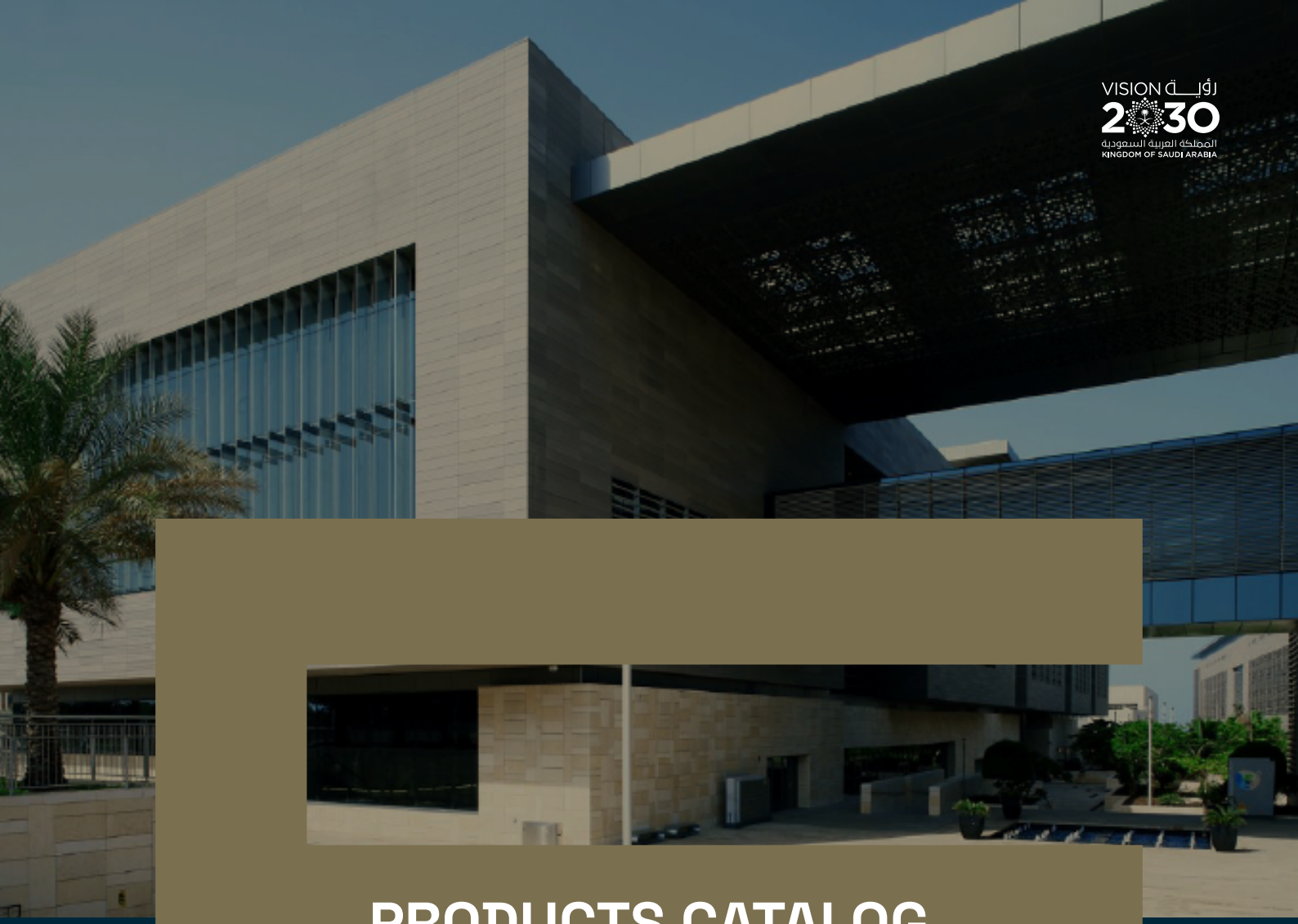


PRODUCTS CATALOG

SAPTEX 1 ISSUE 1
SEPTEMPER 2022

SAPTEX
سابتكس

CONTENTS

SAPTEX

is a Saudi company that carries 40-year of experience in the Saudi and regional markets. Since its establishment in 1980, SAPTEX has been offering an integrated and comprehensive range of thermal insulation products and solutions that meet local and international standards.

PRODUCTS

SAPTEX manufactures environmentally friendly and high-performance thermal insulation products that guarantee superior thermal insulation performance, reducing Thermal Conductivity and enhancing the served application's energy efficiency.

XPS

SAPTEX XPS

BLUE GUARD Boards

Extruded Polystyrene (XPS) boards are high-performance insulation products developed to be the right choice for energy conservation with their high compressive strength, excellent thermal resistance, and water absorption resistance. SAPTEX manufactures XPS with various densities ranging from 28 kg/m³ to 50 kg/m³, in compliance with the standard construction or as a close tolerance version according to the customer requirements. It is particularly suitable for wall, roof, and floor thermal insulation.

SYSTEM HOUSE

SAPTEX SYSTEM HOUSE

PU Spray and injection Chemicals

Polyurethane and Polyisocyanurate spray and injection are superior performance insulation solutions. It has exceptional energy conservation & efficiency performance. SAPTEX formulates the system house in various densities ranging from 35 kg/m³ to 50 kg/m³ and above, complying with the standard construction or as a close tolerance version according to the customer requirements to serve wide-field applications.

PUR/PIR

SAPTEX PUR/PIR

Boards, Pipes and Fittings

Polyurethane (PUR) and Polyisocyanurate (PIR) are superior performance insulation Products. It has exceptional energy conservation & efficiency performance. SAPTEX manufactures PUR/PIR boards with various flexible facings densities ranging from 32 to 50 kg/m³. SAPTEX manufactures pipe insulation, boards, fittings, slabs, and segments as a shape mold and cut products as per customer specification from 30 to 220 kg/m³. Therefore, it is suitable for various thermal Insulation applications.

EPS

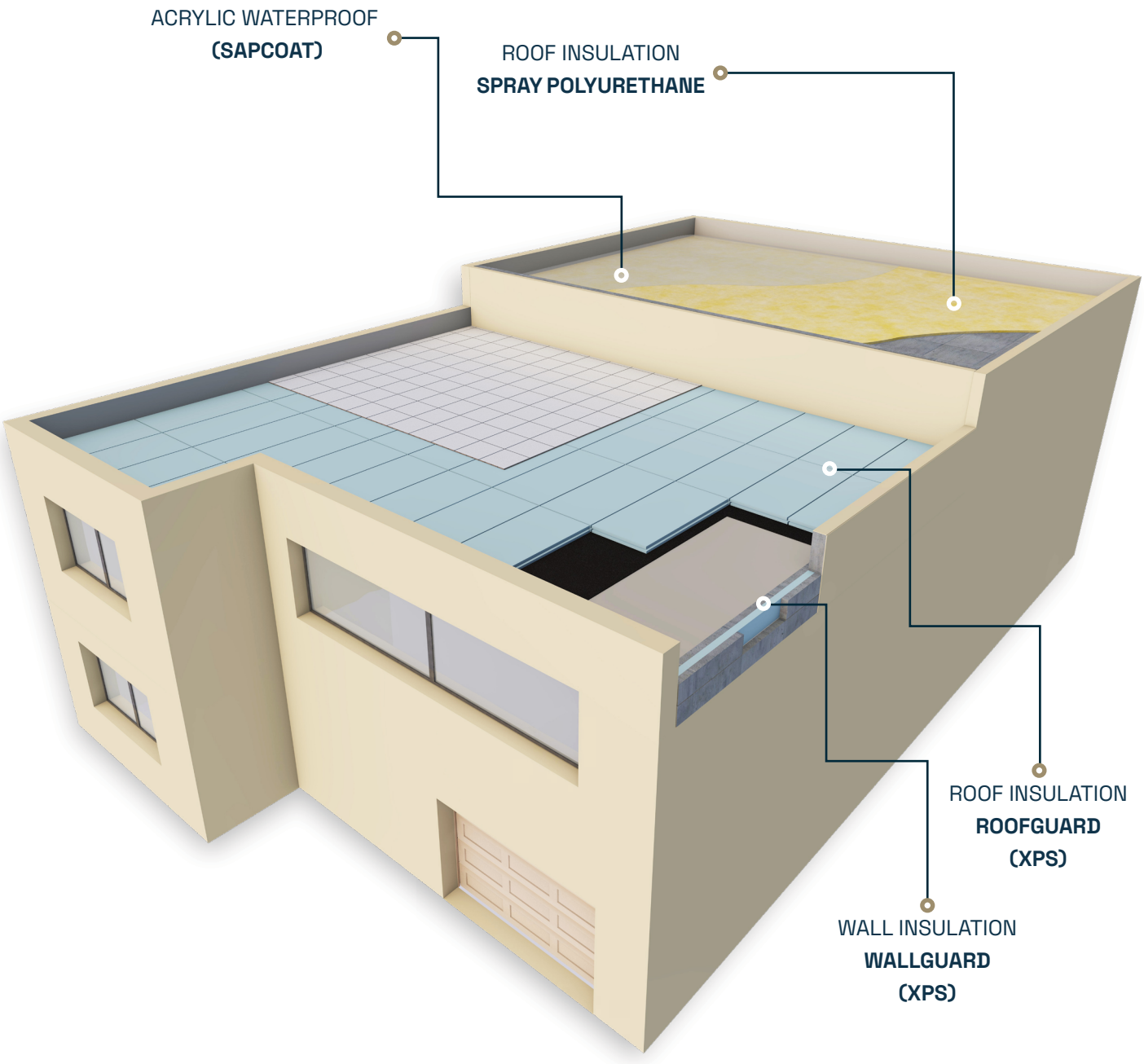
SAPTEX EPS

Boards, Slabs and Hordi

Expanded polystyrene (EPS) is suitable light insulation material. SAPTEX manufactures EPS with various densities ranging from 15 kg/m³ to 35 kg/m³, in compliance with the standard construction or as a close tolerance version according to the customer requirements to serve wide-field applications as a shape mold and cut products

International Organization for Standardization

SAPTEX THERMAL INSULATION PRODUCTS



SAPTEX

We guarantees a superior customer experience by providing a broad spectrum of high-quality thermal insulation products and solutions that satisfy various customers' needs and requirements.

We also serve our customers through our team's accumulative experience in providing innovative thermal insulation solutions that ensure meeting the related environmental and energy efficiency requirements as well as other related building design elements and parameters

UL Certificate of Compliance

SASO Quality Mark Certificate

ISO 9001:2015 Managment System Certificate

scan or click to download

BLUE GUARD - XPS

It is a uniform rigid closed-cell of extruded Polystyrene board, manufactured from high quality materials either as a standard construction product according to ASTM-C578 or a close tolerance version.
supplied in wide ranges of density as:

- ROOF GUARD
- WALL GUARD
- FLOOR GUARD

Dimensions:

Density: from 28 kg/m³ to 50 kg/m³.
Sizes: 1250 mm X 600mm and 3000X600 mm
Thickness: 20,25,30,40,50,60,70,80,90,100 mm
Edges:

Shiplap (rebated) | Tongue & Groove | Straight edges

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

*Rebated edges on all four sides to eliminate thermal bridging

Applications:

Specially designed and developed for roof, wall, and floor thermal insulations in commercial and residential buildings.

Installations:

- Always consult the local regulations and contact the manufacturer for technical questions.
- After the installation, the insulation boards must be protected against weather conditions and sunlight.
- Fixed to structural wall with a suitable adhesive or fastened mechanically.

BLUE GUARD Advantages:

- Excellent thermal insulation represented in high R-value.
- Impact resistance, high compressive strength.
- Excellent mechanical properties.
- Dimension stability
- High resistance to vapor diffusion
- Extremely low moisture absorption
- Acoustic Insulation
- Environmentally friendly, CFC & HCFC free
- Immunity against insects and bacteria.
- Ease of installation.
- Resistance to most of the chemicals.
- Fire propagation resistance that complies with the local and global requirements.
- Complying with the national, regional, and international standards.

SAPTEX can produce the BLUE GUARD boards according to UL classification upon customer request

Extruded Polystyrene (XPS) Board Properties

Property		Test Methods	Unit	WALL-GUARD	ROOF-GUARD	FLOOR-GUARD
Nominal Density		ASTM D1622	kg/m³	28-30	32-35	37-45
Thermal Conductivity at 24°C mean temperature		ASTM C177 / ASTM C518	W/(m.k) BTU-in /Ft².°F	0.027 0.19	0.027 0.19	0.027 0.19
Thermal resistance (of 25.4 mm thickness, at 24°C mean temperature)		ASTM C177/ ASTM C518	(k.m²)/W	0.94	0.94	0.94
Compressive Strength at yield or 10% deformation		ASTM D1621	kPa	173 - 250	276 - 350	415-700
Flexural Strength		ASTM C203	kPa	≥ 345	≥ 414	≥ 517
Water vapor Permeance		ASTM E96	Perm	1.5	1.1	1.1
Water Absorption by total immersion,		ASTM C272	Volume %	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3
Dimensional Stability At 70°C & 97% R.H & at -40°C		ASTM D2126	%	2.0	2.0	2.0
Surface Burning characteristics	Flame Spread	UL 723	Rating	5	5	5.
	Smoke density	UL 723	Rating	110	110	110
Oxygen index		ASTM D2863	%	24	24	24

- **Thermal conductivity and thermal resistance values obtained when samples from production line were tested, values may change according to conditions and age of the sample.**
- **The results of the flame spread, and smoke density test were recorded when the materials were still in their primary location.**
- **Other densities and sizes could be produced upon customer's requirements**

Technical Calculations:

Thermal Conductivity, LAMBDA Value

K-VALUE: W/(m.k)

Represents the heat conductivity of a material, the lower K value, the lower heat loss, consequently, the greater thermal insulation effectiveness

Thermal Resistance

R-VALUE: (m².k)/W

Represents the resistance to heat flow, the higher R value, the lower heat flow, consequently, the greater insulation effectiveness

$$\text{R-VALUE} = \frac{\text{Thickness}}{\text{k-VALUE}}$$

Thermal Transmittance

U-VALUE: W/(m². k)

Represents the heat transmittance of heat, the lower U value, the greater insulation effectiveness.

$$\text{U-VALUE} = \frac{1}{\text{R-VALUE}}$$

WALL GUARD

It is a rigid closed-cell of extruded Polystyrene board (XPS), manufactured from high materials according to ASTM-C578 to guarantee superior thermal insulation performance with its features on energy conservation, mechanical stress resistance, and moisture resistance.

Dimensions:

Density: 28-30 Kg /m³
Sizes: 1250 x 600 mm and 3000 X 600mm
Thickness: 50, 60, 75, 80, 90, 100 mm
Edges:

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

*Rebated edges on all four sides to eliminate thermal bridging

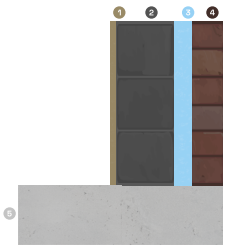
Applications & Installation:

Wall insulation, Installed as:

- **Cavity WALL GUARD**

  A cavity wall is an optimum solution where the exterior brick finish is required, fixed with the inner wall, either mechanically or with a suitable solvent-free adhesive

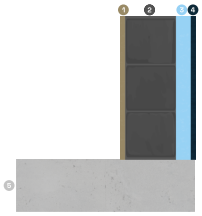
1. Interior plaster.
2. Structural wall.
3. WALL GUARD
4. Outer brick wall.
5. Concrete slab.



- **Exterior WALL GUARD**

  Can be installed either behind panels of marble or granite and fixed to the outer side of external walls either mechanically or with a suitable solvent-free adhesive.

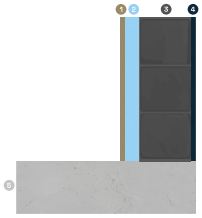
1. Internal Finish
2. Structural Wall
3. WALL GUARD
4. External Finish
5. Concrete slab



- **Interior WALL GUARD**

  Widely used for new construction & existing buildings. It is Fixed to the structural wall either mechanically or with a suitable solvent-free adhesive.

1. Gypsum Board
2. WALL GUARD
3. Structural Wall
4. External Finish
5. Concrete slab



ROOF GUARD

It is a rigid closed-cell extruded Polystyrene board (XPS), manufactured from high materials according to ASTM-C578 to guarantee superior thermal insulation performance with its features on energy conservation, mechanical stress resistance, and moisture resistance.

Dimensions:

Density: 32-35 Kg/m³
Sizes: 1250 X 600 mm and 3000 X 600mm
Thickness:20, 30, 40, 50, 60, 75, 80, 90 & 100 mm
Edges:

Shiplap (rebated) | Tongue & Groove | Straight edges

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

*Rebated edges on all four sides to eliminate thermal bridging

Applications & Installation:

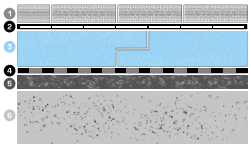
Roof insulation is installed as an **Inverted Roof System** that reduces maintenance costs by protecting the waterproofing membrane from the effects of weather and mechanical stresses during construction.

- The concrete deck should be clean and smooth, and if it is rough, we recommend installing a protection sheet layer underneath the membrane.
- The waterproofing membrane should be of good quality and free of solvents

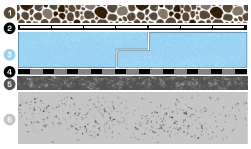
that could attack the ROOF GUARD or lay directly on the concrete deck.

- The ROOF GUARD should be laid loosely over the membrane with tight staggered joints.
- Lay loosely a paving slab or gravel layer over the ROOF GUARD; 50 mm is the minimum depth of the gravel layer to provide sufficient protection against ultraviolet radiation.

1. Roof Tiles.
2. Separation layer.
3. ROOF GUARD
4. waterproofing membrane.
5. Screed to fall.
6. Roof deck



1. Gravel layer.
2. Separation layer.
3. ROOF GUARD
4. Waterproofing membrane
5. Screed to fall
6. Roof deck



FLOOR GUARD

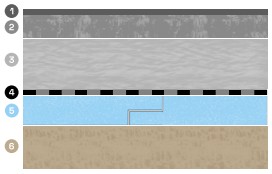
It is a rigid closed-cell of extruded Polystyrene board (XPS), manufactured from high materials according to ASTM-C578 to assure superior thermal insulation performance, with its features on energy conservation, mechanical stresses resistance (high compressive strength value ranging from 500 - 700 kPa), as well as moisture resistance

Applications & Installation:

It's an Ideal insulation option for high load-bearing floors in cold stores, warehouses, and parking areas.

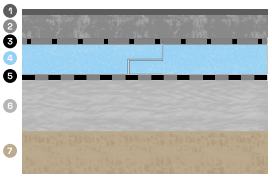
FLOOR GUARD Over Compacted Soil

1. Floor finish
2. Concrete screed
3. Concrete slab
4. Damp Proof Membrane
5. FLOOR GUARD
6. Compacted soil



FLOOR GUARD Over Compacted Concrete Slab

1. Floor finish
2. Concrete screed
3. Vapor barrier
4. FLOOR GUARD
5. Damp Proof Membrane
6. Concrete slab
7. Compacted soil



Dimensions:

Density: 37-45 Kg/m³
Sizes: 1250 x600 mm and 3000mm X 600mm
Thickness: 20,40,50,60,75 &100 mm
Edges:

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

*Rebated edges on all four sides to eliminate thermal bridging

SYSTEM HOUSE

Rigid Polyurethane is closed cell material that provides superior thermal insulation properties to deliver exceptional energy efficiency performance tailored for its various applications.

the Polyurethane foam produced by reacting a blended polyol and polymeric MDI by utilizing Hydrofloro-carbons (HFC), Pentane, or Hydrofluoro-Olefin (HFO) in foam expansion.
The system serves various customers' applications per DIN 4102-1 B3 & B2 fire class requirements.

Polyurethane Spray:

spray-applied polyurethane chemicals with a density ranging from 40-55 kg/m³ is ideal for insulating either small or large areas within a short time. It also acts as a moisture and vapor barrier.

Polyurethane Injection:

Sandwich panel & Other Applications
The System is available for discontinuous and continuous line processes, per DIN 4102-1 B3 and B2 class fire rating requirements.

PU for safety doors comes under this grade. PIR pentane blown system available for continuous process.

SAPTEX adjusts the density and reactivity as per each specific customer's specifications.

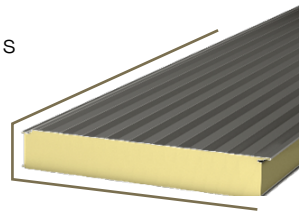
Appliance Systems for water heaters, refrigeration, and cooling systems are also available to meet the full spectrum of applications requiring superior thermal insulation.

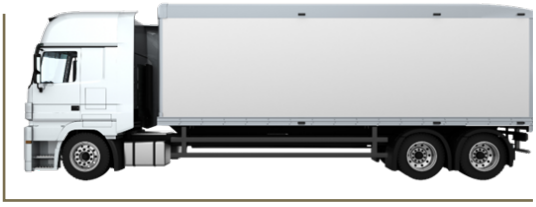
Advantages:

- Superior thermal insulation, represented in high R-value.
- Environmentally friendly, CFC & HCFC free
- Reducing energy consumption and emissions results in energy savings
- Excellent fire propagation resistance complies with the local and global requirements.
- Excellent operational ability and flexibility.

Applications:

- Spray insulation for roof and walls
- Sandwich panels – discontinuous and continuous process
- Appliance: Water heater, domestic/ commercial refrigerators & freezers
- Refrigerated truck panels
- Pipe insulations
- Block foam
- Safety doors





PUR / PIR BOARD

Polyurethane (PUR) or Polyisocyanurate (PIR) boards, are a rigid closed-cell manufactured from high material as a standard construction product according to SASO GSO BS 4841, BS EN13165, ASTM C1289 or to a close tolerance version to guarantee superior performance.
PUR / PIR foam laminated auto-adhering with the required facing material during the production process; hence delamination does not occur during handling/installation.

Facing Materials:

- Asphalt saturated felt paper
- Glass fiber tissue with polyethylene film
- Cellulose fiberglass
- Aluminum foil backed with Kraft paper
- Aluminum foil backed by Glass mat

*Different facings on any side of the board can be applied (upon request at an extra fee).

Advantages:

- Superior thermal Insulation represented in high R-value.
- Excellent fire propagation resistance complies with the local and global requirements.
- Excellent mechanical properties.
- High sound absorption capacity.
- Environmentally friendly, CFC & HCFC free.
- Immunity against insects and bacteria.
- Resistance to most of the chemicals.
- Ease of installation

Applications:

Specially designed and developed for roof and wall thermal insulations in commercial and residential buildings.

Dimensions:

Density: from 32 to 50 kg/m³.
*Densities over 35 kg/m³ are produced on request

Sizes: 2400 x 1200 mm and 1200 x 600 mm.

Thickness: from 25 to 120 mm

Edges:

Shiplap (rebated) | Straight edges

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

*Rebated edges are available upon requirement at an extra fee.

Independent research proved that the higher the board size, the better thermal resistance values achieved

Polyurethane (PUR) Board Properties

Description			Test Methods	UNIT	PUR FOAM (WALL and ROOF)		
Density			ASTM D1622	kg/m³	32-35	40-45	45-50
Compressive Strength, normal to the major plane of the board			BS EN 826	kPa	120-150	150-175	175-250
Water Absorption			ASTM C272	Volume %	1%	1%	1%
Thermal Conductivity at 10°C mean temperature			BS EN 12667	W/(m.k)	≤ 0.021	≤ 0.021	≤ 0.021
Tensile Strength, normal to major plane of board			BS EN 1607	kPa	≥ 60	≥ 60	≥ 80
Temperature Limit				°C	110	110	110
Dimensional stability (under specified temperature and humidity conditions)	Change in length and width	At 70°C & 90 % RH	EN 1604	%	≤ 2.0	≤ 2.0	≤ 1.0
		At -20°C	EN 1604	%	≤ 1.0	≤ 1.0	≤ 1.0
	Change in Thickness	At 70°C & 90 % RH	EN 1604	%	≤ 2.0	≤ 2.0	≤ 2.0
		At -20°C	EN 1604	%	≤ 2.0	≤ 2.0	≤ 2.0
Reaction to fire (Fire classification)			BS EN 13501-1	Rating	Class F	Class F	Class F

Polyisocyanurate (PIR) Board Properties

Description			Test Methods	UNIT	PUR FOAM (WALL and ROOF)		
Density			ASTM D1622	kg/m³	32-35	40-45	45-50
Compressive Strength, normal to the major plane of the board			BS EN 826	kPa	120-150	150-175	175-250
Water Absorption			ASTM C272	Volume %	1%	1%	1%
Thermal Conductivity at 10°C mean temperature			BS EN 13165	W/(m.k)	≤ 0.021	≤ 0.021	≤ 0.021
Tensile Strength, normal to major plane of board			BS EN 1607	kPa	≥ 60	≥ 60	≥ 80
Temperature Limit				°C	110	110	110
Dimensional stability (under specified temperature and humidity conditions)	Change in length and width	At 70°C & 90 % RH	EN 1604	%	≤ 2.0	≤ 2.0	≤ 1.0
		At -20°C	EN 1604	%	≤ 1.0	≤ 1.0	≤ 1.0
	Change in Thickness	At 70°C & 90 % RH	EN 1604	%	≤ 2.0	≤ 2.0	≤ 2.0
		At -20°C	EN 1604	%	≤ 2.0	≤ 2.0	≤ 2.0
Reaction to fire (Fire classification)			BS EN 13501-1	Rating	Class E	Class E	Class E

- values obtained based on recent produced samples from the production line, values may differ according to test conditions and age of the sample.
- Other densities and sizes could be produced upon customer's requirements

PUR PIPE, DUCT AND SLAB INSULATION

It is a rigid closed-cell Polyurethane foam manufactured from high quality material as a shape mold and cut products material either as a standard construction product according to ASTM-C591 or as a close tolerance version that guarantees a superior thermal insulation performance.

Advantages:

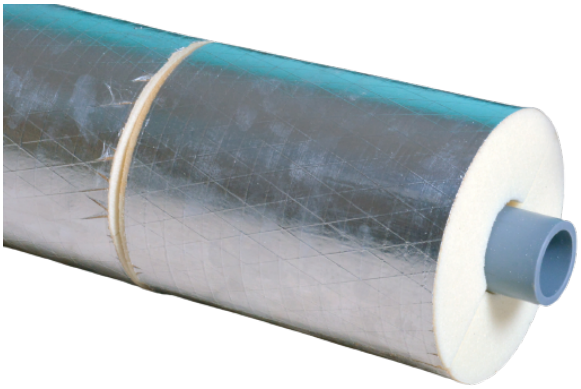
- Superior thermal insulation, high R-value.
- Acoustic Insulation
- Vermin and rodent-proof
- inert to most chemicals.
- Ease of installation

Applications:

Used in various applications where higher service temperatures are required.

- Hot & cold water pre-insulated pipes
- Heating & air-conditioning ducts
- Industrial process pipework.
- Sandwich panel
- Adhered to rigid or flexible substrates to add up a wide variety of properties

Pipes and Fittings:



PUR available as cover for Pipes and fittings (elbows, tees, valve) , PUR pipe can be jacketed with aluminum foil.

Density: 30, 40, 50 and 60 kg/m³
Sizes: all sizes, with 1 meter length.

*Sizes over 100 mm OD are made from segments.

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

Slab:

PUR slabs can be jacketed with aluminum foil.

Density: 30, 40, 50 and 60 kg/m³
Sizes: 1200 x 1000 mm, 1200 x 2000 mm.
Edges: Straight edges

Thermal Support Segments:

Beveled segments are used as thermal support for Vessels, Tanks, or any other special application

Density: 80 ,100, 120 kg/m³, and above

*Above 80 kg/m³, Produced upon customer's request

PIR PIPE, DUCT AND SLAB INSULATION

It is a Rigid closed-cell Polyisocyanurate foam, it is manufactured from high quality material as a shape mold and cut products material either as a standard construction product according to ASTM-C591 or as a close tolerance version to guarantee superior performance.
When subjected to fire, the outer surface of the foam forms a strong network, preventing the further flame spread and penetration. In contrast, it fulfills the highest fire ratings.

Advantages:

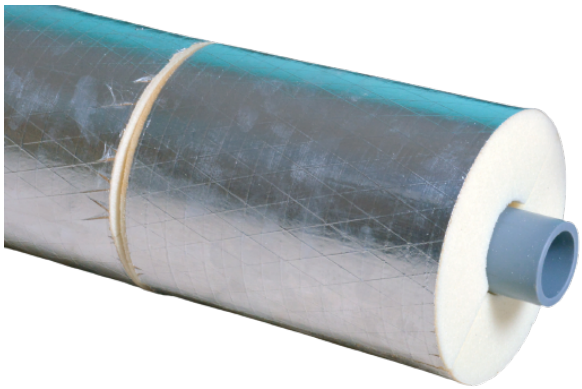
- Superior thermal insulation, high R-value.
- Superior fire resistance Performance
- Least spread of flame and reduces the smoke emitted from the fire
- Acoustic Insulation
- Vermin and rodent-proof
- Inert to most of the chemicals.
- Ease of installation

Applications:

Used in various applications where higher service temperatures or better fire resistance performance are required.

- Air-conditioning systems
- Technical
- Petrochemical
- Process plants
- Adhered to rigid or flexible substrates to add up a wide variety of properties.

Pipes and Fittings



PIR is available as a cover for Pipes and fittings (elbows, tees, valve). , PUR pipe can be jacketed with aluminum foil.

Density: 30 to 50 kg/m³
Sizes: all sizes, with 1-meter length.

*Sizes over 100 mm OD are made from segments.
*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

Slab:

PIR slabs can be jacketed with aluminum foil.

Density: 30 to 50 kg/m³
Sizes: 1200 x 1000 mm and 1200 x 2000 mm
Edges: Straight edges

*Blocks may be colored (if required) either pink or green.

POLYURETHANE (PUR) / POLYISOCYANURATE (PIR) PROPERTIES

Description	Test Methods	UNIT		PUR/PIR PIPE & DUCT INSULATION					PUR THERMAL SUPPORT OR ANY OTHER SPECIAL APPLICATION	
Flammability Class	ASTM D1622	kg/m³		30	35	40	50	60	80	100
Compressive Resistance (At 10% deformation)	ASTM D1621	kPa		≥ 137	≥ 150	≥ 310	≥ 240	≥ 550	≥ 550	≥ 862
Thermal Conductivity at 24°C mean temperature	ASTM C518	W/(m.k)		0.029	0.029	0.029	0.030	0.030	0.030	0.032
Water Vapor Permeability	ASTM E96	perms		4.0	4.0	3.5	3.0	2.5	2.5	2.0
Water Absorption	ASTM C 272	% By-volume		2.0	2.0	1.0	1.0	1.0	0.8	0.8
Closed-cell content	ASTM D6226	%		90	90	90	90	90	90	90
Dimensional stability (at 100°C)	ASTM D2126	% linear change		2.0	2.0	2.0	2.0	2.0	2.0	2.0
Flammability Class	DIN 4102	Rating	PUR	B3	B3	B3	B3	B3	B3	B3
			PIR	B2	B2	B2	B2	B2		
Flame Spread Index	ASTM E84	Rating	PUR	≥ 75	≥ 75	≥ 75	≥ 75	≥ 75	≥ 75	≥ 75
			PIR	≤25	≤25	≤25	≤25	≤25		
Smoke Developed Density	ASTM E84	Rating	450	450	450	450	450	450	450	450

Technical Calculations:

Thermal Conductivity, LAMBDA Value

K-VALUE: W/(m.k)

Represents the heat conductivity of a material, the lower K value, the lower heat loss, consequently, the greater thermal insulation effectiveness

Thermal Resistance

R-VALUE: (m².k)/W

Represents the resistance to heat flow, the higher R value, the lower heat flow, consequently, the greater insulation effectiveness

$$\text{R-VALUE} = \frac{\text{Thickness}}{\text{k-VALUE}}$$

Thermal Transmittance

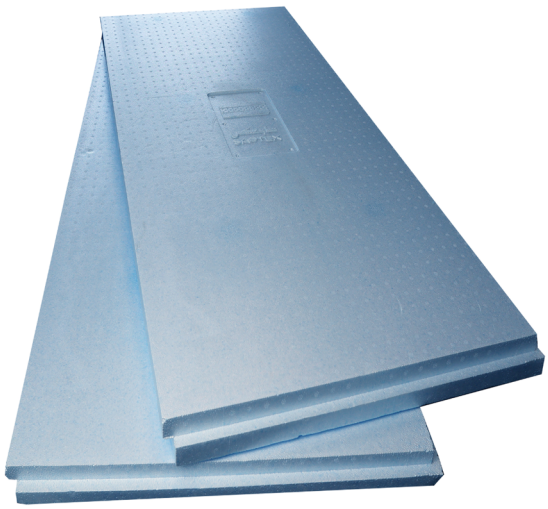
U-VALUE: W/(m². k)

Represents the heat transmittance of heat, the lower U value, the greater insulation effectiveness.

$$\text{U-VALUE} = \frac{1}{\text{R-VALUE}}$$

STYROGOLD / STYROBLUE - EPS

It is a rigid closed cell expanded polystyrene (EPS) boards, an affordable Insulation material.



Advantages:

- Light weight
- Stable thermal insulation.
- Dimensionally stable
- Low water absorption
- Easy to handle and install
- Cost-saving material
- Vermin and rodent-proof
- Inert to most of the chemicals
- Environmentally friendly, CFC &HCFC free.

Applications:

- **Wall Insulation:**
  StyroWall boards for cavity, Internal or external wall Insulation.
- **Roof Insulation:**
  Styroof boards are used for normal roofs.
  Styroof+ boards are used for roofs, with extra loads.
  Styroof & Styroof+ boards are used for both Inverted and conventional roofing.

Dimensions:

Density:
- **StyroWall**: 16 to 22 kg/m3
- **Styroof**: 22 to 28 kg/m3
- **Styroof+** 32 to 35 kg/m3

Sizes: 610 X 1220 mm

Thickness:20,25,30,40,50,60,65,70,80,100,150 mm

Edges:

Shiplap (rebated)

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.offered values upon project design requirements

STYROGOLD / STYROBLUE (EPS) PROPERTIES

Description	TEST METHOD	UNIT	StyroWall		Styroof	Styroof+
DENSITY	ASTM D1622	kg/m3	16-18	18-22	22-28	32-35
Thermal Conductivity (At 24°C mean temperature)	ASTM C 518/ ASTM C 177	w/(m.k)	0.040	0.0379	0.0363	0.0343
Compressive Strength (at yield or 10% deformation)	ASTM D 1621	kPa	≥ 69	≥ 90	≥ 104	≥ 175
Flexural Strength	ASTM C 203	kPa	≥ 175	≥ 210	≥ 240	≥ 345
Water Vapor Permeability	ASTM E96	perms	≤ 5.0	≤ 3.5	≤ 3.5	≤ 2.5
Water Absorption	ASTM C 272	% By-volume	≤ 4.0	≤ 3.0	≤ 3.0	≤ 2.0
Dimensional Stability At 70°C & 97% R.H & at -40°C	ASTM D2126	%	≤ 2.0	≤ 2.0	≤ 2.0	≤ 2.0
Oxygen index	ASTM D2863	%	24	24	24	24

STYROSAP

It is a rigid closed-cell expanded polystyrene (EPS) block, an affordable Insulation material, with densities ranging from 10 to 35 kg/m3 for various applications as a shape mold and cut products.

Advantages:

- Stable thermal insulation.
- Dimensionally stable
- Easy to handle and install
- Economically feasible option for low thermal insulation requirements
- Vermin and rodent-proof
- Inert to most of the chemicals
- Environmentally friendly, CFC & HCFC free.

Board:

It is used for floors, walls, roofs insulation
Wall Densities ranging from 18 to 30 kg/m3
Floor & Roof Densities ranging from 24 to 35 kg/m3
STYRO-COM boards are comprised of gypsum plasterboard bonded to Insulation, for Internal Insulation.

Sizes: 500 X 2000 mm, 1000X 2000 mm, and 1200 x 2000 mm.
Edges: Straight edges 

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements

Pipes Insulation:

It is Pipes Insulation available as pipe sections

Density: ranging from 16 to 35 kg/m3
Sizes: 15mm diameter and upwards, with 20 mm wall thickness and above.

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

STYRO Block:

Sizes: 400 X 200 X 65 (mm)
*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements

HORDI STYRENE:

It is EPS block for Insulated wall construction, placed using:
1. SAPBOND cement adhesive in the first plastering stage (spatter dash)
2. wire mesh.

Density: 10 to 20 kg/m3
Sizes: 400x200x75 mm
Edges: Palin

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

Special Applications:

It is used for external Insulation & finishing system (EIFS) for special purposes like void forming, lightweight concrete, Soil filtering, packaging, etc.

EPS INSERT

It is a rigid closed-cell expanded polystyrene (EPS) foam, produced by molding process, one of the most recommended insulation building materials.

Advantages:

- Efficient thermal Insulation than concrete and red hordi blocks
- Lightweight than the concrete
- Excellent bonding to concrete
- Dimensionally stable
- Easy to handle and install
- Economically feasible option for low thermal insulation requirements
- Vermin and rodent-proof
- Inert to most of the chemicals
- Environmentally friendly, CFC & HCFC free.

Applications & Installation:

Insulated wall construction, placed using:
1. SAPBOND cement adhesive in the first plastering stage (spatter dash)
2. wire mesh.

Dimensions:

Density: 16 to 20 kg/m3

Sizes: 400x200x75 mm

Edges:

*Above sizes are the standard sizes, however, SAPTEX can provide a tailormade solution to meet densities, sizes, and thicknesses within and beyond the offered values upon project design requirements.

EXPANDED POLYSTYRENE (EPS) PROPERTIES

Description	TEST METHOD	UNIT	STYROSAP & EPS INSERT		STYROSAP		
DENSITY	ASTM D1622	kg/m3	16	20	24	28	35
Thermal Conductivity (At 24°C mean temperature)	ASTM C 518/ ASTM C 177	w/(m.k)	0.04	0.0379	0.0363	0.0363	0.0343
Compressive Strength (at yield or 10% deformation)	ASTM D 1621	kPa	≥ 69	≥ 90	≥105	≥140	≥175
Flexural Strength	ASTM C 203	kPa	≥ 175	≥ 210	≥ 240	≥ 280	≥ 345
Water Vapor Permeability	ASTM E96	perms	≤ 5.0	≤ 3.5	≤ 3.5	≤ 3.0	≤ 2.5
Water Absorption	ASTM C 272	% By-volume	≤ 4.0	≤ 3.0	≤ 3.0	≤ 3.0	≤ 2.0
Dimensional Stability At 70°C & 97% R.H & at -40°C	ASTM D2126	%	≤ 2.0	≤ 2.0	≤ 2.0	≤ 2.0	≤ 2.0
Oxygen index	ASTM D2863	%	24	24	24	24	24

Built to Sustain...

sappco click: 0548900415

www.sappco.com.sa/saptex

Email: sales@saptex.com.sa

SAPPCOGROUP

Riyadh head office

Num: 966114482644

P.O Box 40042, Riyadh 11499, Saudi Arabia

Dammam office

Num: 966138471703/ 3323

P.O Box 1703, Dammam 31412, Saudi Arabia

Jeddah Office

Num: 966122864284/4285