

- It is produced by melting silica sand at high temperatures and making it fibres.
- It is used for the purposes of thermal insulation, sound insulation and acoustic applications, fire safety.
- It can be produced in different size and technical specifications according to their area and purpose of usage with different coating materials, as blanket, board, pipe section.

## TECHNICAL SPECIFICATIONS

### • THERMAL CONDUCTIVITY COEFFICIENCY ( $\lambda$ )

Thermal conductivity coefficient is the heat amount that transferred between 1 m<sup>2</sup> surface of the insulation material's perpendicular to each other at 1m<sup>2</sup> distance when the temperature difference is ( $\Delta t$ ) 1°C. Its unit is W/mK. This value is the most important speciality of thermal insulation materials. In order to consider a material to be an insulation material, its thermal conductivity coefficient must be lower than 0,065 W/mK. (ISO and CE Standards) The smaller the material's thermal conductivity coefficient, the more resistance it shows against heat transfer.

**AT Glass Wool has a thermal coefficient of 0,040 W/mK**

### • WATER VAPOUR DIFFUSION RESISTANCE COEFFICIENCY ( $\mu$ )

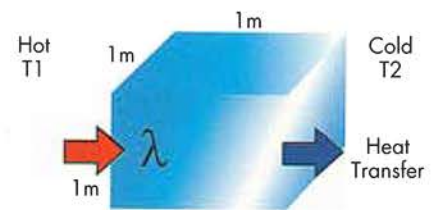
The demand of making a balance that is seen at heat transfer is also valid for partial vapour pressure. Water vapour pressure is tend to move from the environment where the pressure is high to the one where the pressure is low. Every material resists vapour transfer depending on their thicknesses as the way in heat transfer. Ratio of this resistance that the materials show against the vapour diffusion resistance of the air is called water vapour resistance coefficient. Since it is a ratio it does not have an unit.

**AT Glass Wool has a water vapour diffusion coefficient of  $\mu = 1,1$**

### • FIRE CLASS

Fire class is a speciality of the material that shows its resistance against flame and combustion.

**AT Glass Wool is an A class incombustible insulation material according to TS EN 13501-1 Standard.**



### Fire Classes of Insulation Materials

<b>A1</b>	Incombustible materials
<b>A2</b>	The materials that don't contribute significantly to fire load or fire development
<b>B</b>	The materials that provide better conditions than C class
<b>C</b>	The materials that provide better conditions than D class
<b>D</b>	The materials that show resistance for a long time
<b>E</b>	The materials that show resistance for a short time
<b>F</b>	The materials that do not determined fire performance

## GLASS WOOL

### • DENSITY

AT Glass Wool is produced in densities changing from **12 to 100 kg/m<sup>3</sup>** according to its area and purpose of usage.

### • USING TEMPERATURE

It should be known that the thermal insulation material is suitable to be used at what temperature range in order to be applied safely.

AT Glass Wool can be used between **-50 °C and +250 °C** safely

## PRODUCT RANGE

Glass Wool is used in building and HVAC installation insulation, industrial applications.

It can be produced in different size and technical specifications according to their area and purpose of usage with different coating materials, as blanket, board and Pipe.

BLANKET



BOARD



		Lamination Type							
		Product Name	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) = m <sup>2</sup> K/W	Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Water Repellent Silicon
BLANKET	Insulation Blanket	12	80-200	2 - 5	+	+	+	-	
	Insulation Blanket	14	80-200	2 - 5	+	+	+		
	Insulation Blanket	18	80-200	2 - 5	+	+	+	-	
BOARD	Wall Board	22	30 - 100	0,75 - 2,5	+	+	+	+	
	Partition Board	40	50-100	1,25 - 2,5	+	+	+	-	
	Facade Board	40	30-100	0,75 - 2,5	+	+	+	+	
	HVAC Board	50	20-50	0,5 - 1,25	+	+	+		
	Starpan	100	15	0,38	+		+		

				Lamination Type			
Pipe Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	Diameter	Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Silicon Backing
Prefabricated Pipe	60 - 100	25 - 100	1/4" - 14"	-	-	+	-



### INSULATION BLANKET

- Blankets are used by being laid on the floor for the thermal insulation of unused loft.
- Blankets are not covered with any material.



### AREAS OF USAGE

- On all sorts of wooden fixed roofs and metal roofs,
- On loft floors,
- In sandwich roof systems,
- On solar energy systems,
- At poultry farms and animal houses.

### ITS ADVANTAGES

- Fiberglass insulation blanket is light and easy to use.
- It does not tear down while being applied.
- It is applied to all roof types.
- By means of its water repellent feature, it does not take water leakage in itself and stays dry.
- In case of fire, being "A" class incombustible material is a very important advantage in terms of fire safety.
- There would be no change at its size due to exposure to heat and moisture.
- It does not decay, decompose, mould, corrode or oxidise in time.
- It would not be destroyed by bugs and microorganisms.
- It is not hygroscopic or capillary.

### TECHNICAL SPECIFICATIONS OF THE PRODUCT

Blanket Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) =m <sup>2</sup> K/W	Lamination Type		
				Yellow Fiberglass	Black Fiberglass	Aluminium Foil
Insulation Blanket	12	80-200	2 - 5	+	+	+
Insulation Blanket	14	80-200	2 - 5	+	+	+
Insulation Blanket	18	80-200	2 - 5	+	+	+

\* Please contact to export department for different density, thickness and dimensions.

## BUILDING INSULATION

### WALL BOARD

These are the insulating board used for external (thermal) and internal (thermal and sound) insulation.

**Coating Type:** None, With Silicon

#### AREAS OF USAGE

- As a water repellent silicon thermal and sound insulation material between two wall elements,
- In double sided sandwich wall panels,
- At acoustic purposed applications.



#### TECHNICAL SPECIFICATIONS OF THE PRODUCT

Board Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) =m <sup>2</sup> K/W	Lamination Type			
				Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Water Repellent Silicon
Wall Board	22	30	0,75	+	+	+	+
	22	50	1,25	+	+	+	+
	22	100	2,50	+	+	+	+

\*Please contact to export department for different density, thickness and dimensions.

### WALL BOARD

They are the glasswool boards with both sides coated with yellow fiberglass.

**Coating Type:** Yellow fiberglass (both sides)

#### AREAS OF USAGE

- Is used in thermal insulation of external walls



#### TECHNICAL SPECIFICATIONS OF THE PRODUCT

Board Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) =m <sup>2</sup> K/W	Lamination Type			
				Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Water Repellent Silicon
Wall Board	28	50	1,25	+	+	-	+
	28	75	1,87	+	+	-	+
	28	100	2,50	+	+	-	+

\* Please contact to export department for different density, thickness and dimensions.

#### ADVANTAGES

- By means of its water repellent feature, it does not take water leakage in itself and stays dry.
- In case of fire, being "A" class incombustible material is a very important advantage in terms of fire safety.
- There would be no change at its size due to exposure to heat and moisture.
- It does not decay, decompose, mould, corrode or oxidise in time.
- It would not be destroyed by bugs and microorganisms.
- It is not hygroscopic or capillary.

**FACADE BOARD**

They are the glasswool boards with both sides coated with yellow fiberglass.

**Coating Type:** Yellow fiberglass(one side)



**AREAS OF USAGE**

Since it does not accept water leakage due to any damage on the surface of the outer coating of the building by means of its feature that rejects the moisture and the water, it is used as water repellent silicon insulation material behind outer facade coatings.

TECHNICAL SPECIFICATIONS OF THE PRODUCT				Lamination Type			
Board Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) =m <sup>2</sup> K/W	Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Water Repellent Silicon
Facade Board	40	30	0,75	+	+	+	+
	40	50	1,25	+	+	+	+
	40	60	1,50	+	+	+	+
	40	80	2,00	+	+	+	
	40	100	2,50	+	+	+	+

\* Please contact to export department for different density, thickness and dimensions.

**PARTITION BOARD**

They are the glasswool boards with one side coated with yellow or black fiberglass.

**Coating Type:** Yellow fiberglass(Both sides)



**AREAS OF USAGE**

- At thermal and sound insulation of all sorts of partition and division walls and elevator, stair enclosure and air shafts,
- Insulation of wooden buildings from inside,
- At lofts, between roof rafters and under inclined apron concrete for the purpose of thermal and sound insulation.

TECHNICAL SPECIFICATIONS OF THE PRODUCT				Lamination Type			
Board Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) =m <sup>2</sup> K/W	Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Water Repellent Silicon
Partition Board	40	50	1,25	+	+	+	-
	40	75	1,87	+	+	+	-
	40	100	2,50	+	+	+	-

\* Please contact to export department for different density, thickness and dimensions.

## BUILDING INSULATION

### FLOATING FLOOR BOARD

It is the hard glasswool boards with one side coated with yellow or black fiberglass.

#### AREAS OF USAGE

- For the purpose of thermal and sound insulation between layers, under floating screed, on the bearing floors and under the movements for the purpose
- For the purpose of blast sound insulation and sound insulation on level and inclined terrace roofs, under floating screeds and coatings.



#### TECHNICAL SPECIFICATIONS OF THE PRODUCT

Board Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) =m <sup>2</sup> K/W	Lamination Type			
				Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Water Repellent Silicon
Floating Floor Board	100	15	0,38	+	+	-	-
	100	20	0,50	+	+	-	-
	100	30	0,75	+	-	-	-

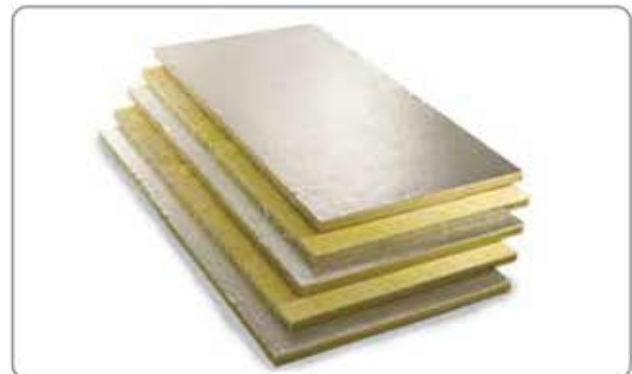
\* Please contact to export department for different density, thickness and dimensions.

### STARPAN

It is the hard glasswool board with one face coated with aluminium foil

#### AREAS OF USAGE

As a heat absorber and reflector behind heat sources such as radiator, stove and oven.



#### TECHNICAL SPECIFICATIONS OF THE PRODUCT

Board Type Product Range	Density (kg/m <sup>3</sup> )	Thickness (mm)	R(Thermal Resistance) =m <sup>2</sup> K/W	Lamination Type			
				Yellow Fiberglass	Black Fiberglass	Aluminium Foil	Water Repellent Silicon
Starpan	100	15	0,38	+	-	+	-

\* Please contact to export department for different density, thickness and dimensions.