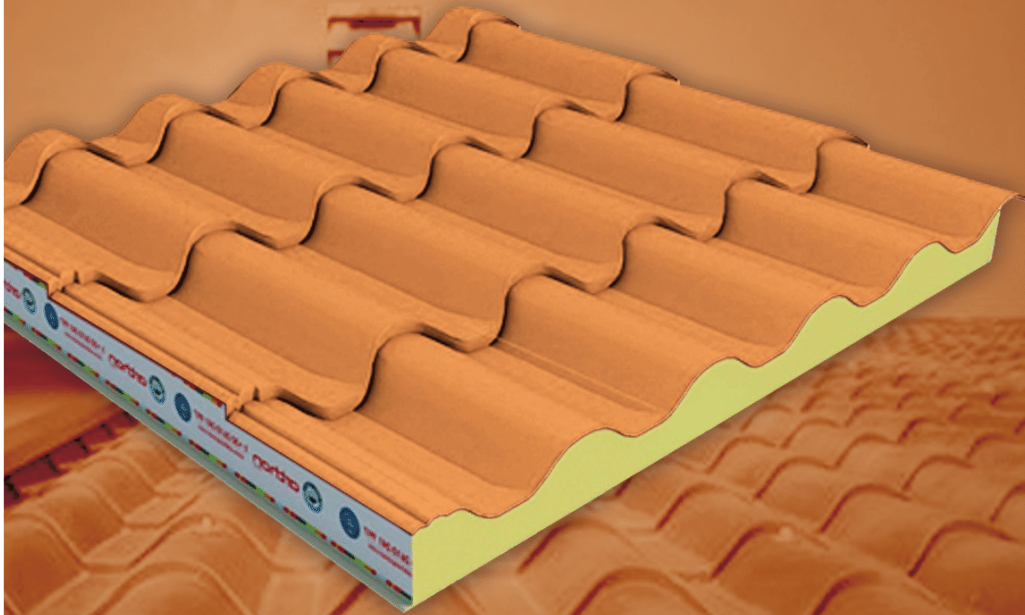


www.arkhon.gr



arkhon PANEL

Roman tile

Roman Tile Polyurethane Panel



Roman tile

General Features

Arkhon Roman tile is the insulating polyurethane metal panel at the shape of the traditional Roman tile offering unique aesthetics and high thermal insulation ($k = 0,022 / U = 0,258 \text{ kcal} / \text{m}^2\text{h}^\circ\text{C}$).

Is produced in long metal sheets and is available in matt shades or aged paints.

The ARKHON ROMAN TILE can be placed on existing roof structures that suffer from roof leaks and insulation problems, providing energy and aesthetic upgrade.

Strict control of raw materials, fully automated industrial

production, constant research and expertise of the staff, guarantees customer satisfaction. The installation guide showing all the ways to connect the panels in order to achieve the best results in thermal insulation, water / air tightness and fire resistance. The panels are produced mostly from galvanized pre-painted steel sheets, however there is the possibility of producing them with aluminum sheets or stainless steel.

Regardless of the type of the project you design, there will always be available our engineering team to assist you finding the best solution with panels in your application.

THE MAIN ADVANTAGES OF ARKHON ROMAN TILE ARE:

- Easy and safe installation (low weight in long dimensions)
- Particular aesthetics
- 100% water tightness.
- Direct application

Products Applications

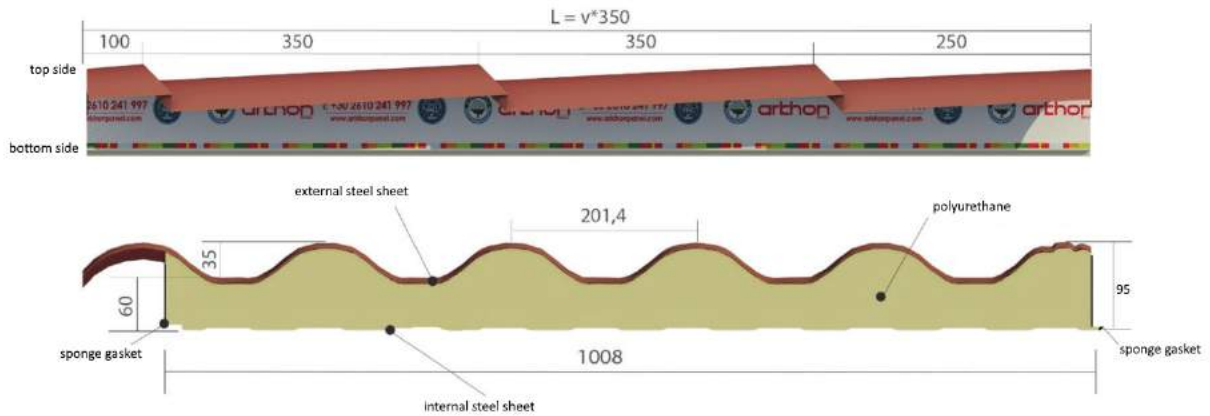
The arkhon roman tile Panel, available in a single step (pressing 35centimeters), is forming an outstanding architectural effect. The Panel arkhon roman tile can be used in a multitude of applications such as e.g. in metal buildings

covers, sports facilities, partitions, food processing areas, bungalows, lightweight construction and generally in all applications requiring roof cladding.



Also Panel arkhon roman tile can be used as an addition to existing housing construction (metal or conventional), offering excellent optical effect and mainly energy upgrade of the building.

Arkhon roman tile Dimensions and properties



Arkhon Roman Tile	
Thickness of the polyurethane panel (mm)	60
Overall panel height (mm)	95
Weight kg / m2 (0.50mm) steel	11.19

Features Polyurethane	
Density (ISO 845)	40+- Kg/m3
Percentage of closed cells	≥ 92%

Available lengths

Available lengths up to 15 meters (means of transport limitation) for larger sizes please contact us.
Indicative lengths in accordance with step (length tile) 35cm

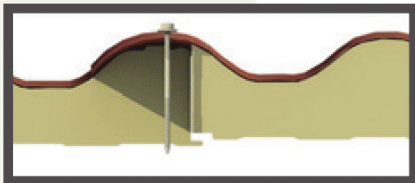
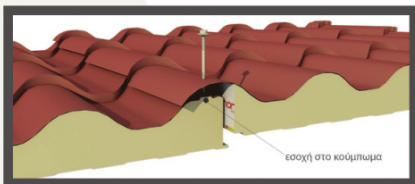
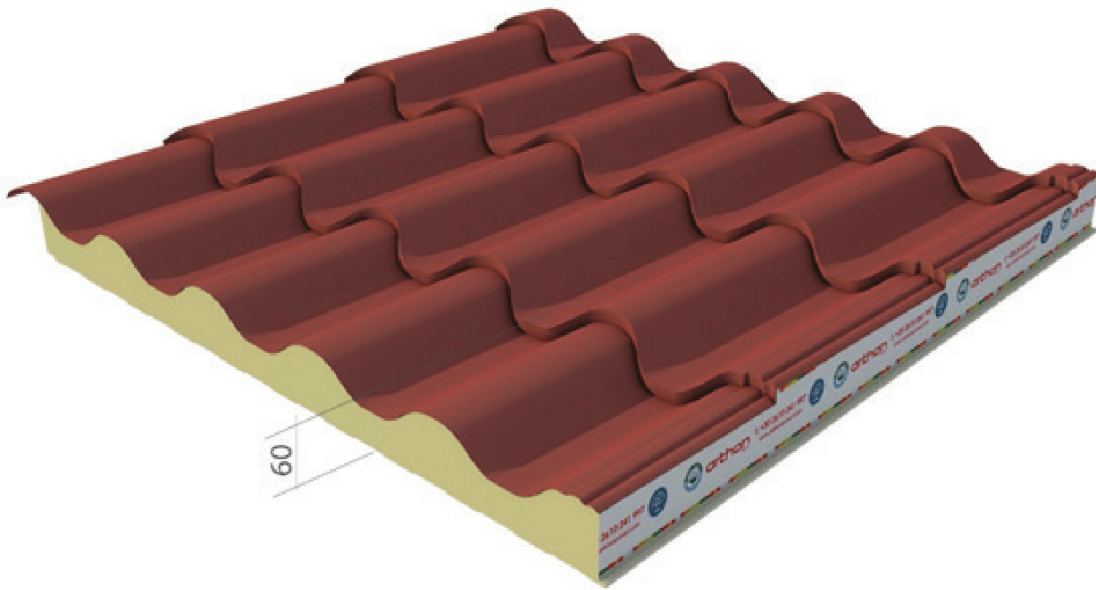
Number of Tiles	1	2	3	4	5	6	7	8	9	10	11	12
Panel length	700mm	1050mm	1400mm	1750mm	2100mm	2450mm	2800mm	3150mm	3500mm	3850mm	4200mm	4550mm
Number of Tiles	13	14	15	16	17	18	19	20	21	22	23	24
Panel length	4900mm	5250mm	5600mm	5950mm	6300mm	6650mm	7000mm	7350mm	7700mm	8050mm	8400mm	8750mm

How to connect Arkhon Roman Tile

The potential of the right joint

Regardless of the type of the project you design, there will always be available our engineering team to assist you finding the best solution with panels in your application. All the

know-how to insulate without discontinuities, contained in specially developed and designed panel joints.



Specially developed and designed panel joint

1. Anti-capillary groove
2. Silicon is not required
3. Double micro gutter for water tightness
4. Guaranteed thermal transmittance U value
5. No thermal bridge or big gaps
6. Insulation continuance
7. Slope from 5 degrees
8. Special color coatings for zero maintenance





Arkhon Roman Tile Panel Surfaces



Technical characteristics of steel
(EN 10169-1/03 - EN 10142/00 - EN 10147/00 & EN10142/00)

Top coat	20 mic.
Primer	5 mic.
Back coat	5 mic.
Gloss	32

PVC

Galvanized Steel with PVC coating. | Lamination thickness 120 mic*.

Additional Surfaces

Upon request we can meet special demands for extreme or unusual environments, such as farm houses, sea salt processing factories, acidic environments etc

* Suitable for sanitary clean rooms. PVC is available in RAL9002 color.

External Side

ΚΕΡΑΜΙΔΙ RAL8004 MATTE



ΜΠΕΖ RAL1015



ΓΚΡΙ RAL 7015



ΚΟΚΚΙΝΟ ΠΑΛΑΙΩΜΕΝΟ



ΜΠΕΖ ΙΟΝΙΟΥ



ΠΡΑΣΙΝΟ RAL 6005



RAL3013



RAL9002



ΕΥΛΟ ΑΝΟΙΧΤΟ



ΕΥΛΟ ΣΚΟΥΡΟ



Internal Side

Energy Efficiency Data

Our Arkhon Roman Tile PUR Panels are manufactured according to European Union Standards EN 14509 (CEN/TC128/SC110).

Thermal Transmittance Properties

Thermal Transmittance properties of Arkhon Panels were calculated using tabular data from EN 13165 standard.



By using arkhon panels you can achieve excellent steady insulation efficiency without gaps or inconsistencies in the joints.

insulating properties			
THICKNESS	R	U	K
60 mm	2,658 m ² K/W	0,375 W/m ² K	0,323 K/m ² h°C

Note: Thermal conductivity with theoretical maximum of $\lambda = 0,022$ W/(mk).

Acoustic efficiency

Arkhon panel acoustic efficiency has been calculated with the use of specialized software. The results in the following chart are based in arkhon horizon 80mm.

Sound Reduction Index (SRI)						
Frequency Hz	125	250	500	1k	2k	4k
SRI dB	17.2	20.0	23.2	23.4	23.2	40.5

Environmental Care

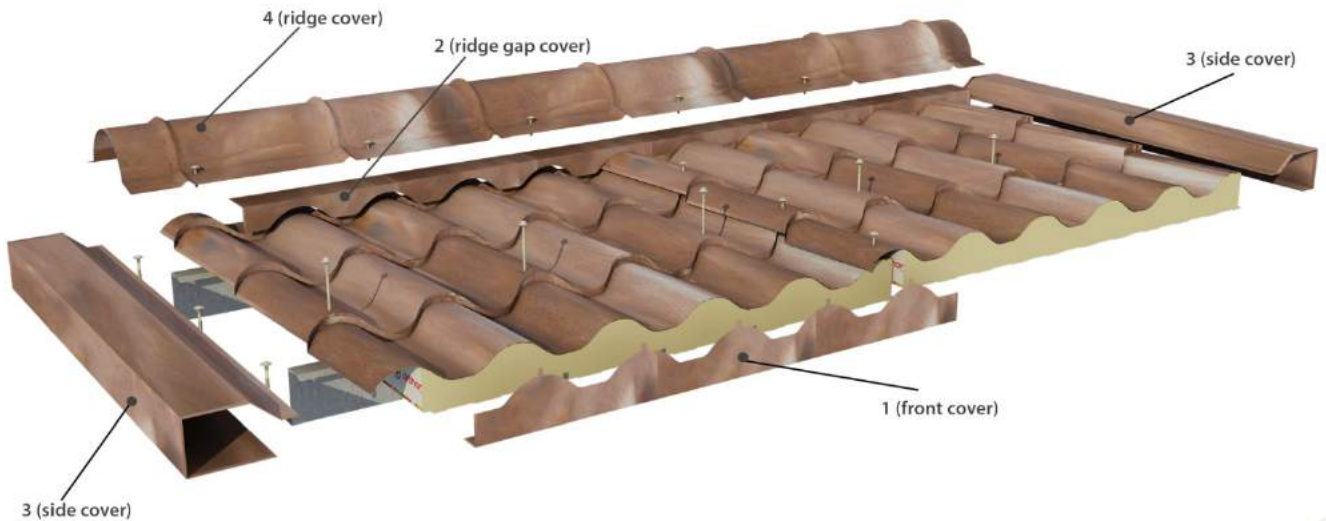
Our company uses environmentally friendly policies with reusable materials and we produce polyurethane without harmful materials HCFC & CFC.





Flashings for Arkhon Roman Tile

For the complete and correct installation of Arkhon Roman Tile, roof panels, required a series of flashings in order to perfectly place the insulation and get the best aesthetic appeal of each construction. Since most of the buildings have their own unique requirements (always based on the architectural and structural design), required flashings vary from case to case. Our technical department is always available to serve and meet your every special need.



Support & Waterproofing equipment

Properly mounting our panels require a series of connecting materials that Arkhon can provide depending on your project (self-piercing bolts, washers etc). We also provide special materials for waterproofing constructions (like butyl-ate string, foam gaskets etc) that are subject to very humid environments. or bolts with longer piercing ability, please contact us.

Panel Thickness (mm)	Screw Type	Punching Ability
60	6.3 x 125mm	8mm





Arkhon's Technical Department with professional staff (civil, mechanical chemical and enviromental engineers) is prepared to support costumers in their search for the most adequate professional solutions with the guarantee of the best insulation and operating efficiency. Arkhon's factory is equipped with state-of-the-art infrastructure which includes most automated machines, a team of experienced technicians, chemical materials by one of the most important groups in Europe and an effective management system that guarantees our products high quality level.



Arkhon applies enviromental friendly policy using recyclable materials and polyrethanes cfc & hcfc free.

tel: +30 2610 241997 | fax: +30 2610 241996 |
Patras Industrial Area

info@arkhon.gr | www.arkhon.gr

Group of

