



**SAFETY STRUCTURES
FOR SPORT AND ENTERTAINMENTS
STANDS - STAGES - BARRIERS**





SPORT - ENTERTAINMENT



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Tradition and innovation

Ceta was set up in 1947 in Bergamo and since then it exists and operates in what is the very "heart" of the Italian construction industry.

Its wealth of experience and technological know-how have allowed CETA to become a leading company in the creation of prefabricated scaffolding systems for the construction industry and stands for sport and entertainment.

The quality and versatility of CETA stands, grandstands and seats are widely appreciated. In fact, our order books for international events and shows, held both in Italy and overseas, are bulging.

Thanks to the special attention we pay to quality - at each stage in the production process and when dealing with our customers - the I.G.Q. (Italian Quality Institute for metal products) has found that CETA products have superior properties, well in excess of the standards required to obtain certification. And yet CETA isn't content to sit on its laurels. It's future-oriented. Only too aware of growing market demands and the need to satisfy its customers changing needs, CETA makes daily efforts to come up with new ideas and develop structures. New, more practical, safe and low-cost solutions.



The production departments and the control phases



Automated island for welding frames.



Left:
electronic thickness gauge for checking zinc-plating and paint protection.
Right:
Automatic welding lines control station.



Automatic machine for welding Multiceta cross braces.

Guaranteed quality

UNI EN ISO CERTIFICATION: 9001-2008

In October 2002 CETA obtained UNI EN ISO 9001, the Certification of Company Quality Systems.

This recognition represents a guarantee of CETA quality due to the company's full observance of precise standards in terms of research, design, production and sale of all its scaffolding products.



Guarantee of long life

Through the voluntary required certification "SQ Scaffolding", the Italian Institute of Guaranteed Quality (IGQ) for metallurgical products certifies CETA's products having superior levels of quality and safety respect of those already required by the current technical and safety standards in Italy.

Painted products are guaranteed in terms of both the quality of the paint and the painting procedure, assuring that the ASTM D 2247 test standard is met.

Hot immersion galvanised products meet EN ISO 1461 standards while **Electrolyte galvanised products** guarantee the following zinc-plating thickness: 8 micron as a minimum on couplers and 15 micron on all other single items.

Guarantee of coupling

The tolerances demanded by our production process and the executed controls guarantee the repeatability and an easy fitting for all CETA products during their assembly.

Welding process certification

All welding processes used by CETA and its suppliers have been certified by the Italian Welding Institute, SINCERT accredited laboratory.

This qualification complies with UNI EN ISO 150607 and UNI 1418 for the automatic welding systems, and UNI EN 287-1 for the semiautomatic ones.

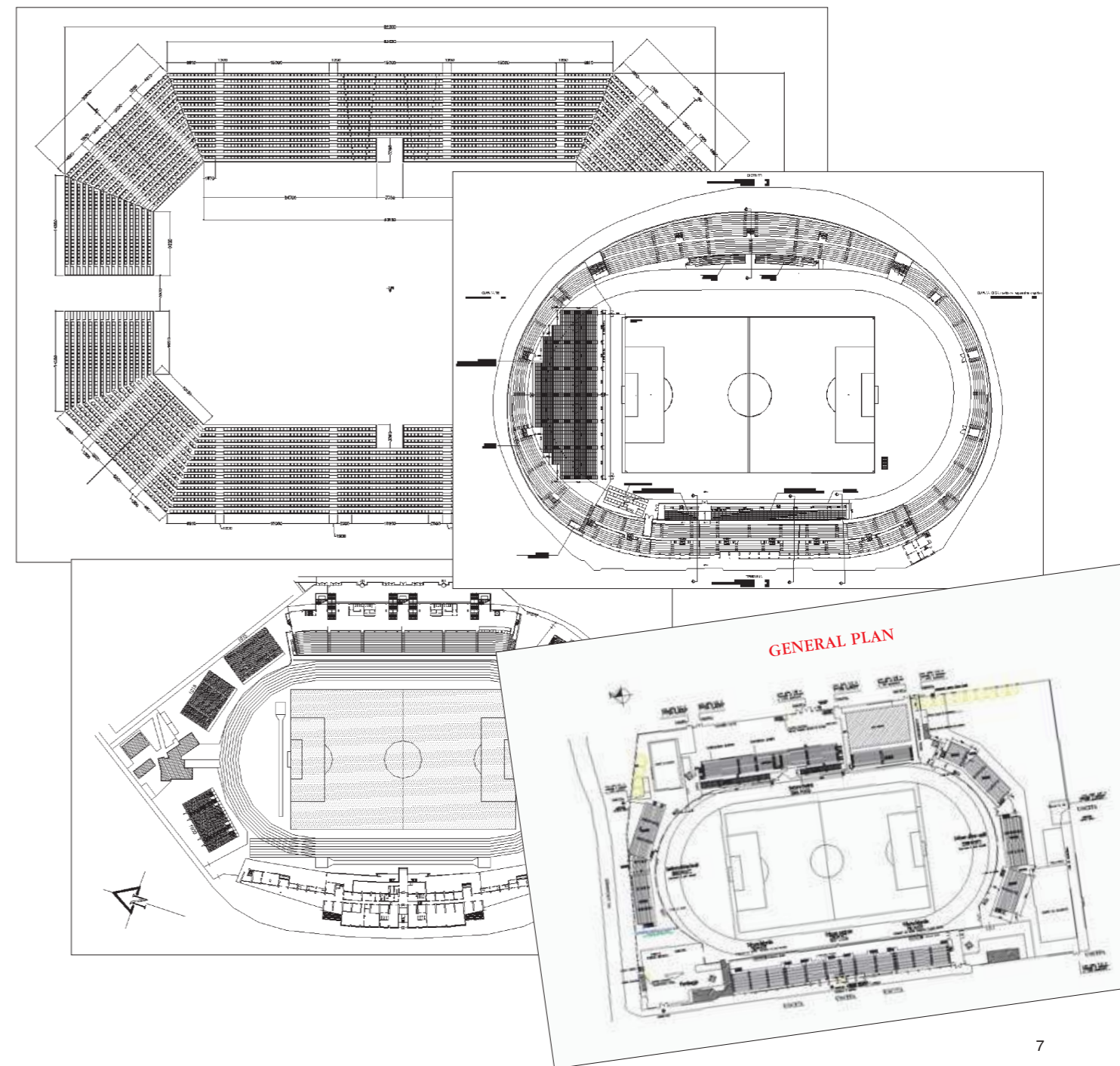
CETA expertise helps our customers

Our technical staff is at your full disposal, capable of guaranteeing the best advice on technical matters, of providing effective answers in few time and privileging customised solutions by considering any different needs.

Design, sale, hire and customer service are the fields where CETA has matched the quality of its products with an equally efficient service.

Today, the choice of scaffolding or a stand for sport and entertainment is a decision tied not just to present needs or, even less so, exclusively to question of costs.

To look ahead, to appreciate the value of the modularity of a strong system with lasting quality means to make an investment that will surely bear fruit in the present and even more so in the future.



Sport and Entertainment Division

CETA's experience in the construction industry was all-important in setting up its own Steel Structural Work Division for sport and entertainment back in 1967.

Hence the creation of stands and stages, telescopic stands, seats, covers and barriers.

In all these fields, CETA systems have proved themselves to be superior in terms of quality and lasting life, simplicity and quickness in installation, versatility in configuration and system modularity, thanks also to a full kit of complements and accessories.



(Above):
Fiorano circuit:
Ferrari 60th jubilee

Right:
Milano, Mazda Palace,
"Unità" National Festival
Footbridge.



Ravello, International Festival.

Not just steel



Firenze, Boboli Gardens, Opera Festival.



Tropea.

CETA designs and builds complete seating systems for open sports stands and interiors.

Some product lines involve a mix of plastic resins and polyurethane foam for the seats, special acrylic fabrics and coordinated use of other materials.

All CETA seats are the results of specific ergonomic studies to guarantee max comfort, even in the competitive mass-produced articles offering excellent value for money.

Special attention has been paid to the fastness and brightness of the colours under all conditions, to structural

strength, to finishing and customizing and to a perfect movement in case of reclining seats.

The seats and the chairs have **Class 1 "Fire reaction"** certification and also offer excellent results in weather and UV-ray tests.

Thanks to their structural, functional and aesthetic qualities, CETA systems are important features in the leading sports centres and entertainment complexes.

Good examples here are the imposing structures specifically developed for: the "Palio of Siena International Horse

Race", "Carabinieri" (Police Corps) and Rome foundation jubilee, "Guardia di Finanza" (police) in Gaeta, Horse Fair in Verona, Boboli Gardens in Firenze, Vigiliane Feasts in Trento, Ravello Festival, Beach soccer tournament in Terracina, Tour Intel Roma-Viareggio-Milano; Indoor Stadium in: Bologna, Rimini, Genova, Livorno, Lisbona, Siviglia, Pala hockey and Oval in Torino; City Stadium in Empoli, Livorno, Brescia, Cremona, Siena, Vodafone Cervia, to name just a few.

Venezia, MSC Musica Ship Inauguration.



Marostica: Chess open game.



Bologna: Motor Show.



Prefabricated Stands

World Skiing Alpine Championship Alta Badia.



Prefabricated Stands Series M-2M

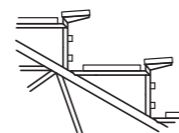
CETA offers a wide range of modular prefabricated stands made from hot-galvanised steel.

The various types include: Series M with a simple slope and 0.20 m risers and the Series 2M with a double slope and 0.40 m risers.

The prefabricated structural elements of the Series M and 2M are fully interchangeable and can be used together to get a wide choice of combinations, to suit different slopes and guarantee a perfect vision.



Series M stand
Riser: 0.20 m



Series 2M stand
Riser: 0.40 m

Construction features

The stands are built using hot-galvanised S235 JR steel tubes and profiles with continuous welding by automated systems to guarantee the perfect finish of each element (welding process qualified by the Italian Welding Institute). The stands are tested and inspected to guarantee full compliance with current legal standards and total safety and peace of mind for the spectator.



Load-bearing structure

The load-bearing structure consists of terraced frames (trusses) and supports of varying heights connected in length by the tread boards, seating elements and vertical windbracing.

The structure rests on adjustable feet capable of compensating any differences in height of the ground (up to 0.10 m).



Windbracings

The windbracings used for longitudinal connection are inserted in the trusses and supports with a double slot system and are made from tubular triangles with a locking ratchet.

Tread boards

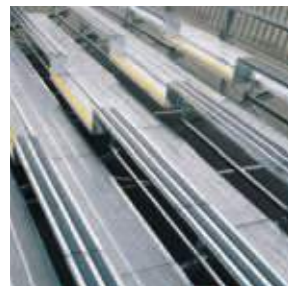
The tread boards are formed from forged steel with a non-slip relief consisting of indented triangular wedges. The boards have an original coupling system for fast assembly and safe fastening to the trusses.

Steel frames with plywood finish (class 1 fire resistance) can be supplied on request, with phenol film coating on both sides and a knurled extrados to improve weather and wear resistance.



Benches

The benches are made from a shaped steel sheet element with two slats made of high density polystyrene, opportunely shaped for greater comfort, which can be supplied in various colours. The benches are fastened to the trusses with a simple, but safe self-locking system.



Fast safe assembly

Series M and 2M stands are quick to erect thanks to the small number of bases and prefabricated elements fitted with a simple, exclusive self-locking system, free of screws and bolts. This system makes the structure monolithic, without any risk of the pieces coming apart, thus guaranteeing max safety.



Aisles

The aisle steps are made from shaped steel with a non-slip relief and fitted with strips of special non-wear wood painted yellow to highlight the way.



Toeboards

The toeboards are made from sheet metal strips and have one (series M) or two (series 2M) hooks: they are fixed to the trusses to eliminate gaps. These are secured with the same system used by the tread boards and benches.



Safety rails

Side rails, front and rear parapets are made from steel and comply with the relevant safety standards (UNI 9217); they are always at least 1 m high. The front rails are secured to the tread boards, while the rear rails are fixed to the benches or chair frames. The side rails cannot be removed as they are fixed one to each other.



Seats

CETA seats, models **Drop** (without back), **Game** (26 cm back) and **Set** (38 cm back) are fitted on a special metal support fastened to the trusses.

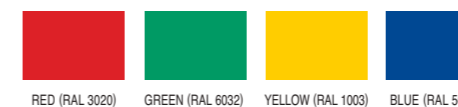
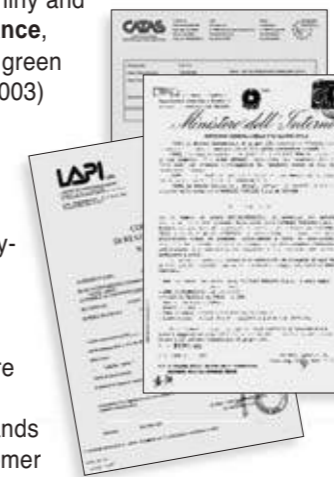
These are single-piece moulded seats made from high density copolymer polypropylene, paste coloured and enriched with UV-proof substances and fire-retardants.

The seats, which are highly ergonomic and have ribbings for extra strength, are self-supporting, drain off any rainwater quickly and have spaces for numbering.

The seats are bright and shiny and have **Class 1 Fire Resistance**, coming in red (RAL 3020), green (RAL 6032), yellow (RAL 1003) and blue (RAL 5010).

Also available in other colours on request.

CETA also has a range of chairs with blown polypropylene (**All Stars**) or up-holstered (**First Class** and **Top Class**) tip-up seats, having Class 1 and 1IM Fire Resistance. These chairs can be fitted on special stands made to order to suit customer needs.



Access stairs

The access stairs have one or more flights of 6 steps and are made from shaped steel sheet with a non-slip relief. These are easily installed in any position (front, side or within) with safety rails and landings (where appropriate).



Guaranteed safety

All metal parts are **hot-galvanised by immersion** in accordance with **UNI EN ISO 1461** requirements. This treatment guarantees complete protection against corrosion and eliminates the need for maintenance.

Fire risk

Stand with benches have virtually zero fire risk.

Seismic areas

CETA stands have been designed to withstanding seismic activity, complying with the provision of **Ministerial Decree dated 14th January 2008** Technical standards for constructions.

Special stands

CETA technical staff can develop special stands to meet specific customer requirements.

Special stands for the disabled

On request, areas and ramps to allow access for the disabled can be designed in accordance with the current standards.

Customer service

CETA guarantees its customers qualified service and technical advice to find the best solution for all intended uses of these structures.

Roma.



Corridors

The stands can be given front, intermediate or rear corridors (1.20 m wide) for free passage, again in compliance with current standards.

Prefabricated covers

CETA stands can be equipped with covers consisting of a steel load-bearing structure (piers and connection beams) and corrugated iron roofing.

Torino, Police Celebration.



Lugano, ATP Challenger Series.



A few references for Series M-2M stands

Montpellier: Mediterranean Games.



Genova: Inauguration of European Vision cruiser.



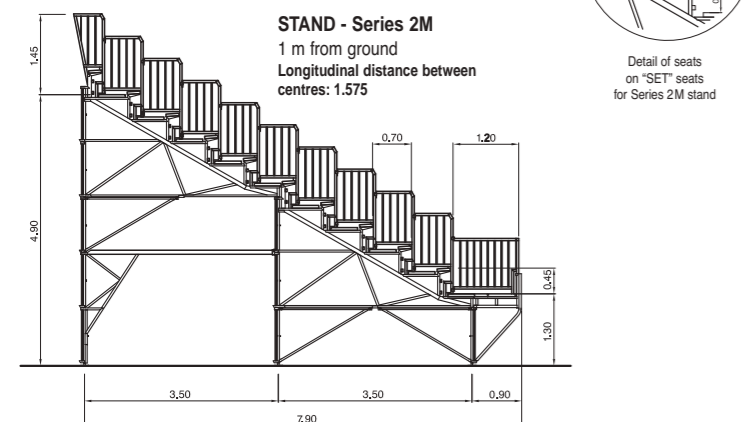
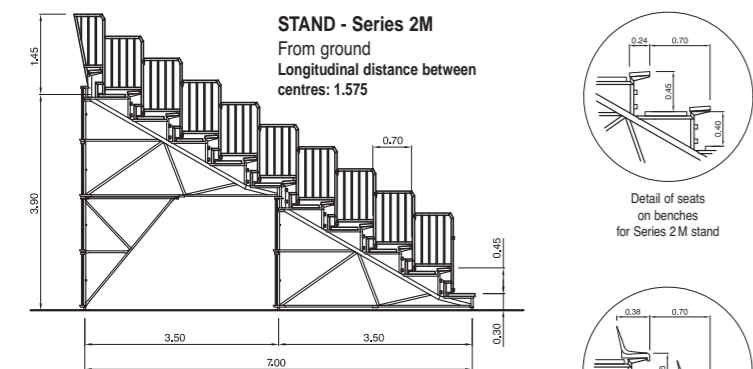
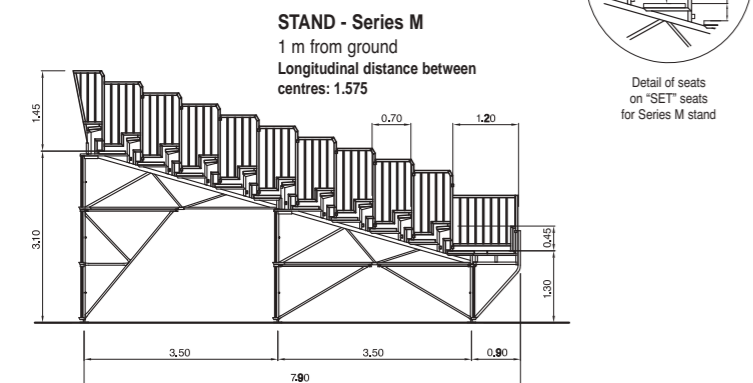
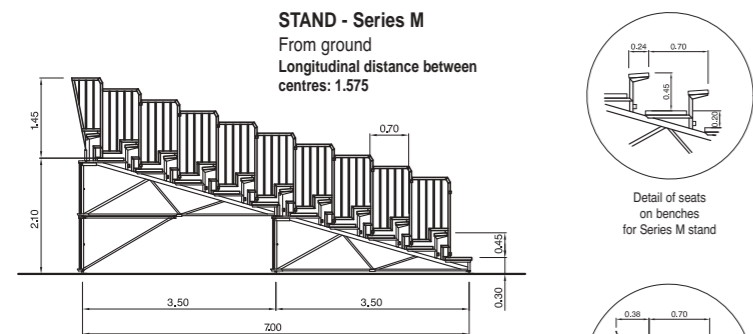
Bergamo, "Guardia di Finanza" cadet oath celebration.



Montecarlo: Country Club.



Series M-2M: drawings of some solutions



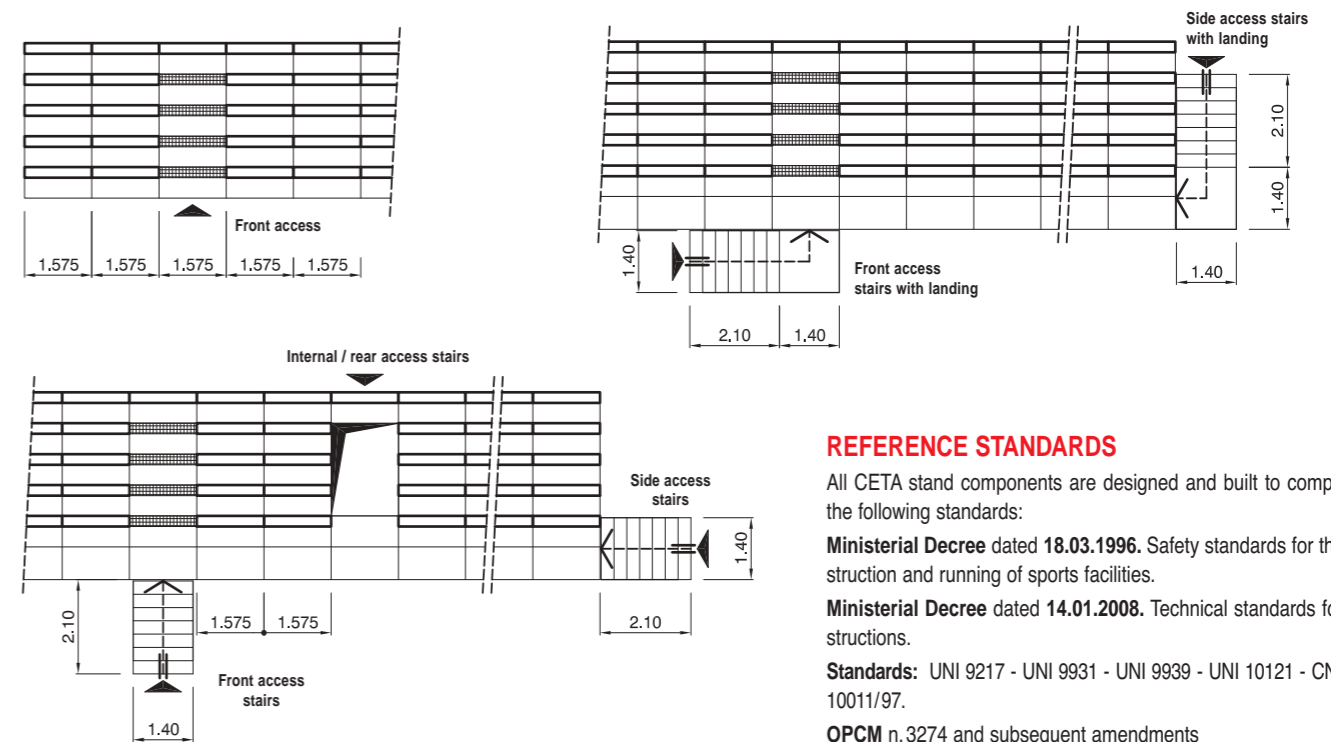
Type	N° of rows	Stand dimensions	Height of first level	Height of first seat	Height of last level	Height of last seat
M 3/0	3	2,10	0,30	0,75	0,70	1,15
M 4/0	4	2,40	0,30	0,45	0,70	1,15
M 5/0	5	3,50	0,30	0,75	1,10	1,55
M 6/0	6	4,20	0,30	0,75	1,30	1,75
M 7/0	7	4,50	0,30	0,45	1,30	1,75
M 8/0	8	5,60	0,30	0,75	1,70	2,15
M 9/0	9	5,90	0,30	0,45	1,70	2,15
M 10/0	10	7,00	0,30	0,75	2,10	2,55
M 11/0	11	7,70	0,30	0,75	2,30	2,75
M 12/0	12	8,40	0,30	0,75	2,50	2,95
M 13/0	13	9,10	0,30	0,75	2,70	3,15
M 14/0	14	9,40	0,30	0,45	2,70	3,15
M 15/0	15	10,50	0,30	0,75	3,10	3,55

Type	N° of rows	Stand dimensions	Height of first level	Height of first seat	Height of last level	Height of last seat
M 3/1	3	2,99	1,30	1,75	1,70	2,15
M 5/1	5	4,39	1,30	1,75	2,10	2,55
M 6/1	6	5,09	1,30	1,75	2,30	2,75
M 8/1	8	6,49	1,30	1,75	2,70	3,15
M 10/1	10	7,89	1,30	1,75	3,10	3,55
M 11/1	11	8,59	1,30	1,75	3,30	3,75
M 12/1	12	9,29	1,30	1,75	3,50	3,95
M 13/1	13	9,99	1,30	1,75	3,70	4,15
M 15/1	15	11,39	1,30	1,75	4,10	4,55
M 16/1	16	12,09	1,30	1,75	4,30	4,75
M 17/1	17	12,79	1,30	1,75	4,50	4,95
M 18/1	18	13,49	1,30	1,75	4,70	5,15

Type	N° of rows	Stand dimensions	Height of first level	Height of first seat	Height of last level	Height of last seat
2M 3/0	3	2,10	0,30	0,75	1,10	1,55
2M 4/0	4	2,40	0,30	0,45	1,10	1,55
2M 5/0	5	3,50	0,30	0,75	1,90	2,35
2M 6/0	6	4,20	0,30	0,75	2,30	2,75
2M 7/0	7	4,50	0,30	0,45	2,30	2,75
2M 8/0	8	5,60	0,30	0,75	3,10	3,55
2M 9/0	9	5,90	0,30	0,45	3,10	3,55
2M 10/0	10	7,00	0,30	0,75	3,90	4,35
2M 11/0	11	7,70	0,30	0,75	4,30	4,75
2M 12/0	12	8,40	0,30	0,75	4,70	5,15
2M 13/0	13	9,10	0,30	0,75	5,10	5,55
2M 14/0	14	9,40	0,30	0,45	5,10	5,55
2M 15/0	15	10,50	0,30	0,75	5,90	6,35

Type	N° of rows	Stand dimensions	Height of first level	Height of first seat	Height of last level	Height of last seat
2M 3/1	3	3,22	1,30	1,75	2,10	2,55
2M 5/1	5	4,62	1,30	1,75	2,90	3,35
2M 6/1	6	5,32	1,30	1,75	3,30	3,75
2M 8/1	8	6,72	1,30	1,75	4,10	4,55
2M 10/1	10	8,12	1,30	1,75	4,90	5,35
2M 11/1	11	8,82	1,30	1,75	5,30	5,75
2M 12/1	12	9,52	1,30	1,75	5,70	6,15
2M 13/1	13	10,22	1,30	1,75	6,10	6,55
2M 15/1	15	11,62	1,30	1,75	6,90	7,35
2M 16/1	16	12,32	1,30	1,75	7,30	7,75
2M 17/1	17	13,02	1,30	1,75	7,70	8,15
2M 18/1	18	13,72	1,30	1,75	8,10	8,55

Access types



REFERENCE STANDARDS

All CETA stand components are designed and built to comply with the following standards:

Ministerial Decree dated 18.03.1996. Safety standards for the construction and running of sports facilities.

Ministerial Decree dated 14.01.2008. Technical standards for constructions. **New**

Standards: UNI 9217 - UNI 9931 - UNI 9939 - UNI 10121 - CNR UNI 10011/97.

OPCM n.3274 and subsequent amendments

CETA SPA reserves the right to make changes, at any time and without notice, for the technical characteristics of the elements illustrated in this catalogue.

Siracusa, Live Show.



Prefabricated Stands Series GM - G2M

In addition to the **Series M - 2M**, CETA also offers its new **GM** and **G2M** stands, which have been studied and produced with quality design criteria. The goal always being to offer spectators more comfort and safety. The modular prefabricated elements can be coupled together in order to get stands from 3 to a large number of rows.

The various elements (cross-bars and beams) are connected following a set order and have self-locking devices to prevent them from coming apart by accident.

Series GM - G2M stands have a step riser 0.20 m (GM) or 0.40 m (G2M) high and a 0.75 m tread. Designed in compliance with current safety laws and standards.



Load-bearing structure

The load-bearing structure consists of terraced frames (trusses) and supports of varying heights connected in length by the tread boards and vertical wind-bracing.

The structure rests on adjustable feet capable of compensating for any unevenness (up to 0.10 m).



Tread boards - Benches

The tread boards are formed from forged steel with a non-slip relief consisting of indented triangular wedges.

The boards have an original coupling system for safe fastening to the trusses.

Two slats made of high density polystyrene, opportunely shaped for greater comfort on the benches, are inserted in special grooves in the front.



Windbracings

The windbracings used for longitudinal connection are inserted in the trusses and supports with a double slot system and are made from tubular triangles with a locking ratchet.



Construction features

Series GM and G2M prefabricated stands fully comply with current standards and are built using hot-galvanised S235 JR steel tubes and profiles with continuous welding by automated systems to guarantee the perfect finish of each element (welding process qualified by the Italian Welding Institute).

Quality controls are performed at each stage, both in the design and production process, and systematic checks are made on the end product.



Quick and easy assembly

Series GM and G2M stands are quick to assemble thanks to the small number of bases and prefabricated elements fitted with a simple, exclusive self-locking system, free of screws and bolts. This system makes the structure monolithic, without any risk of the pieces coming apart, thus guaranteeing max safety.



Corridors

The stands can be fitted with front, intermediate or rear corridors (1.20 m wide) for free passage, in compliance with current standards.

Prefabricated covers

Each stand can be equipped with covers consisting of a steel load-bearing structure (piers and connection beams) and corrugated iron roofing.

Guaranteed safety

All metal parts are **hot-galvanised by immersion** in accordance with **UNI EN ISO 1461** requirements.

This treatment guarantees complete protection against corrosion and eliminates the need for maintenance.

Fire risk

Stand with benches have virtually zero fire risk.

Seismic areas

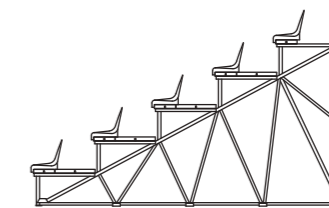
CETA prefabricated GM and G2M stands have been designed to withstand seismic activity, complying with the provision of **Ministerial Decree dated 14th January 2008** Technical standards for constructions. New

Special stands

CETA technical staff can develop special stands to meet specific customer requirements.

Special stands for the disabled

On request, areas and ramps to allow access for the disabled can be designed in accordance with the current standards.



Series G2M stand
Riser: 0.40 m

Aisles

The aisle steps are made from shaped steel with a non-slip relief and a completely filled riser.

The boards are fitted with strips of special non-wear wood painted yellow to highlight the way.



Access stairs

The access stairs have one or more flights of 6 steps and are made from shaped steel sheet with a non-slip relief.

These are easily installed in any position (front, side or within) with safety rails and landings.



Safety rails

Side rails, front and rear parapets are made from steel and comply with the relevant safety standards EN 13200-3:2005 (UNI 9217); they are always at least 1,10 m high.

All rails are secured to the tread boards, while the side rails are fixed to each other.



Buffering

Buffer strips made from bent sheet metal with two hooks are applied to the trusses to cover the terrace risers using a special self-locking system.



Seats

CETA seats, models **Drop** (without back), **Game** (26 cm back) and **Set** (38 cm back) are fitted directly to the front of the tread board.

These are single-piece moulded seats made from high density copolymer polypropylene, paste coloured and enriched with UV-proof substances and fire-retardants.

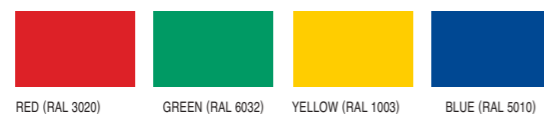
The seats, which are highly ergonomic and have ribbings for extra strength, are self-supporting, drain off any rainwater quickly and have spaces for numbering on request.

The seats are bright and shiny and have **Class 1 Fire Resistance**, coming in red (RAL 3020), green (RAL 6032), yellow (RAL 1003) and blue (RAL 5010).

Also available in other colours.

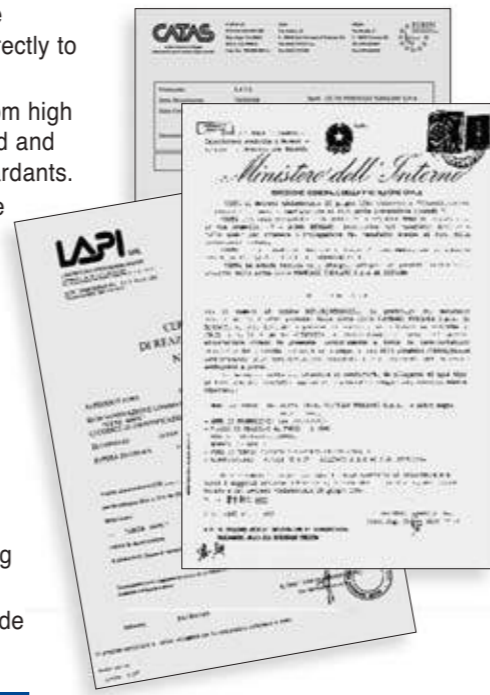
CETA also has a range of chairs with blown polypropylene (**All Stars**) or up-holstered (**First Class and Top Class**) tip-up seats, having Class 1 and 1IM Fire Resistance.

These chairs can be fitted on special stands made to order to suit Customer needs.

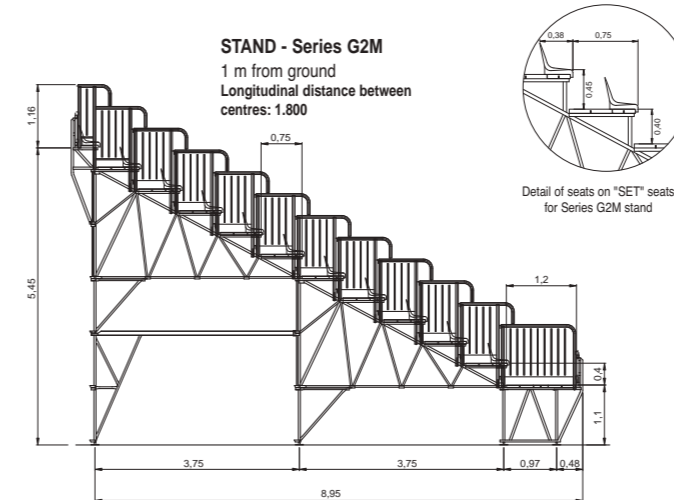
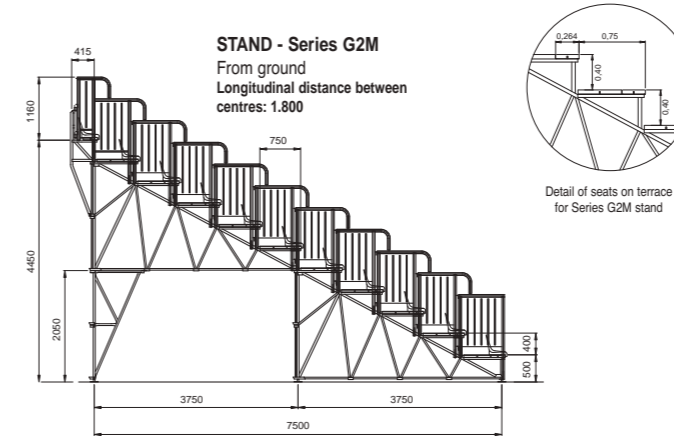


Customer service

CETA guarantees its customers qualified service and technical advice to find the best solution for all intended uses of these structures.



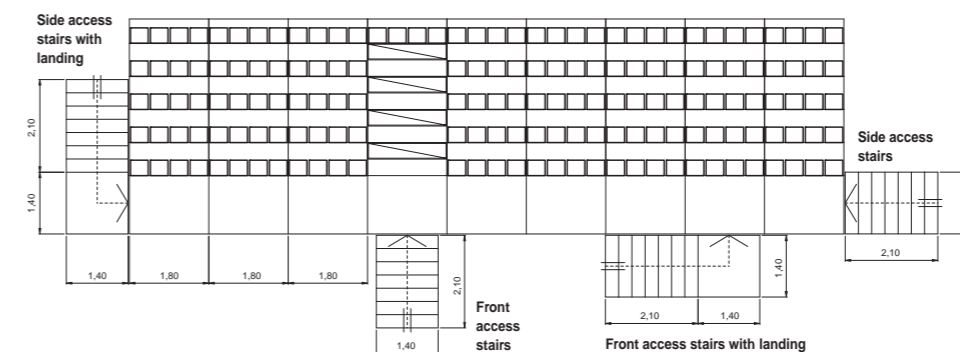
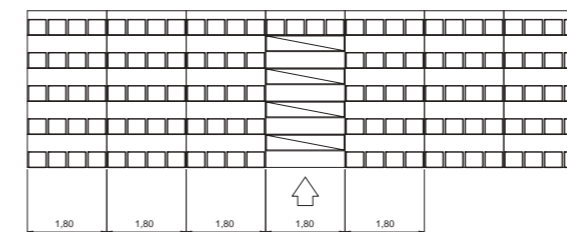
Series G2M: drawings of some solutions



Type	N° of rows	Stand dimensions	Height of first level	Height of first seat	Height of last level	Height of last seat
G2M 3/0	3	2,25	0,50	0,50	1,30	1,30
G2M 4/0	4	3,00	0,50	0,50	1,70	1,70
G2M 5/0	5	3,75	0,50	0,50	2,10	2,10
G2M 6/0	6	4,20	0,50	0,50	2,50	2,50
G2M 7/0	7	4,93	0,50	0,50	2,90	2,90
G2M 8/0	8	6,00	0,50	0,50	3,30	3,30
G2M 9/0	9	6,75	0,50	0,50	3,70	3,70
G2M 10/0	10	7,50	0,50	0,50	4,10	4,10
G2M 11/0	11	7,93	0,50	0,50	4,50	4,50
G2M 12/0	12	8,68	0,50	0,50	4,90	4,90
G2M 13/0	13	9,75	0,50	0,50	5,30	5,30
G2M 14/0	14	10,50	0,50	0,50	5,70	5,70
G2M 15/0	15	11,25	0,50	0,50	6,10	6,10
G2M 16/0	16	11,68	0,50	0,50	6,50	6,50
G2M 17/0	17	12,43	0,50	0,50	6,90	6,90
G2M 18/0	18	13,50	0,50	0,50	7,30	7,30
G2M 19/0	19	14,25	0,50	0,50	7,70	7,70
G2M 20/0	20	15,00	0,50	0,50	8,10	8,10
G2M 21/0	21	15,43	0,50	0,50	8,50	8,50
G2M 22/0	22	16,20	0,50	0,50	8,90	8,90
G2M 23/0	23	17,25	0,50	0,50	9,30	9,30
G2M 24/0	24	18,00	0,50	0,50	9,70	9,70
G2M 25/0	25	18,75	0,50	0,50	10,10	10,10
G2M 26/0	26	23,05	0,50	0,50	10,50	10,50

Type	N° of rows	Stand dimensions	Height of first level	Height of first seat	Height of last level	Height of last seat
G2M 3/1	3	3,70	1,10	1,10	2,30	2,30
G2M 5/1	5	5,20	1,10	1,10	3,10	3,10
G2M 6/1	6	5,65	1,10	1,10	3,50	3,50
G2M 8/1	8	7,45	1,10	1,10	4,30	4,30
G2M 10/1	10	8,95	1,10	1,10	5,10	5,10
G2M 11/1	11	9,38	1,10	1,10	5,50	5,50
G2M 12/1	12	10,13	1,10	1,10	5,90	5,90
G2M 13/1	13	11,20	1,10	1,10	6,30	6,30
G2M 15/1	15	12,70	1,10	1,10	7,10	7,10
G2M 16/1	16	13,13	1,10	1,10	7,50	7,50
G2M 17/1	17	13,88	1,10	1,10	7,90	7,90
G2M 18/1	18	14,95	1,10	1,10	8,30	8,30
G2M 20/1	20	16,45	1,10	1,10	9,10	9,10
G2M 21/1	21	16,88	1,10	1,10	9,50	9,50

Access types



REFERENCE STANDARDS

All CETA stand components are designed and built to comply with the following standards:
OPCM: n. 3274 dated 20.03.2003. Initial elements regarding general criteria for the seismic classification of Italian territory and technical building standards for seismic areas (and subsequent amendments).

OPCM: n. 3519 dated 28.04.2006. General criteria for the identification of seismic areas and for the compilation and updating of the lists of said areas.

Ministerial Decree dated 14.01.2008. Technical standards for constructions.

UNI 9217 Sport facilities and grandstands.

Characteristics and general requirements.

Ministerial Decree dated 18.03.1996 Safety standards for the construction and running of sports facilities.

Ministerial Decree dated 06.06.2005

Modifications to D.M.18.03.1996 (Pisanu Decree).

EN 13200 - 3:2005. Spectator facilities - Separating elements - Requirements

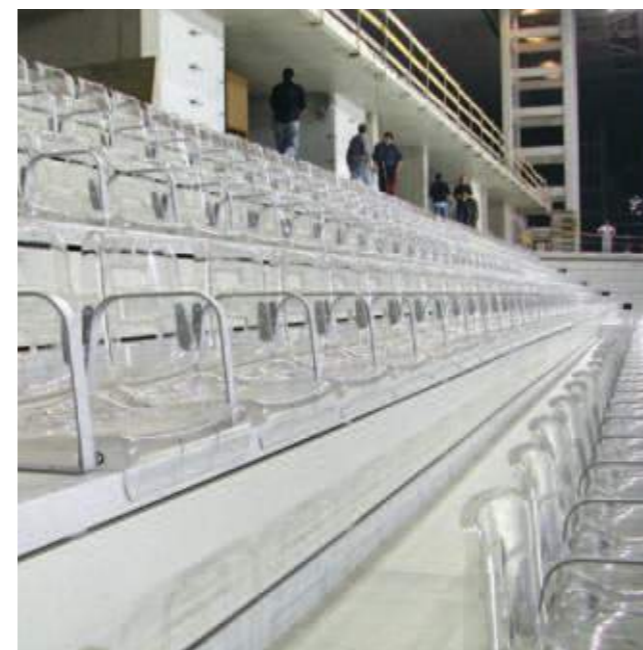
CETA SPA reserves the right to make changes, at any time and without notice, for the technical characteristics of the elements illustrated in this catalogue.

Telescopic Stands: stands that restore space

Livorno, Multipurpose Indoor stadium "Palalivorno".



Torino, Pala Hockey.



Functional and structural features

CETA's telescopic stands are designed with cutting-edge technology and offer the best answer to the ever more frequent need for interior space. These structures run on wheels and are easily extracted in a matter of minutes to provide a large number of spectator seats. After the event, it's equally simple and fast to return the stand to a compact,

perfectly aligned unit taking up the minimum of space. In this way, gyms, indoor stadiums, congress halls and many other interiors can be organised in a truly flexible manner and with significant reductions in running costs. Different activities can thus be held in the same interior: sports events, teaching sessions, competitions, shows and many other kinds of events.



The stands that furnish

Solutions designed to suit the specific needs of the customer; the constant search for top quality materials; bearing structures and seats perfectly integrated to suit the context: all these factors help make telescopic stands the perfect solution for all interiors, enhancing both its architectural and functional aspects.



The stand opens and closes smoothly thanks to trolleys that support the terraces; simply pulling out the first terrace, the others connected to this follow in turn.

When closed, the terraces are stacked one on top of the other to create a very compact "cabinet". The stand can also be partially opened to make more space for other purposes.

Castors for all surfaces

Castors allow the trolleys to move over the floor and guide the opening/closing procedure: there are two of them at the rear of each trolley to bear the weight of this and one at the front for stability.

The castors have ball bearings and are coated with polyamide and polyurethane to suit the intended use and type of surface. In fact, some floors in gym, indoor stadiums and other buildings may be particularly delicate, meaning that a castor with the right type of coating is essential to avoid the risk of scratching or marking the surface.



Wheels and rollers for perfect movement

The wheels ensure the trolleys move smoothly, while the rollers eliminate friction between one tread board and the next.

The sectors are kept 100% parallel when opening/closing, for a fast operation requiring the minimum of manual effort.

Self-locking devices to guarantee max stability

These are found at the base of each riser and prevent the trolleys from moving once fully opened.

They thus make the stand 100% stable and safe.

These devices are automatically released only while the stand is being closed by authorised personnel.



Functional and structural features

Total quality with max safety

CETA's telescopic stands are designed in full compliance with current legal standards, even for buildings in seismic areas. They are built using hot-galvanised S235 JR steel tubes and profiles with continuous welding by automated systems to guarantee the perfect finish of each element (welding process qualified by the Italian Welding Institute). Special attention is paid to the coating of the stand, which is a strong multi-layer one. In line with its policy of total reliability, CETA carries out accurate tests and quality controls at all stages of the production process to guarantee compliance with the standards and absolute safety and peace of mind for the spectator.



Fixed or removable anchoring

The stands are anchored to the ground at the last trolley by means of screw anchors. If the structure is particularly high, it can be also fixed to the wall with brackets. The solution is particularly useful when one wants to protect special flooring and floors.

On request, mobile anchor systems can be used to fix the stand to the floor or wall.

For example, this system is used for moveable stands where the single sectors can be separated and moved away from their original position.

Long-lasting paint

To guarantee long life for the paint, all metal parts are specially treated. First, all traces of impurity and welding burrs are removed mechanically, followed by degreasing and pickling.

Then the metal is coated with ferrous salt phosphate at 60° C to guarantee its resistance to corrosion. Finally the metal is oven painted via electrostatic application of coloured and catalysed epoxy powder followed by polymerisation baking at 190° C for 20 minutes.

The standard colour is semi-gloss black; other colours are available on request.

Steel load-bearing structure



The load-bearing structure of the mobile element (the terrace) in telescopic stands consists of two trolleys and the frame bearing the tread board. Each trolley comprises a closed-profile riser and lower "C" transom with the castor wheels.

The frame for the tread board is made from square and rectangular tubes and consists of a string rear beam and a front cross brace linked by small transoms that also act as a support for the plywood cover. Two diagonal braces and a lower cross brace made from square tubes provide extra reinforcement and prevent possible wobbling due to the dynamic force of the crowd.

The ends of the profiles are closed with plastic plugs to improve the look and to assure safety for people.



Side rails for max protection

The stand has side rails and can also be fitted with front and rear parapets if necessary. The side rails are made from steel and comply with the relevant safety standards (UNI 9217 and the Italian Ministerial Decree dated 14th January 2008).

The rails are always at least 1 metre high.

The side rails are arranged one per row and are linked together by simple bayonet couplings. These rails also provide further straightening for the structure.

Where applicable, telescopic side rails can be supplied to avoid the need to remove them when closing the stand.

Finishes and optionals

The tread boards, benches, front risers and steps are all made from waterproof plywood (15 and 18 mm thick) with phenol film coating on both sides making them waterproof and more wear resistant.

The layers (15. mm each) are glued together with phenol adhesive, for resistance to both boiling water and harsh weather conditions.

The timber used has Class 1 fire certification (tests C.S.E. - RF 2/75 - A and C.S.E. - RF 3/77 - Ministerial Decree 26.06.1984).

The visible surfaces of the tread boards and steps can be fitted with special guiding lights and are gently embossed for non-slip passage-ways.

The benches, having rounded edges and the front risers are smooth and elegant.

All these features make CETA's telescopic stands extremely safe and comfortable, guaranteeing added value that will surely be appreciated by the end user too.

Optional finishes: a wide choice

If specifically requested, the tread boards and the steps can be covered with carpet or rubber, with Class 1 fire resistance.

The benches can be made by extruded aluminium with high pressure layered and coloured lamination (2.5 mm thick), particularly shockproof and waterproof, with good resistance to steam and chemicals, always with Class 1 fire resistance.

The stands can also be fitted with side and rear buffer strips made from PVC or wood (Class 1 fire resistance) to cover the metal structure and improve the look of the stand.

Corridors and access stairs on request

On request, the stands (both at ground level or raised) can be fitted with tip-up front corridors and rails.

These disappear completely once the structure is closed.

Intermediate and rear corridors can also be fitted, as well as access stairs with mobile or telescopic landings, plus suitable areas and access ramps for the disabled.



Finishes and optionals

CETA stand technology for all applications

The many different areas of application for telescopic stands have led to the need to study structures that better meet each customer's specific space requirements and intended use.

Thanks to the high standard of CETA technology, telescopic stand systems have been developed and built to allow for even more flexible use of the stands and full exploitation of the available space, while making the user's work easier. The types of telescopic stand described below can all be made on request.



Motorised stand



Instead of manually opening and closing the stands, this is done electrically thanks to the application, to the first terrace, of draft trolleys driven by gear motors.

One or more sectors of the stand can be moved and stopped using a mobile pushbutton panel connected to a control box. A warning light and buzzer indicate that the stand is moving. Motorised stands have the CE mark and are supplied with the necessary instructions for use and servicing.



Under-floor stands

The stand can be closed until it disappears completely under the reinforced concrete floor of the building, thus recovering even more space. Under-floor stands are the ideal solution when you need continuity between the telescopic stand and the above section, access from above and the application of the last seat directly on the floor itself.

Moveable stands

Each section of the stand, if pre-fitted and without fixed anchoring, can be moved in all directions. The stand is moved by means of lifting transpallets and two trolleys fitted with pivoting wheels and ball bearings, covered with polyurethane for fast and easy movement. This lets you make the most of the available space, use sections of the stand in different areas or store them.

The stands can also be driven, controlled by industrial computers. This solution is recommended for large structures.

Our staff at your disposal to meet your every need

CETA's technical staff is happy to develop special stands to meet the customer's specific needs. CETA also guarantees qualified service and assistance to find the best solution to all problems connected with the use of the structure.

The choice of seat

Telescopic stands can be fitted not just with simple benches, but also with other types of seats. Here is a large look at the types of seats CETA offers. For further details, please ask for our specific "CETA seats" catalogue.



Drop-Game moulded seats

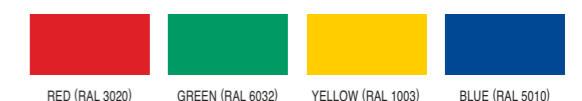
The Drop (without back) and Game (26 cm back) seats are made from high density copolymer polypropylene, paste-coloured and enriched with UV-proof substances and fire-retardants (Class 1 fire resistance).

Self-supporting, the seats have ribbings for extra strength and small channels with holes to drain off any water quickly.



CETA seats are placed directly on the tread of each terrace and remain inserted even when the stand is closed. Bright and shiny, the seats come in red (RAL 3020), green (RAL 6032), yellow (RAL 1003) and blue (RAL 5010). Also available in other colours with minimum orders of 1000 seats.

The seats can also be numbered (optional) with Plexiglas plates fixed to these with a permanent holding device, the number being silk-screen printed and so indelible.



The choice of seat

Blown seats: All Stars

These chairs are blow-moulded using high density copolymer polypropylene, paste-coloured and enriched with UV-proof and antistatic substances and fire-retardants (Class 1 fire resistance). Self-supporting and fitted with ribbing for extra strength, the chairs consist of separate seats and back with an embossed-effect surface thanks to photo-engraving during moulding.

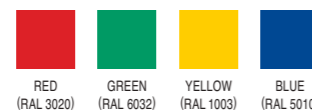


the underside of the seat or to the front or rear of the back, the number being silk-screen printed making it indelible. Plates identifying the row or sector are also possible.



Standard colours are red (RAL 3020), green (RAL 6032), yellow (RAL 1003) and blue (RAL 5010).

Also available in other colours with minimum orders of 500 seats.



Optional

Automatic tip-up system of a group of seats fitted on beam.

Thanks to their modern ergonomic shape and thickness, these chairs are especially comfortable and can even be fitted with armrests on request.

The tip-up seats make it easier for people to pass and involve an automatic spring device, or they close thanks to gravity in the case of tip-up chairs with armrests. In fact, the armrests have springs that always tip up automatically together with the seat. "All Stars" chairs are normally fitted in groups of 2, 3 or 4 on tip-up beams fitted to the rear of the tread board.

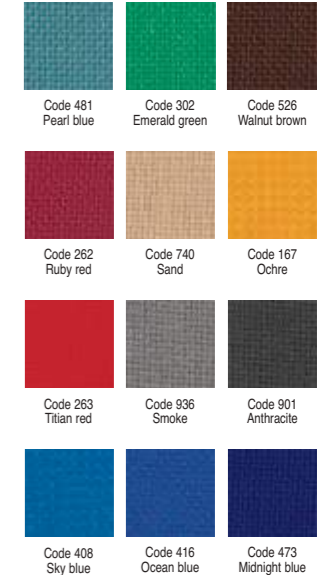
These chairs can also be used with low terraces and disappear from view when the telescopic stand is closed.

When fitted on the front of the tread board, the chairs still remain inside the structure when closed after lowering the backs forward.

The chairs can also be numbered (optional) with Plexiglas plates fixed to either

Upholstered chairs: First Class, Top Class

First Class (without armrests) and Top Class (with armrests) chairs have separate seats and backs and are Class 1 IM fire retardant.



Extremely elegant and comfortable, the chairs are made from a strong steel core and upholstered with expanded foam and fabric in a variety of shades.

The fabric is 100 % non-tear, hyper-allergenic and non-stain.

The tip-up seats make it easier for people to pass and involve an automatic spring device, or spring and gravity in the case of Top Class tip-up chairs with armrests.



The armrests are made from steel with an integral self-extinguishing polyurethane cover and have springs so that they always tip-up automatically together with the seat. Thanks to the tip-up beams to which the chairs are normally fitted in groups of 2, 3 or 4, these chairs can also be used with low terraces and disappear from view when the telescopic stand is closed.

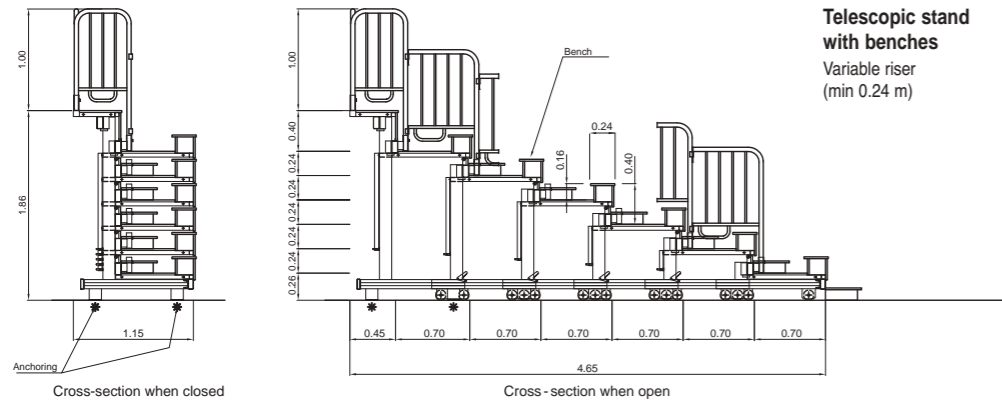
The chairs can be numbered (optional) with engraved PVC plates fixed to the underside of the seat. Plates identifying the row or sector are also possible.

Optional

Automatic tip-up system of a group of seats fitted on beam.

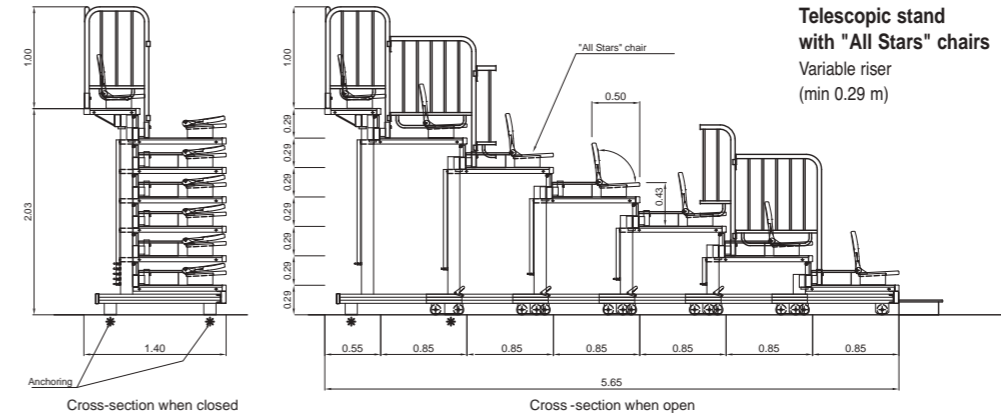


Dimensions. Drawings of some solutions



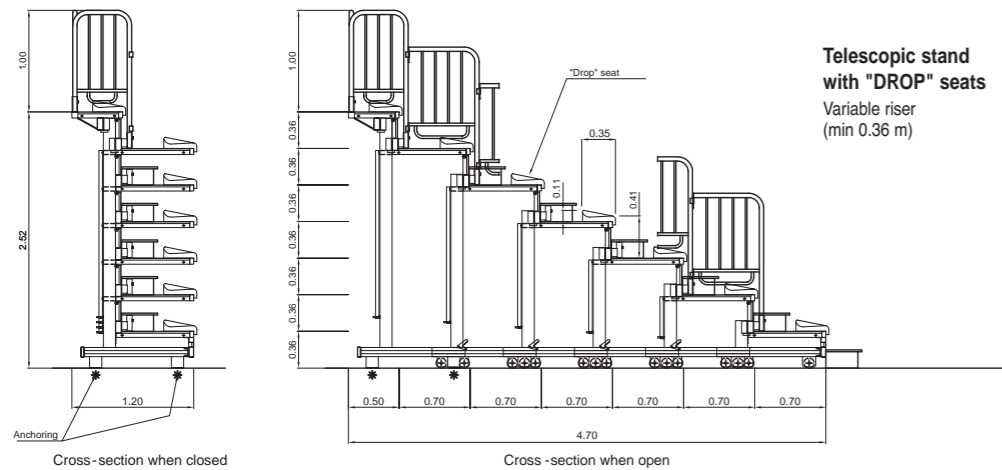
Type	N° of rows	Dimensions when closed	Dimensions when open	Height of last bench
TM 3	3	1,15	1,85	0,90
TM 4	4	1,15	2,55	1,14
TM 5	5	1,15	3,25	1,38
TM 6	6	1,15	3,95	1,62
TM 7	7	1,15	4,65	1,86
TM 8	8	1,15	5,35	2,10
TM 9	9	1,15	6,05	2,34
TM 10	10	1,15	6,75	2,58
TM 11	11	1,15	7,45	2,82
TM 12	12	1,15	8,15	3,06
TM 13	13	1,15	8,85	3,30
TM 14	14	1,15	9,55	3,54
TM 15	15	1,15	10,25	3,78

Riser 0,24 Tread 0,70



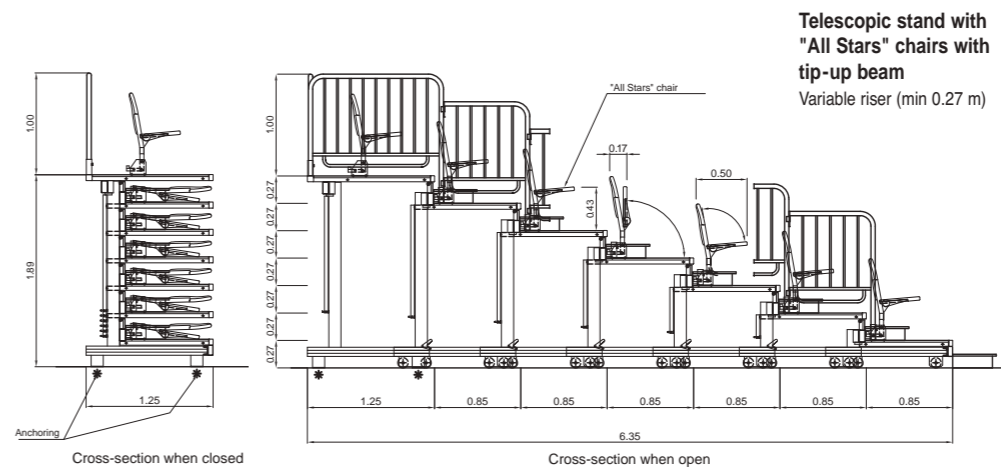
Type	N° of rows	Dimensions when closed	Dimensions when open	Height of last bench
TM 3	3	1,40	2,25	0,87
TM 4	4	1,40	3,10	1,16
TM 5	5	1,40	3,95	1,45
TM 6	6	1,40	4,80	1,74
TM 7	7	1,40	5,65	2,03
TM 8	8	1,40	6,50	2,32
TM 9	9	1,40	7,35	2,61
TM 10	10	1,40	8,20	2,90
TM 11	11	1,40	9,05	3,19
TM 12	12	1,40	9,90	3,48
TM 13	13	1,40	10,75	3,77
TM 14	14	1,40	11,60	4,06
TM 15	15	1,40	12,45	4,35

Riser 0,29 Tread 0,85



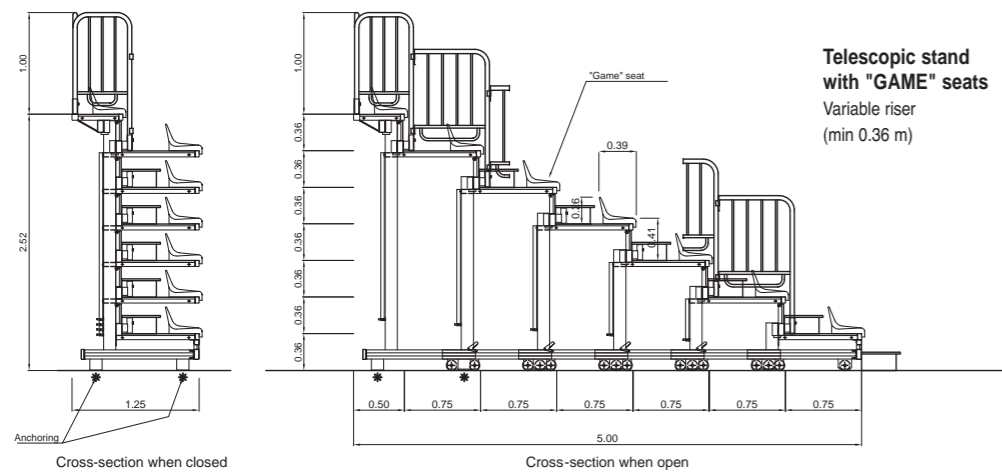
Type	N° of rows	Dimensions when closed	Dimensions when open	Height of last bench
TM 3	3	1,20	1,90	1,08
TM 4	4	1,20	2,60	1,44
TM 5	5	1,20	3,30	1,80
TM 6	6	1,20	4,00	2,16
TM 7	7	1,20	4,70	2,52
TM 8	8	1,20	5,40	2,88
TM 9	9	1,20	6,10	3,24
TM 10	10	1,20	6,80	3,60
TM 11	11	1,20	7,50	3,96
TM 12	12	1,20	8,20	4,32
TM 13	13	1,20	8,90	4,68
TM 14	14	1,20	9,60	5,04
TM 15	15	1,20	10,30	5,40

Riser 0,36 Tread 0,70



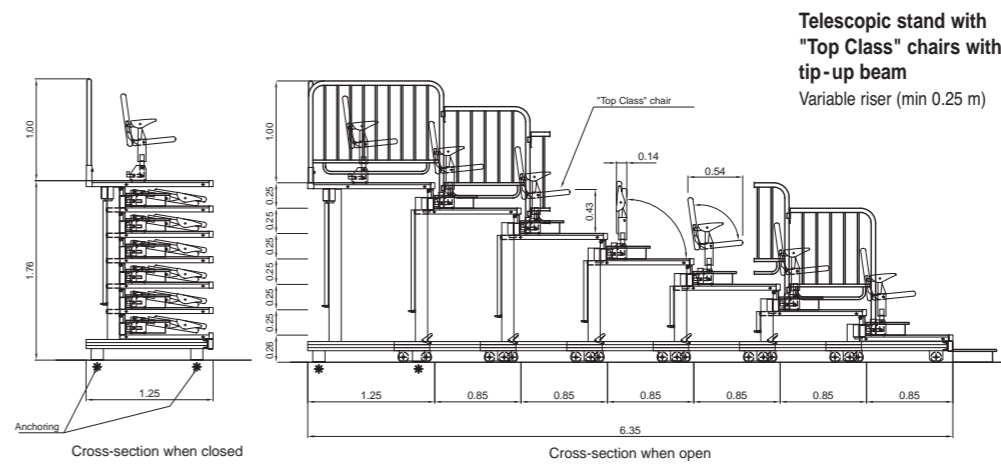
Type	N° of rows	Dimensions when closed	Dimensions when open	Height of last bench
TM 3	3	1,25	2,95	0,81
TM 4	4	1,25	3,80	1,08
TM 5	5	1,25	4,65	1,35
TM 6	6	1,25	5,50	1,62
TM 7	7	1,25	6,35	1,89
TM 8	8	1,25	7,20	2,16
TM 9	9	1,25	8,05	2,43
TM 10	10	1,25	8,90	2,70
TM 11	11	1,25	9,75	2,97
TM 12	12	1,25	10,60	3,24
TM 13	13	1,25	11,45	3,51
TM 14	14	1,25	12,30	3,78
TM 15	15	1,25	13,15	4,05

Riser 0,27 Tread 0,85



Type	N° of rows	Dimensions when closed	Dimensions when open	Height of last bench
TM 3	3	1,25	2,00	1,08
TM 4	4	1,25	2,75	1,44
TM 5	5	1,25	3,50	1,80
TM 6	6	1,25	4,25	2,16
TM 7	7	1,25	5,00	2,52
TM 8	8	1,25	5,75	2,88
TM 9	9	1,25	6,50	3,24
TM 10	10	1,25	7,25	3,60
TM 11	11	1,25	8,00	3,96
TM 12	12	1,25	8,75	4,32
TM 13	13	1,25	9,50	4,68
TM 14	14	1,25	10,25	5,04
TM 15	15	1,25	11,00	5,40

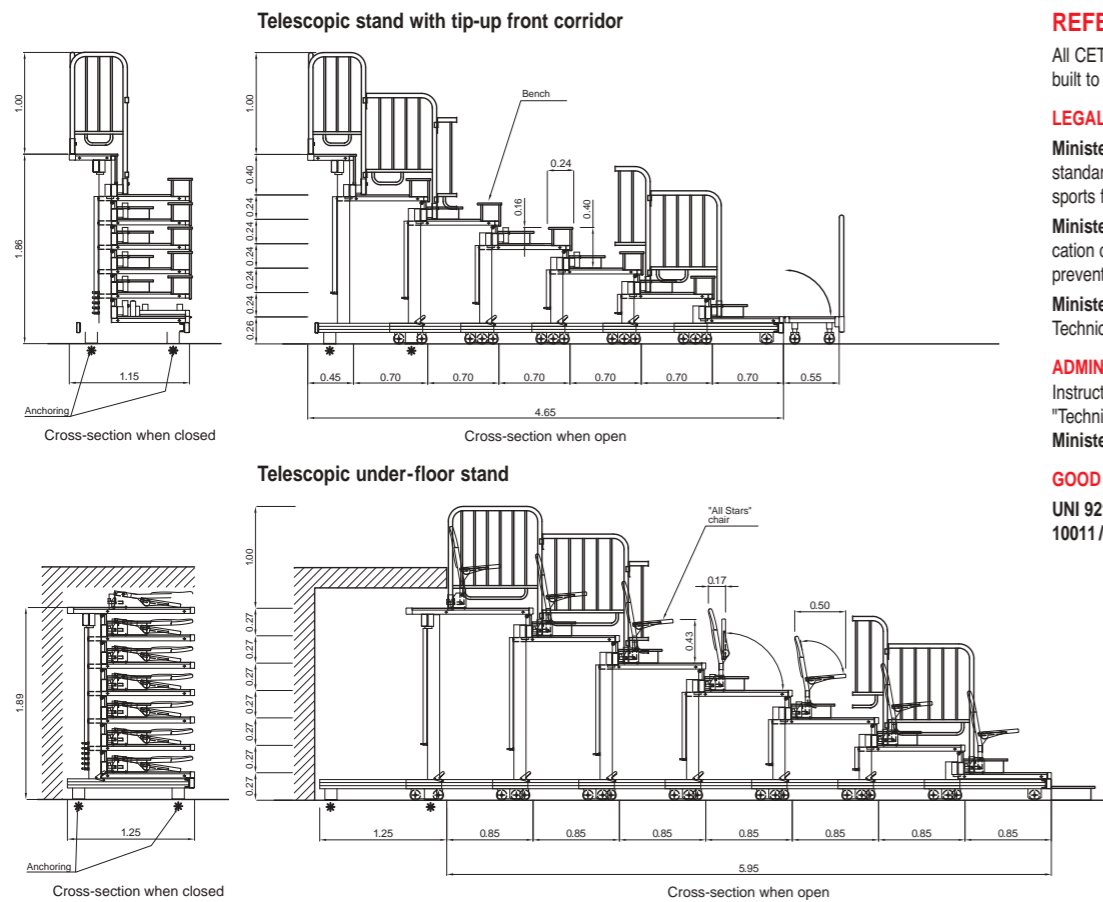
Riser 0,36 Tread 0,75



Type	N° of rows	Dimensions when closed	Dimensions when open	Height of last bench
TM 3	3	1,25	2,95	0,76
TM 4	4	1,25	3,80	1,01
TM 5	5	1,25	4,65	1,26
TM 6	6	1,25	5,50	1,51
TM 7	7	1,25	6,35	1,76
TM 8	8	1,25	7,20	2,01
TM 9	9	1,25	8,05	2,26
TM 10	10	1,25	8,90	2,51
TM 11	11	1,25	9,75	2,76
TM 12	12	1,25	10,60	3,01
TM 13	13	1,25	11,45	3,26
TM 14	14	1,25	12,30	3,51
TM 15	15	1,25	13,15	3,76

Riser 0,25 Tread 0,85

Dimensions. Drawings of some solutions



REFERENCE STANDARDS

All CETA stand components are designed and built to comply with the following standards:

LEGAL STANDARDS

Ministerial Decree dated 18.03.1996 - Safety standards for the construction and running of sports facilities.

Ministerial Decree dated 26.06.1984 - Classification of fire resistance and approval of fire-prevention materials.

Ministerial Decree dated 14.01.2008 - Technical standards for constructions.

New

ADMINISTRATIVE STANDARDS

Instruction concerning the application of the "Technical standards for construction" as per **Ministerial Decree 14th January, 2008**.

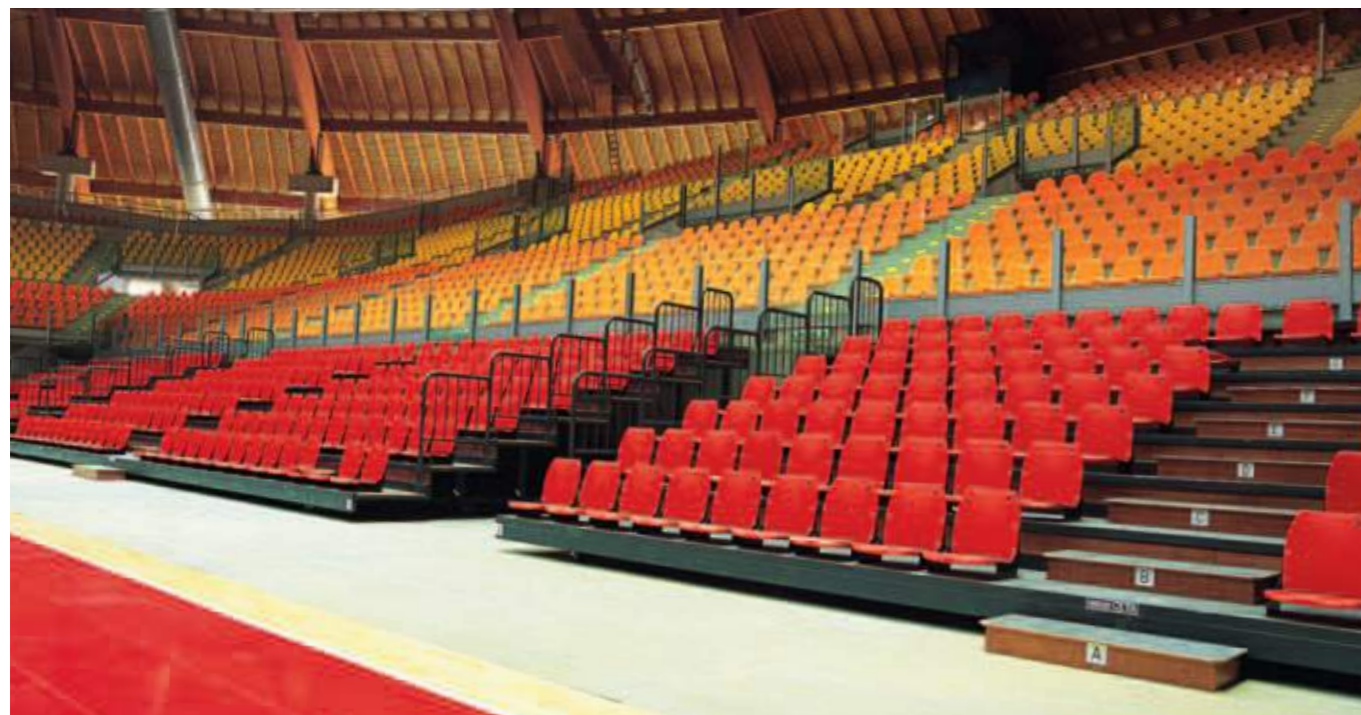
New

GOOD WORKING PRACTICES

UNI 9217 - UNI 9931 - UNI 9939 - CNR 10011/97.

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Livorno, Multipurpose Indoor stadium "Palalivorno".



A few references for Telescopic Stands

Těrllicko theatre (Czech Republic).



Siviglia: Indoor Stadium.



Trento (Loc. Ghiaie): Indoor Stadium.



Milan: Armani theatre.



Rimini: Indoor Stadium.



A few references for Telescopic Stands

Caorle: Indoor Stadium.



Rimini: Indoor Stadium.



Cesena: Indoor Stadium.



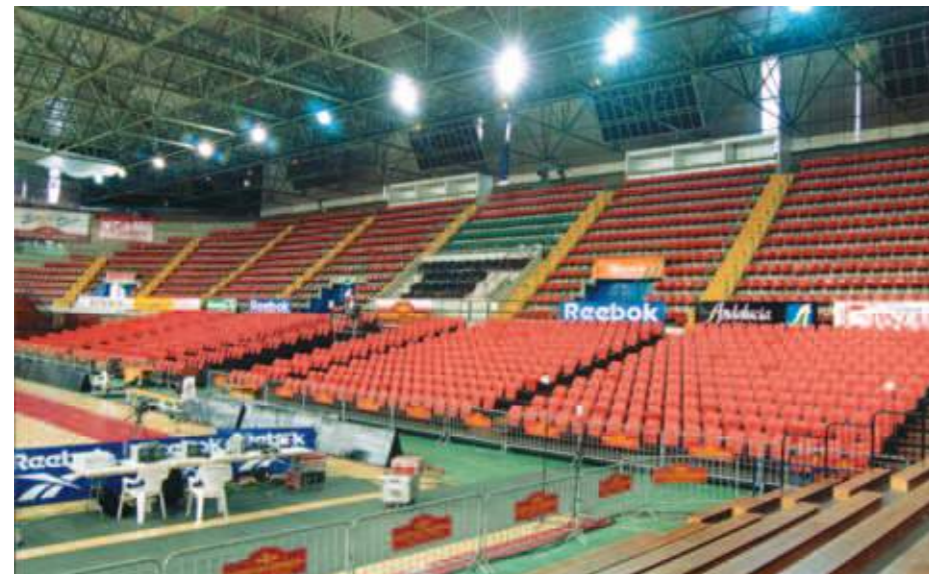
Modena: Indoor Stadium.



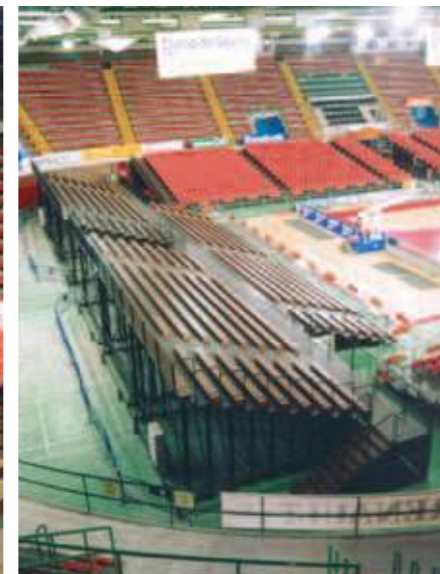
Bolzano: Indoor Stadium.



Siviglia: Indoor Stadium.



Siviglia: Indoor Stadium.



Bari: Indoor stadium C.U.S. Bari.



Firenze: Indoor Stadium.



Bressanone: Theatre.



Foggia, Skating rink.



Těrlíčko: Theatre (Czech Republic).



Revò (TN).



Ceta Seats

Livorno, Multipurpose Indoor stadium "Palalivorno".



One-piece seats: Drop, Game, Set



The CETA seats range contemplates three different one-piece models: backless, medium sized backrest (cm 26) and high backrest (cm 38). Of glossy, brilliant appearance, the CETA one-piece seats are made of high density copolymer polypropylene, paste-coloured and enhanced with UV-proof and fire-retardants substances. Self-supporting, they are provided with reinforcing ribs and small channels with holes for favouring rapid drainage of water

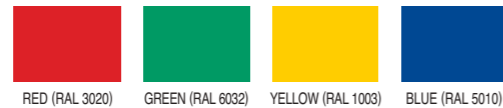
They are extremely easy to fit: the one-piece injection moulded CETA seats, in fact, are placed directly on the tread of

SEAT number plate

The one-piece seats can be numbered (optional) with Plexiglas plates fixed directly to these with a permanent holding device, the number being silk-screen printed and so indelible.

Colour range

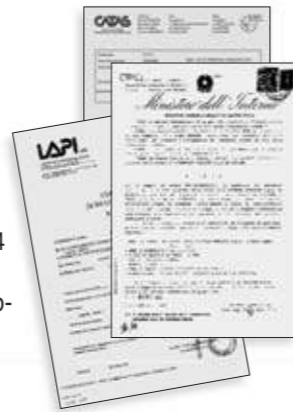
CETA one-piece "DROP", "GAME" and "SET" seats come in: red (RAL 3020), green (RAL 6032), yellow (RAL 1003) and blue (RAL 5010). Also available in other colours with minimum orders of 1000 seats.



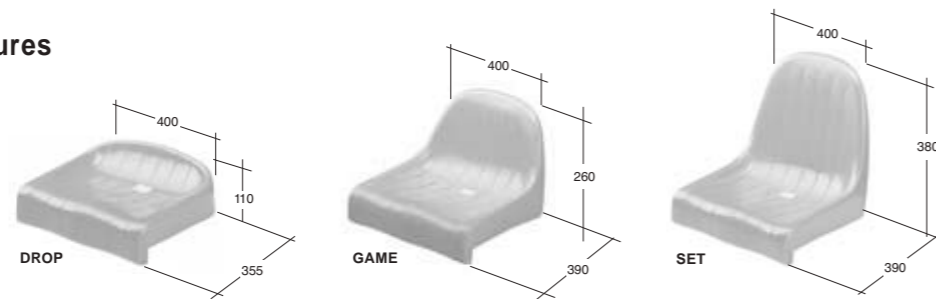
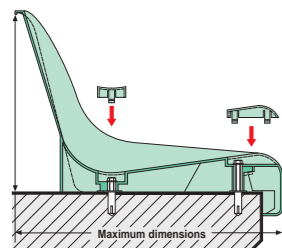
Guarantee Certification

CETA one-piece seats have **Class 1 "Fire reaction"** certification (according to the positive outcome of C.S.E. tests RF 2/75/A and RF 3/77 as per Ministerial Decree 26.06.1984, ordinary supplement to Official Gazette n.234 dated 25.08.1984). They also offered excellent results in weather and UV-ray tests, with more than 1000 hours subjected to the Xenotest, and to mechanical tests made by CATAS - Centre for Research and Development. They comply with EN 12727 Standards.

each terrace and fixed by using two galvanized steel expansion bolts protected by special non-removable caps. In this way the CETA one-piece seats cannot be removed and comply with all the most recent safety standards. However, thanks to special steel frames, they can also be fitted on the riser: should the terraces have too low riser, the seats can be fitted on steel beams complete with uprights and special bases for fixing to the tread. All metal parts are supplied with hot-dip galvanising protection or (optional) epoxy powder paint protection.



Technical and dimensional features



CETA SPA reserves the right to make changes, at any time and without notice, for the technical characteristics of the elements illustrated in this catalogue.

A few references

Genova, Mazda Palace.



Livorno, Multipurpose Indoor stadium "Palalivorno".



Empoli: City Stadium.



Roma: John XXIII Institute.



Kazakistan: Astana Stadium.



Roma: Foro Italico.



Torino, Pala Hockey.



Blown polypropylene chairs: All Stars

A perfect synthesis between ergonomics and practicality, these chairs are blow-moulded using high density copolymer polypropylene, paste-coloured and enriched with UV-proof and antistatic substances and fire-retardants.

Self-supporting and fitted with ribbing for extra strength, the chairs consist of separate seats and back with an embossed-effect surface thanks to photoengraving during moulding.

Thanks to their modern ergonomic shape and thickness, these chairs are more comfortable than an usual plastic seat and can even be fitted with fixed or tip-up armrests on request.

The tip-up seats make it easier for people to pass and involve or an automatic spring device, or they close thanks to gravity in the case of tip-up chairs with armrests. In fact, the armrest have springs that always tip up automatically together with the seat.

In the city and indoor stadiums, these chairs are normally fitted to risers of the terraces though steel frames or, as in parterres, they are fitted in groups on beams (with PVC caps) fixed to the floor or self-stabilising.

In the telescopic stands the chairs are fitted on tip-up beams (fitted to the rear of the tread board) and disappear from view when the telescopic stand is closed.

The steel parts are normally painted black with epoxy powders: on request they can also be supplied in other colours or hot galvanised.



Thanks to special tip-up beams, the chairs can disappear from view when the structure is closed and so they can also be fitted in telescopic stands.



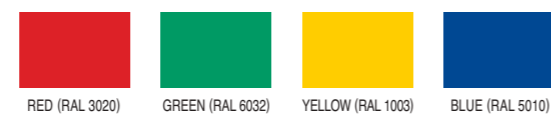
Seat number plate

"All Stars" chairs can be numbered (optional) with Plexiglas plates fixed to either the underside of the seat or to the front or rear of the back, the number being silk-screen printed making it indelible.

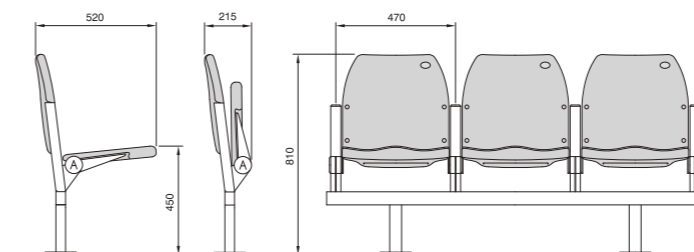
Plates identifying the row or sector are also possible.

Colour range

Standard colours for "All Stars" chairs are: red (RAL 3020), green (RAL 6032), yellow (RAL 1003) and blue (RAL 5010). Also available in other colours with minimum orders of 500 seats.



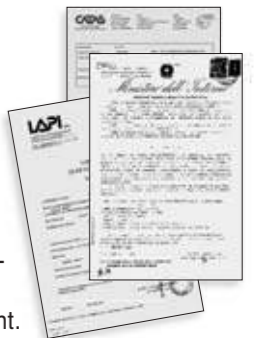
Technical data



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Guarantee Certification

CETA "All Stars" have **Class 1 "Fire reaction"** certification (according to the positive outcome of C.S.E. tests RF 2/75/A and RF 3/77 as per Ministerial Decree 26.06.1984, ordinary supplement to Official Gazette n. 234 dated 25.08.1984). They also offered excellent results in weather and UV-ray tests, with more than 1000 hours subjected to the Xenotest, and to mechanical tests made by CATAS - Centre for Research and Development.



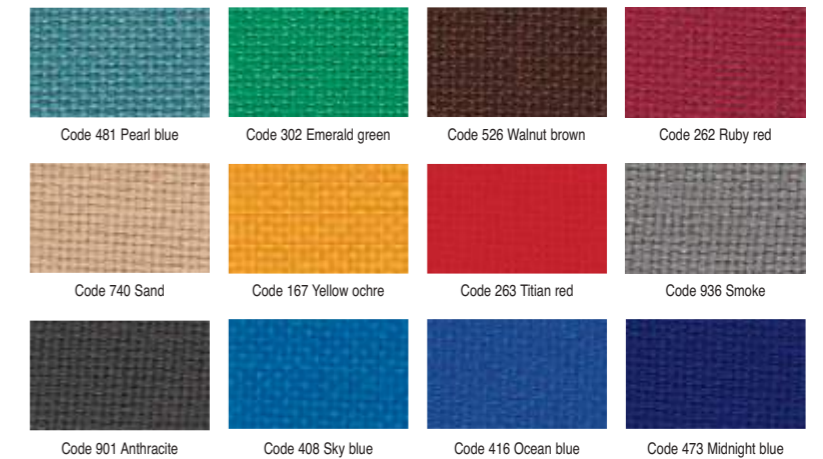
Upholstered chairs: **First Class** (without armrests), **Top Class** (with armrests).

First Class and Top Class chairs are made from a strong steel core and upholstered with expanded foam: they are covered by a removable cover which resistant, removable fabric is Class 1 IM fire retardant. Extremely elegant and comfortable, these appreciated chairs have separate seats and backs. The tip-up seats make it easier for people to pass and involve an automatic spring device, or spring and gravity in the case of Top Class tip-up chairs. Thanks to particular steel beams, "First Class" and "Top Class" chairs are normally fitted in groups on beams fixed to the floor or self-stabilising. The beams are protected by special non-removable PVC caps. In telescopic stands the chairs are normally fitted to particular tip-up beams and so they disappear from view when the structure is closed. The steel parts are normally painted black with epoxy powders: on request they can also be supplied in other colours. "First Class" and "Top Class" chairs are supplied just when the ordered pieces are more than 50.



Fabric

Practical and comfortable, the covering fabric is fully removable and **Class 1 IM Fire Retardant** certified. Completely non-allergenic, it is also stain-proof and resistant to trichloroethylene, ethylene perchloride, acid and alkalis as well as to tearing and rubbing. In case of fire, it does not give off toxic gases and the fumes are white. A range of colours is available.



Armrests

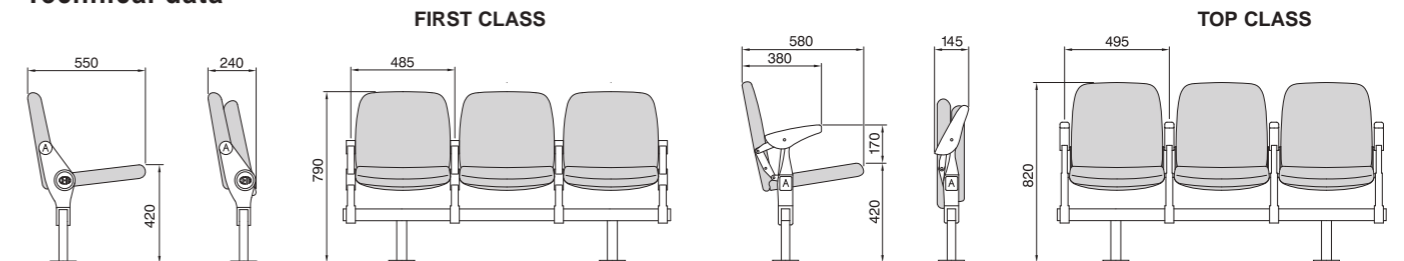
"Top Class" chairs (differently from "First Class" ones) are fitted with armrests that are made from steel with an integral self-extinguishing polyurethane cover and studied so that they always tip-up automatically together with the seat.



Seat number plate

The chairs can be numbered (optional) with engraved PVC plates fixed to the underside of the seat. Plates identifying the row or sector are also possible.

Technical data



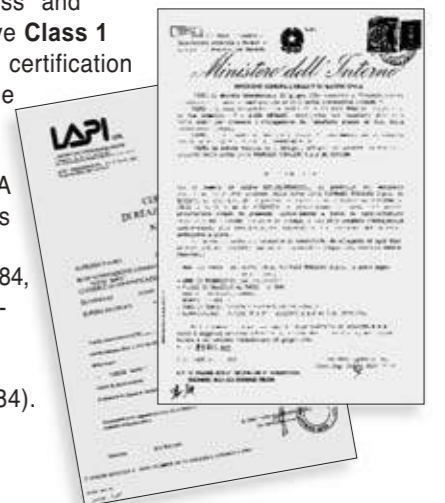
CETA SPA reserves the right to make changes, at any time and without notice, for the technical characteristics of the elements illustrated in this catalogue.



"First Class" and "Top Class" chairs, fitted on special folding type beams, disappear into the folding structure in telescopic grandstands.

Guarantee Certification

CETA "First Class" and "Top Class" have **Class 1 "Fire reaction"** certification (according to the positive outcome of C.S.E. tests RF 2/75/A and RF 3/77 as per Ministerial Decree 26.06.1984, ordinary supplement to Official Gazette n. 234 dated 25.08.1984).



A few references

Livorno, Multipurpose Indoor stadium "Palalivorno".



Siena: City stadium.



Seville: Indoor Stadium.



Athens, Petraso National Theatre - Olympic Games 2004.



Bressanone: City theatre.



Brugherio, Icet Hall - RAI.



Milano, Elfo Theatre.



Trento loc. Ghiaie: Indoor Stadium.



Series '95 Prefabricated stages



Firenze, Boboli Gardens, Multipromo Opera Festival.

Multiceta® stages



Ravello, International Festival.

Modular solutions to meet the customers' specific needs

Ceta Series '95 prefabricated Stages are made exclusively from high quality materials and fully comply with the current Standards, including the ones for what concerns overloading and seismic resistance.

The stages are built using hot-galvanised S235 JR steel tubes and profiles with continuous welding by automated systems to guarantee the perfect finish of each element (welding process certified by a laboratory authorised by the Italian Institute of Welding).

Of course, Ceta Series '95 prefabricated Stages also offer the same prerogatives as the other CETA products, which are the basis of their superiority.

Maximum safety.

In line with its policy of total reliability, CETA carries out accurate tests and quality controls at all stages of the production process, from design and selection of the materials up to the production of the elements: tests and controls are carried out even on the finished products.

Superior quality and durability.

All metal parts of CETA products are hot-galvanised by immersion in accordance with UNI EN ISO 1461 requirements. This specific treatment is considered the complete protection against corrosion: in fact it guarantees max reliability of the frame throughout the ages and eliminates any future charges for maintenance.

Quick and easy assembly.

CETA structures are quick to assemble thanks to the small number of elements and can be fitted also by non-specialised personnel.

Customer service.

CETA guarantees its customers qualified service and technical advice to find the best solution for all intended uses of these structures, even the ones not included in this catalogue.

THE WALKWAYS

The walkways are made from waterproof plywood (2x1 m and 18 mm thick) with phenol film coating on both sides making them waterproof and more wear resistant.

The visible surface is embossed for non-slip passage-ways.

The layers (1.5 mm each) are glued together with phenol adhesive, for resistance to both boiling water and harsh weather conditions (as per British Standards BS 1203 type W BP).

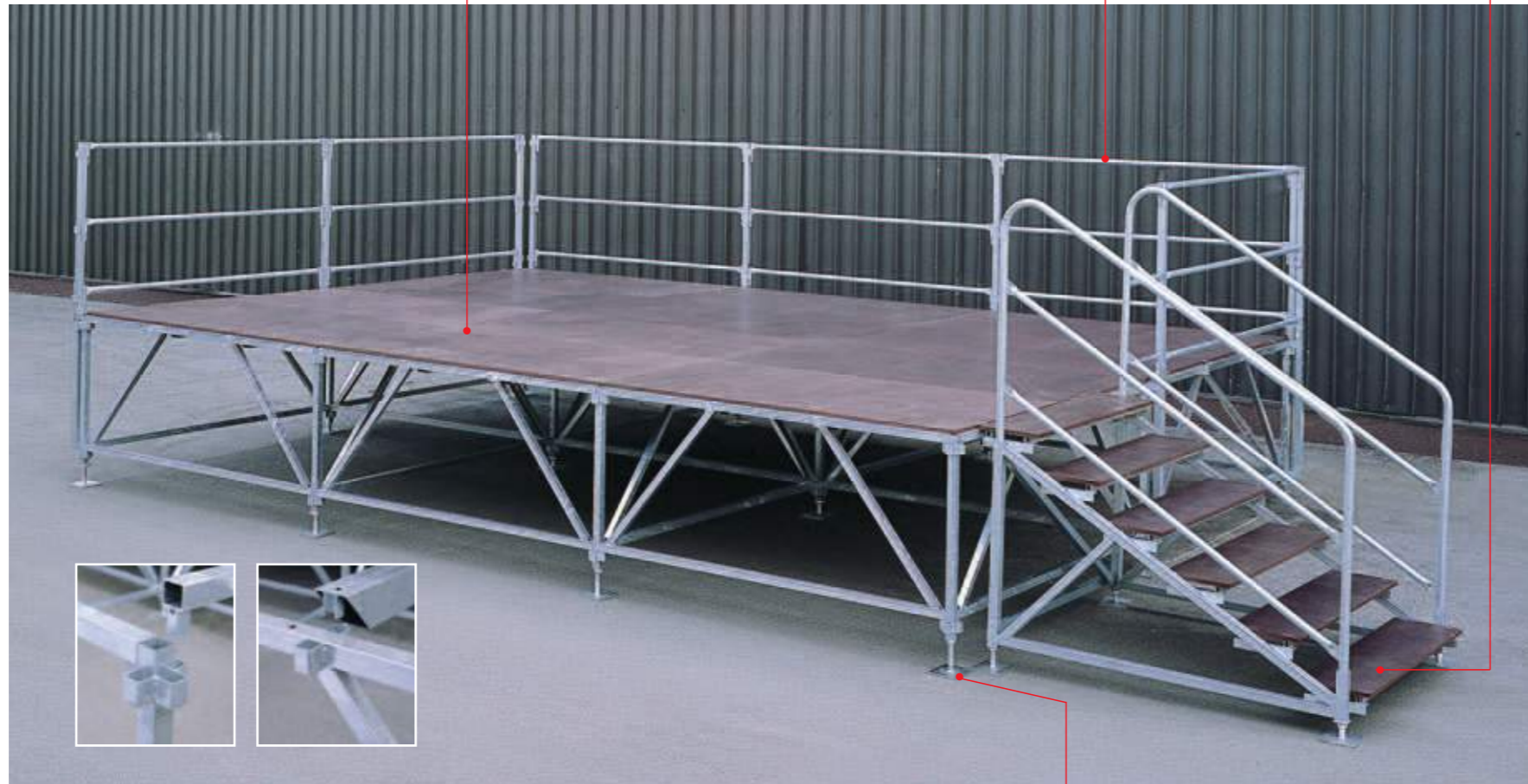
The timber used has **Class 1 fire certification** (tests C.S.E. - RF 2/75 - A and C.S.E. - RF 3/77 - ministerial Decree 26060.1984).

SAFETY RAILS

Safety rails are easy and quick to be assembled and are at least 1 m high.

ACCESS STAIRS

The access stairs have one or more flights of 6 steps (tread: 30 cm - riser: 16,7 cm) and are installed with safety rails and adjustment feet. The frame is made from steel and the steps are made in multilayer panels.



LOAD-BEARING STRUCTURE

The load-bearing structure, totally made of steel, consist of uprights connected both longitudinal and transverse by the support beams.

These beams (each 2 m long) are connected to each other by strong squared pipes which also act as divider for the flooring. It is therefore possible to assemble structures of the required sizes in multiples of 2 x 2 m x 1m in height from ground.

THE ADJUSTMENT FEET



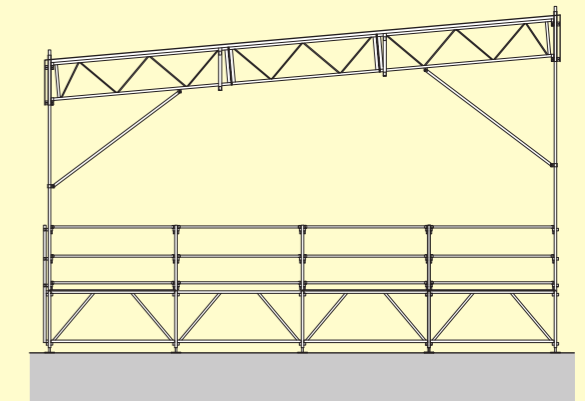
Perfect stability on ground is guaranteed by the adjustable feet inserted in the uprights and provided with full-turned threaded elements, capable of compensating for any unevenness (up to 0.10 m).

OPTIONALS

SELF-LIFTING ROOF

On request, CETA Series '95 Prefabricated stages can be equipped with roofs consisting of a steel load-bearing structure (piers and connection beams) and a PVC covering homologated for **Class 2 Fire reaction**.

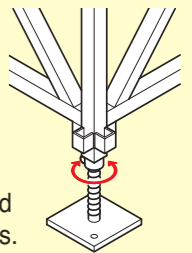
A pelmet of approx. 50 cm is also available around the perimeter covering.



Each upright is fitted with a winch for raising the cover, which is assembled directly on the platform's flooring, thus allowing the operators to work in complete safety.

50 CM ADJUSTABLE BASE PLATES

To avoid problems given by ground unevenness (up to 0.40 m) and for assembling a floor that is 1.0-1.40 m from ground level, CETA Series '95 Prefabricated Stages can be fitted with 50 cm adjustable base plates.

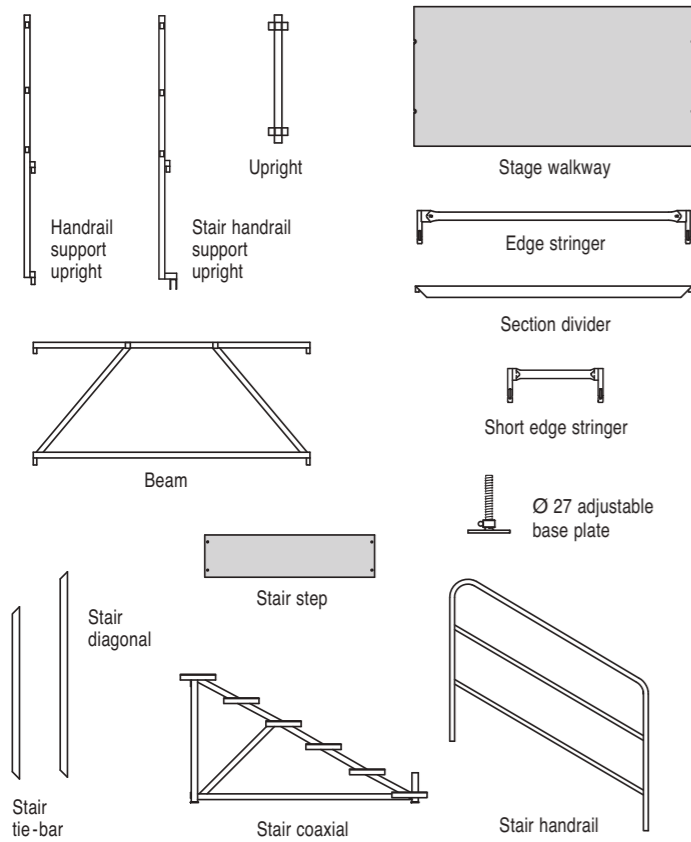


FOR THE DISABLED

On request, special ramps to allow access for the disabled can be supplied.

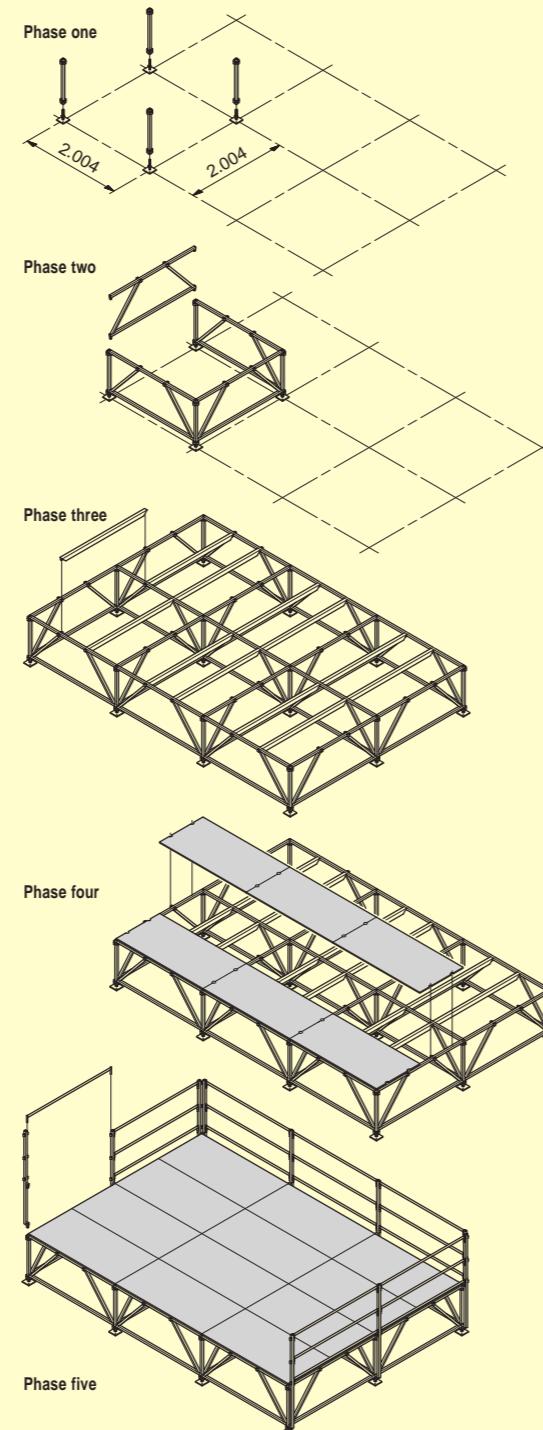
Elements, assembling and layout possibilities

The elements

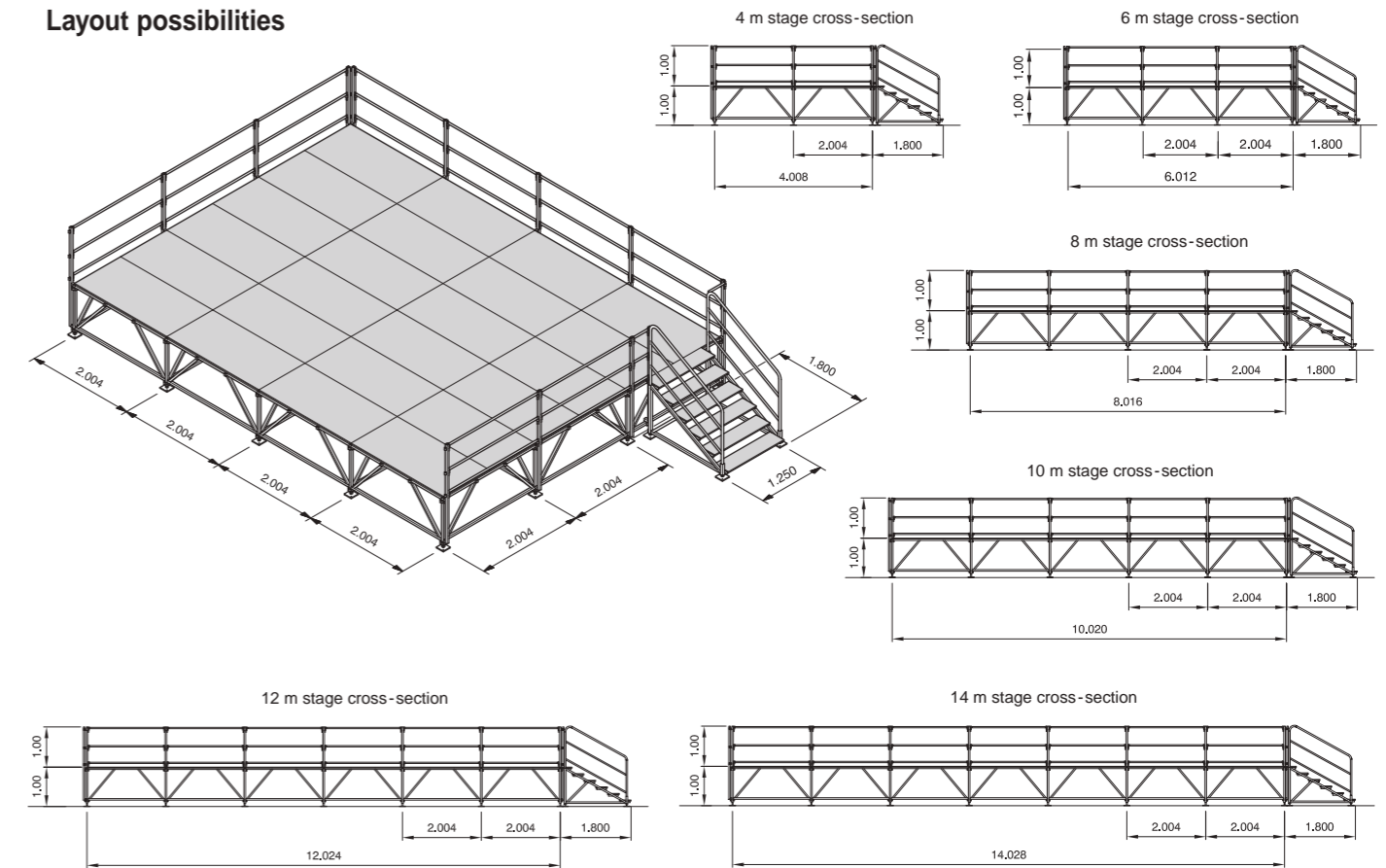


Assembly

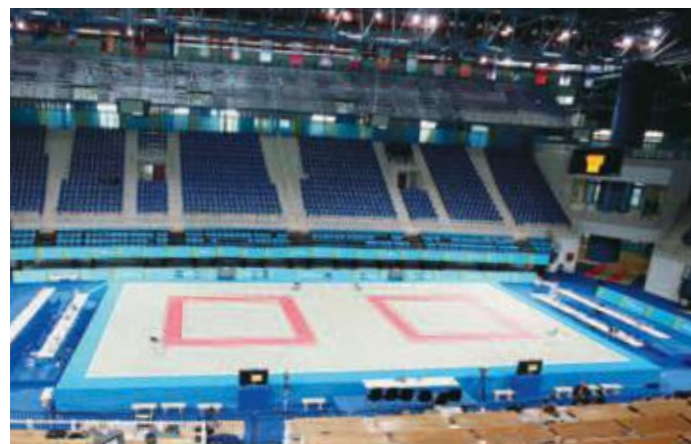
As the assembly diagram shows, CETA Series '95 Prefabricated Stages can be installed very easily and quickly, even by non-specialised personnel.



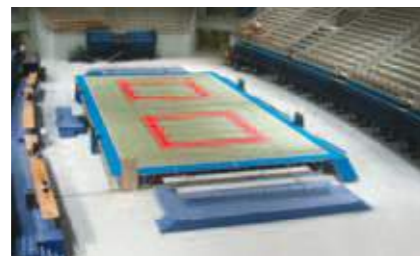
Layout possibilities



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Atene, Palazzetto Judo Giochi Olimpici 2004.



Multiceta® Stands for Sport and Entertainment

LOAD-BEARING STRUCTURE

The stage has precast uprights, beams and cross-bars Multiceta®. These are coupled together to form the load-bearing structure. The surface of the stage is supported by special **lattice girders** that slot into the uprights thanks to a multi-direction joint.

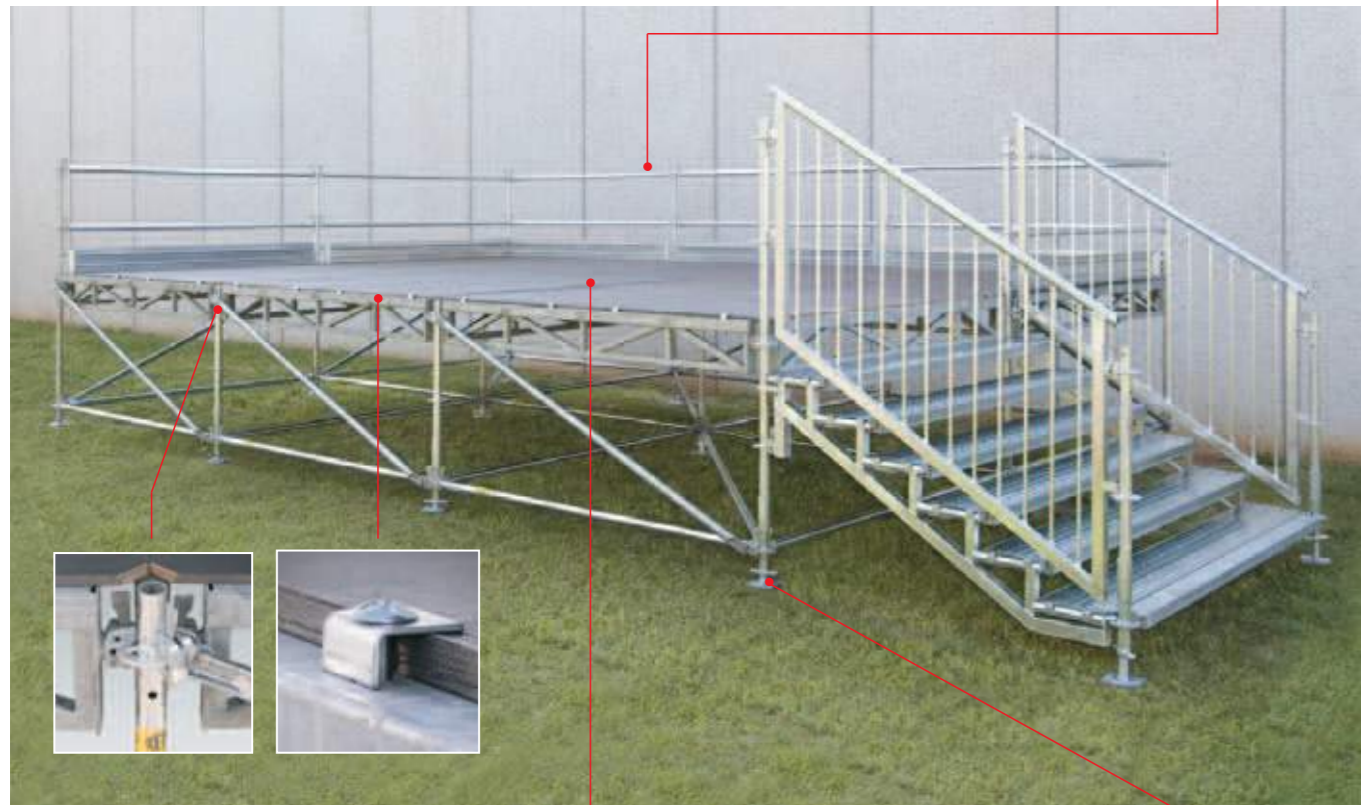
These lattice girders also have special slots to allow for precast section dividers supporting the stage surface and threaded inserts to house the screws used to fix the panels making up the stage surface.

The height-adjustable base plates at the bottom of the structure ensure that this is perfectly levelled. Max extension 50 cm (depending on height-adjustable base plate type).

The stage elements can be used to produce a variety of structures of different sizes (multiples of 1.80x1.80 - 2.50x2.50 m).

PROTECTION SIDES

Quick and easy to assembly, these protection sides are at least 1 m high from the stage surface.



STAGE SURFACE

Min height of stage from ground: 0.28 m.

The surface is made from plywood panels with a non-slip treatment 18 mm thick (**Class 1**) and are coated on both sides with phenolic film to increase their wear resistance.

Wood layers 1.5 mm thick, joined together by phenolic glue (high and low temperatures resistant).

Glueing in compliance with British Standard BS 1203 type WBP.



OVERLOAD

The Multiceta® stage is designed and calculated to support overloads of 6 kN/m².

ADJUSTABLE BASE PLATES

Height-adjustable base plates in the uprights guarantee the perfect stability and levelling of the stage. These are fitted with solid threaded bars to compensate differences in height of the ground up to 50 cm.



MULTICETA® MULTIDIRECTIONAL SYSTEM

The Multiceta® system lets you solve all the problems met when preparing structures for the show-biz world: stages, lighting and equipment towers, scenery supports and even trade fair stands.

Multiceta used as a stand at the Cologne exhibition centre.



PUBLIC STAIRS

CETA public stairs offer modularity, versatility and easy construction. Designed to offer max comfort and the safety of emergency stairs, CETA stairs can be used in the construction site, for pedestrians and even, with small modifications, as emergency stairs.



Stairs: technical data

Max width (cm)	Max load kN/m ²
77	6
110	6
150	6
180	6
200	6
250	6
300	3

Barriers



Barriers

CETA can fully provide two types of barriers in order to meet the specific requirements of limiting an area or to contain and direct public movements: **City 2.0** and **City 2.5 Series Barriers**.

City 2.0 and City 2.5 Series Barriers are fully compatible and have the following characteristics:

- **Max stability and safety**

Particularly strong and stable even when utilised individually, their bars have such a distance between centres as they guarantee maximum safety, even in presence of children;

- **Complete revolving**

Thanks to the particular shape of their feet, CETA CITY Series barriers can form any kind of angle when used to create barricades and enclosures;

- **Quick self-locking assembly**

Simple and quick to unload, CETA barriers can also be setup while the vehicle is moving at walking pace. The practical connecting mechanism by means of special hooks welded to the uprights ensures a continuous and unmovable barricade;

City 2.0 support



City 2.5 support



- **Lasting and elegant**

Fully **hot galvanised**, CETA barriers are long life guaranteed and suitable for any environments.

Both CETA barrier models can be supplied with reflecting strips complying with Highway Code Regulation, art.32.



City 2.5



City 2.5 with reflecting strip

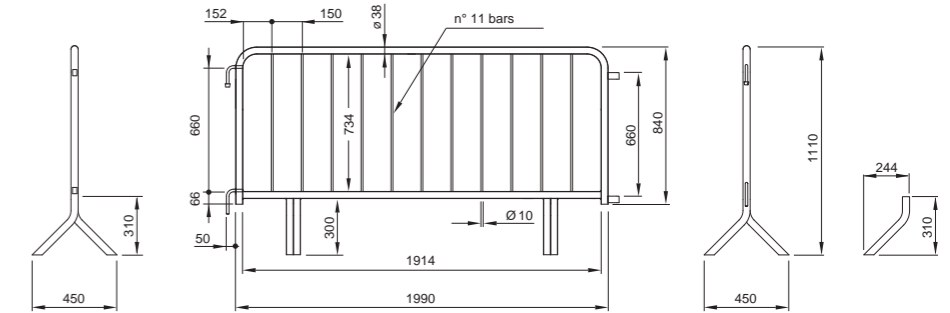


City 2.0

Technical and dimensional data

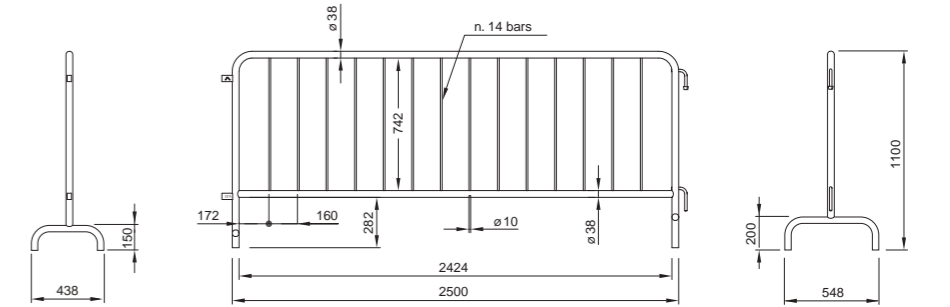
CITY 2.0 SERIES

Length:	2.000 mm
Height:	1.100 mm
Pipe diameter:	38 mm
Vertical bar diameter:	10 mm
Vertical bars:	n.11
Gap between bars:	150 mm
Weight:	~ 16 kg



CITY 2.5 SERIES

Length:	2.500 mm
Height:	1.100 mm
Pipe diameter:	38 mm
Vertical bar diameter:	10 mm
Vertical bars:	n.14
Gap between bars:	160 mm
Weight:	~ 20,5 kg



REFLECTING STRIP (one side) 2.5 Series

Length:	2.110 mm
Height:	200 mm



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