

Prefabricated Stands

World Skiing Alpine Championship Alta Badia.

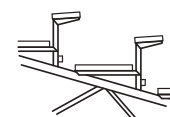


Prefabricated Stands Series M-2M

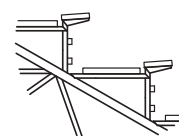
CETA offers a wide range of modular prefabricated stands made from hot-galvanised steel.

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.

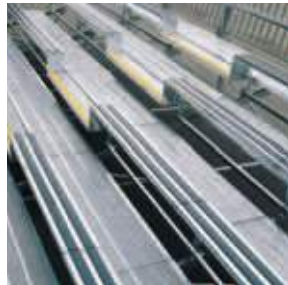
Tread boards

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.



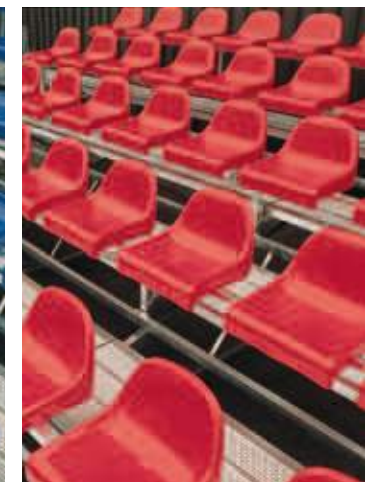
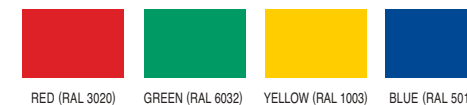
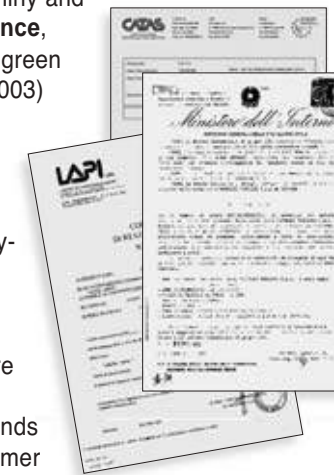
Seats

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 1M 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 withstand 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.



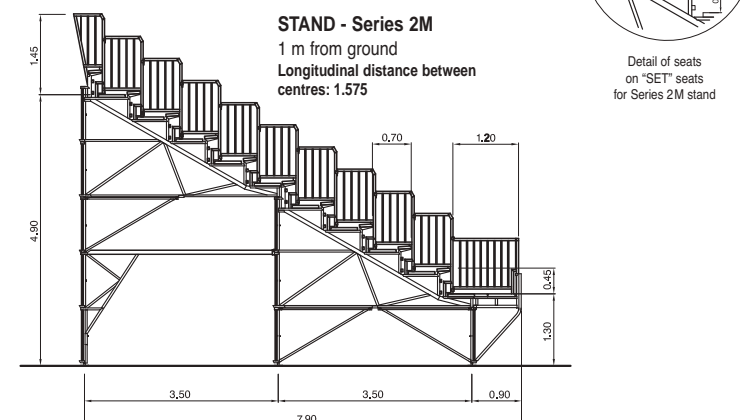
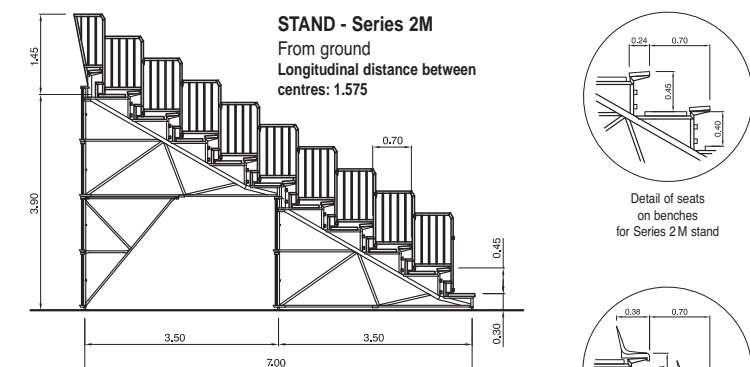
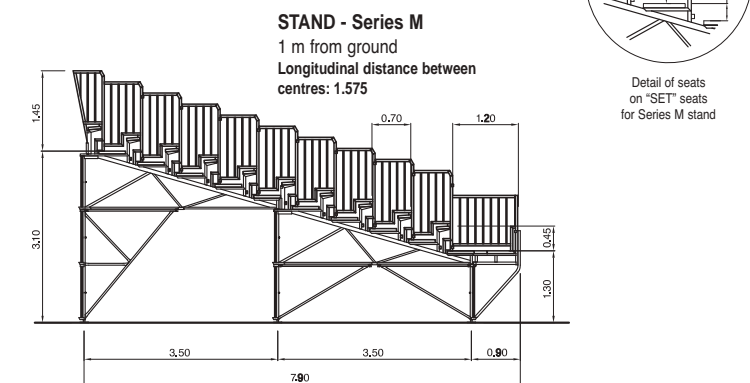
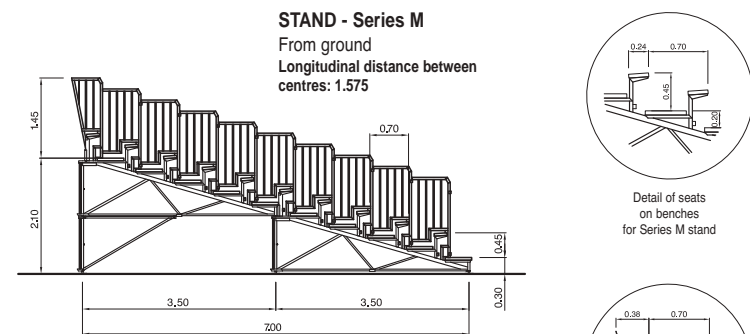
Bergamo, "Guardia di Finanza" cadet oath celebration.



Montecarlo: Country Club.



Series M-2M: drawings of some solutions



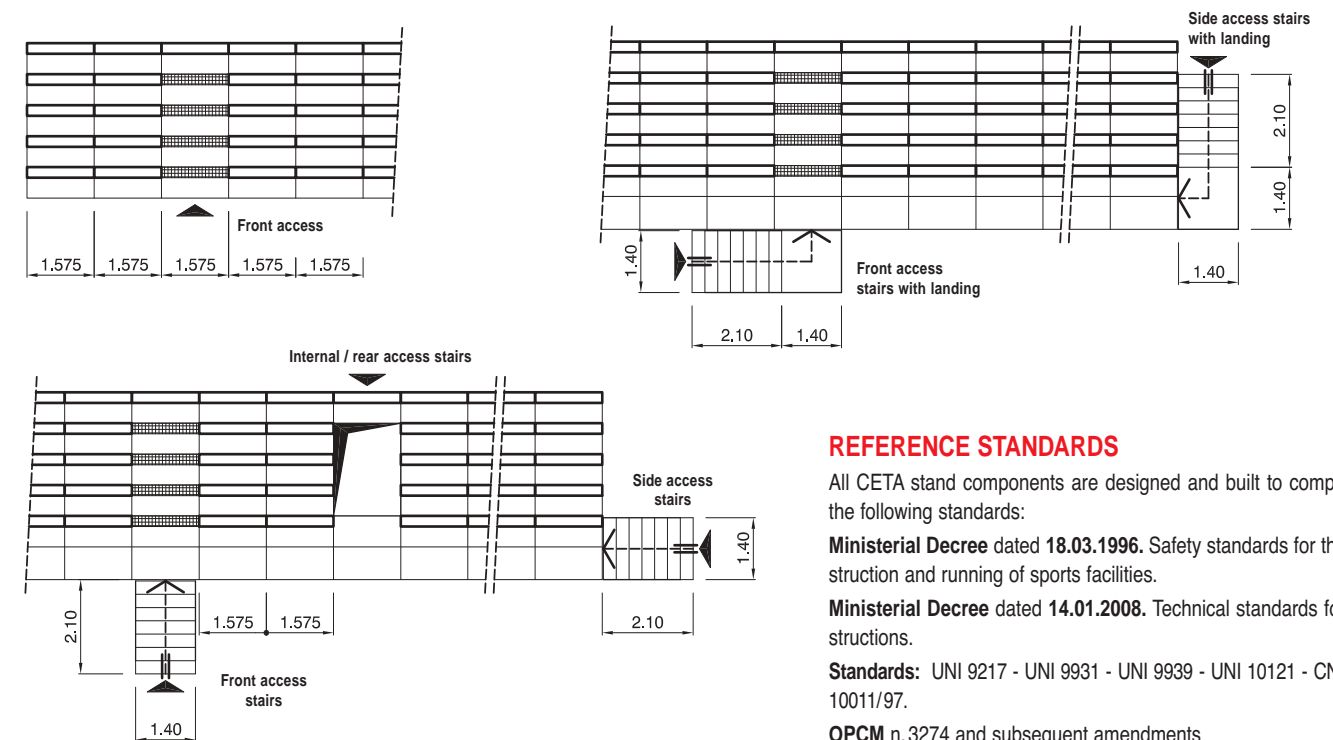
Type	N° of rows	Stand dimensions	Height of first level	Height of first seat	Height of last level	Height of last seat
M 3/0	3	2,10	0,30	0,75	0,70	1,15
M 4/0	4	2,40	0,30	0,45	0,70	1,15
M 5/0	5	3,50	0,30	0,75	1,10	1,55
M 6/0	6	4,20	0,30	0,75	1,30	1,75
M 7/0	7	4,50	0,30	0,45	1,30	1,75
M 8/0	8	5,60	0,30	0,75	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 consist 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).

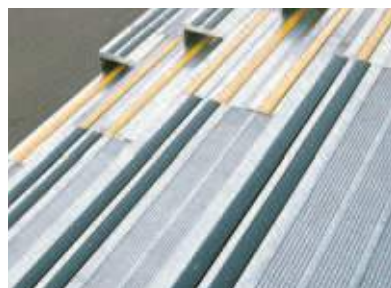


Tread boards - Benches

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

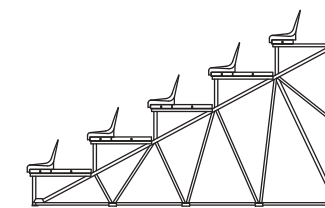
CETA prefabricated GM and G2M stands have been designed to withstand seismic activity, complying with the provision of **Ministerial Decree dated 14th January 2008** Technical standards for constructions.

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.

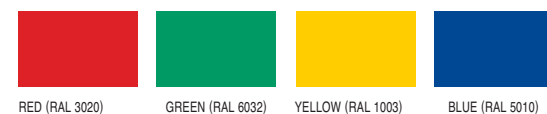
The seats, which are highly ergonomic and have ribbings for extra strength, are self-supporting, drain off any rainwater quickly and have spaces for numbering on request.

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.

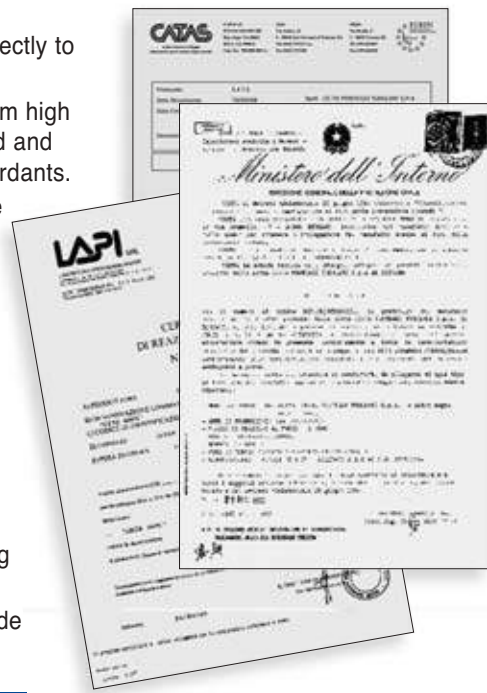
CETA also has a range of chairs with blown polypropylene (**All Stars**) or up-holstered (**First Class and Top Class**) tip-up seats, having Class 1 and 1IM Fire Resistance.

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

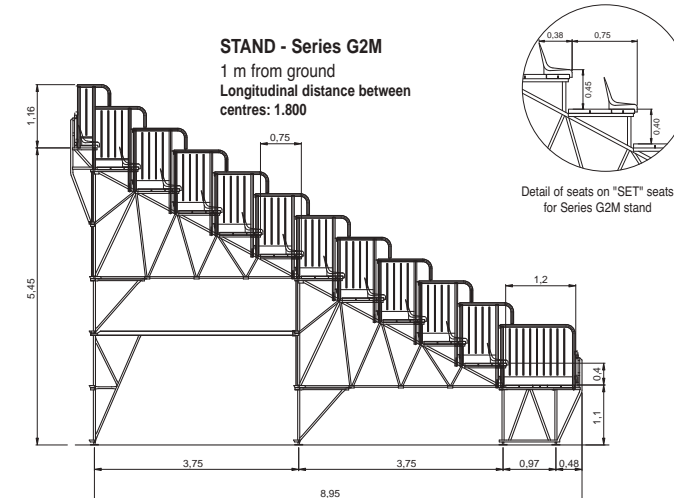
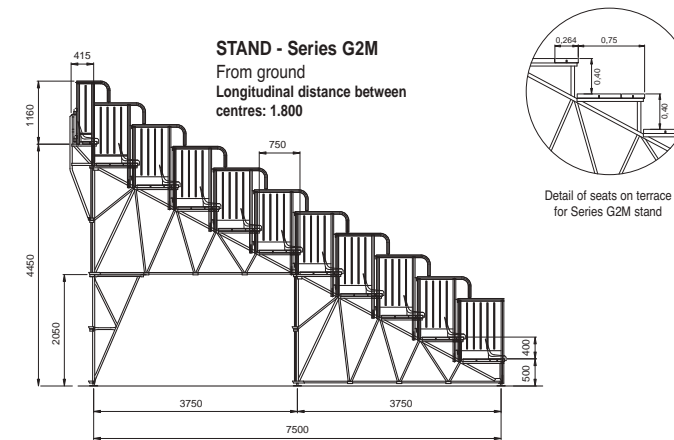


Customer service

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



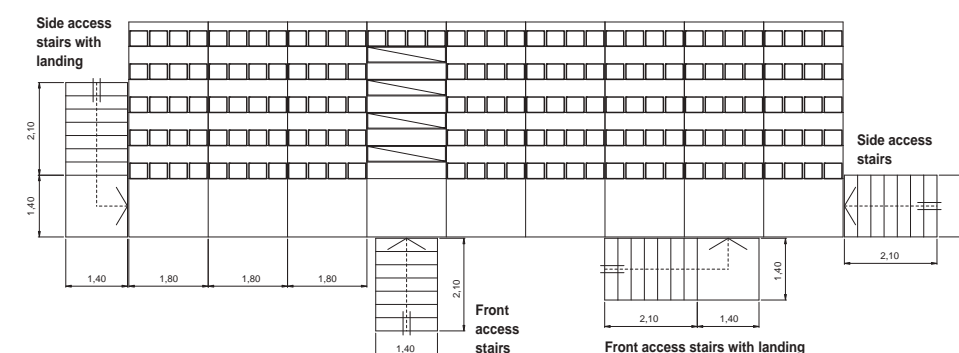
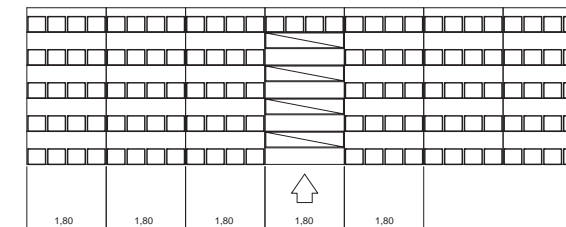
Series G2M: drawings of some solutions



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.