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About STT Türk Gazbeton

Our founder M. Tansu Tuğlu, who has great experience for more than 30 years in the field of cement, ready-mixed concrete, aerated concrete building materials industries, mining and contracting services, has decided to invest in the aerated concrete sector.

In 2022, one of our group companies **STT YATIRIM YAPI SAN. ve TİC. A.Ş.** purchased two former AKG Gazbeton A.Ş. factories; one is located in Çorlu built on 96 acres with a closed area of 22.000 m² and the other one in Kırıkkale built on 110 acres of land with a closed area of 24.000 m², and started its operations in the construction sector. Our company obtained **STT TÜRK GAZBETON** trademark registration and started production.

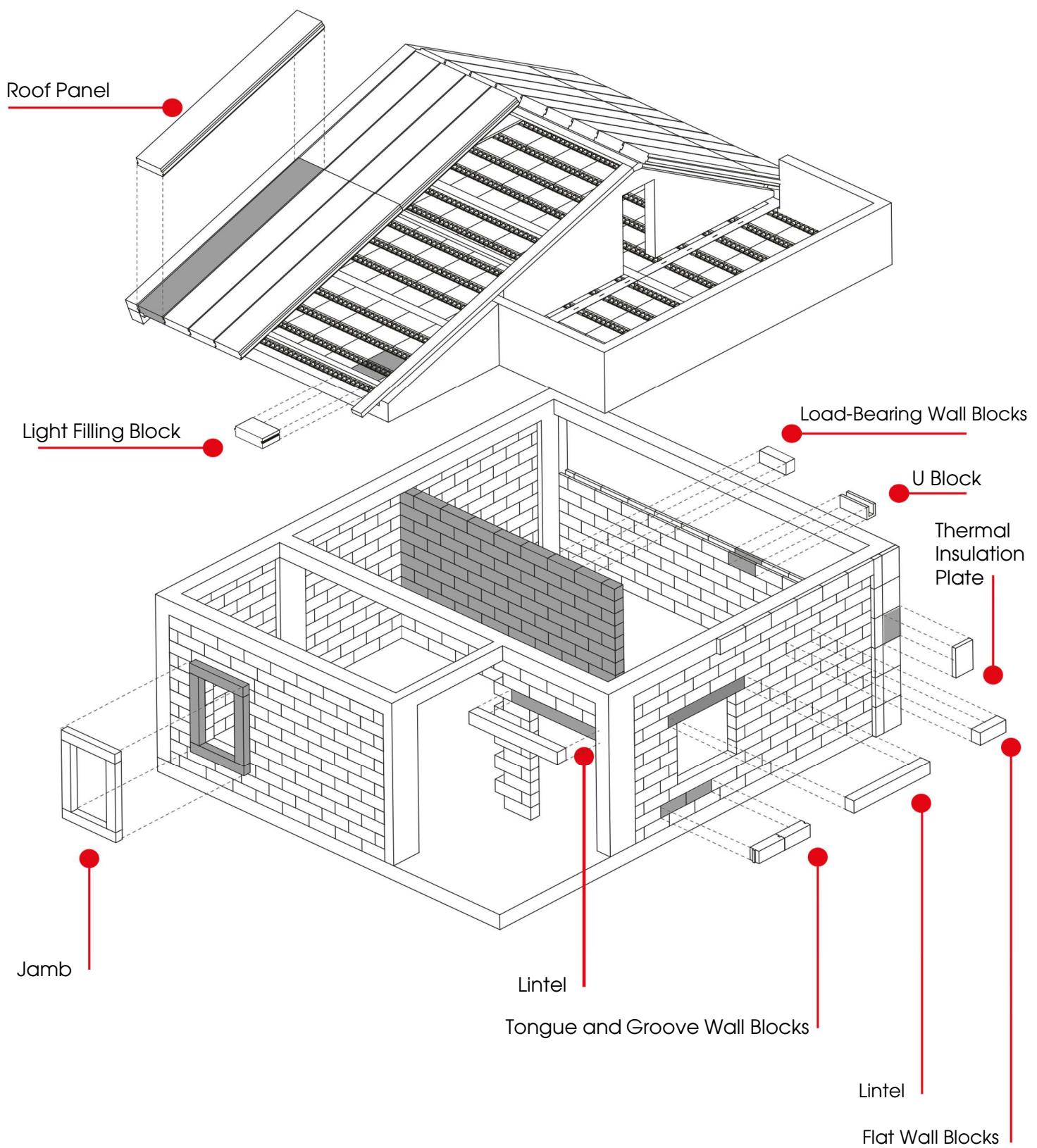
Our company has gained an important position in the sector with its Çorlu Factory with the largest production volume in Europe with **630.000 m³/year** and **Kırıkkale** Factory with **570.000 m³/year** production volume, with a total capacity of **1.200.000 m³/year**.

STT TÜRK GAZBETON, which is one of the leading companies with the widest product range in Turkey in the aerated concrete sector, produces under three product categories: block products, reinforced products and thermal insulation plate. As block product group, **STT TÜRK GAZBETON** plants produce plane wall blocks, Tongue and groove wall blocks, light filling blocks, U blocks and thermal insulation plates. As reinforced product group, our plants produce wall, roof and floor panels, lintels and jamps.

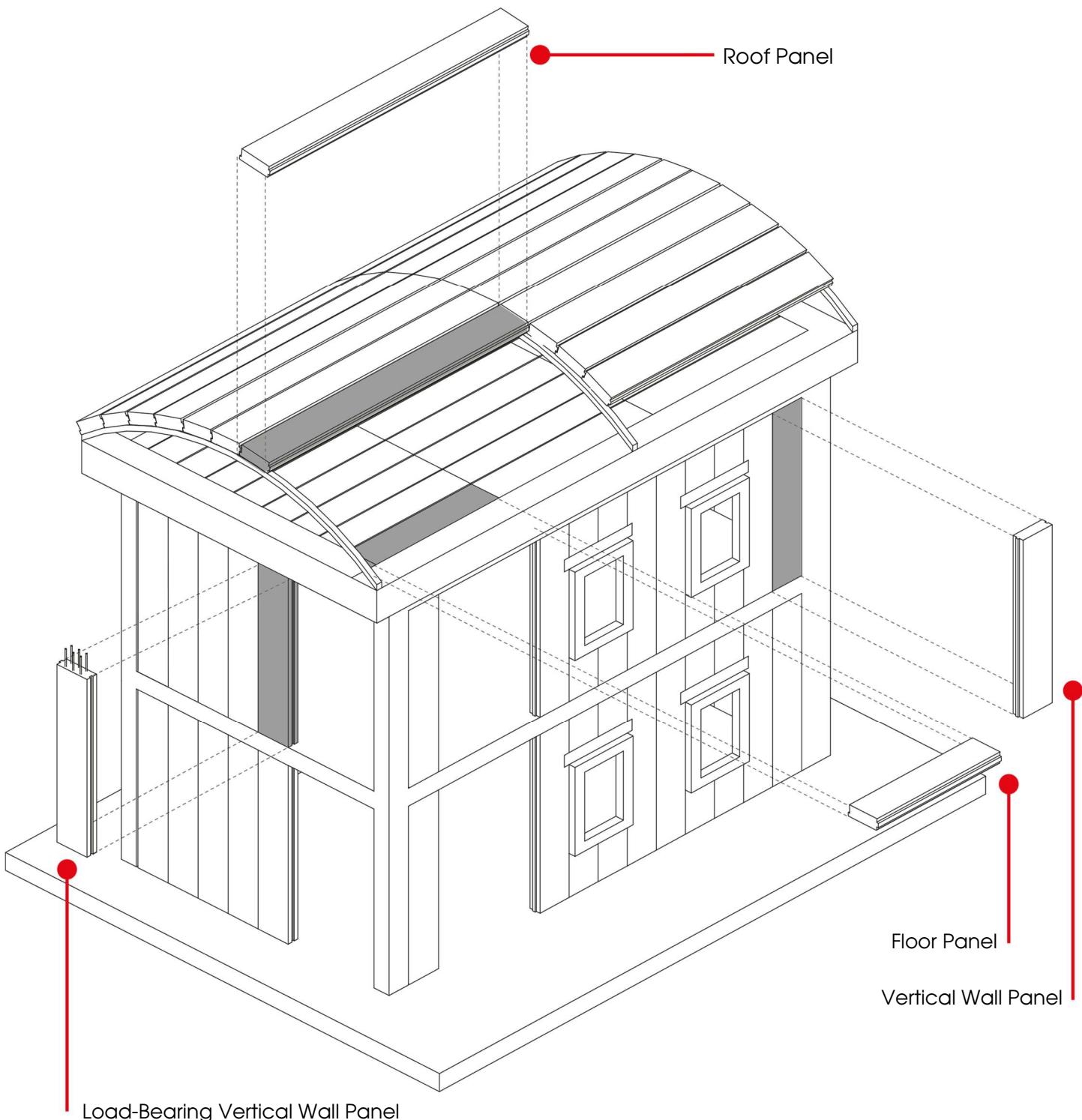
STT TÜRK GAZBETON AAC is a non-combustible A1 class product and has high thermal insulation properties.



PRODUCT RANGE



PRODUCT RANGE



STRUCTURAL FEATURES



Fire Safety

STT Türk Gazbeton is A1 class non-combustible AAC. According to the 'Regulation on Fire Protection', it provides fire safety at every point. It does not emit smoke and toxic gas and prevents fire transition between spaces.



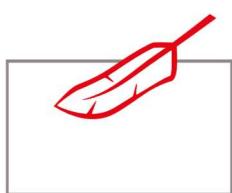
High Thermal Insulation

STT Türk Gazbeton is the wall material which provides the necessary thermal insulation in single-layer walls in all four seasons with the lowest thermal conductivity value. It contributes to energy efficiency in buildings and minimizes heating and cooling costs.



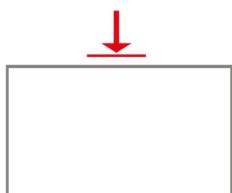
Earthquake Safe

STT Türk Gazbeton, a low-density "massive" wall material, reduces loads on buildings and provides earthquake safety thanks to its lightness and durability.



Light

STT Türk Gazbeton, which consists of 70-80% pores by volume, is a lightweight building material with a low density.



Durable

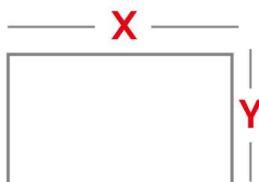
STT Türk Gazbeton, which is a solid wall material, offers a safe life with high compressive resistance. It is an ideal building material with its robustness and static compatibility.



Soundproofing

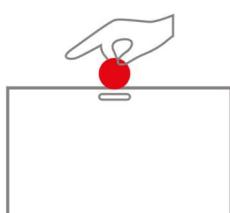
STT Türk Gazbeton products with porous structure show sound insulation performance by providing the sound insulation values required for the walls according to the Regulation on the Protection of Buildings against Noise.

STRUCTURAL FEATURES



Exact Dimensions

STT Türk Gazbeton is precise since the cutting process of the products is carried out with a computer-aided system with millimetric precision, there is no deviation in the measurements.



Saving

STT Türk Gazbeton products reduce the dimensions of reinforced concrete elements during static design with their lightness feature. It saves up to 8% in reinforced concrete and up to 22% in foundation costs. In addition, thanks to the thermal insulation it creates, it maintains thermal comfort and provides advantages in heating and cooling costs.



Practical / Easy to Process

STT Türk Gazbeton products are easy to process and apply quickly. During the application, it adds speed to the construction stage by providing ease in both transportation and walling; provides savings in product and labor costs.



Environmentally Conscious

STT Türk Gazbeton is preferred in environmentally sensitive projects that reduce CO₂ emission in thermal insulation.

STT Türk Gazbeton is produced without the use of agricultural soil with natural raw materials; wastes contribute to sustainability by being evaluated in production.



Healthy

STT Türk Gazbeton products, which are breathable and do not dust, do not contain radioactive and toxic substances and offer healthy living spaces.



Breathable

STT Türk Gazbeton breathes with its mineral structure and diffusion feature.

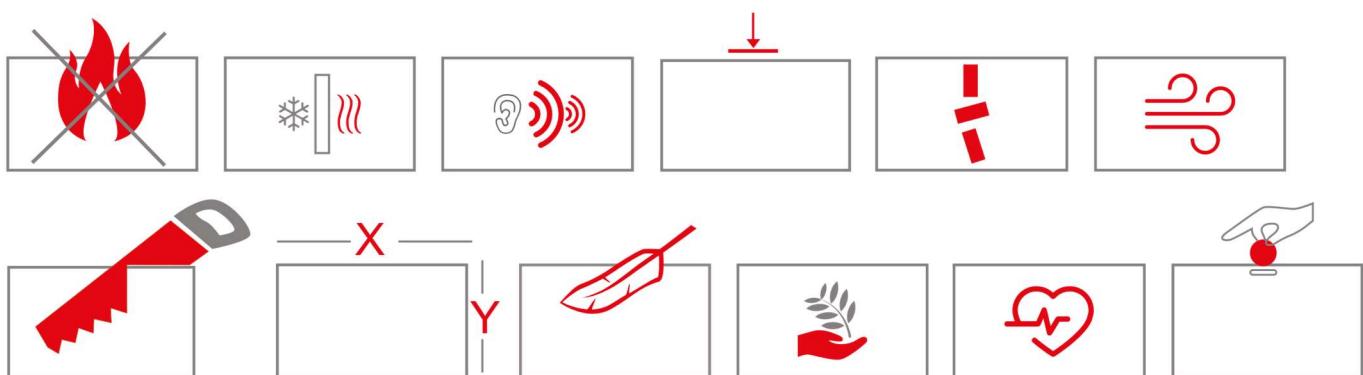


Infill Walls



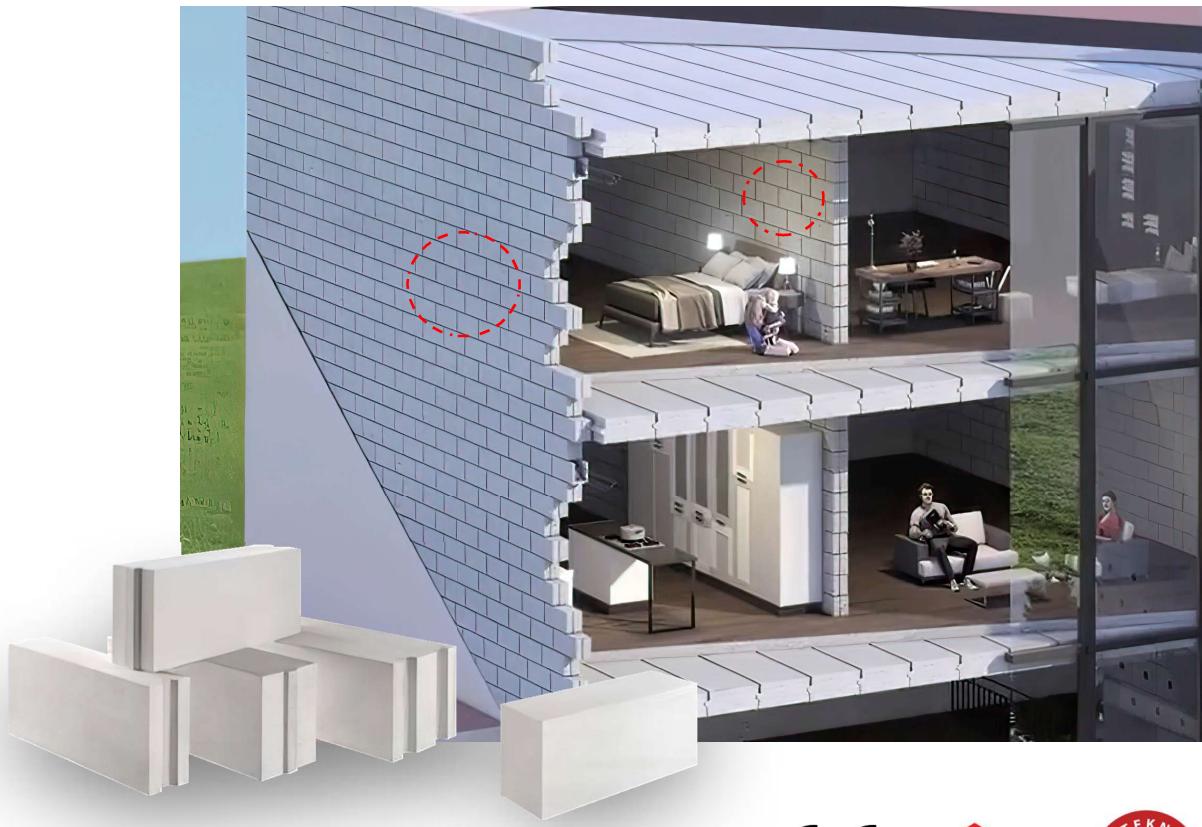
Infill Walls

STT Türk Gazbeton Block Products, produced according to TS EN 771-4 standard, are building materials used in the inner and outer walls of all kinds of building systems. Combined with high thermal insulation, energy saving and light weight properties which provides safety in buildings, **STT Türk Gazbeton** Block Products save time, materials and labor and create both economical and functional solutions.



Flat and Tongue and Groove Wall Blocks

Flat and Tongue and Groove Wall Blocks are the building materials used in the inner and outer walls of all kinds of reinforced concrete, steel, wood, prefabricated and masonry buildings. They reduce thermal bridges; thus, on the one hand, the application speed increases, and on the other hand, the glue consumption decreases.



Technical Specifications	G2/350	G2/400	G3/500	G4/600	Unit
Product Dimensions	Length	60	60	60	cm
	Height	25	25	25	cm
	Thickness	5-40	5-40	5-40	cm
Thermal Conductivity Value	λ (UTO)	0,09	0,10		W/mK
	λ (TSE)	0,09	0,10	0,13	0,16 W/mK
Average Compressive Strength	2,2	2,5	3,5	5,0	N/mm ²
Fire Class	A1 (Non-Combustible)				
Dry Unit Volume Weight	350	400	500	600	kg/m ³
Static Account Weight	450	500	600	700	kg/m ³

Lintel

STT Türk Gazbeton Lintels are reinforced elements that complement wall blocks in accordance with TS EN 845-2 Standard. They are used for passing door and window openings in walls. Lintels enable to save significant time and labor by allowing to continue to build walls without waiting for molds, irons and so on. It is easily installed with its dimensions compatible with all kinds of walls by preventing heat bridges and condensation.



Technical Specifications		G3/500	G4/600	Unit
Thermal Conductivity Value		0,13	0,16	W/mK
Average Compressive Strength		3,5	5,0	N/mm ²
Fire Class		A1 (Non-Combustible)		
Dry Unit Volume Weight		500	600	kg/m ³
Clear Clarity	Trap Share	Length	Height	Thickness
100		140		
120		160		
140	20	180	20-25	10-12,5-15 17,5-20
160		200		
200		240		
240		280		

- According to TBDY 2018, the length of the wall-mounted sections of the lintels will not be less than 200 mm .
- Note: For different sizes; Please contact the sales department.

AAC Adhesive

It is a high-performance glue specially developed for masonry with aerated concrete blocks. It provides a firm adhesion of the blocks to each other. AAC Adhesive forms solid walls with its superior adhesion property and provides earthquake safety. AAC Adhesive increases thermal insulation strength as it does not allow the formation of heat bridges by reducing joint thicknesses.

AAC Adhesive, which is offered to the market in powder form in 25 kg bags protected against moisture, is mixed only by adding water and is ready for use in a short time. In order to obtain a good adhesive mixture, it is convenient to use a mixing bit attached to a low-speed hand drill. Clumps and bubbles should be absent in the mixture.



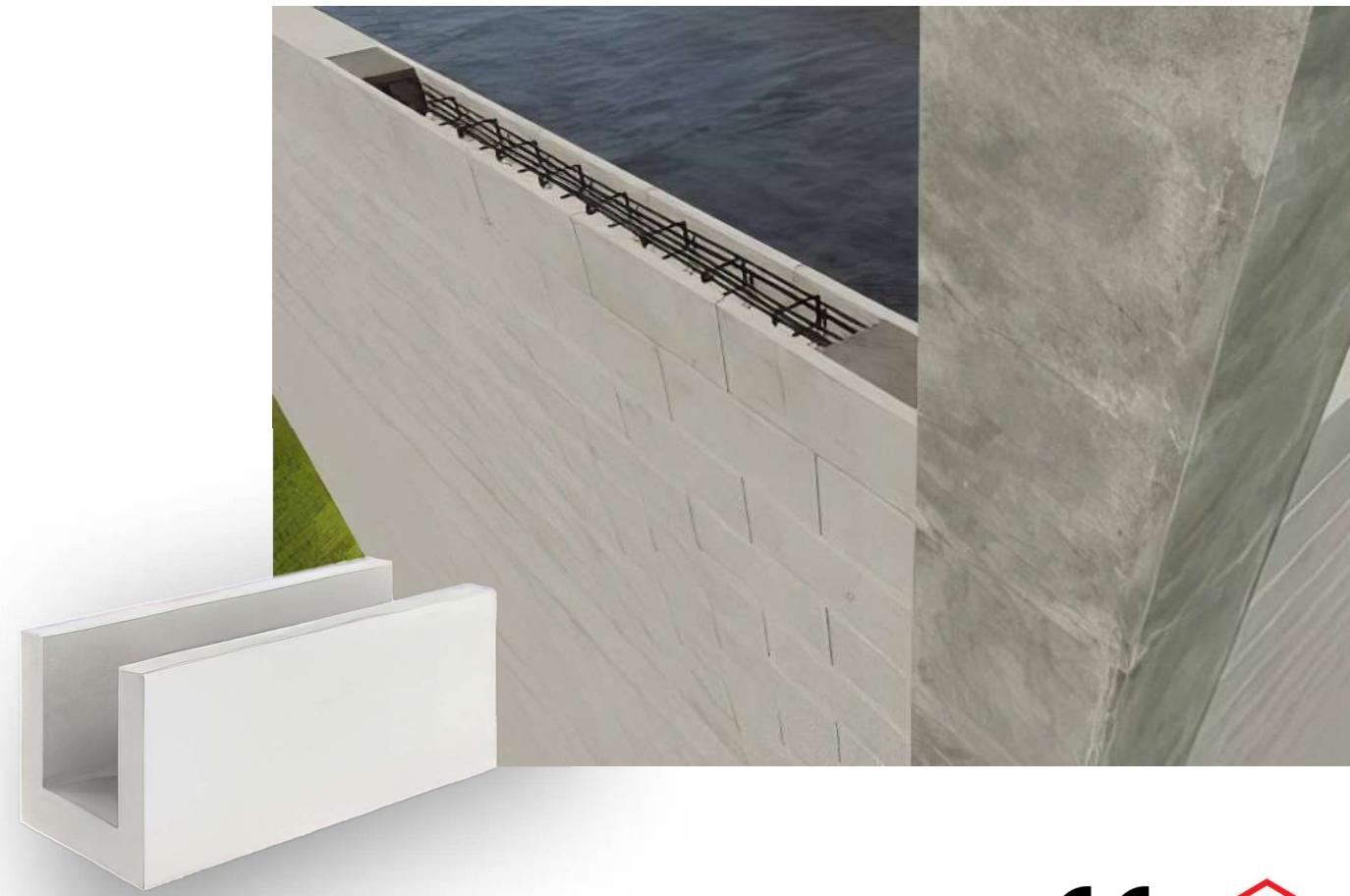
Amount of Adhesive Consumption

The amount of adhesive to be spent on 1 m² of masonry

Block Thickness (cm)	10	12,5	15	17,5	20	22,5	25	27,5	30
Adhesive (kg/m ²)	1,6	2,0	2,4	2,8	3,2	3,6	4,0	4,4	4,8

U Block

They are practical blocks that eliminate the need for molds in line construction, prevent heat bridges, related condensation and surface incompatibilities.



Technical Specifications	G4/600	Unit
Product Dimensions	Length	60
	Height	25
	Thickness	17,5-20-25-30
Thermal Conductivity Value	λ	0,16
Average Compressive Strength		5,0
Fire Class	A1 (Non-Combustible)	
Dry Unit Volume Weight	600	kg/m ³

Jambs

STT Türk Gazbeton jambs are equipped, complementary elements that surround the window and door spaces and add visual richness to the buildings. They are produced in sizes suitable for the dimensions of the doors or windows they surround.

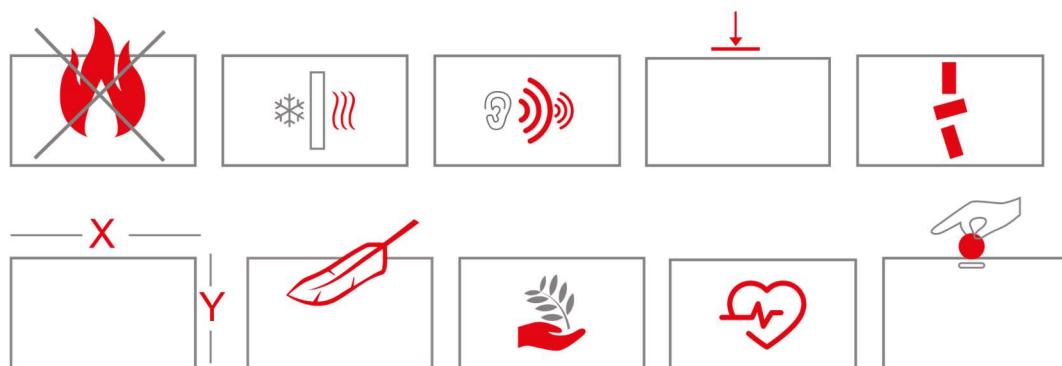


Length	Height	Thickness	Unit
120			
140			
160			
190	20-25	10-12,5-15-20-25	cm
220			
260			
300			



Wall Panels

STT Türk Gazbeton Reinforced Products are used as wall elements in all kinds of carrier structure systems produced according to TS EN 12602 standards. It provides safety in buildings with high thermal insulation, energy saving, fire safety and lightness. **STT Türk Gazbeton** Reinforced Products save time, materials and labor. It is quickly assembled with the help of mounting brackets and a crane. It is designed and manufactured to meet different wind and earthquake forces. They are produced with longitudinal chamfered or chamferless lamp tenon profile.



Horizontal Wall Panels

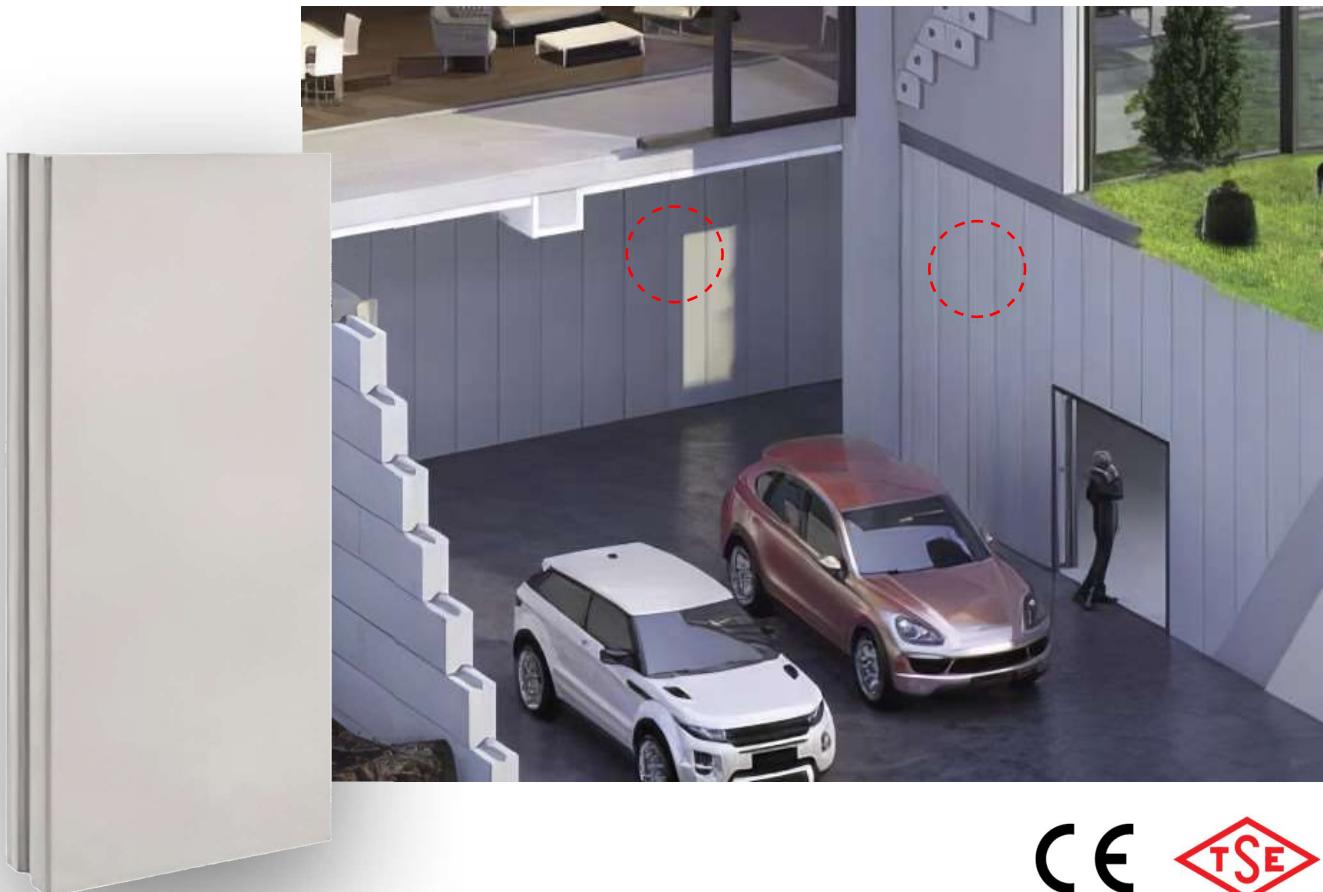
STT Türk Gazbeton Horizontal Wall Panels are used in the inner and outer walls of reinforced concrete, steel, wood and prefabricated structure. It can be applied by mounting between the columns or on the inner and outer surfaces of the column.



Technical Specifications	G3/500	G4/600	Unit
Product Dimensions (Thickness increase multiples of 2.5 cm)	Length	≤ 600	cm
	Width	≤ 60	cm
	Thickness	10-30	cm
Thermal Conductivity Value	λ (TSE)	0,13	W/mK
Average Compressive Strength		3,5	N/mm ²
Dry Unit Volume Weight	500	600	kg/m ³
Static Account Weight	620	720	kg/m ³
Safety Coefficient		1,9	
Water Vapor Diffusion Coefficient	5-10		μ

Vertical Wall Panels

STT Türk Gazbeton Vertical Wall Panels can be used both as internal and external walls in the frame cavities formed by the building carcass and in the creation of all kinds of partition walls independent of the carcass. Vertical wall panels can be preferred in all structures where floor height does not exceed 6 meters.



Technical Specifications	G3/500	G4/600	Unit
Product Dimensions (Thickness increase multiples of 2.5 cm)	Length	≤600	cm
	Width	≤60	cm
	Thickness	10-30	cm
Thermal Conductivity Value	λ (TSE)	0,13	W/mK
Average Compressive Strength		3,5	N/mm ²
Dry Unit Volume Weight	500	600	kg/m ³
Static Account Weight	620	720	kg/m ³
Safety Coefficient		1,9	
Water Vapor Diffusion Coefficient	5-10		μ

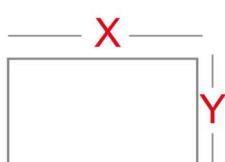
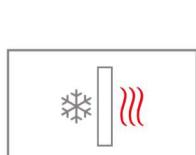
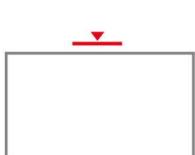
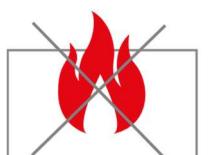


Thermal Insulation Plate



Thermal Insulation Plate

Thanks to its mineral-based structure, it is an A1 class non-combustible thermal insulation material that provides fire safety. The thermal conductivity value of the thermal insulation plate is 0,050 W/mK (UTO). In old and new buildings, with superior insulation performance, it contributes to thermal insulation solutions by saving energy. By reducing CO₂ emissions, decreases operating costs in buildings. The thermal insulation plate, which has excellent pore structure and high strength with boron and other components inside, does not lose its insulation property and form during the life of the structure. It offers a healthy thermal insulation solution with its easy processing, robust and breathable structure. It is preferred in environmentally friendly green buildings with its natural structure.



Thermal Insulation Plate

With STT Türk Gazbeton Thermal Insulation Plate solutions; In the exterior thermal insulation of existing and new buildings, surfaces that offer robust, fireproof and thermal insulation properties can be obtained together.

Thermal insulation plate offers comfortable, breathable indoor environments without losing its physical properties throughout the life of the structure.

A1 Class Non-Combustible Thermal Insulation Plate does not emit smoke and toxic gas during fire. Thanks to this structure, it is used safely in high buildings in accordance with the regulations.



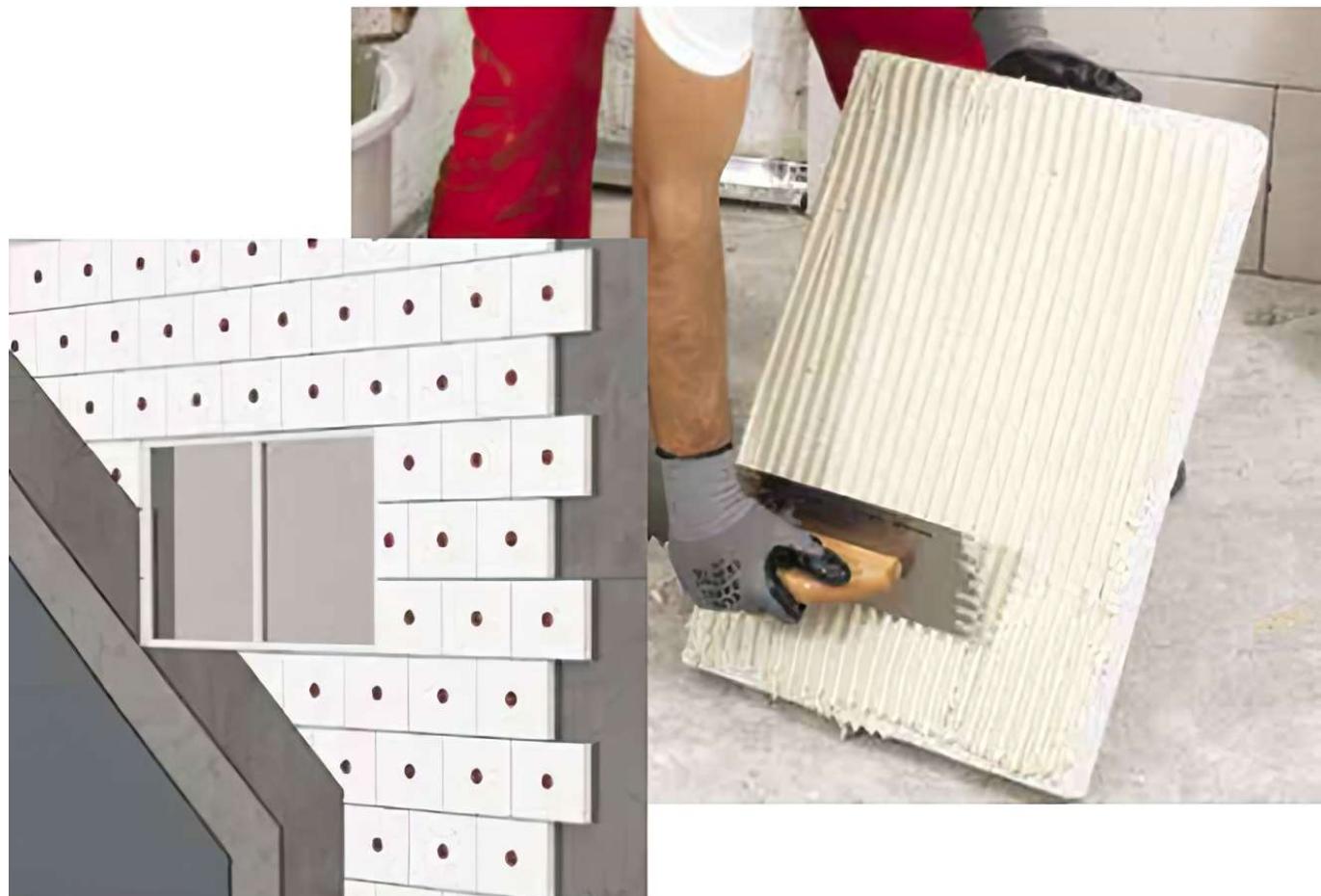
Technical Specifications		Unit
Product Dimensions	Length	50/60 cm
	Height	40 cm
	Thickness	5-6-7-7,5-8-9-10 12,5-15-20-25 cm
Thermal Conductivity Value	λ (UTO)	0,050 W/mK
Compressive Strength	≤ 400	kPa
Fire Class	A1 (Non-Combustible)	
Dry Unit Volume Weight	~ 160	kg/m ³
Water Vapor Diffusion Coefficient	≤ 3	μ

- For other thicknesses; Please contact our company.

Thermal Insulation Plate Adhesive

Thermal Insulation Plate Adhesive and Thermal Insulation Plate first layer Plaster; Thanks to its components, it is a hydrophobic, chemically additive, long-lasting, fiber-reinforced material with high adhesion properties.

It is used in the application of mesh plaster on Thermal Insulation Plate. The consumption per square meter during the usage phase is approximately 5 kg/m² for both products. Storage life is a maximum of 12 months.



Technical Specifications	Plate Adhesive	Plate First Layer Plaster
Colour	White	White
Dry Unit Volume Weight (kg/lt)	1,4±0,2	1,1±0,2
Amount of Mixing Water (25 kg For Dry Mortar)	6-7 lt	7,5-8,5 lt
Ambient Temperature for Application	+5°C to +35°C	+5°C to +35°C
Strength of the Hardening Coating	-25°C to +80°C	

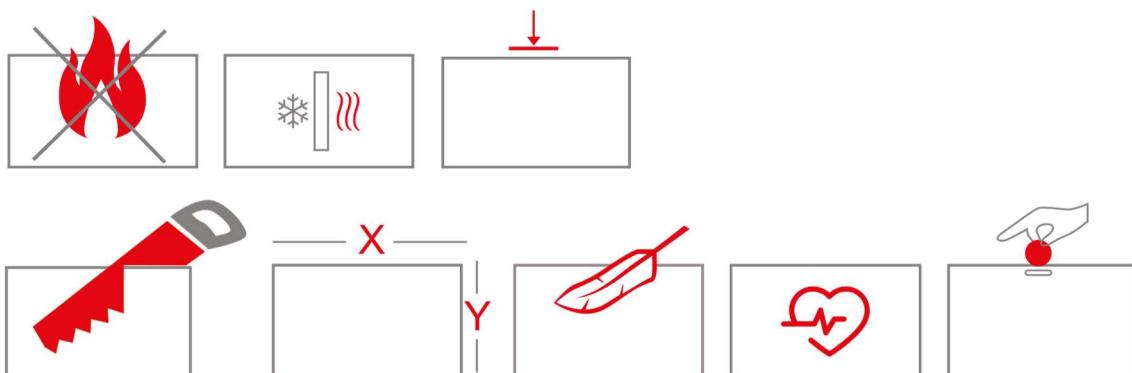


Flooring Solutions



Flooring Solutions

STT Türk Gazbeton Lightweight Filling Blocks, Floor Panel and Roof Panel products offer comfort and fire safety by increasing the thermal insulation between the outdoor and floors with its porous structure.



Light Filling Blocks

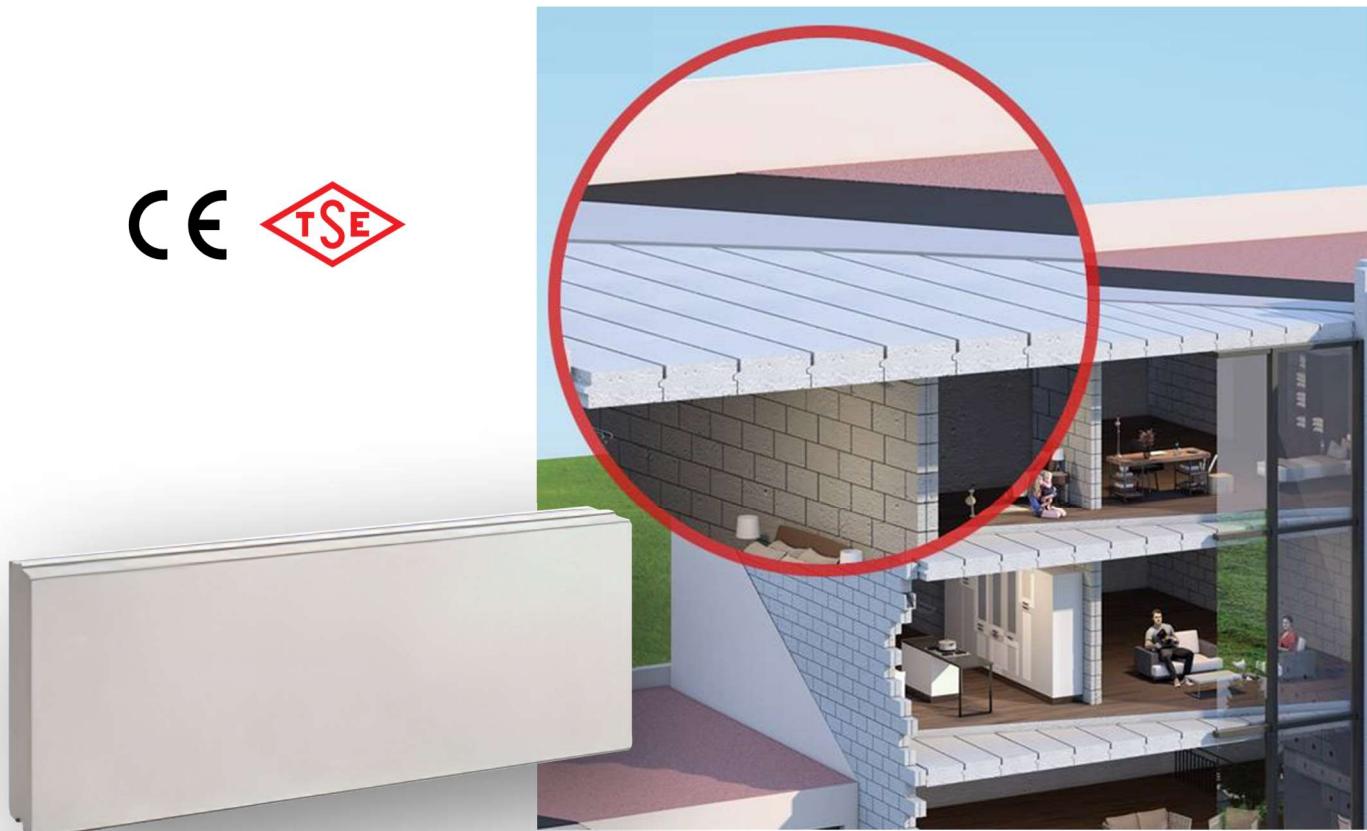
STT Türk Gazbeton In addition to providing superior thermal insulation for floors, Lightweight Asmolen is an economical product that offers fire safety with its lightweight, practical and fireproof feature. It brings convenience to the masters with it's carrying pocket. It is produced in desired dimensions in accordance with the project. It saves concrete with its gapless structure and plaster with its smooth surfaces.



Technical Specifications			Unit
Product Dimensions	Width	40-50	cm
	Length	60	cm
	Thickness	20-45	cm
Thermal Conductivity Value	λ	0.085	W/mK
Fire Class	A1 (Non-Combustible)		
Dry Unit Volume Weight	≤ 300		kg/m ³
Static Account Weight	400		kg/m ³

Floor Panel

STT Türk Gazbeton Floor Panels are produced for use in the intermediate floor and walkable roof flooring of all load-bearing systems. The panels, which have all of their load carrying capacity and are ready for installation at the moment they are produced, are easily and quickly mounted in place with the help of mounting apparatus and crane. The thicknesses of the **STT Türk Gazbeton** Floor Panels are projected depending on the loads on them and the openings passed. The floors created with these panels can be coated with any finishing material.



Technical Specifications	G3/500	G4/600	Unit
Product Dimensions (Thickness increase multiples of 2.5 cm)	Length	≤600	cm
	Width	≤60	cm
	Thickness	10-30	cm
Thermal Conductivity Value	λ (TSE)	0,13	W/mK
Average Compressive Strength		3,5	N/mm ²
Dry Unit Volume Weight	500	600	kg/m ³
Static Account Weight	620	720	kg/m ³
Safety Coefficient		2,3	

Roof Panels

STT Türk Gazbeton Roof Panels are equipped, load-bearing, large-sized building elements produced for the roofs of many different types of structures, especially industrial buildings, residential type structures. **STT Türk Gazbeton** Roof Panels; allows different roof applications for flat, sloping, vaulted, hinged, gable, with and without eaves type roofs. It can be easily mounted on all kinds of reinforced concrete, steel and prefabricated structures. It does not require the use of formwork, while the use of concrete is necessary only for panel joints and perimeter beams. It has the ability to prevent fire passage and has superior thermal insulation properties.

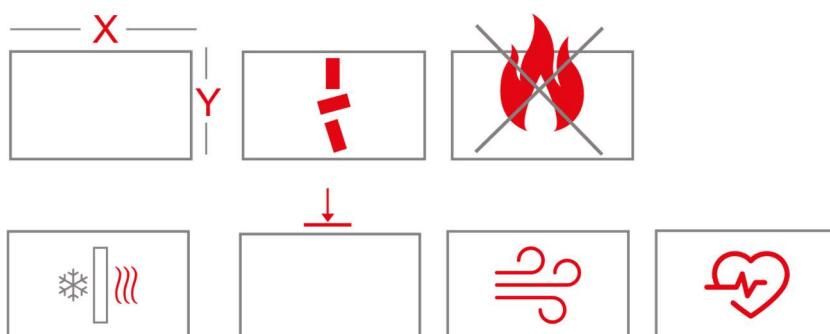


Technical Specifications	G3/500	G4/600	Unit
Product Dimensions (Thickness increase multiples of 2.5 cm)	Length	≤600	cm
	Width	≤60	cm
	Thickness	10-30	cm
Thermal Conductivity Value	λ (TSE)	0,13	W/mK
Average Compressive Strength		3,5	N/mm ²
Dry Unit Volume Weight	500	600	kg/m ³
Static Account Weight	620	720	kg/m ³
Water Vapor Diffusion Coefficient	5-10		μ



Load-Bearing Walls

Load-Bearing wall elements are in G4 strength class and are manufactured as **STT Türk Gazbeton** Block and Reinforced Panel. When used with roof and flooring elements, it forms the "**STT Türk Gazbeton** Masonry Building System". The fact that the elements have sufficient thickness and a high thermal insulation value, provides the possibility of using them in suitable climatic zones without the need for additional insulation.



Load-Bearing Wall Blocks

STT Türk Gazbeton Load-Bearing Wall Blocks, which are produced according to TS EN 771-4 standard and have a compressive strength of 5,0 N/mm², are used safely in masonry structures and structures where the roof construction is placed on the wall. It is also preferred for sound insulation of two neighboring walls with strong sound insulation.

Load-Bearing Wall Panels

STT Türk Gazbeton Vertical Wall Panels, which are produced according to TS EN 12602 standard and have a compressive strength of 5,0 N/mm², can also be produced as carriers for use in masonry structures. These panels can be used as load-bearing inner and outer walls in masonry structures. Even in the most risky areas defined as first-degree earthquake zones in Turkey Building Earthquake Regulation (TBDY) 2018, it is possible to build masonry structures up to two floors using Bearing Vertical Wall Panels.



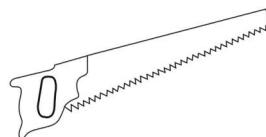
Technical Specifications	G4/600	Unit
Product Dimensions	Length	≤300 cm
	Width	≤60 cm
	Thickness	20-30 cm
Thermal Conductivity Value	λ (TSE)	0,16 W/mK
Average Compressive Strength	5,0	N/mm ²
Dry Unit Volume Weight	600	kg/m ³
Static Account Weight	720	kg/m ³
Water Vapor Diffusion Coefficient	5-10	μ

Hand Tools

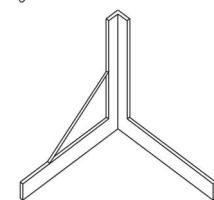
With STT Türk Gazbeton Hand Tools

STT Türk Gazbeton products can be applied more quickly and easily. **Saws** produced with Diamond and Steel tip provides products to be cut with precision. **Miter** which helps to cut blocks in exact dimensions and **Grate** which is used for correction of level differences of blocks has been developed for the purpose.

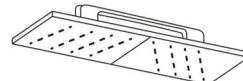
Rubber Mallet is used for placement of blocks in place, aligning and ensuring gluing/integration purposes. **Mixing Tip** is used for easy mixing without clumping of AAC adhesive and **Adhesive Trower/Shovel** for ability to apply adhesive at one time and enough quantity application are produced as special. **Channel Opener** is used for easy opening of channels for mechanical installations of electric wires and pipes required to be placed, **Junction Opener** is used to open enough holes for electric junction boxes on the wall easily and without damage.



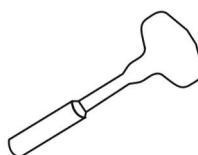
Saw



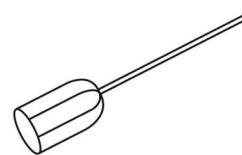
Miter



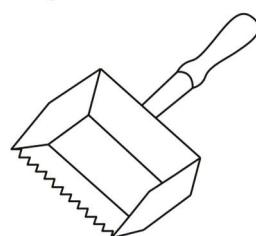
Grater



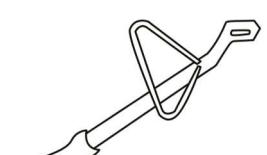
Rubber Mallet



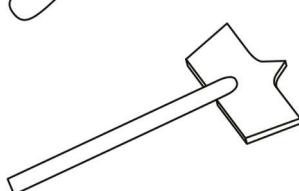
Mixing Tips



Adhesive Trowel/Shovel



Channel Opener



Junction Box Opener



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