

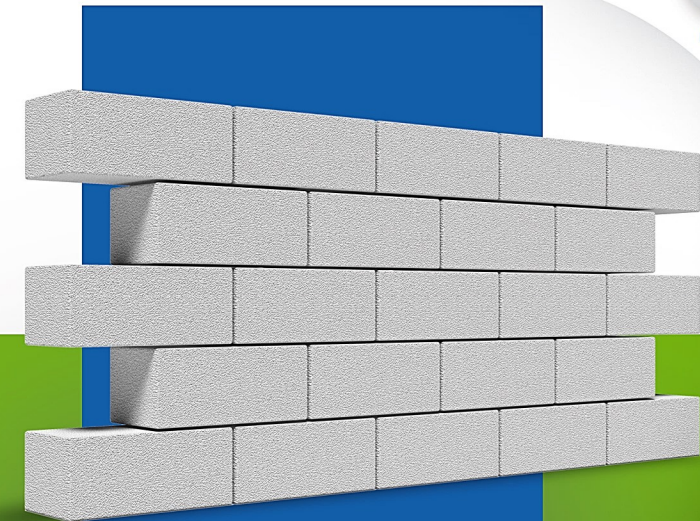


Modern Lifestyle
We Create Modern &
Healthy Workplace
With AAC



AAC
BLOCKS

We **Create** Modern
& Healthy **Building** ...



LIGHTWEIGHT



FIRE RESISTANT



FAST CONSTRUCTION



SOUNDPROOF



STRENGTH



MAINTAIN TEMPERATURE

AAC
BLOCKS

Healthy living
We help to provide homes
With AAC





RAYA TRADING Co.
RACHEL TILE BRAND.

What you need to know about Raya Blocks:

Raya Novin Sazeh Company is the largest manufacturer of auto-claved lightweight blocks and panels in the center and south of the country and has the most up-to-date machines with German HESS and Finnish LAHTI technology. The products are produced with the highest quality and the least human intervention.

The need to use the Raya blocks:

Due to the advancement of construction materials technology, newer building materials have been introduced to the market today in accordance with building standards. Raya style blocks, as one of the new and efficient building materials compared to older building materials, have been able to satisfy their customers.

AAC block history:

In 1924, a researcher named Dr. Axel Erickson, an architect and assistant professor of the college of Civil Engineering, with Henrik Groger at the Royal University of Technology, discovered a material that had properties such as wood. Exol Gazbetong was started and later the company established the first and largest brand of auto-claved lightweight concrete called "Itung" in the world. This product is now produced with different brand names in the world.

Building Future
We Enforce Sustainable Building With AAC

Enjoy the most up to date European technologies





Technical advantages
of Rayablocks:

AAC
BLOCKS ADVANTAGES



Product sizes:

BLOCK DIMENSIONS	Herblock area (cubic meters)	Capacity of each pallet (cubic meters)	Capacity of each pallet (square meters)	Number of blocks in each pallet	Approximate dry weight of each block
60x25x30	0.045	1.8	6	40	22.5
60x25x25	0.0375	1.8	7.2	48	19
60x25x20	0.03	1.8	9	60	15
60x25x15	0.0225	1.8	12	80	11
60x25x12.5	0.01875	1.8	14.4	96	9.5
60x25x10	0.015	1.8	18	120	7.5
60x25x5	0.0075	1.8	36	240	3.8

Technical specifications of the block

PARAMETER	UNIT OF MEASUREMENT	THE AMOUNT
Dimensions	mm	600!x250
Thickness	mm	50-100-150-200-250-300-350
pushing resistance	N/mm ²	≥2.1
Dry volumetric mass	Kg/N/m ³	550-450
Heat conductivity	W/m°k	0.013-0.08
Sound insulation	Db	37-50 depending on thickness and volumetric mass
Dimensional tolerance	mm	Maximum 1.5
Rupture modulus	N/mm ²	0.7-0.5
Elastic modulus	KN/N/mm ²	2-1.6
Fire resistance	Hour	2 to 6 hours depending on thickness
Shrinkage due to drying	%	Maximum 0.02

- LIGHTNESS**
(reduction of structural dead load)
- ECO-FRIENDLY**
- REDUCTION IN COSTS**
- QUICK AND EASY INSTALLATION**
- NO INFESTATION OF ANIMALS**
- SOUND-PROOF**
- INCREASING THE LIFE OF THE BUILDING**
- CUTTABLE WITH A SAW**
(ABILITY TO CREATE CHANNELS AND GROOVES IN THE WALL TO PASS THE FACILITY)
- RESISTANT TO MOISTURE AND FROST**
- AVOIDANCE OF CONSUMING UNNECESSARY MATERIALS**
- EASY AND FAST TRANSPORTATION**
- FIRE RESISTANT**
(FIREPROOF AND REDUCTION OF FIRE TRANSMISSION SPEED)
- INCREASING THE INTERIOR SPACE OF THE BUILDING**
- INCREASING THE BUILDING'S RESISTANCE TO EARTHQUAKES**



● Production Process:

● Raw materials used

Main components:

Silica sand-lime-cement-aluminum powder-water
All materials are recyclable and can be returned to the production cycle.



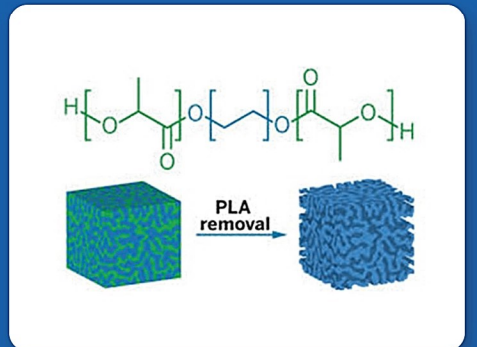
● Prepared dry mortar:

Dry mortar is one of the new construction materials that is prepared in standard conditions. It is provided to contractors in a semi-finished form. Dry mortar is a common type of concrete made from a combination of sandstone, Portland cement, and chemical additives. It is marketed dry in waterproof bags. In fact, all the steps of preparing the mortar are done in the factory and only adding water and stirring are done at the project site.



● Production Process:

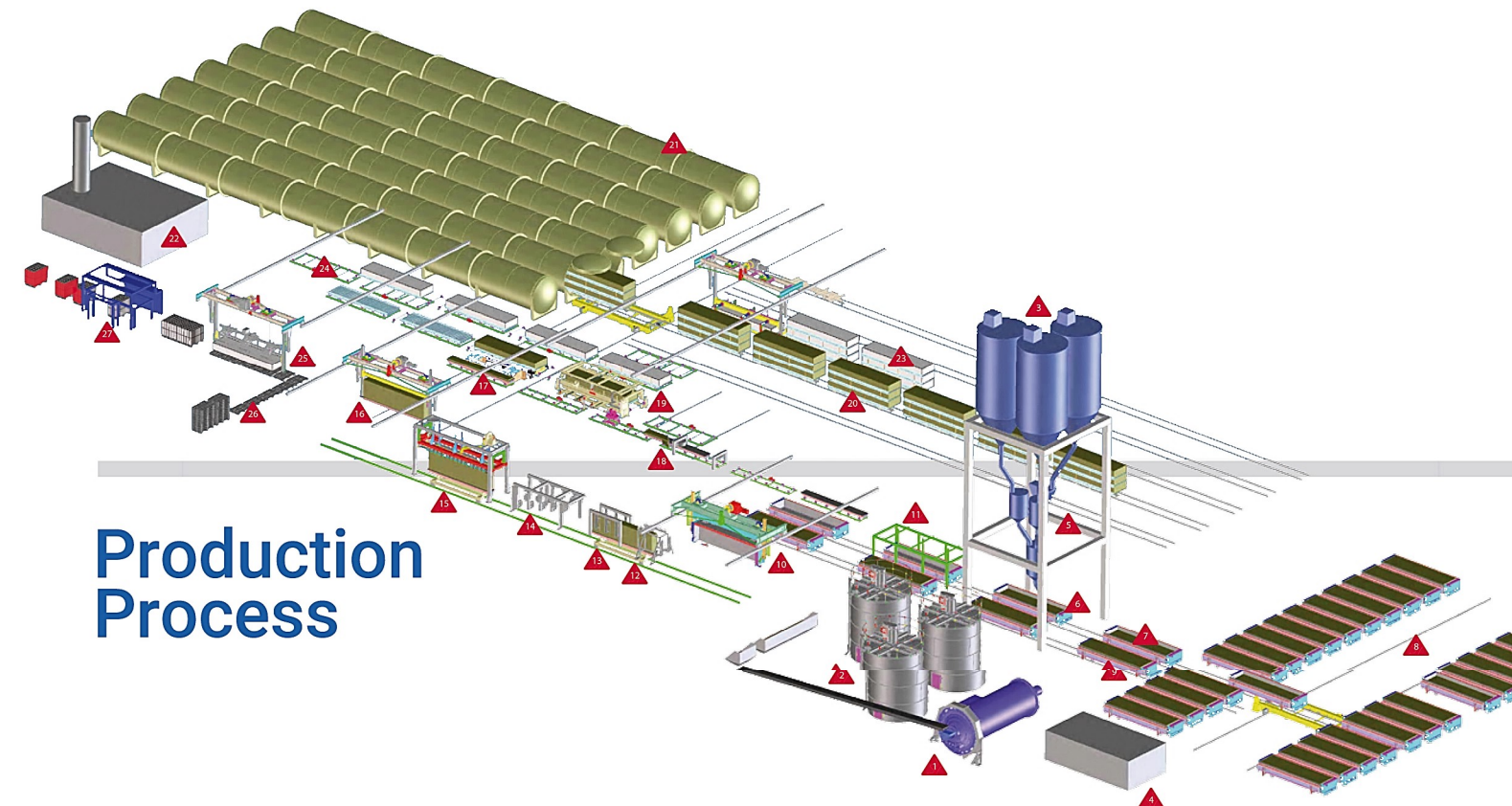
Autoclave block is a new product that is used in all types of residential, commercial and industrial constructions. In the production of autoclave blocks, there are three silos for storing silica, lime and cement, which enter the production line at certain intervals. In the first stage of concrete production, raw materials including silica and water in wet form, lime, cement, and aluminum powder for the production of the green cake are mixed and after reducing sufficient moisture, it is transferred to the cutting line and cut to the desired size and loaded in an autoclave for processing under a certain pressure and temperature.



Dry mortar has many advantages over traditional types and for this reason in many countries of the world, the traditional method of mortar production has given way to dry mortars.

Superiority of prepared mortar:

- Easy and fast to use
- Production in a controlled environment and careful instrumentation
- Available in required volumes
- Reduction of material waste
- Easy to carry (bag and bulk)
- Reduction of costs and increased quality
- Compliance with a variety of national and international standards
- Time-saving



Production Process