



# Data Sheet

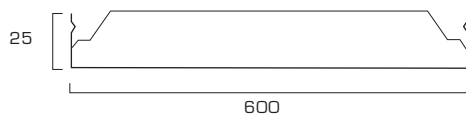
## ENIGMA MATROX

### DESCRIPTION

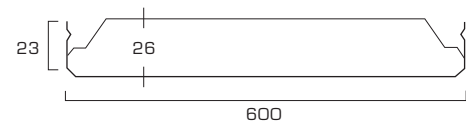
False ceiling made up with steel or aluminum tiles hooked to hidden structure. Enigma Matrox tiles are available both with right or bevelled edge.

### SECTIONS

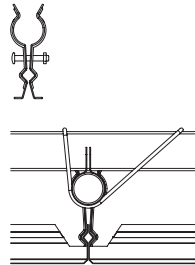
#### RIGHT EDGE



#### BEVELLED EDGE



#### STRUCTURE PROFILE SECTION



Among hidden structures, the Matrox one with galvanized steel tubular carrier is one of the most solid building solution.

This system is normally used in the shipbuilding industry, where high resistance to stress and perfectly aligned tiles are required.

Enigma Matrox with its holding system is the right solution for healthcare where high levels of hygiene and security are essential.

### TECHNICAL DATA

<b>TILES DIMENSION</b>	600x600 mm Other dimensions on request
<b>TYPE</b>	Clip-in tiles Right or 45° bevelled edge
<b>MATERIAL AND WEIGHTS</b>	Aluminum 5/10: 1,60 kg/sqm Aluminum 6/10: 1,92 kg/sqm Aluminum 7/10: 2,24 kg/sqm Steel 5/10: 4,60 kg/sqm Steel 6/10: 5,52 kg/sqm
<b>HIDDEN STRUCTURE</b>	Matrox

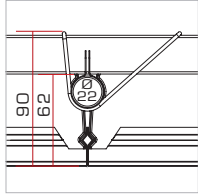
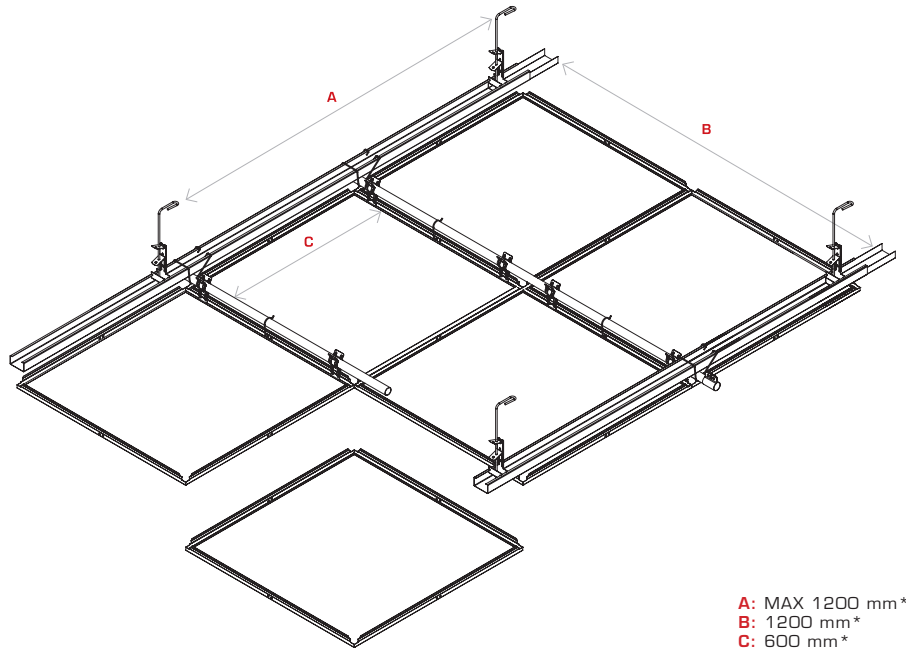
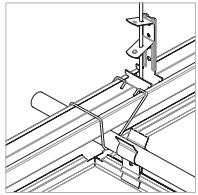
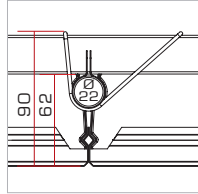
### CERTIFICATIONS

<b>FLEXION RESISTANCE</b>	Maximum span mm 1200 - 1 Class
<b>DURABILITY OF PRE AND POST PAINTED MATERIALS</b>	C Class
<b>DURABILITY OF GALVANISED MATERIALS</b>	B Class
<b>RELEASE OF DANGEROUS SUBSTANCES</b>	No release of any dangerous substance according to European Law EN 13964:2014
<b>FIRE REACTION</b>	According to UNI EN 13501-1: plain or perforated tiles with Viledon Plus A1 Class perforated tiles with standard Viledon A2s1d0 Class - structure A1 Class
<b>ACOUSTIC TEST</b>	Refer to Atena Acoustic Catalogue
<b>BEARING CAPACITY</b>	model 600x600: 16 kg/sqm

## MATROX STRUCTURE

MODEL 600 x 600 mm

### DETAILS

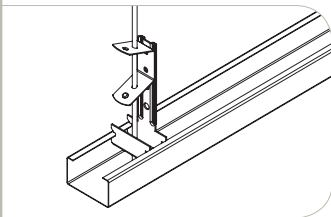
TILE SECTION  
RIGHT EDGETILE SECTION  
BEVELLED EDGE

**A:** MAX 1200 mm\*  
**B:** 1200 mm\*  
**C:** 600 mm\*

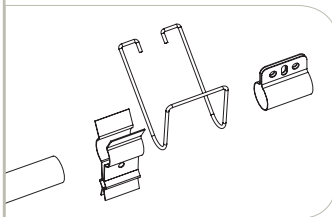
### Laying instructions:

- Draw the lines of the perimeter frame.
- Determine the height of the ceiling with a level and mark it with a string.
- Install the perimeter profiles.
- Proceed with the hangers.
- Install structure and tiles as following:

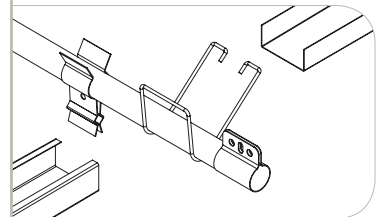
**1)** HOOK THE "C" PROFILES ON THE HANGERS WITH AN INTERAXE OF 1200 mm.



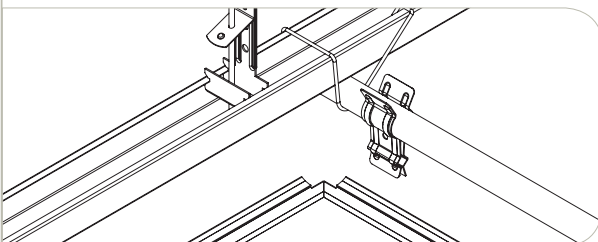
**2)** INSERT MOBILIO CLIPS AND HOOKING SPRINGS.



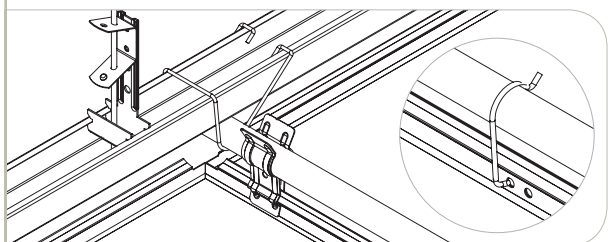
**3)** HANG ALL "C" PROFILES TO MOBILIO TUBULAR PROFILES.



**4)** PUSH TILES ON MOBILIO CLIPS TO FIX THEM.



**5)** INSERT THE SAFETY SPRINGS TO COMPLETE THE INSTALLATION.



\* Verify the interaxe according to the load at m<sup>2</sup> and particular conditions.

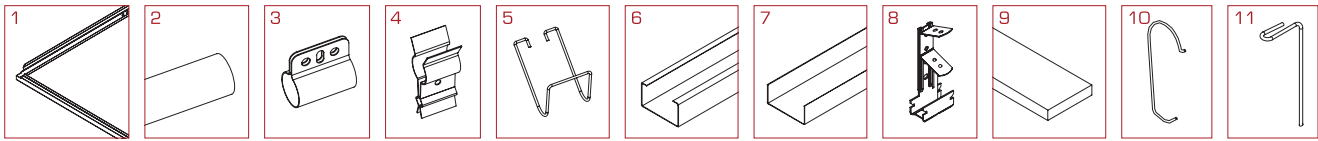
All dimensions are nominal and expressed in millimeters.

All technical specification data and information can be changed without advise.

For further information please contact sales department: tel. + 39 0421 75526 [commerciale@atena-it.com](mailto:commerciale@atena-it.com)

## ENIGMA MATROX INCIDENCES

MODEL 600 x 600 mm



MATROX STRUCTURE				
ID	DESCRIPTION	MATERIAL	QUANTITY	
1	ENIGMA MATROX TILE	steel / aluminum	(pcs/sqm)	2,78
2	Ø22 MOBILIO TUBE	galvanised steel 10/10	(lm/sqm)	1,70
3	MOBILIO TUBE JOINT	galvanised steel 5/10	(pcs/sqm)	0,45
4	MOBILIO CLIP	black prepainted steel 8/10	(pcs/sqm)	6
5	HOOKING SPRING	galvanised steel 10/10	(pcs/sqm)	1,4
6	49x27 "C" CARRIER	galvanised steel 6/10	(lm/sqm)	0,85
7	CARRIER JOINT	galvanised steel 6/10	(lm/sqm)	0,22
8	HOOK WITH SPRING	galvanised steel 8/10	(pcs/sqm)	1
9	NEOPRENE GASKET (for sealing system)	NEOPRENE	(lm/sqm)	3,34
10	SAFETY SPRING	galvanised steel 6/10	(pcs/sqm)	3
11	Ø4 HANGER WITH EYE	galvanised steel	(pcs/sqm)	1

## Note for Enigma Matrox tile application:

Post painted steel Enigma Matrox to be used with continental profile.

Pre painted steel Enigma Matrox to be used with triangular profile.

Pre and post painted aluminum Enigma Matrox to be used with pre painted triangular profile.

## MATERIAL WEIGHT

MODEL 600 x 600 mm

TILES					COMBINED HIDDEN STRUCTURES WEIGHT	
MODEL	DIMENSIONS	MATERIALS	THICKNESS	kg/m <sup>2</sup>	MATROX kg/m <sup>2</sup>	
					S	S+P
ENIGMA MATROX	600 x 600	ALUMINUM	5/10	1,60	1,50	3,10
			6/10	1,94	1,50	3,44
			7/10	2,24	1,50	3,74
		STEEL	5/10	4,61	1,50	6,11
			6/10	5,53	1,50	7,03

S THIS TERM REFERS TO THE WEIGHT OF THE STRUCTURE ONLY

S + P THIS TERM REFERS TO THE TOTAL WEIGHT OF THE CEILING STRUCTURE AND TILES

STRUCTURE WEIGHTS DO NOT CONSIDER HANGERS - TILES WEIGHT REFERS TO SMOOTH TILES ONLY

## PACKAGING

MODEL 600 x 600 mm

PACKAGING						
MODEL	DIMENSIONS	MATERIALS	THICKNESS	PIECES PER BOX *	BOXES PER PALLET	CODE * *
ENIGMA MATROX	600 x 600	ALUMINUM	5/10	10	28	PMATRL5BIC000NB
			6/10	10	28	PMATRL6BIC000NB
			7/10	10	28	PMATRL7BIC000NB
		STEEL	5/10	10	28	PMATRC5BIC000NB
			6/10	10	28	PMATRC6BIC000NB

\*\*THE GREY PART OF THE CODE CHANGES ACCORDING TO THE TILES SPECIFICATIONS

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## TECHNICAL SPECIFICATION

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### MATERIAL AND COLOR:

- Aluminum 5/10 White | Silver | Gloss AISI
  - Aluminum 6/10 White | Silver
  - Steel 5/10 - 6/10 White | Silver
- Postpainted similar to RAL 9010 and RAL 7035 (gloss and matt)  
Postpainted all RAL color gloss and semi-gloss  
SILVER postpainted similar to RAL 9006 and all matt RAL colors.  
See "Colors and Materials" data sheet

### FINISHING:

Plain surface

Perforated surface:

- Perforation type
- Hole
- Diagonal or parallel perforation
- % perforated area

Read Atena Perforations data sheet

### HIDDEN STRUCTURE:

- Matrox

### PERIMETER PROFILES:

Chosen by project requirements, see Metal Modular Catalogue, "Perimeter profiles" section.

Fire reaction according to UNI EN 13964 A1 Class for plain or perforated tiles with Viledon Plus, A2s1d0 Class for perforated tiles with standard Viledon.

The panels will be removable to ensure any easy access to the interspace and a flexible positioning of the lighting elements.

In case the perimeter frame is made up of cutted tiles, we recommend the use of plain tiles.

Good results in terms of sound-absorbency can be obtained with perforated tiles by inserting rockwool or mineral fiber on the back, packed in hot-sealed polyethylene containers.

## STORAGE MODE

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In order to guarantee to customers the realization of a perfect false ceiling, materials supplied by Atena S.p.A. shall be maintained in good conditions from purchase to installation.

They must be stored in a closed, clean and dry site.

Atena S.p.A. protects its products with resistant packaging under normal handling.

Please handle packages with care to avoid shocks and inappropriate handling that might damage what is provided.

Tiles are packaged in brown cardboard boxes with stripe and delivered on pallets secured with cellophane.

The manual handling must be carried out with caution and in compliance with safety regulations at work.

For carriage of packaged products on pallets, provide a mechanical transport to avoid damages or risks resulting from inadequate transport.

## CLEANING, MAINTENANCE AND REMOVAL

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Cleaning and maintenance require some attention and care even though are easy to make and don't take much time. It is necessary to use neutral and not aggressive soaps. In case of any damage, tiles can be repainted or replaced.

False ceilings maintenance usually refers to:

placing, alignment or replacement of damaged or broken tiles. Panels can be also removed for restoration or maintenance of the system below.

The maintenance work shall be appointed to: specialised workers trained with technical data sheets about setting, removal and maintenance of the false ceilings, in order to ensure excellent results.

The tiles shall be taken off with the use of a specific tool supplied by Atena S.p.A. which allows the tiles removal without damaging the structure.

Using inadequate tools can damage the structure, causing adherence loss or even accidental panel fall.

All the maintenance intervention must follow the technical data sheet indication and every noted diversity has to be promptly reported.

Each worker assigned with maintenance operation must carefully remove the tile, perform the intervention and do not alter the false ceiling structure, the hanging system and the connection between these elements.

When the maintenance is over, install again the panels, verifying that the tiles are properly hooked on the profiles and the planarity is guaranteed. Any difference in tiles level is caused by wrong installation and, for this reason, they must be quickly controlled.

## LAWS REFERENCE AND WARRANTY

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Each Atena false ceiling is produced for internal use according to the technical rules for construction NTC 2008, and the specific regulations UNI EN 13964, 14195:2005.

Each Atena S.p.A. product has its own DOP (Declaration Of Performance) CE according to the European Law 305/2011.

False ceilings and claddings for internal and external use have to be dimensioned on environment features, to list some of the possible examples: earthquakes, wind, thermal expansion, place of installation, use destination of the building and project requests.

Independently by information, suggestions, advices and technical opinions exchanged between the parts, Atena S.p.A. will produce its products only according to the orders received and the technical drawings/projects attached, having no responsibility on what is not indicated in the order, in the technical drawings or in the project.

Atena S.p.A., as producer, is responsible for manufacturing defects. Complaints have to be presented according to the selling conditions. Materials used for Atena false ceilings have been produced just with this purpose, every other use is considered improper.