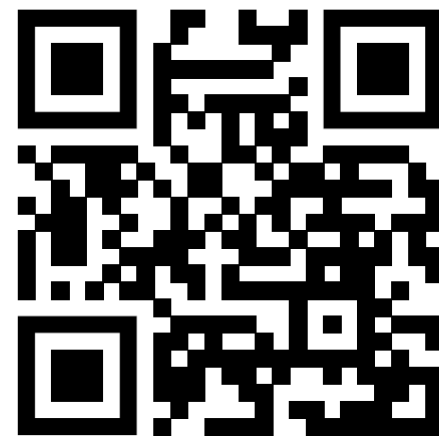




## CONTACT US



## Smile Trading Group

Our credibility + Your trust

=

Your satisfied smile

### Transform your construction

- 1- The stg block guarantees the tranquility durability and safety of your building.
- 2- Safeguard your construction against earthquakes and fire with a modern style.
- 3- We offer you high-quality sound and thermal insulation at the lowest cost.

 Stg.tradi

 [www.facebook.com/stg.trading1](https://www.facebook.com/stg.trading1)

 [www.linkedin.com/in/alikarami-stg1](https://www.linkedin.com/in/alikarami-stg1)

 (98) 913 237 7293

 (98) 913 428 2260

 (98) 31 5267 4306

 [www.stg-trading1.com](https://www.stg-trading1.com)

 [info@stg-trading1.com](mailto:info@stg-trading1.com)





## Revolution in the Construction Industry with AAC Blocks

With the expansion of the construction industry, the use of lightweight and durable materials in producing structural and non-structural infill components has gained attention. In this context, the technology of autoclaved aerated concrete (AAC), which offers significant speed and ease in the production process, has emerged.

AAC blocks are among the components whose range of applications is rapidly growing.

Moreover, the characteristics of these blocks, such as their compatibility with environmental conditions, sustainability and durability, low weight, and performance features as thermal, fire, and sound insulation, make them a suitable alternative to conventional materials used in construction.

Additionally, the ability to produce these blocks in various forms, ease of cutting them, and their simple installation using existing guidelines further enhance their popularity.

### Scope of Application

Walls made from AAC blocks can be used as partition walls and exterior walls. Exterior walls are subjected to wind and earthquake loads and must be able to withstand impact loads, while partition walls are affected by earthquakes and need to be able to respond to smaller impact loads.



### History


Autoclaved Aerated Concrete (AAC) is a type of concrete filled with closed air bubble cells, which was first invented and produced in Sweden by Dr. Johan Axel Eriksson in the 1920s.

The motivation behind its production was to protect forests and create materials with properties similar to wood, such as lightness, thermal insulation, and ease of cutting and shaping, while avoiding the drawbacks of wood, such as flammability, rotting, and destruction by termites.

German innovators discovered how to cut it, and with this technology, mass production began until it was approved under German standards (DIN) in 1958. During the 1950s, it saw large-scale production by German and Polish companies.

Since 1987, the revolution in construction has been spurred by the production of large pieces of this material, significantly reducing construction time. Today, this product is produced using various methods and under different brand names in many countries.





### Attractive and wonderful features that are exclusive to STG blocks.

- 👍 1. It increases the construction speed by 3 to 4 times ompared to normal materials.
- 👍 2. It is cost-effective and also reduces steel consumption by more than 30%.
- 👍 3. It is very light building reduces the static load of tall buildings and towers.
- 👍 4. It is very light weight with a density of 450 to 550 kg/m2 (one third lighter than normal materials)
- 👍 5. It reduces construction costs and saves time.
- 👍 6. It does not need wall post.
- 👍 7. Sound insulation exceeding 50 decibels.
- 👍 8. Thermal and cooling insulation, significantly reducing energy consumption heating and cooling compared to conventional building materials
- 👍 9. Moisture insulation and freeze resistance.
- 👍 10. Cost savings and ease of transportation due to the ability for palletized packaging.
- 👍 11. Remarkably fast and easy installation owing to lightweight, precise sizing, impact resistance and screw-compatibility.
- 👍 12. Easy cutting for carrying out electrical and plumbing installations.
- 👍 13. A fire-resistant wall capable of withstanding direct fire up to 1200 degrees Celsius for 4 hours.
- 👍 14. Reduction of earthquake forces due to low density, decreased dead load of the structure, and high compressive strength.

- 👍 15. High safety and durability without the need for repairs.
- 👍 16. Minimal finishing coverings for façades, leading to reduced plastering costs due to a smooth and level surface.
- 👍 17. Increase in interior space of the building
- 👍 18. Production capability based on client needs
- 👍 19. No penetration of vermin
- 👍 20. Recyclable and non-toxic
- 👍 21. Environmentally friendly and compatible
- 👍 22. Standard surface water absorption at the initial 1 centimetre, with proper adhesion of façade coverings
- 👍 23. It does not submerge in water for up to 6 months
- 👍 24. Resistant to loads caused by strong winds and storms
- 👍 25. Known as lightweight concrete, composed of silica, cement, lime, aluminium powder, stone gypsum, and water.
- 👍 26. Unlike conventional hollow materials, this material has a dense, porous, and white appearance.

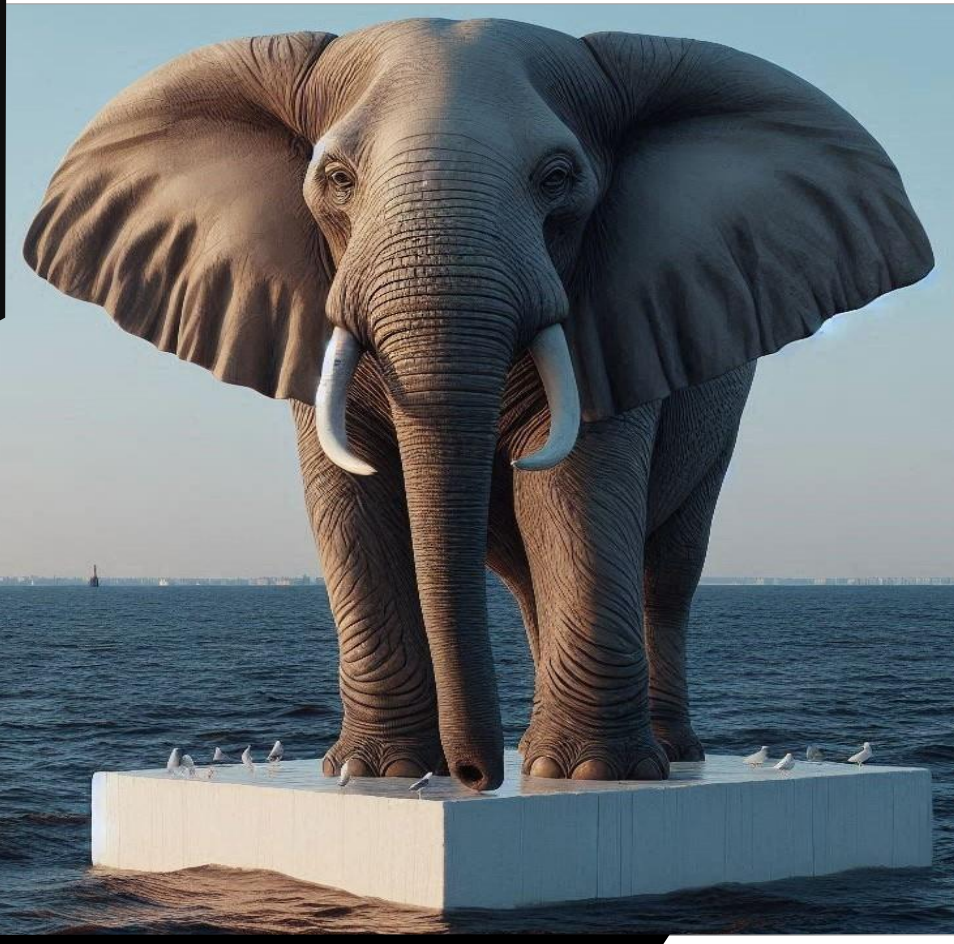
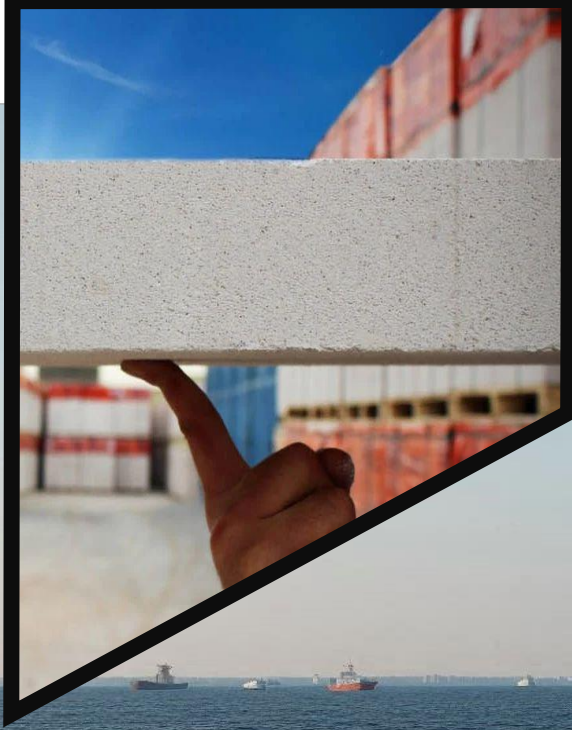
### Reduction of Earthquake Forces

Given the low density and reduced dead load of the structure in lightweight STG blocks, there's a favorable outcome in effectively reducing the seismic weight of the structure.

As a result, the shear force from the earthquake, known as base shear, can easily be reduced by up to 10%. Therefore, the lower the base shear in structures, the better the seismic performance of the structure during an earthquake will be.







## Lightweight

Currently, the lightest building materials for masonry are STG blocks. With a unique structure containing millions of air bubbles (meaning 80% of the initial mortar is air) they have a density ranging from 450 to 550 kilograms per square meter.

Advantages of STG blocks:

- 1- The speed of execution is three times faster than other materials due to their lightweight and dimensions.
- 2- In the design of structural elements, a minimum of 10% reduction in dead load allows for savings in concrete or metal used in projects.
- 3- Compared to similar materials, they are, on average, 45% lighter.
- 4- More than 25% is saved in mortar consumption.
- 5- At least 30% is saved in costs.
- 6- They do not require repairs or renovations for a long time.
- 7- They will have a durable quality and a very long lifespan.

## Sound Insulation

In residential buildings, if annoying noise exceeds 50 decibels indoors, it can lead to hearing damage and a decrease in human comfort, which includes ground and airborne traffic. STG blocks provide on average sound reduction of 45 to 50 decibels based on wall thickness design.

This product, with its excellent reduction of sound intensity and insulation properties, has also earned the ASTM standard in the category of very good insulators.

## Thermal insulation

The exterior walls of a building should have proper insulation against cold and heat throughout the year. Unfortunately, in some countries, more than 30% of energy loss comes from these building walls. The lightweight STG block is the only bricklaying product that can be implemented without any thermal details; the main reason for this insulation is the homogeneous structure in all directions of the STG blocks.

### STG blocks allow for

1. Your building is 70% more insulated compared to other buildings.
2. Energy savings and a noticeable reduction in costs.
3. Maintaining a comfortable temperature inside the building during extremely cold winter months and also during very hot summer conditions.
4. A calm, secure, and moderate environment against climate changes.
5. Reducing energy consumption not only saves money but also prevents heat loss and its release into the atmosphere, ultimately helping to stop global warming.
6. Saving and reducing the volume, quantity, and equipment needed for heating and cooling by almost 45%.
7. With the use of these blocks, there's no longer a need to install thermal coatings in the building. It effectively and significantly reduces heat and cooling transfer from one space to another.



## ► Fire safety

Controlling fires at the point of occurrence and preventing their spread is crucial to protect human life and property. The STG block is a 100% non-combustible product. The STG block is the first building material in the wall construction sector to receive a fire safety certificate (UL) with the minimum wall thickness of 10 centimetres, equivalent to E120 classification.

STG blocks were subjected to a temperature of 1200 degrees Celsius. The other side of the wall showed no temperature increase for two hours, and after four hours, the temperature only increased by 75 degrees.

After the flames were extinguished, the wall remained intact without any cracks. The STG block is an excellent option for preventing energy waste and providing thermal insulation, and it does not emit any harmful gases during a fire. This feature makes it particularly suitable for sensitive public places like hotels, hospitals, educational centers, libraries, and offices.

## ► Waterproof Insulation

The various insulating properties of STG blocks have made them one of the best-selling building materials today. One of the main advantages of STG blocks is their moisture insulation, making it easy to use this product in areas with high humidity, preventing moisture from penetrating inside the home. Additionally, in areas with heavy rainfall, this product serves as a very effective insulator.

In the event of a break or crack in water pipes within a building, STG blocks act as insulation. STG blocks have obtained the UK standard number BS4315 as waterproof insulation.

STG blocks have standard surface water absorption of 1 centimetre in the initial phase, with adequate adhesion for facing coatings, and they do not submerge in water for up to 6 months.

## Cost-effective

Considering the removal of expenses such as rebar, wall posts, the need for plastering, the lack of requirement for thermal insulation and moisture barriers, reduced execution time, lower labour costs due to the ease and speed of transportation and installation, and also reduced material waste, using STG blocks is highly cost-effective.

## Frost Resistant

STG blocks have good frost resistance due to their porous structure with a high percentage of closed cavities, which has passed its test in cold countries such as Sweden.

## Minimal need for wall posts and wall anchors

Lightweight STG blocks, due to their installation with a thin bed mortar known as block adhesive, do not require the use of base reinforcement bars, and instead, simple steel or galvanized ties will be used as a substitute. In addition to speeding up wall stabilization, we will see a desired cost reduction of at least 30% compared to the implementation of base reinforcement bars.

## Standard water absorption and proper connection of facade coverings

The STG block doesn't make much of a difference when it comes to the adhesion of various stones and mortars. All products have a volumetric water absorption between 50 to 55 percent, and there won't be any difference between this block and clay or cement blocks.





## Materials Thickness Groove and implementation of easy installations and minimal final coatings

STG blocks are completely solid while being lightweight. This feature has made grooving and grooving on these walls easier, and it will be easy to implement plans of electrical, mechanical, water and sewage installations on the wall.

Also, due to the appropriate level and alignment of the walls executed with STG blocks, there is no need for the conventional implementation of gypsum and soil or thick cement plaster.

The application of service coatings such as ceramic tiles is easily possible with thin-film adhesives, and façade coatings, which are known as plasters, with thicknesses of 1 to 3 mm, are easily possible. All of these factors increase the speed of construction up to 3 times compared to ordinary materials.

STG blocks can be easily sawn, nailed, drilled and grooved, which can significantly improve the construction speed and reduce cost and waste in the building.

In the table below, a comparison of the amount of implementation of different walls in square meters by a Materials Thickness implementation team

	Brick	Clay Block	STG block
Thickness = 10 cm	15	30	40
Thickness = 20 cm	10	20	25
Thickness = 30 cm	5	-	20



### It is not corruptible

Firstly, due to the raw materials, this product cannot spoil and has a long shelf life. Secondly, because inorganic materials have been used to produce this product, it does not have any changes in nature and properties

### Termite Free

Due to the raw materials and inorganic and mineral structure, as well as the presence of empty space in STG blocks, no insects such as termites, ants, and beetles nest or lay eggs in it, and it is not possible for insects to penetrate this product. Mold and microorganisms do not form on or inside it. We will not have corrosion in them. It prevents pollution and penetration of insects and animals into the building and makes the structure safer.

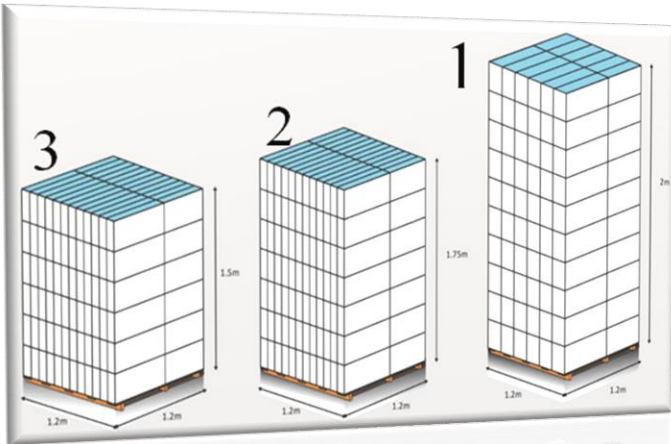
### Environmentally friendly and adaptable

Unlike other similar products, STG blocks are made without using soil, which is the most important resource for human life. The production of this product requires the least fossil energy, like gases; STG is recognized globally as a green construction product. Among all hard building materials, it offers the best thermal insulation ratios, weight, and strength.

Traditional building materials generate a significant amount of construction waste, which not only wastes time and money but also harms the environment and is almost non-recyclable. In contrast, STG blocks not only do not produce construction waste but are also recyclable and do not harm the environment.

Comprehension					
Row	10 Holes Brick	Blade	Cement Block	LECA Block	STG Block
Density (kg/m³)	1700-1800	650 - 700	700 – 755	700 – 900	450 -550
Thermal Conductivity Coefficient (20cm wall)	1.81	1.52	0.19	0.17	0.09
Internal Wall Weigh (11cm Thickness, kg/m²)	250	190	113	127	78
Sound Insulating (15 cm Wall)	---	---	48 db	46 db	45 db
Compression strength Map)	10	3 to 4	2	2	2.5 At least
Heat Resistance (10 cm wall)	2 Hours	2 Hours	3 Hours	3 Hours	4 Hours
Shrinkage	---	---	0.035 %	0.065 %	Less than 0.02 %
Ease Of Using	Intermediate	Intermediate	Intermediate	Intermediate	High

STG Block Characteristics		
Row	Item	Amount
1	Density	450 – 550 kg/m³
2	Compression strength	2.8 – 3.5 N/mm²
3	Rupture Model	0.6 – 0.75 N/mm²
4	Reactionary model	1.4 – 1.8 KN/mm²
5	Thermal conductivity	0.09 – 0.11 W/mk°
6	Water absorption	50 – 65 %
7	Sulfate Resistance	400 – 600 mg/lit
8	Shrinkage	0.010 – 0.013 %
9	Dimension Tolerance	± 3 mm

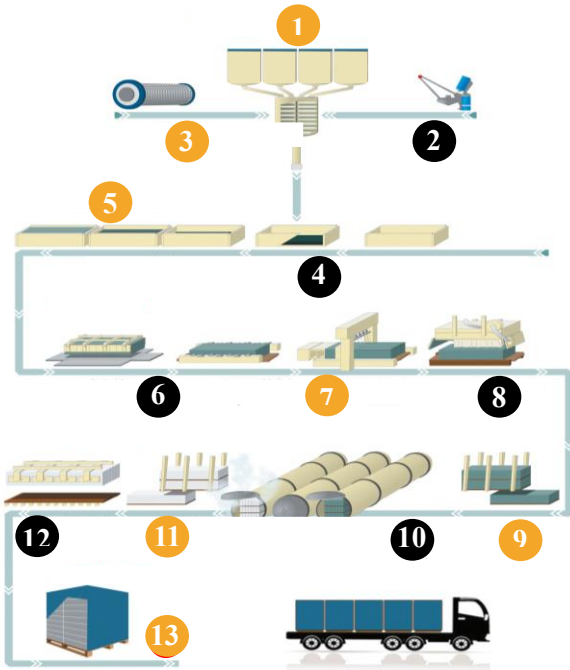


Pallet No. 1 with dimensions (1.2\*1.2\*2) is for export

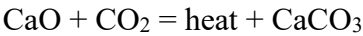
Row	Desc	Blocks/M³	Pallet Volume(M³)	Coverage/Pallet	Qty/Pallet	Qt/M³
1	60*25*8	0.012	2.88	36	240	83.33
2	60*25*10	0.015	2.88	28.8	192	66.66
3	60*25*12	0.018	2.88	24	160	55.55
4	60*25*15	0.0225	2.88	19.2	128	44.4
5	60*25*20	0.03	2.88	14.4	96	33.33
6	60*25*25	0.0375	2.88	11.4	76	26.7
7	60*25*30	0.045	2.88	9.6	64	22.3
8	60*20*20	0.024	3.6	18	150	41.66
9	60*20*15	0.018	3.744	24.96	208	55.6
10	60*20*10	0.012	3.6	36	300	83.3

### Stages of producing lightweight AAC blocks under the brand name STG

- 1 Water + lime + silica + Cement
- 2 Add aluminum powder
- 3 ball mill
- 4 Mold or format
- 5 The volume of the cake increases 2to3 times, Release of hydrogen gas/Rest for 2 to 3 hours
- 6 Remove the cake from the mold and Moving the cake for cutting
- 7 High speed cutting vertically and horizontally
- 8 Cleaning the chips from cutting
- 9 Transfer to autoclave
- 11 steam cooking,12 bar pressure, The temperature is 180 degrees,10 to 12 hours
- 10 split
- 12 Transport for packing
- 13 Packing and loading



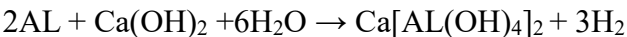
Conversion of limestone to quicklime



Reaction of quicklime with water to form hydrated lime

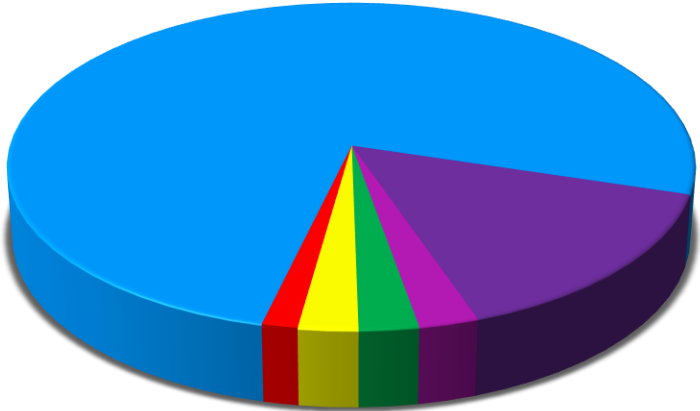
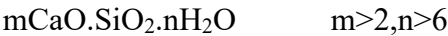


Reaction of hydrated lime with aluminium powder



Porosity agent 6H

Agent for concrete resistance: hydration of calcium silicate



silica	18%
Cement	0/7-1%
lime	0/7-1%
chalk	0/7-1%
Aluminum powder	0/3-0/4%
Air	70-80%



STG Ceiling Block

Roof block is one of the advanced and new building materials products, which is an excellent alternative to ordinary materials for the implementation of structural roofs.

Due to its many advantages, this roof block has been very welcomed by engineers and project executors and has gained a lot of popularity, which is widely used in the construction industry.

This product is produced in standard and specific dimensions. In terms of material and production stages, it is no different from the STG light block, and the only type of cut is different, and it is suitable for the ceiling, and it has all the advantages of STG light blocks, and because of its tightness, it also prevents the percussion sound.



Dry mortar

The use of various types of construction mortars is quite common and essential in building construction.

The main concerns in constructing residential buildings are the precise mixing of materials to obtain mortar, controlling the quality of the required materials, ensuring the strength and durability of the materials, training skilled personnel to use these materials effectively, transporting and storing materials during work, maintaining the mortar after it's prepared, managing the volume of materials needed, and handling any excess after completing the construction work. Researchers have improved the properties of mortars by adding polymer materials while addressing implementation issues.

To solve the problems and drawbacks of mortars mixed in workshops using traditional methods, dry mortar technology was invented in Western Europe, and its usage is currently on the rise.

Benefits of using STG dry mortar



- 1- Product variety and reduced execution costs
- 2- Consistent formulation due to materials being combined based on precise weight
- 3- No need for skilled labour to prepare the mortar, reducing human error



- 4- Quick preparation and high adhesion just by adding a specific amount of water
- 5- Strength, quality, aesthetics, durability, and compatibility with various building materials such as STG lightweight blocks, different types of bricks, tiles, ceramics, and mosaics, etc



- 6- Easy transportability and minimal space occupation at the construction site
- 7- Controlled ordering of the required amount of mortar and easy storage after finishing construction for use in future projects



- 8- Very low pollution and environmentally friendly
- 9- Features such as resistance to moisture and cracking, resistance to termites and pests, resistance to acid rain, extreme heat and cold, and dozens of other significant parameters compared to common mortars



- 10- Savings in cement consumption
- 11- Excellent adhesion to building materials, reducing the dead load of the structure

STG Block Adhesive

STG block Adhesive is a thin bed mortar with high strength attributes for quick & firm laying of STG blocks.

STG ceramic tile adhesive is a cement-based adhesive designed according to European standards with high strength and longevity, due to industrial production and continuous quality control, it has very high uniformity and quality.

Cement	Portland-type II, white cement
Aggregate	Silica sand < 1mm
Composition	Cement, silica sand, additives
Color	White - grey
Packaging	25 kg bag
Water Ratio	25-28% of dry mortar weight (6-7litre)
Application time	1 hour
Consumption	25 kg/m
Thickness	2-5 mm
Durability	Water proof, frost and weather conditions resistant
Initial adhesive strength	More than1.5 MPa according to EN1348 standard





# Guide to Maintenance and Implementation of STG Blocks

## Maintenance

- 1- The unloading of the blocks should be done by a suitable means such as a forklift, and if the pallets are rubbed against each other, there is a possibility of damage and loss of corners.
2. The pallet of blocks and dry mortar should be unloaded and stored as close as possible to the project and on a flat surface above the ground.
3. If they are drained on the roof. It should be distributed near the columns and walls.
4. One day before using STG blocks, the coatings should be removed to make moisture and heat exchange with the environment.

## Preparation of Block Glue

STG block adhesive should be poured into suitable plastic containers according to the instructions on the packet and mixed with clean water (drinking water). It's recommended to use a mechanical method for mixing, and continue until the air is removed. To do this, you can use a mixer that attaches to a drill and mix at a low speed until you achieve the desired consistency.

A key point is that the working life of the mortars is defined and generally ranges from 4 to 5 hours. Therefore, care should be taken to avoid making extra mortar, as once it hardens, you cannot add water to it and reuse it.

## Installing First Row Blocks

1. The first row (first row) should be executed with precise control, alignment and direction.
2. The main extensions should be worked first, then the intersections.
3. Under the work at the site of laying the wall blocks using cement Sand mortar, a smooth and level surface with a thickness of 1 to 2.5 cm should be created.
4. In the ground walls at a distance of less than 30 cm from the soil surface, a layer of moisture insulation should be applied before applying the mortar.
5. After each block is installed, its surface is cleaned with a brush, and then glued to the vertical surfaces of the block. The minimum thickness of the adhesive is 2 mm and the maximum is 3 mm. Before applying some water should be sprinkled on the surface
6. A trowel or a toothed spatula should be used to apply the glue.
7. After installing each block, check its levelness. Modifying with the slow strokes of the rubber hammer is possible in a maximum time of 5 minutes.
8. In order to prevent the inter-frame effect during the earthquake and the effects of expansion and contraction, the walls should be connected to the structure at a distance of at least one cm from the columns, beams, and concrete walls executed with flexible metal belts at a distance of up to three blocks (vertical and horizontal). For this purpose, perforated metal strips should be used at the junction of the side walls, seams and the connection to the column.
9. The distance and number of connecting tentacles should be controlled according to the height of the structure and the designer's opinion.
10. To fill the gaps, flexible materials such as polyportane, plastofom, or dead plaster can be used.



## Installing blocks in the next row

1. At the time of implementation, the surface of the blocks should be wet. To implement the next blocks, the vertical and horizontal surfaces must be glued with a serrated trowel and the surface of the blocks must be cleaned with a brush before gluing.

2. When installing the block, first put the edge away from the block connection, and then the connecting part is in place. Avoid slipping the block and clean excess mortars with a spatula. The spatula should be placed 45 degrees relative to the block and the movement should be in such a way that the sharp edge is not towards the seam.



3. The overlap of blocks should be at least 5 cm (the minimum distance between vertical seams is 15 cm) and should be constant for each ridge (row).

4. At the angular intersection of the walls, the Persian surface should be placed on the outer side, in other words, the vertical seam should not be placed on top of each other, for the implementation of the wall work, the level and extension of each block should be controlled after installation.

5. The secondary wall with a thickness less than the main wall with an executive distance of about one centimeter and is connected to the main wall using steel strips with a distance of one meter.

## Backrest or coil

If the height of the wall is more than 3.5 meters, a horizontal coil attached to the structure of the building should be used. If the length of the wall is more than 6 meters or 40 times the thickness of the wall, it should be used as a backing strap or upright coil attached to the structure of the building. The vertical and horizontal edges of the blades should not be free.

## Cutting

Cutting can be done with hand saws, band saws, and woodworking tools in the desired dimensions and shape. In case of cutting with electrical appliances, use masks and safety supplies.

## Drilling

Drilling should be done with a rotary cutting machine. The diameter of the hole should not exceed one-third of the depth of the block. Around larger holes should be reinforced with metal mesh. If the depth of the groove is more than one-third of the depth of the block, reinforcement should be done in both ridges with two 8 mm rebars.

## Facilities Implementation

For the paths of the installations, vertical grooves and holes can be drilled in the walls. After the installation is implemented, additional paths and holes should be filled with block mortar adhesive.

## Wall surface staining

Block mortar adhesive can be used to repair chipping and staining. Clean the surface with a brush before running. The staining is done using a spatula, then the surface is smoothed with a fine scraper or sander and ready to be painted.

## Door & Window Installation

The installation of doors and windows is done directly on STG blocks, and it is better to use cement sand mortar for the placement of metal frames.

## Joinery

1 - With respect to the smooth surface, the wall can be covered by applying wallpaper, thin layer of plaster, cement plaster, ceramic, acrylic patterned coatings or ready-made mortar.

2 - Before applying joinery and non-dry façade, the surface of the blocks should be thoroughly cleaned and then moistened.

3 - In the place of discontinuity of walls, such as corners, next to openings, etc. fiberglass meshes can be used. The minimum curing time for plaster and surfaces that have been applied with cement sand mortar is three days, and the surface of the wall must be kept moist.

4 - In the junction of different materials in the façade, such as the junction of the STG block with the reinforced concrete shear wall or the concrete and metal structure, rabbits (with the direction of the horizontal belt) should be used.

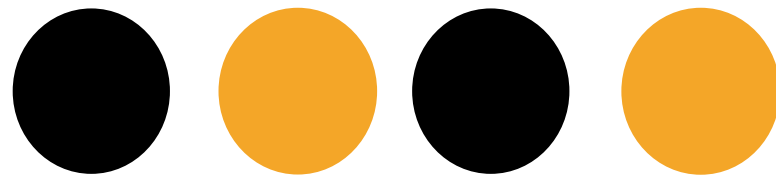
5 - In industrial buildings and parking lots, STG blocks can be painted directly with acrylic paint.





## How to prepare tile glue

Mixing of powder with water should be done using an electric mixer (drill + blade). The bucket or container in which the powder and water are mixed should be proportional to the speed of work and the volume of mixing, always add the powder slowly to the water and make sure that the electric mixer is on when the powder is added to the water and the mixing process continues until a uniform and homogeneous mortar is obtained. Leave the prepared tile adhesive mortar alone for 5 minutes, repeat the mixing process again for a short time.



## Characteristics of STG Ceramic Adhesive

1. The base adhesive is cement and mineral and has a long lifespan, while chemical adhesives are made of excellent materials and have a shorter lifespan due to the perishability of organic materials.
2. Due to the ease of preparation and application, the speed of implementation is very high. In addition, the service life of the prepared adhesive mixed with water is at least 2 hours.
3. Ceramic tile adhesive has high strength and adhesion (more than 0.5 MPa) and is resistant to high humidity and extreme heat.

4. The most important feature of dry mortars and this type of adhesive is to save the amount of water consumption for preparation.

5. It is easy to glue tiles on tiles without the need to remove old tiles.

6. With this type of adhesive, you will not have any restrictions in choosing the size of ceramic tiles.

7. This adhesive is mineral base and completely environmentally friendly.

8. Packed in 25 kg bags and while reducing the consumption of materials and severely reducing the distraction of building materials

9. Easily is conveyed on the floors.

10. The possibility of installing all kinds of coatings on concrete, stone, etc.

11. For sticking various types of tiles and porcelain ceramics in large pieces and sizes on different vertical and horizontal surfaces, inside and outside buildings.

12. Usable in underfloor heating systems and suitable for facade tiling.

Note: In cold weather and places where the height of the tile work is high, the ceramic installation should be carried out in two stages with a time interval of 6 hours. So that the heaviness of the ceramic and the lack of water absorption of the materials do not cause the ceramic to slip and separate.







## STG TILE AND CERAMIC ADHESIVE

Tile, Ceramic, Facade brick Adhesive is a mortar for installing tile and facade brick on floors and walls in thin-set applications.

<b>Cement</b>	Portland - type II, white cement
<b>Aggregate</b>	Silica sand $\leq 1$ mm
<b>Composition</b>	Cement, silica sand, additives
<b>Color</b>	White, grey
<b>Packaging</b>	25 kg bag
<b>Water Ratio</b>	25% of dry mortar weight
<b>Application time</b>	1 hour
<b>Consumption</b>	3-4 kg/m <sup>2</sup>
<b>Thickness</b>	3-10 mm
<b>Durability</b>	Water proof, frost and weather conditions resistant
<b>Initial Adhesive strength</b>	1.4 MPa accord to EN1348 standard.

### How to apply tile glue

In the standard method of tiling with tile glue, you must first apply the glue in parallel grooves and in one direction on the desired surface using a serrated trowel. Then apply a thin layer of adhesive to the surface behind the tile or ceramic and install the tile on the surface in a maximum of 20 minutes. The best usage temperature for this product is between 15 and 25 degrees Celsius. At lower temperatures, the drying time of the adhesive will be longer. The initial gripping time of this product is 24 hours under standard temperature conditions of 25 degrees Celsius, and the tile adhesive reaches its maximum strength after 28 days. This duration depends a lot on various factors such as temperature, humidity, adhesive thickness, and application conditions, and may be more or less frequent.

Note 1: The tile application platform and the way the adhesive is applied on it should be such that at least 60% of the back of the tile is impregnated with glue after installation, otherwise a spatula with a greater depth of grooves should be used.

Note 2: After mixing the tile adhesive with the prepared mortar water, it should be used in a maximum of 60 minutes according to the ambient temperature, so prepare the adhesive in a quantity that is used during this time, after applying the adhesive on the surface, the tile should be installed in 20 minutes at most. At the time of installation, the surface temperature under the work should be at least 5 and a maximum of 40 degrees Celsius.

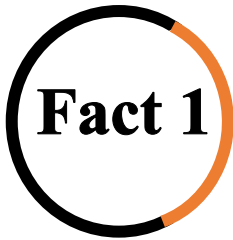


### How to use

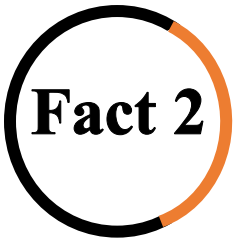
The place of use should be free of any grease, dust, loose particles or old paint. Do not use in places that are under high vibration. Do not use on metal surfaces. If it is applied to concrete surfaces, at least 28 days have passed since the concrete pouring.

### Conditions and maintenance of STG Block Adhesive and Ceramic Tile Adhesive

1. The maintenance and safety tips of the light block adhesive are like cement and gloves should be used when working with the glue
- 2- The bags should be placed on a dry floor with a minimum distance of 10 cm from the ground
3. They should not be exposed to rain
4. Up to 8 bags can be stacked on top of each other
5. Dry mortar pallets should be stored at the closest distance from the project site.
6. The mortar should be prepared in the required size according to the instructions stated on the envelope and the mixing should continue until the air is removed.



1- Knowledge has always been an efficient and appropriate tool for advancing any project and goal, which is one of the vital and necessary issues.



2- Light block tools are also among these items for correctly and completely specialized performance of building wall and building block projects using STG light blocks.