , 50up to 100) mm

FLAMMABILITY: All items can be produced by using Non-flammable gas as blowing agent and Flame Retardant Additives.

TYPICAL DATA SHEET ROCKAL XPS FOAM INSULATION BOARDS

.NO	Properties	Test Method	ROCKAL FOAM Pro
1	الكثافة ,Density (Kg/m ³)	ASTM D 1622	37-40
2	الموصلية الحرارية ,Thermal Conductivity (K), max (W/m.K)	ASTM C 518	0.028
3	اجهاد الضغط عند 10% ترخيم Compressive Strength at 10 % deflection, min.(kPa)	ASTM D 1621 ASTM C 165	450
4	قوة الانحناء ,Flexural Strength, min (kPa)	,ASTM C203 ,Method I Procedure B	500
5	امتصاص الماء ,Water Absorption by Submersion, min (% Volume)	ASTM D 2842	0.3
6	نفذية بخار الماء ,Water Vapor Permeance, max (Perm/inch)	ASTM C 355 ASTM E 96	1.1
7	ثبات الأبعاد Dimensional Stability .max ,(Change in dimension) (%)	ASTM D 2126	2
8	مؤشر الأكسجين ,Oxygen Index, min (% Volume)	ASTM D 2863	24
9	خواص الاحتراق Fire Classification according to,standard method for Surface Burning Characteristics of Building Material under designation	EN-13501-1	Class E
10	معامل خفض الضوضاء Noise Reduction Coefficient (NRC)	ASTM C 423	≥ 0.80

HANDLING, STORAGE & USAGE CONDITIONS.

Don't load heavy objects on the stacked product.

XPS Foam Board should be stored in a cool, dry and well-ventilated place.

The shelf life of unopened XPS board is six months, while in the rainy season it is only three months.

Keep Fire (source of ignition), heat source, chemical solvent far away from XPS Foam Board.

Avoid exposure to sunlight, rain, wind and avoid any other mechanical damage. XPS Foam Board is not resistant to UV, so it can' be exposed in especially not to be exposed to sunlight.

XPS Foam Board should not be left on the site to exposed to UV -rays prolonged sunlight (more than 1 hour specially on higher than 350C) as this will result in surface degradation. When stored more than a month, it needs to regularly flip boards to prevent caking.

Using reflective light-coloured canvas to cover XPS boards is recommended when the storage time is long.



ROCKAL XPS IS FOLLOWING THE ASTM C 578 & EN 13164.

We reserve the possibility to change, without warning, the technical characteristics in order to make the product more responding to the application requirements.

The information in this Technical Data Sheet is given to the best of our knowledge. However, as the product is often used under conditions beyond our control, we cannot guarantee but the product itself.