

# Innovation For Creativity

## metal ceilings and facades



MADE IN ITALY  
MANUFACTURING  
QUALITY • DESIGN



Product range: **HEAVY DUTY PROFILES**

## GIGA-GRID

### DATA CENTER

#### PANELS

600x1200 mm  
Lay-on/Lay-in panels  
Right edge | Alined  
Plain or perforated surface with  
black acoustic tissue  
6/10 standard white pre-painted  
aluminium (other colors on request)

#### STRUCTURE

Standard white Post-painted  
Extruded aluminium profiles  
(other colors on request)  
Main: 3600 mm lenght  
Cross: 600 | 1200 mm lenght

#### SUSPENSION

Suspension kit with Turnbuckles,  
hexagon nut M10, threaded bars  
Ø10 mm up to 2 m, stud bolts  
M10 1,5 pitch with hexagon nut,  
washer and M10 hammerhead nut,  
35x20 mm, 8 mm thick

#### WALL ANGLES

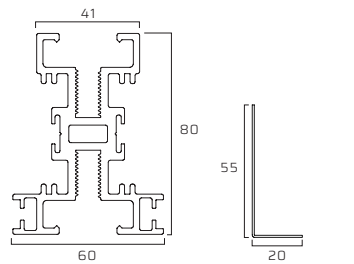
"L" 20x55 mm L=3050 mm  
12/10 standard white pre-painted  
aluminium  
with "V" holding down spring

#### ACCESSORIES

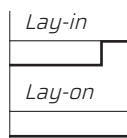
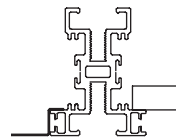
20/10 white post-painted galvanised  
steel special wall angle brackets to fix the  
extruded aluminium profiles to the wall

20/10 white post-painted galvanised  
steel angular cross connector brackets 4  
pcs for each module

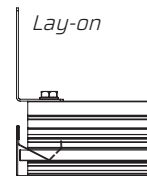
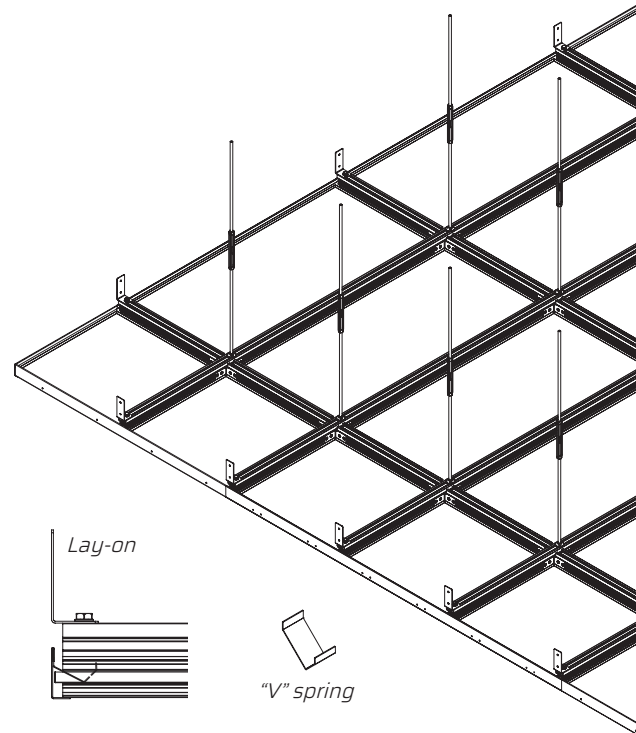
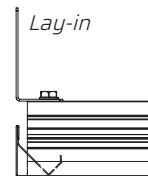
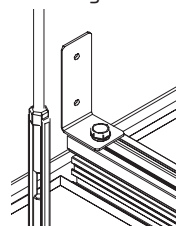
20/10 white post-painted galvanised  
steel main profile joint bracket



Panels



Wall angle bracket

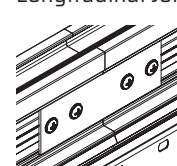


"V" spring

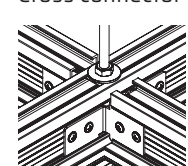
#### COMPONENTS

ID	DESCRIPTION
1	PANELS
2	SUSPENSION
3	MAIN GIGA-GRID PROFILE
4	CROSS CONNECTOR
5	LONGITUDINAL JOINT
6	WALL BRACKET
7	WALL ANGLE

Longitudinal Joint

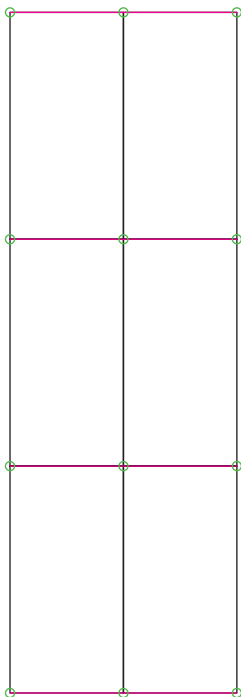
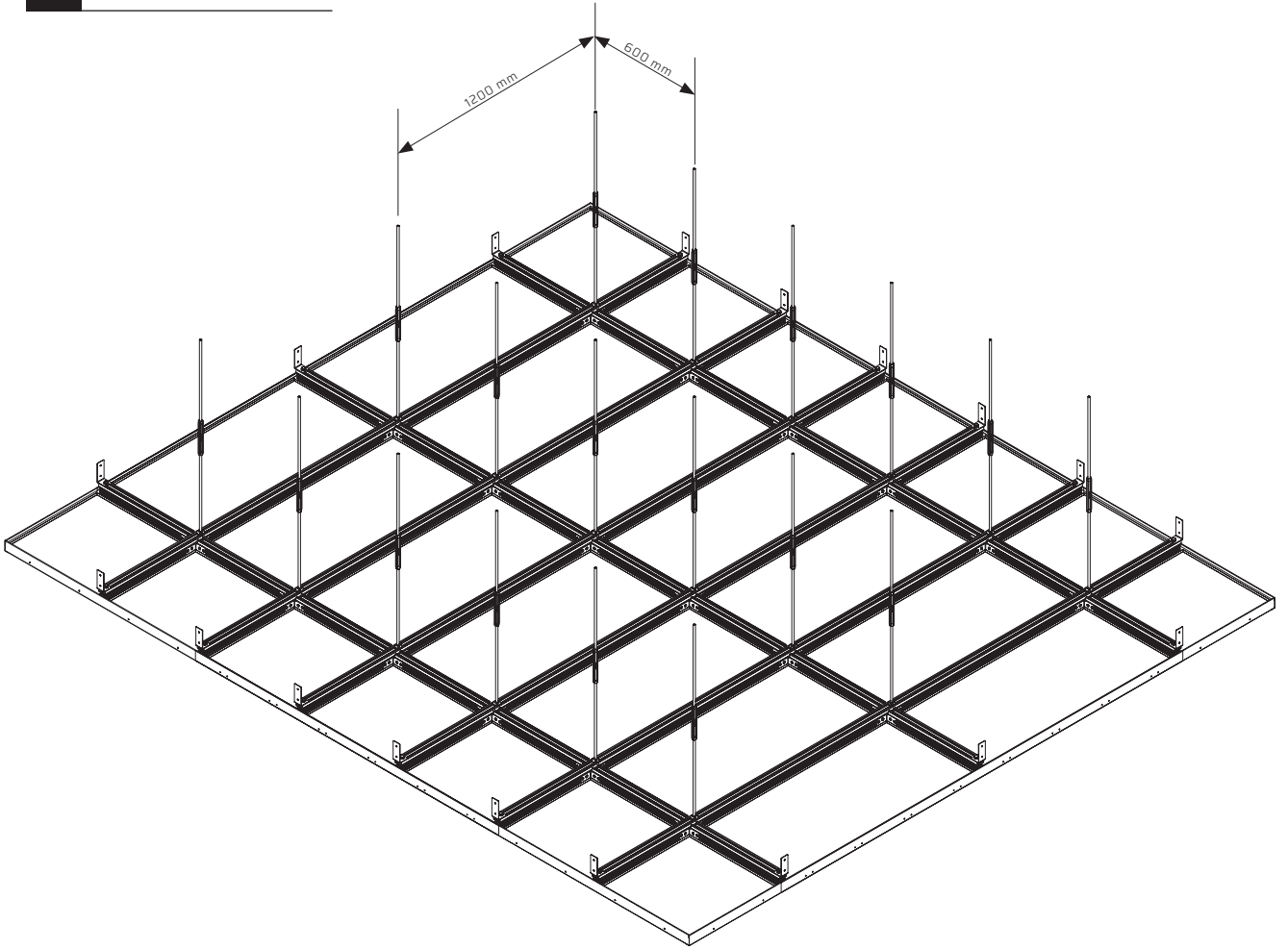


Cross connector






\*verify **interaxes** and **hanger models** according to the load at m<sup>2</sup> the antiseismic report and particular conditions. The **fastening** must be checked with regard to the loads, the anchoring base features and the installation accuracy, in order not to compromise the stability of the metal ceiling system. Lightings, accessories and systems must not weigh on the metal ceiling system, but must be independently suspended.

**CONFIGURATION A | 600x1200 mm**



**THE 600x1200 mm SYSTEM  
MAXIMUM BEARING CAPACITY**

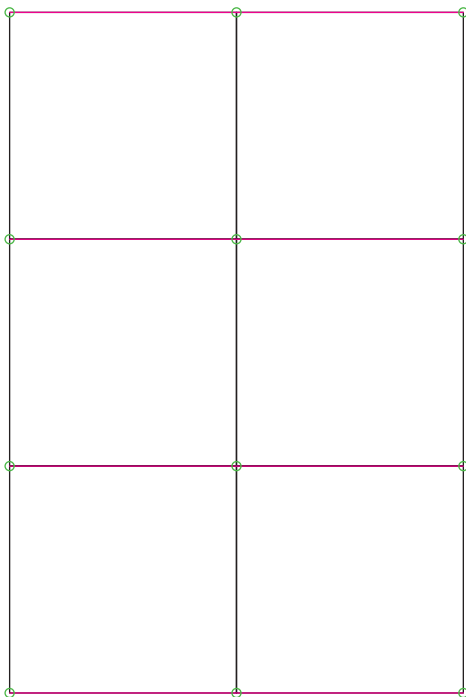
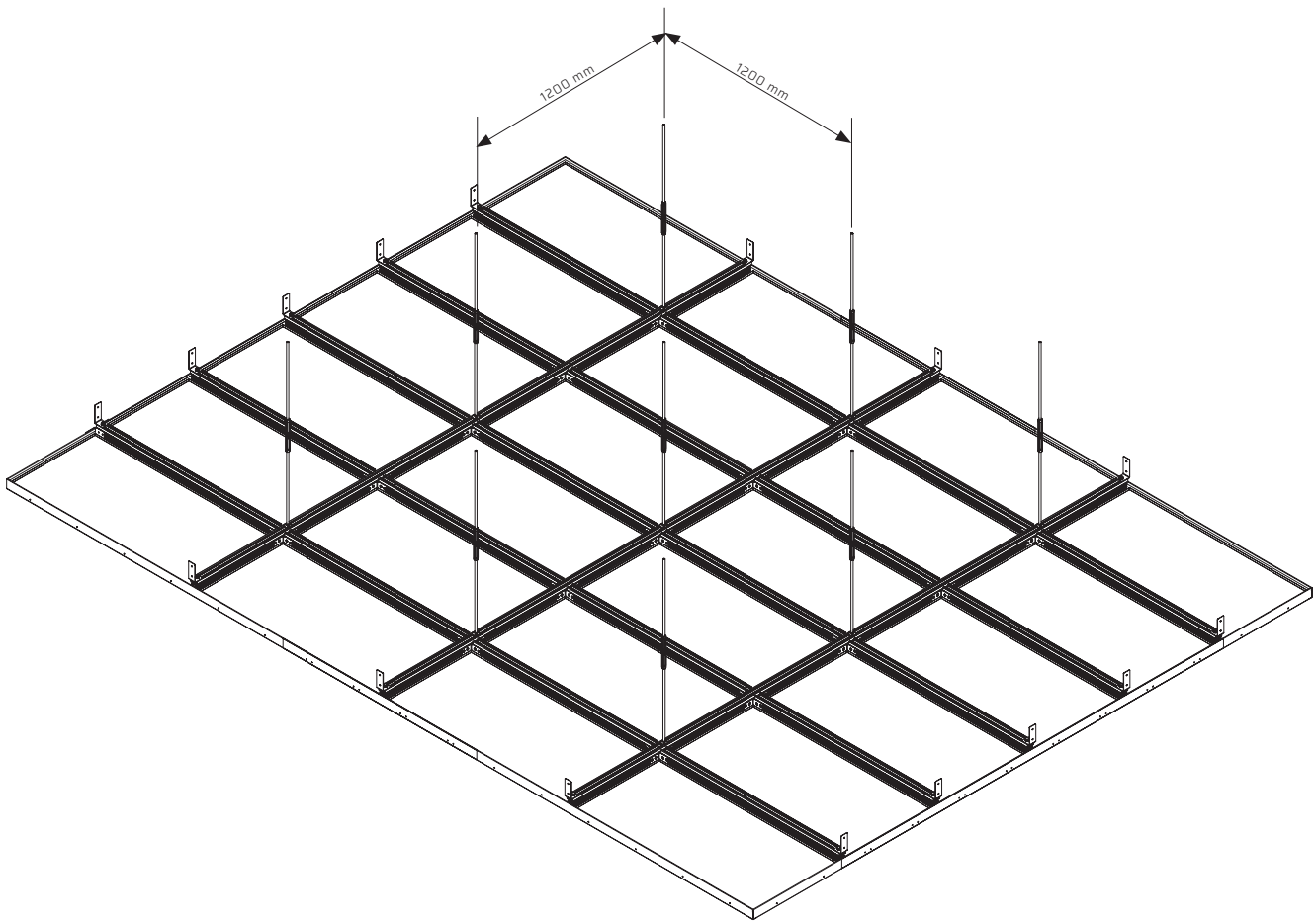
		
Suspension kit 600x1200 mm spacing	Main extruded aluminium profile 3600 mm length 600 mm spacing	Cross extruded aluminium profile 600 mm length 1200 mm spacing

**SPAN TABLE**

Main profile spacing	600 mm
Suspension kit spacing	1200 mm
Maximum allowable uniform area load (kN/m <sup>2</sup> )	6,0 kN/m <sup>2</sup>
Maximum mid-span Point Load	4,2 kN
Maximum Static Point Load	4,0 kN

Loads in configurations other than those indicated in the tables must be verified by a qualified technician by analyzing the stress on the primary profiles and the load-bearing capacity of the individual anchor points (hangers). For further information, contact the manufacturer's technical office.

## CONFIGURATION B | 1200x600 mm



### THE 1200x600 mm SYSTEM MAXIMUM BEARING CAPACITY



Suspension kit  
1200x1200 mm  
spacing

Main extruded  
aluminium profile  
3600 mm length  
1200 mm spacing

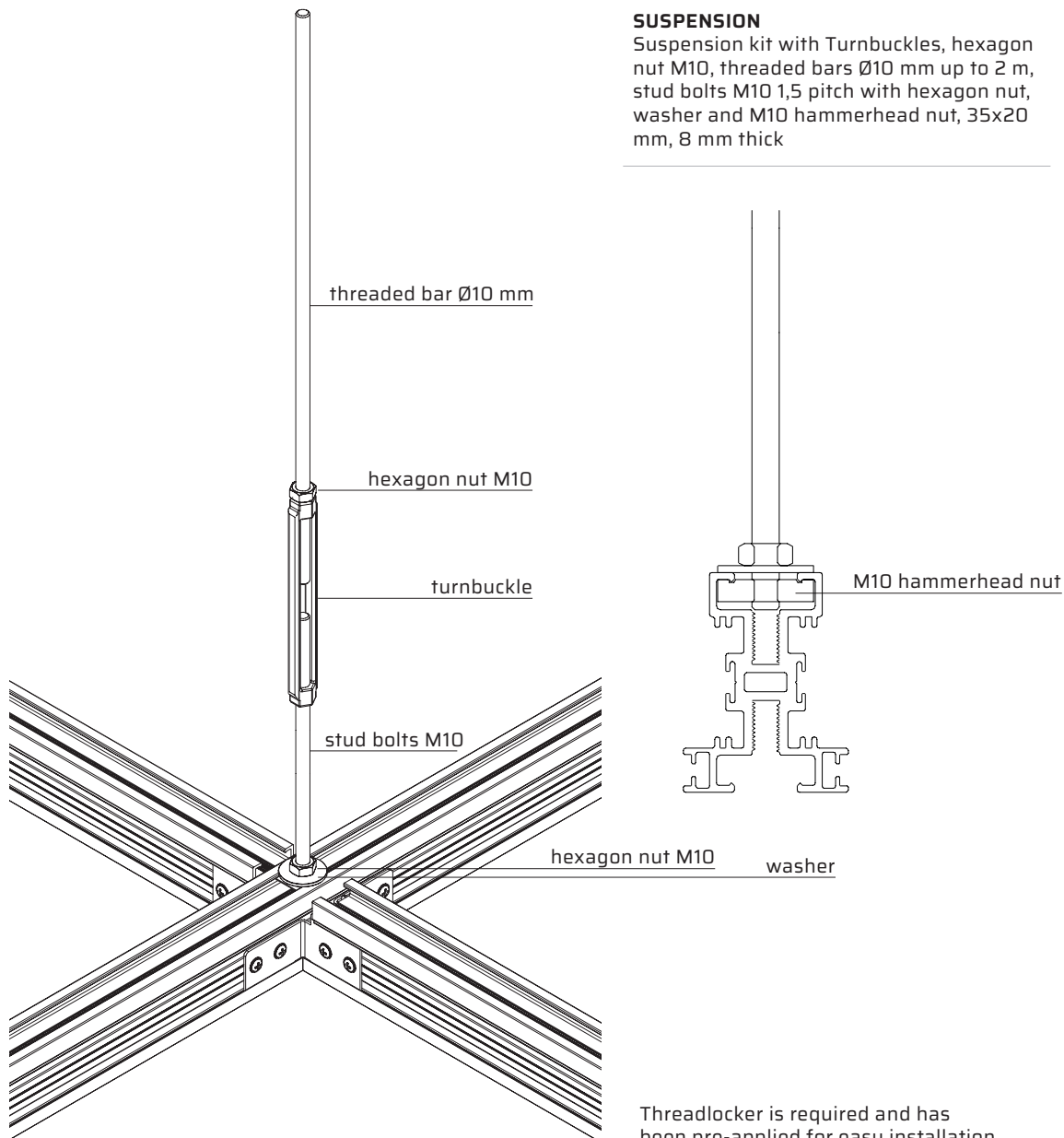
Cross extruded  
aluminium profile  
1200 mm length  
600 mm spacing

### SPAN TABLE

Main profile spacing	1200 mm
Suspension kit spacing	1200 mm
Maximum allowable uniform area load (kN/m <sup>2</sup> )	4,1 kN/m <sup>2</sup>
Maximum mid-span Point Load	3,8 kN
Maximum Static Point Load	4,0 kN

Loads in configurations other than those indicated in the tables must be verified by a qualified technician by analyzing the stress on the primary profiles and the load-bearing capacity of the individual anchor points (hangers). For further information, contact the manufacturer's technical office.












## SUSPENSION KIT



Verify **interaxes** according to the load at m<sup>2</sup> the antiseismic report and particular conditions. The **fastening** must be checked with regard to the loads, the anchoring base features and the installation accuracy, in order not to compromise the stability of the metal ceiling system. Lightings, accessories and systems must not weigh on the metal ceiling system, but must be independently suspended.












According to the NTC 2018, when the non-structural element is assembled on site: structure designer is in charge of identifying the request, the supplier and / or installer is in charge of providing elements and connection systems of adequate capacity, the project manager is in charge of verifying the accuracy of installation. Therefore, when required by the legislation in force, for the application of anti-seismic systems it is necessary to communicate to Atena the seismic stresses acting on the false ceiling, calculated by the designer of the structure. On the basis of these data Atena will provide the related connection systems accompanied by the necessary technical documentation. For more information on Atena's anti-seismic systems, contact the reference sales offices. The documentation on the site is for example only. (NTC 2018 § 7.2.3-7.2.4).

## TECHNICAL PERFORMANCES

	<b>FLEXION RESISTANCE</b>	Maximum span mm 1200 - <b>1 Class</b> EN13964
	<b>CORROSION RESISTANCE</b>	Galvanized steel products: <b>C2 Class</b> Pre-painted galvanized steel products: <b>C3 Class</b> Post-painted galvanized steel products: <b>C4 Class</b> Pre/post-painted aluminium products: <b>C5 Class</b>
	<b>(RH%) RELATIVE HUMIDITY RESISTANCE</b>	Galvanized steel products: ≤ <b>90%</b> Pre/post-painted galvanized steel products: > <b>90%</b> Stainless steel and aluminium products: > <b>90</b>
	<b>FIRE REACTION</b> UNI EN 13501-1	Structure, suspensions and wall angles: <b>A1 Class</b> Smooth or perforated panels with Plus acoustic fleece: <b>A1 Class</b> Perforated panels with Standard acoustic fleece: <b>A2s1d0 Class</b>
	<b>ACOUSTICS</b>	Information in "Acoustic Performance"
	<b>METAL CEILING MAXIMUM LOAD</b>	-
	<b>LIGHT REFLECTION</b>	Smooth glossy white: up to 85% ISO 7724-2 (3)
	<b>COLOR STABILITY</b>	In compliance with standard technical tolerances. Test according to the ΔE - CIELab method. ISO 7724-2 (3)
	<b>CLEANING</b>	Wet cloth with warm water and neutral non-abrasive detergents.
	<b>DURABILITY OF PAINTED ITEMS</b>	C Class EN13964
	<b>DURABILITY OF GALVANIZED ITEMS</b>	B Class EN13964

## SUSTAINABILITY

Data declared according to ISO 14021 standard and validated during the EPD verification. Type III environmental labelling.

	<b>RECYCLED PRODUCT CONTENT</b>	Compliance CAM 2.5.8		<b>GREEN BUILDING</b>	Requirements compliance: <b>LEED®   BREEAM®   WELL™</b> CAM 1.3.4
	<b>MATERIAL DEMOLITION AND REMOVAL</b>	Non hazardous waste in compliance with CAM 2.6.2.		<b>GREEN ENERGY</b>	Renewables prevalent use CAM 1.2
	<b>DISASSEMBLY</b>	Steel   Aluminium 100% recyclable CAM 2.6.2   2.4.14		<b>WASTE MANAGEMENT</b>	Compliance CAM 2.6.2.
	<b>ACOUSTIC PERFORMANCE</b>	CAM 2.4.11		<b>BIM DESIGN AND MAINTENANCE PLAN OF THE WORK</b>	CAM 2.7.3   2.4.13
	<b>SVHC PRESENCE</b>	Compliance CAM 2.5.7		<b>FORMALDEHYDE</b>	Absent E1 Class CAM 2.5.1.   3.2.8
	<b>RELEASE OF DANGEROUS SUBSTANCES</b>	None CAM 2.5.1.   3.2.8 EN13964			Requirement 2.5.1 - Compliance on all products. Rewarding requirement 3.2.8 - Compliance for post painted products with "Gold Leaf" high performance coating.

## WARRANTY

The warranty, covers the manufacturing products defects. Except as provided in the specific warranty extensions, the warranty period is one year from delivery of goods. Any complaints must be communicated in accordance with the sales terms and conditions. Metal ceilings system components have been conceived for this purpose only, any other use is considered improper.

## CLEANING, MAINTENANCE AND REMOVAL INSTRUCTIONS

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 warm water and neutral and non-abrasive detergents. Metal ceilings maintenance usually refers to: placement, alignment or replacement of damaged or broken modules (panels, staves, baffles, open cells) which can be also removed for restoration or maintenance of the system below. In order to ensure an excellent results, the maintenance work must be carried out by specialised workers trained with technical data sheets about setting, removal and maintenance of the metal ceilings. Using inadequate tools can damage the bearing structure, causing adherence loss or even accidental modules fall. All the maintenance intervention must follow the technical data sheet instructions or specific information when provided and every diversity has to be promptly reported. Each worker charged with maintenance operation must carefully remove the modules, perform the intervention and do not alter the metal ceiling structure, the hanging system and the connection between these elements. When the maintenance is over, modules must be installed again, checking that these are well hooked or positioned if they are lay-in/on on a visible structure and that the flatness of the assembly is guaranteed. Any difference in level is caused by wrong installation and, for this reason, the system must be quickly controlled.

## STORAGE MODE

Materials shall be maintained in good condition from purchase to installation. Materials must be stored in a closed, clean and dry site, not under direct light. Materials provided with protective films must be transported and stored in proper environmental conditions, i.e.: temperature 10 to 30°C, relative humidity 40 to 75%RH. Within three (3) months of delivery and in any case before installation, the protective films must be removed. Products are protected with resistant packaging under normal handling. Please handle packages with care to avoid shocks and inappropriate handling that might damage what is provided. 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.

## SUSTANABILITY AND SAFETY

All metal ceilings ITALIAN SELECTION are made with products that do not release dangerous substances into the environment including formaldehyde. Coating and / or sublimation are free from Volatile Organic Compounds (VOC). The products will be recyclable and as a whole manufactured using recycling processes materials, the recycled material percentage is calculated for each type of product, in compliance with CAM requirements and declared according to the ISO 14021 standard. The metal ceiling systems contribute to getting credits for the certification of building design, construction and sustainable and efficient management according to the LEED protocol and to the BREEAM and ITACA cross-cutting aspects.

## FASTENERS

IFC supplies the hangers and accessories such as screws, washers and nuts to connect the elements of its own supply only. Lightings, accessories and systems must not weigh on the metal ceiling system, but must be independently suspended. The fastening must be checked with regard to the loads, the anchoring base features and the installation accuracy, in order not to compromise the stability of the metal ceiling system.

## ANTISEISMIC EQUIPPMENTS

According to the NTC 2018, when the non-structural element is assembled on site: structure designer is in charge of identifying the request, the supplier and / or installer is in charge of providing elements and connection systems of adequate capacity, the project manager is in charge of verifying the accuracy of installation". Therefore it is necessary to communicate to IFC the stresses acting on the false ceiling (seismic acceleration, wind load,..) in order to allow a proper calculation of the single elements. For more information on IFC's anti-seismic systems, contact the reference sales offices. The documentation on the site is for example only. (NTC 2018 § 7.2.3-7.2.4).

## NORMATIVE REQUIREMENTS

IFC LTD is maker and sole distributor in Israel and Palestinian territories.

“Italian selection” products are manufactured in Italy by the selected Italian maker Atena S.p.A.

The Italian company has adopted a quality management system in compliance with the UNI EN ISO 9001 standard.

All “Italian selection” metal ceilings are produced for indoor applications, in compliance with Technical Standards for Construction NTC 2018 and relative circular requirements, the Minimum Environmental Criteria CAM (Ministerial Decree 11 October 2017), the specific technical standards applicable UNI EN 13964 and 14195. Each product has its own DOP (CE Declaration of Performance) according to the European Law for construction products 305/2011.

The performance properties declared in D.o.P. Declarations of Performance provided by the manufacturer are guarantees, if the metal ceilings are installed in the environment conditions for which it has been conceived and the recommended maintenance is executed.

Precisely, metal ceilings are non-structural construction elements therefore they must be properly sized in order to withstand with adequate safety against all actions that can stress the building, such as, but not limited to, earthquakes, winds, thermal expansion, humidity, etc., in relation to the installation site, the building use and the project technical features. Check with IFC technical department the specific environmental conditions to which the product will be subjected, in order to choose the most suitable materials for the installation site.

In the case of outdoor installation, the metal ceilings are not covered by an harmonized technical standard, therefore they are not subject to the regulation 305/2011. They are in any case subjected to the NTC 2018 and to the safety checks of civil constructions, and must be properly sized according to the installation site environmental conditions, to the structural features and to the project specifications.

The products are sold to the customer together with guarantees and technical sheets, with instructions for transport, unloading, storage, handling, installation and maintenance, supplied by the manufacturer, verified and approved by IFC.

Independently by information, suggestions, advices and technical opinions exchanged between the parts, during pre-agreement negotiations IFC will supply the 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.

All rights are reserved and subject to industrial protection. All data provided and illustrated are indicative and can be changed at any time according to the business needs and the production processes.

The information contained in this following sheet must to be considered updated at the date of writing. Changes in product performance occurred after that date may affect the accuracy of the data sheet: it is compulsory for users to make sure to have the latest version of this sheet.



Italian selection products



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MANUFACTURING  
QUALITY • DESIGN

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