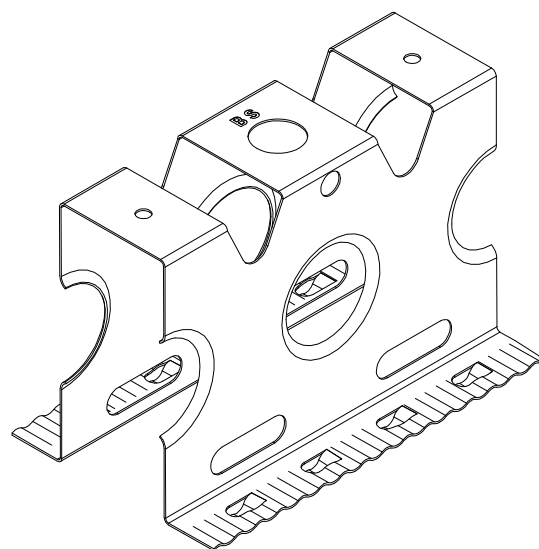


OMEGA-X SYSTEM



USER MANUAL
2018

BS ITALIA - ΩX ENG Manual
Rev. 01/2018

 **B.S. Italia**[®]
Gruppo Styl-Comp

innovazione basata sull'esperienza
innovation based on experience

PLEASE READ CAREFULLY THE INFORMATION AND INSTRUCTIONS CONTAINED IN THIS USER MANUAL BEFORE USING ANY COMPONENT OF THE OMEGA-XX SYSTEM, COVERED BY INTERNATIONAL PATENT.

For any doubt about the correct use of the components described in this manual please contact:

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infobsitalia@styl-comp.it

B.S.Italia S.p.A. is a certified company and the OMEGA-X system was designed and built in accordance with:

B.S.Italia Certifications



SYSTEM PRESENTATION

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WARNINGS

COMPONENTS CODES

The drawings in this maual are purely indicative

ADVANTAGES

ΩX is an innovative bracket for the support of the concrete layer hung on the bearing layer of the prefabricated panels with thermal cut. It supports and unites the two concrete layers separated from each other by the presence of the insulating layer which makes the thermal cut.

ΩX stands out in the field of the thermal cut proposal thanks to its high compatibility with the concrete of the panel and thanks to its irrelevant thermal bridge.

Infact, thanks to an in-depth engineering of form and materials **ΩX** guarantees high performances both in thermal and static terms.

Maximum performances Minimum thickness

These innovative brackets activate a mechanism resistant to the trellis, so bidirectional, synthesis of extreme power and robustness, but for the first time with the minimum thickness. We have the **Top** of the performances in a static+thermal key, at the same time.

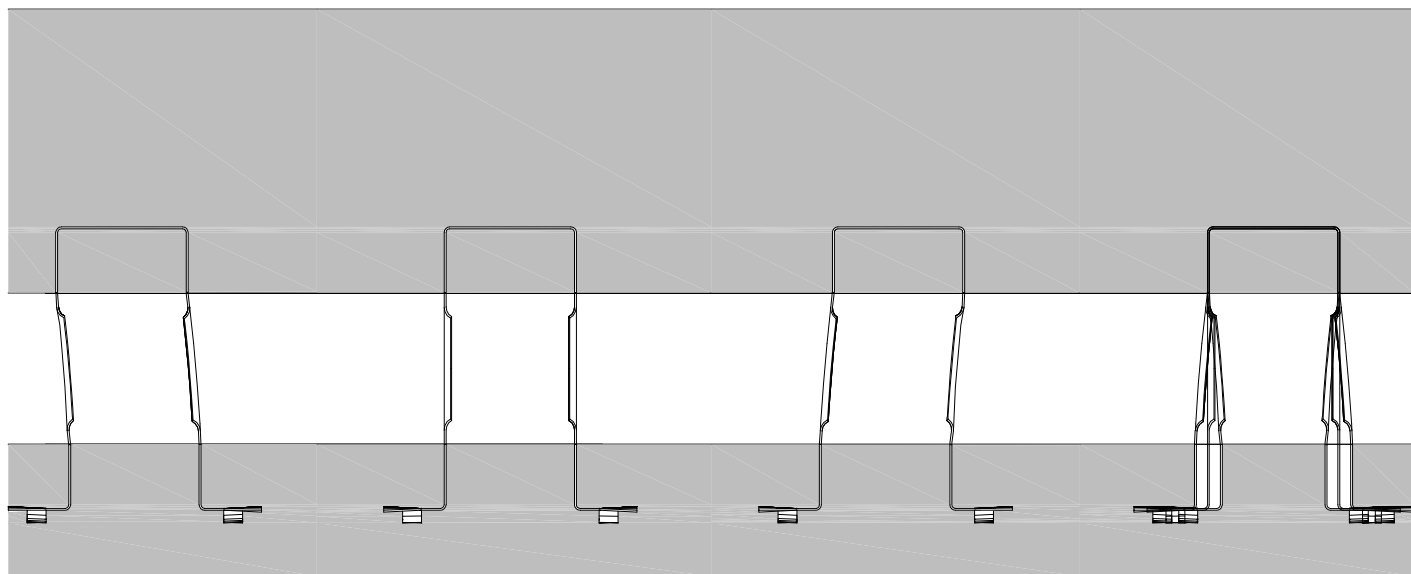
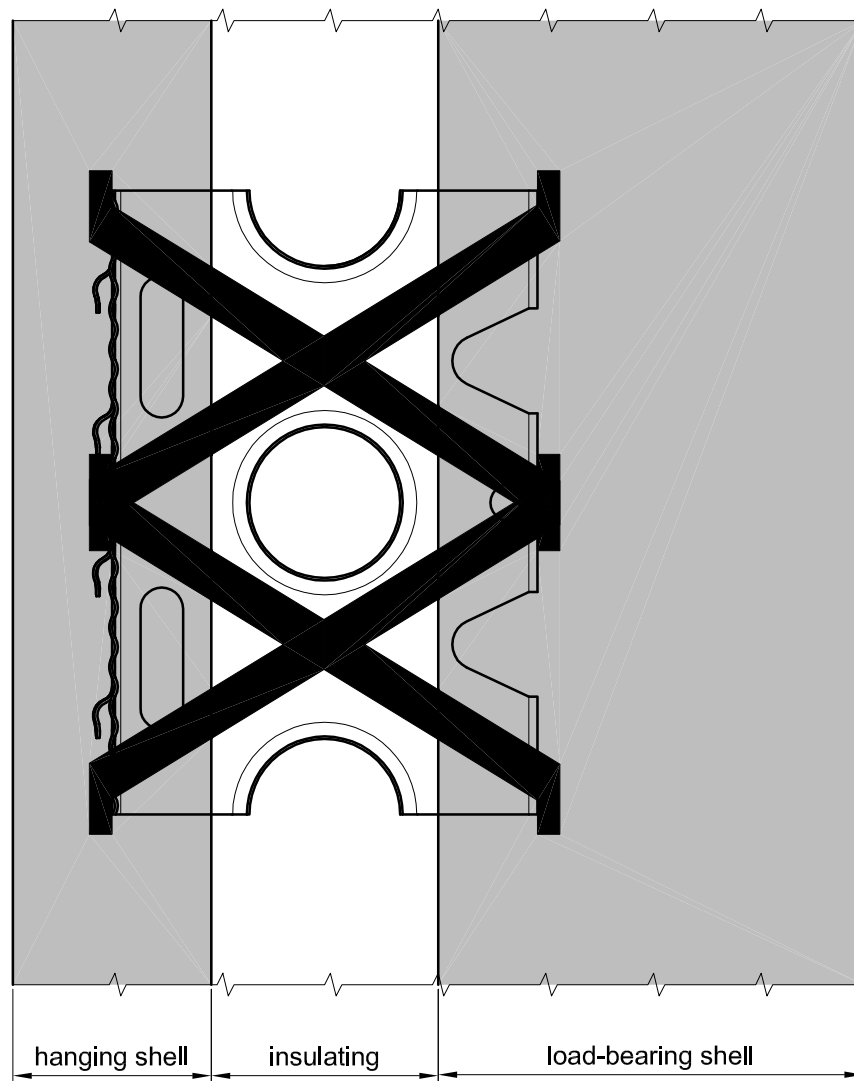
Toughness

The system guarantees an inseparable and tenacious connection with the reinforcement of the hung layer.

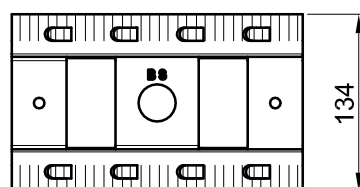
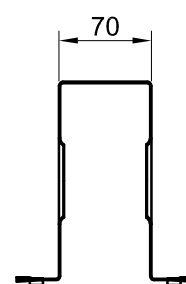
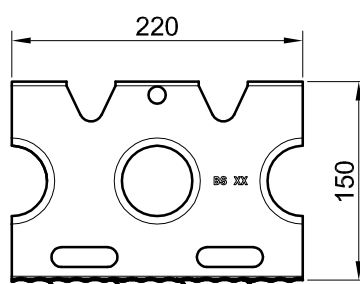
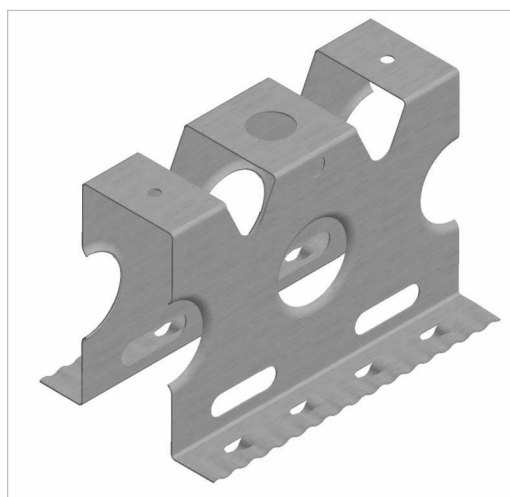
Improved adherence

ΩX brackets are characterized by holes and undulations that realize an improved adherence with the concrete, enhancing its interaction with it and ensuring the best collaboration: adhesion-interaction-anchoring-seaming, they consacrate the bracket as the best ally of the concrete.

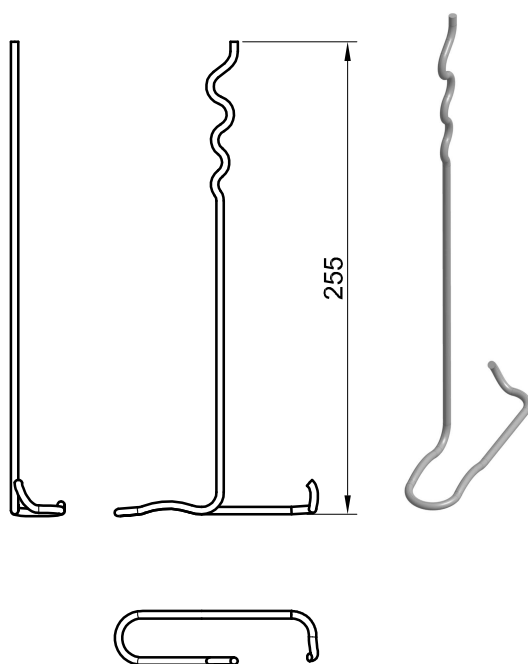
CONCEPT OF STATIC FUNCTION "X"STRUT-TIE



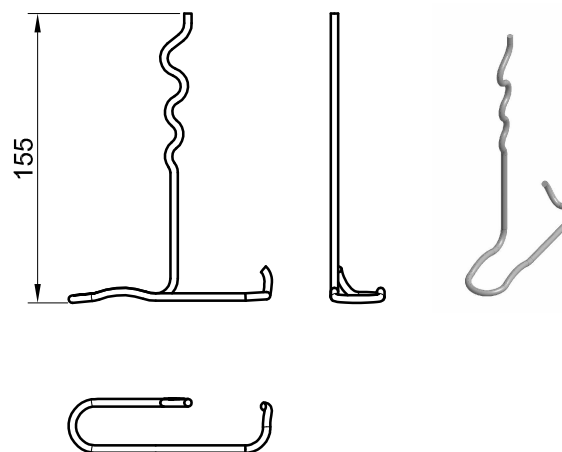
Omega-X support insert



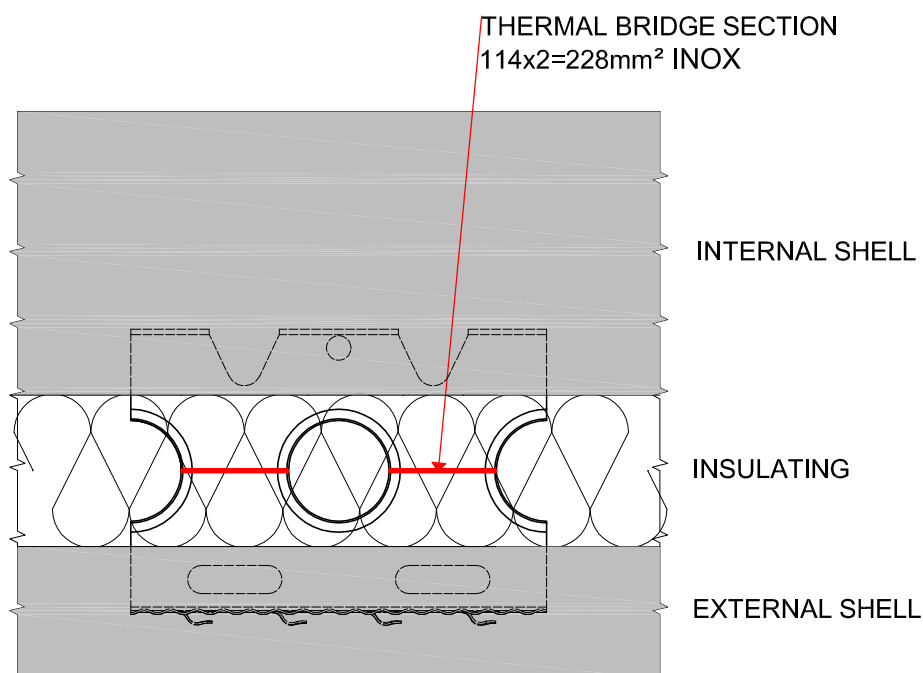
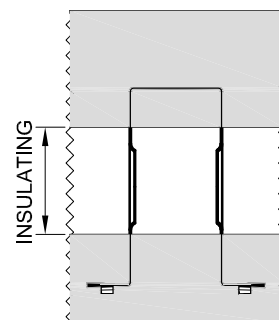
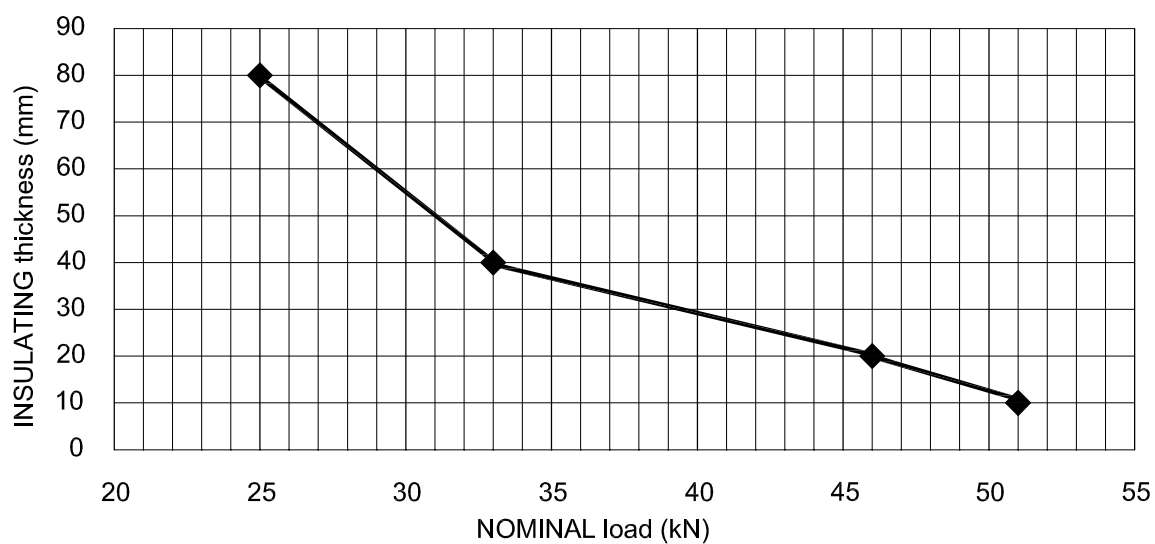
Sewing fork
H=255mm



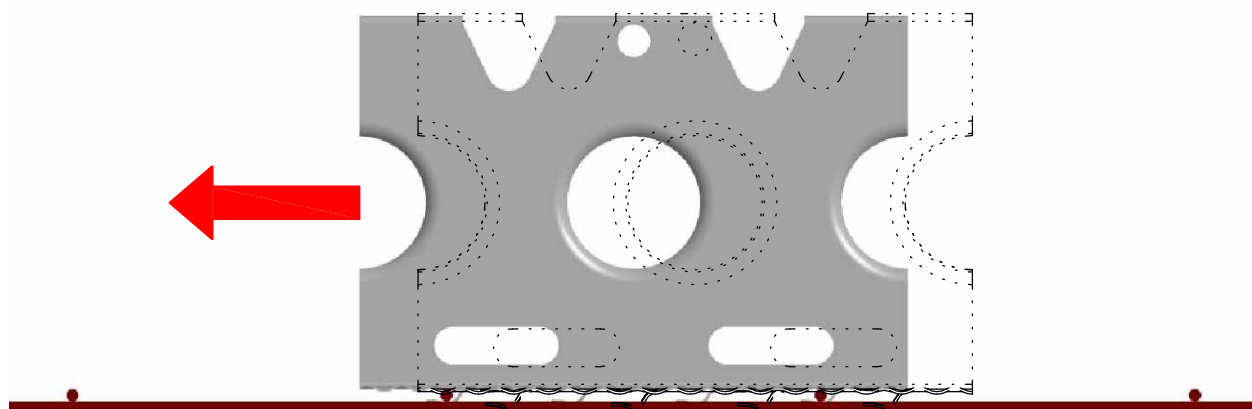
Sewing fork
H=155mm



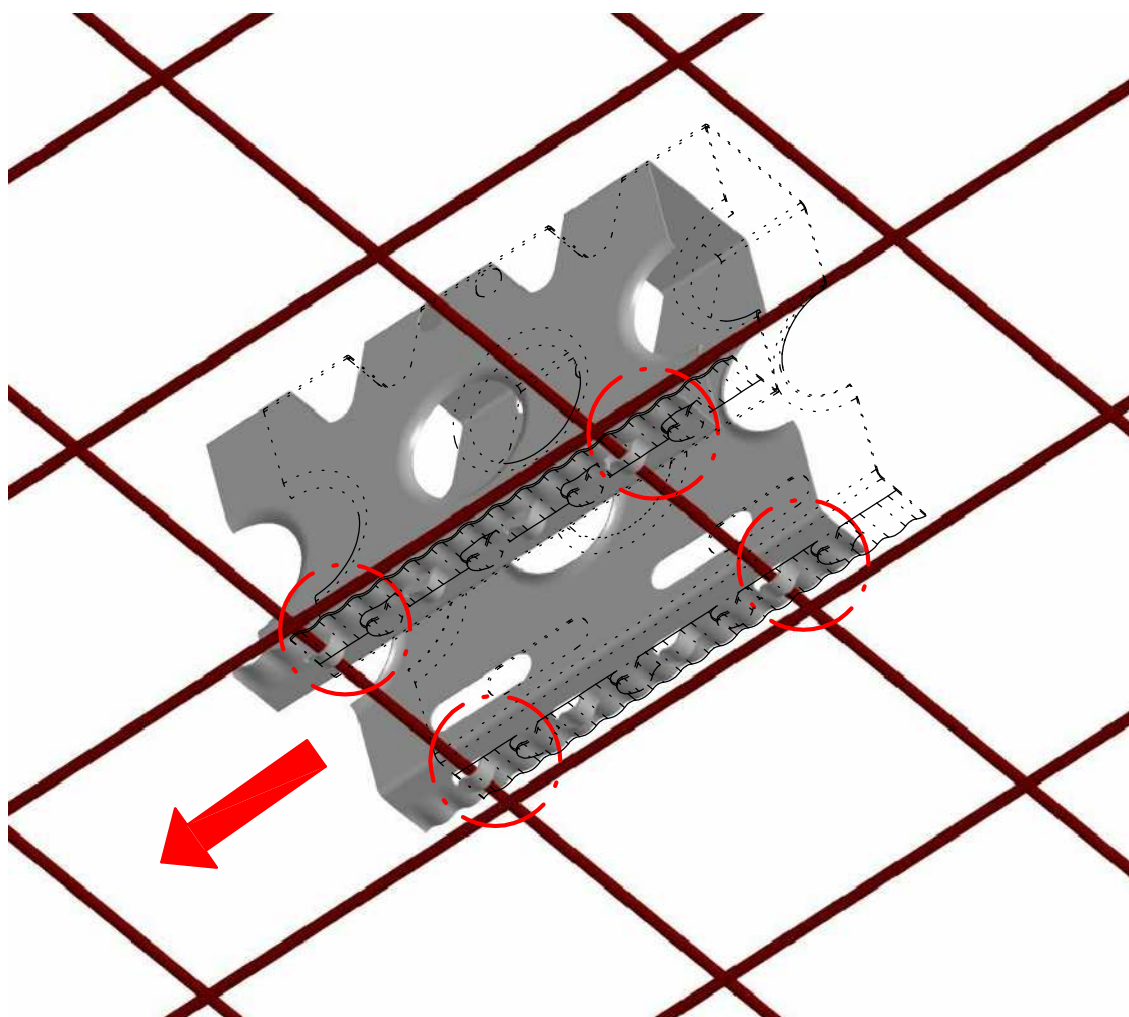
OMEGA-X L=220mm Sp. 10/10



OMEGA-X HOOKING TO THE NET

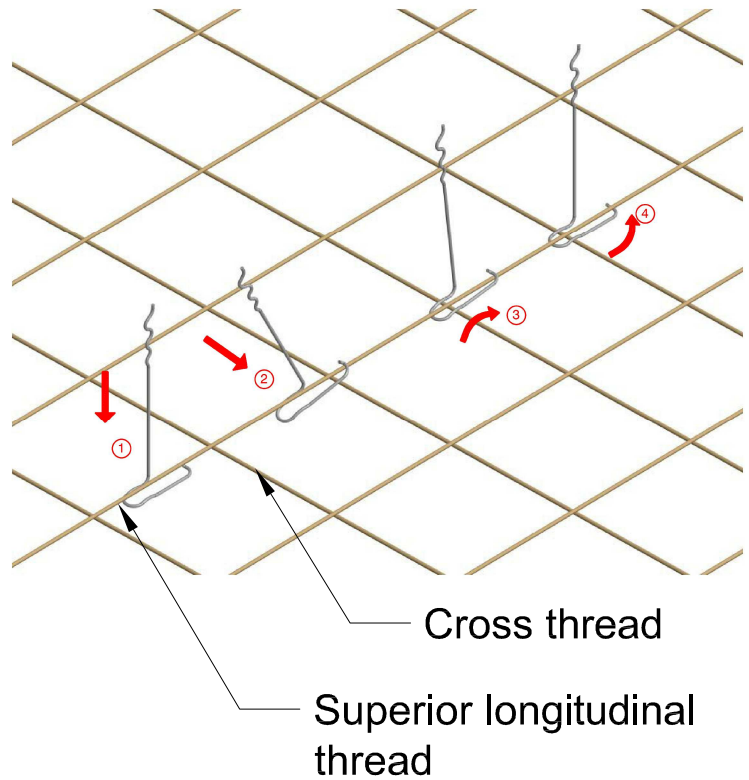


Place the Omega-X insert on the net and slide until the cross threads of the net itself fit into the special elastic tabs.



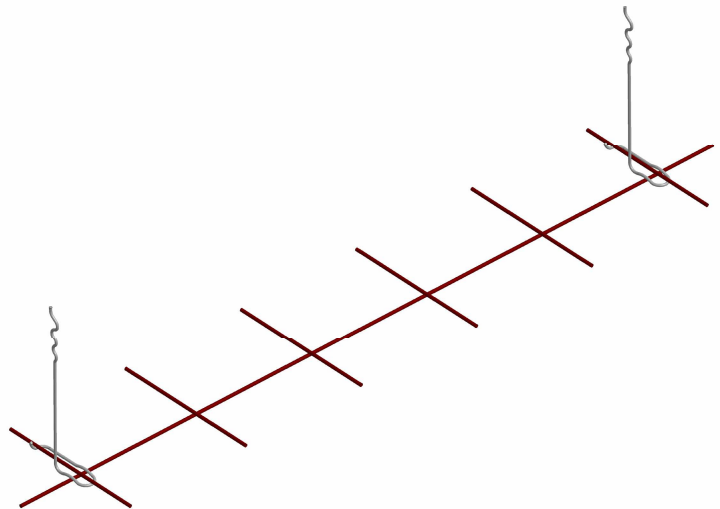
PHASES OF FORK HOOKING TO THE NET

- ① Insert the fork in a vertical position alongside the longitudinal thread of the net.
- ② Translate horizontally towards the longitudinal thread and raise the terminal part of the fork.
- ③ Return the fork to a vertical position by passing the final part of the fork over the cross thread.
- ④ Conclude the hooking of the fork by passing its tail under the longitudinal thread.



Forks preassembled on a net to be placed after casting the outer shell.

The method for hooking the fork to the net is the same as described in the previous points.



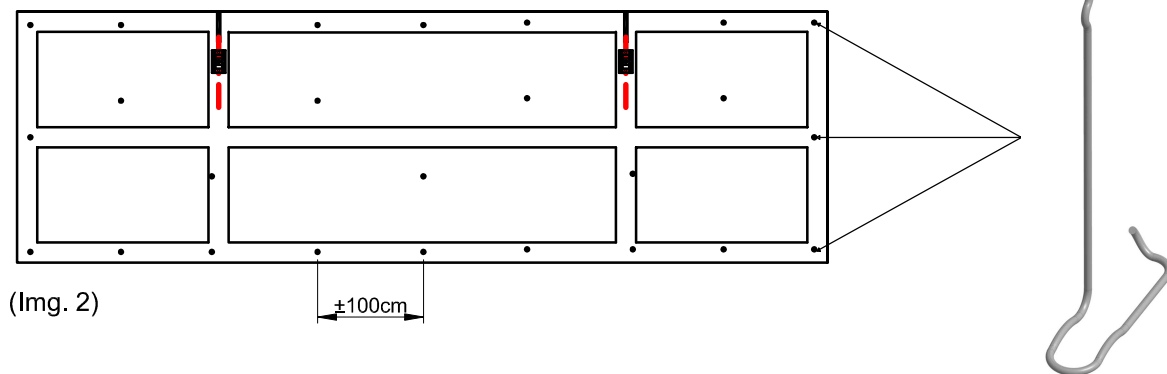
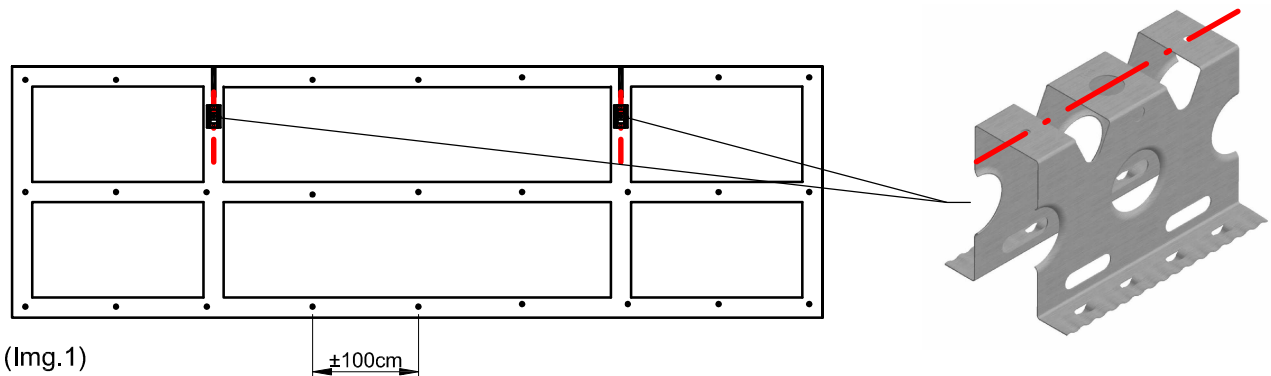
N.W.: The fork position can be either transversal or longitudinal to the formwork.

"Longitudinal and transversal thread of the net" means the positions relative to the axis of the fork. The longitudinal thread of the net must ALWAYS be the UPPER thread indicated in the figure.

PLACEMENT INTO THE FORMWORK (Horizontal panel)

The OMEGA-X support inserts, in the construction of horizontal panels, must be positioned along the axes of the lifting systems and below them.

N.W.: the axis of the OMEGA-X insert must always be parallel to the loading action of the hanging shell.



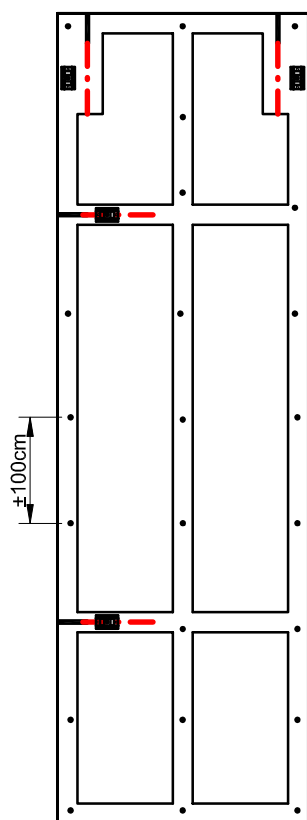
The forks should be placed on three longitudinal rows (upper curb, midline and lower curb), except for panels with a height of less than 210 cm that do not require the median line of forks, about 100 cm from each other, except that at or near the Omega-X inserts.

The central row can be positioned in a straight line (Img. 1) or "zig-zag" (Img. 2).

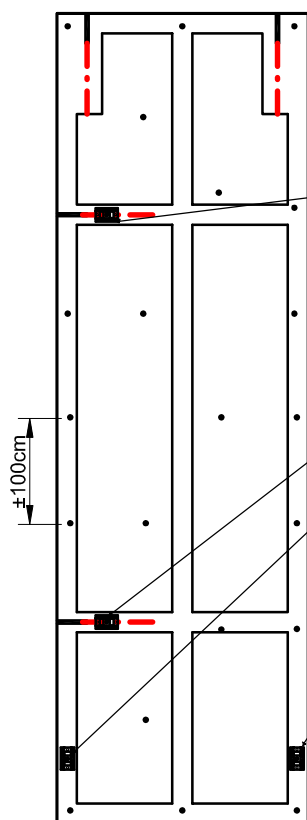
PLACEMENT INTO THE FORMWORK (Vertical panel)

The OMEGA-X support inserts, in the construction of vertical panels, must be positioned in correspondence with the reinforcement beams.

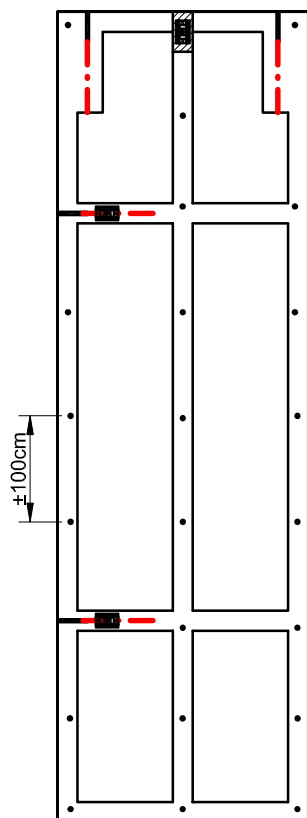
OMEGA-X EXAMPLES OF APPLICATION:



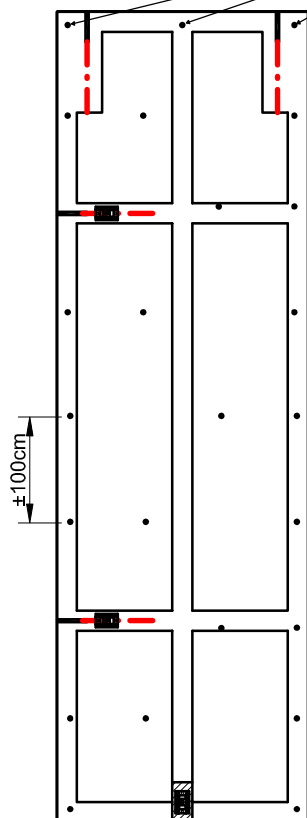
(Img. 1)



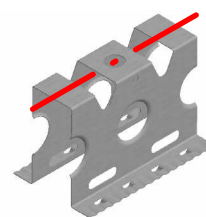
(Img. 2)



(Img. 3)




(Img. 4)



The forks must be positioned on three longitudinal rows (upper curb, midline and lower curb), except for panels with a width of less than 210 cm that do not require the median line of forks, about 100 cm from each other, except that at or near the Omega-X inserts.

The central row can be positioned in a straight line (figs 1 and 3) or "zig-zag" (figs 2 and 4).

N.W.: the axis of the OMEGA-X insert must always be parallel to the loading action of the hanging shell.

 Insulating reduction zone. As the thickness of the insulating varies, the flow rate of the Omega-x system varies according to the table on p. 7

In Imgs. 5 and 6 are shown only forks.



(Img. 5)

panel with upper perimeter curb

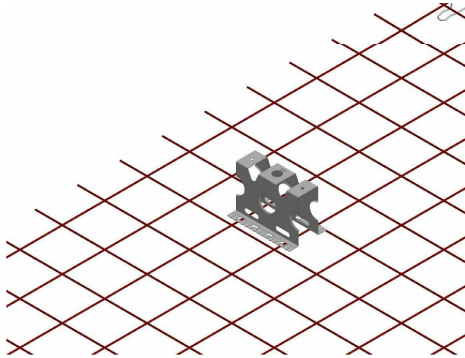


(Img. 6)

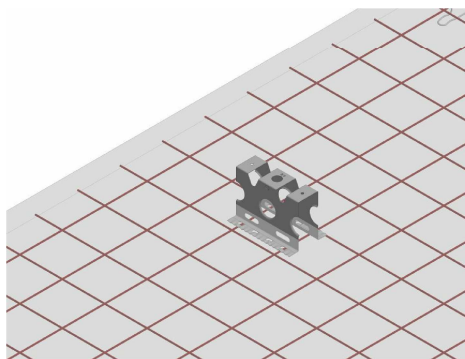
panel with lower perimeter curb

OMEGA-X CAST PHASES - FORMWORK REMOVAL SIDE

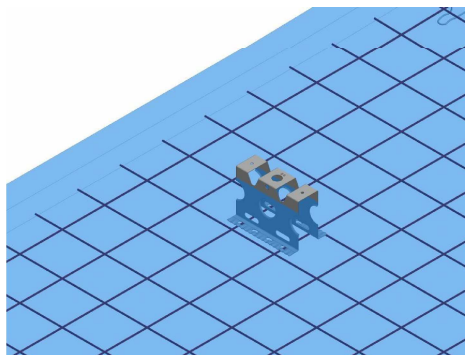
Omega-X insert fixed to the net



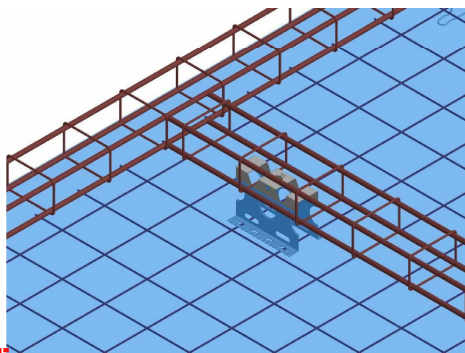
Cast of the hanging shell (external)



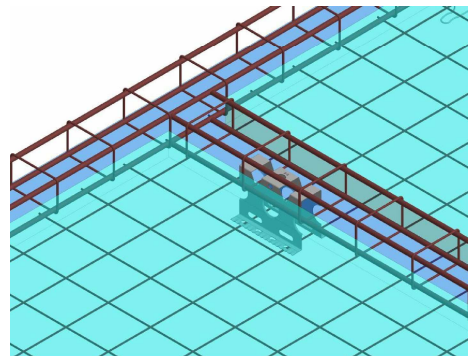
Placement of the insulating



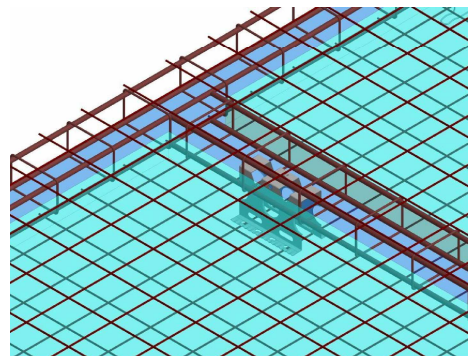
Placement of the reinforcement



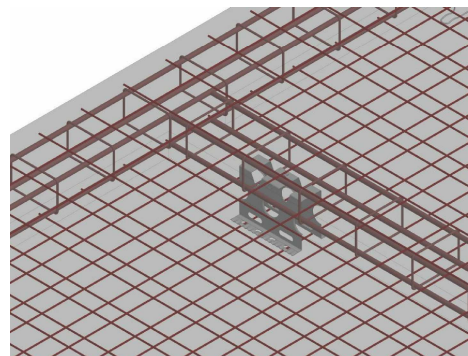
Placement lightening polystyrene



Placement of the superior net

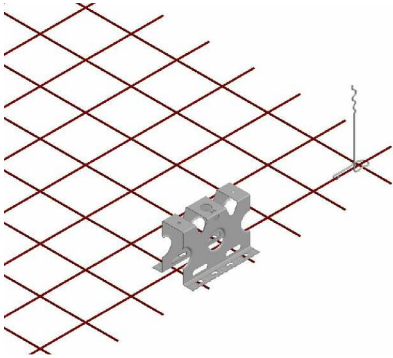


Cast of the load-bearing shell (internal)

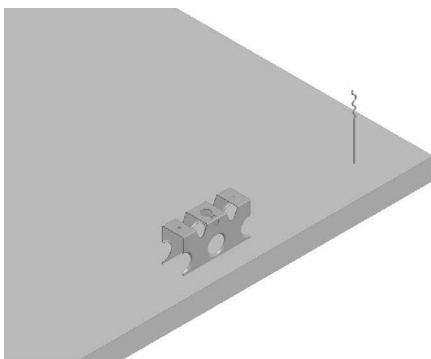


OMEGA-X CAST PHASES - TILTING SIDE

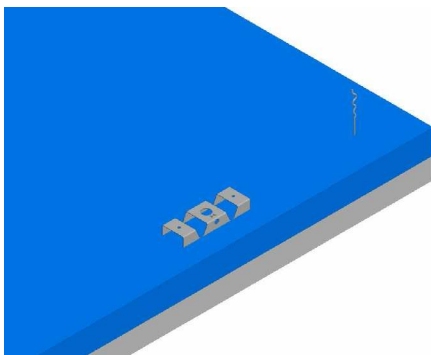
Omega-X insert and forks fixed to the net



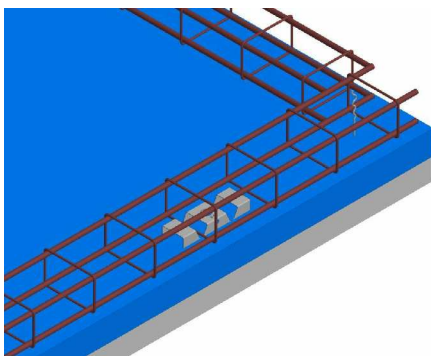
Cast of the hanging shell (external)



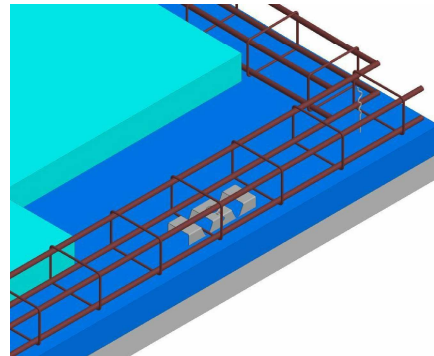
Placement of the insulating



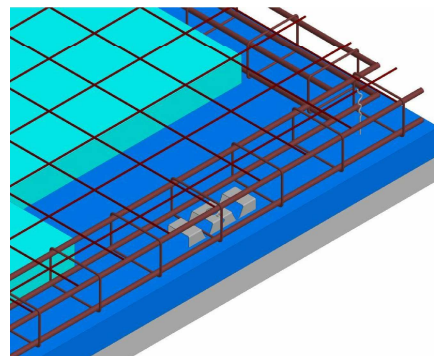
Placement of the reinforcement



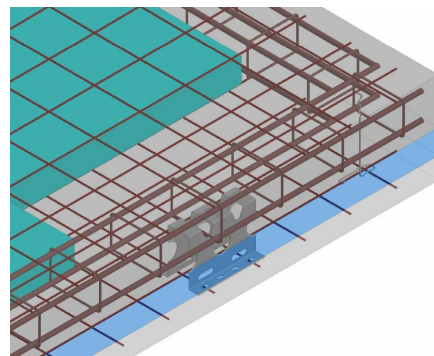
Placement lightening polystyrene



Placement of the superior net



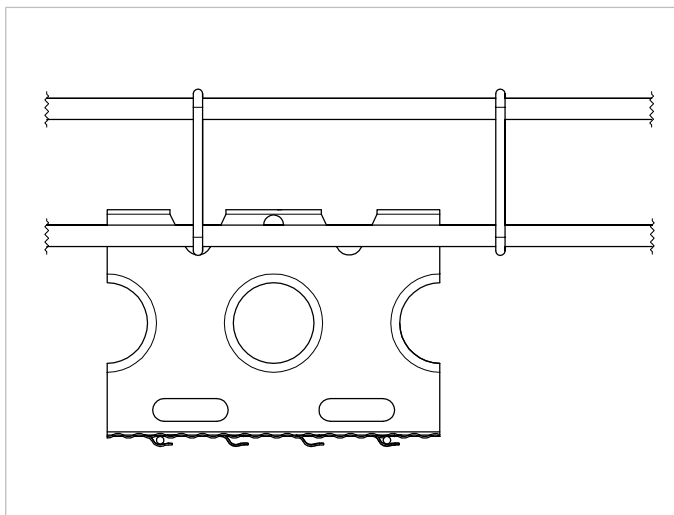
Cast of the load-bearing shell (internal)



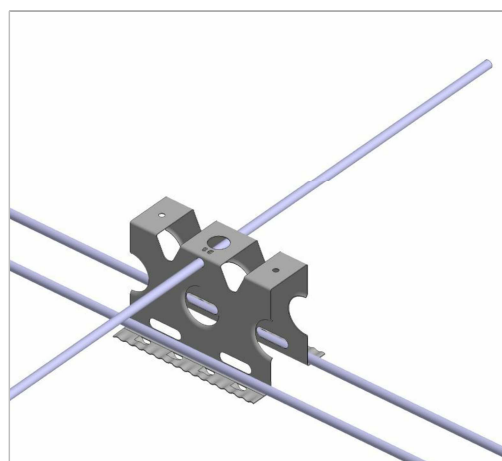
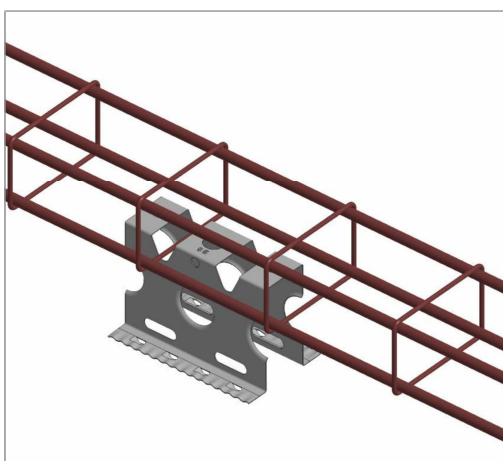
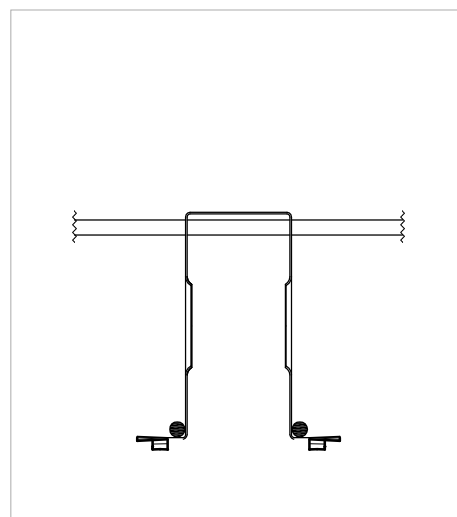
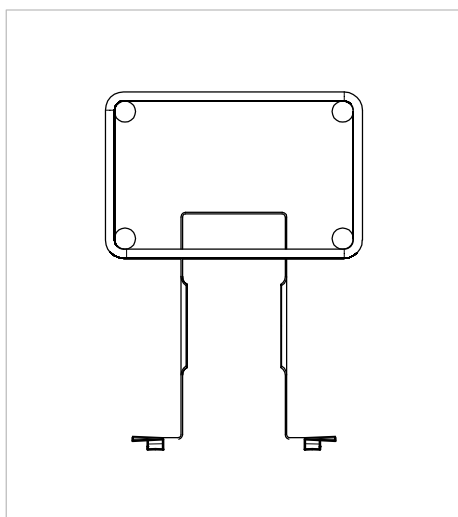
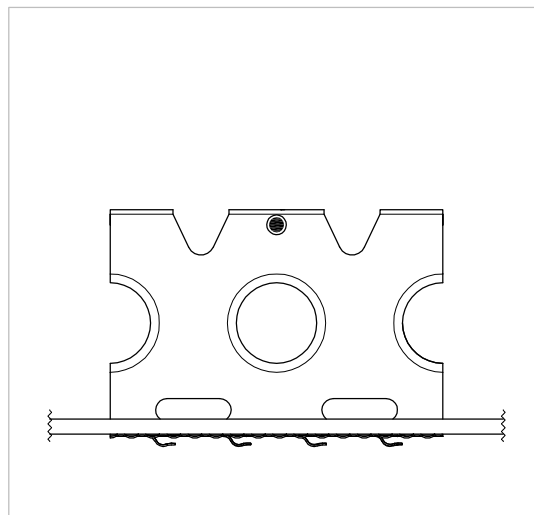
COUPLING WITH BEAMS AND BRACKETS

The Omega-X insert, thanks to the geometry of its holes, allows an easy and quick coupling with reinforcement beams and possibly with brackets.

REINFORCEMENT BEAM

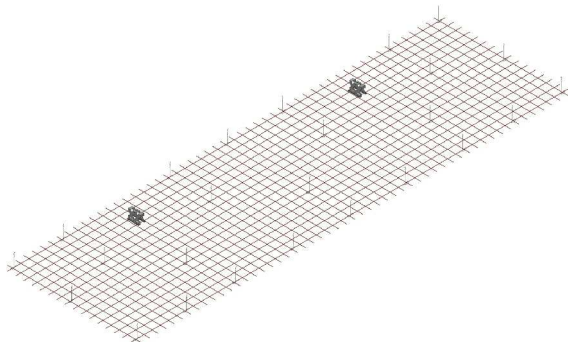


BRACKETING

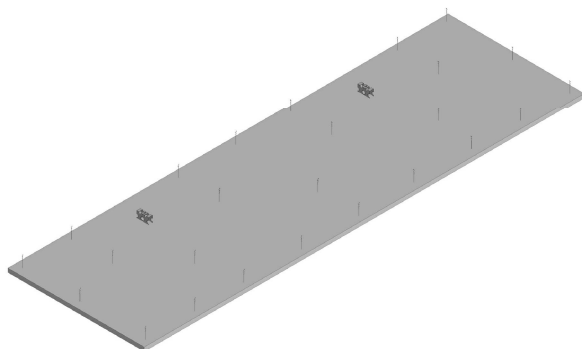


CAST PHASES OF THE PANEL

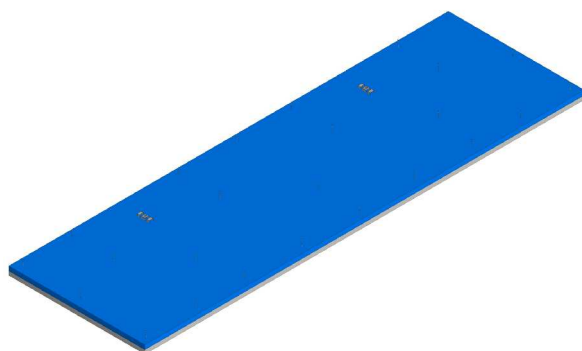
Omega-X insert and forks fixed to the net



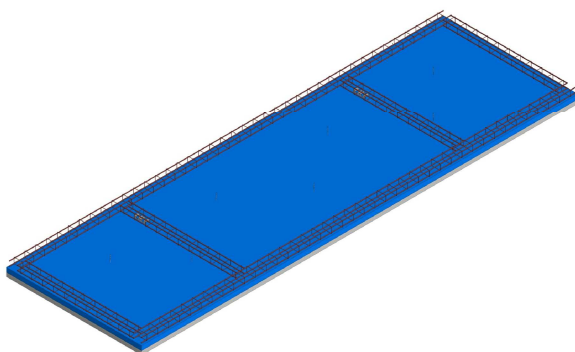
Cast of the hanging shell (external)



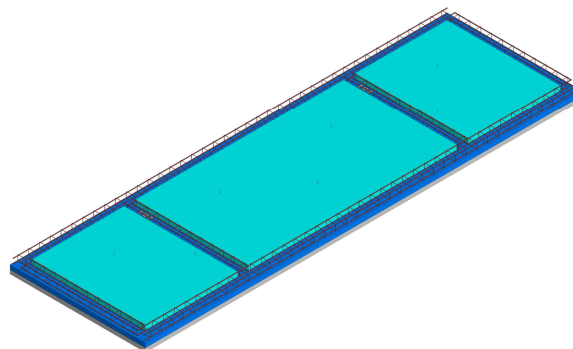
Placement of the insulating



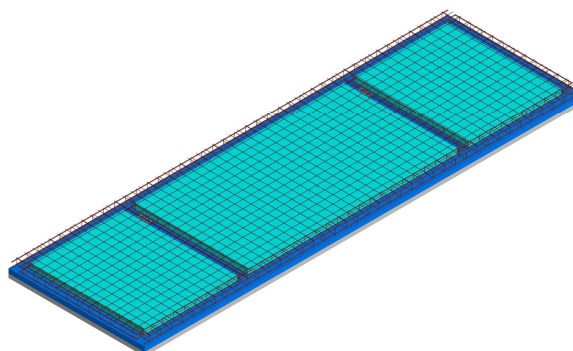
Placement of the reinforcement



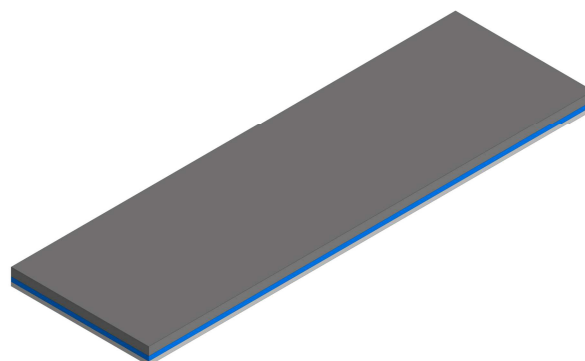
Placement of the lightening polystyrene



Placement of the superior net



Cast of the load-bearing shell (internal)



For any doubt about the correct use of the components described in this manual, please contact:

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WELDINGS OR MODIFICATIONS:

Welding or modifications of the components of the OMEGA-X system, which may cause a reduction in the flow rate, a change in the technical characteristics of the materials or induce hazardous working conditions are not permitted. B.S. Italia assumes no responsibility for damages of any kind due to changes made to its products or individual components.

PROJECT MODIFICATIONS:

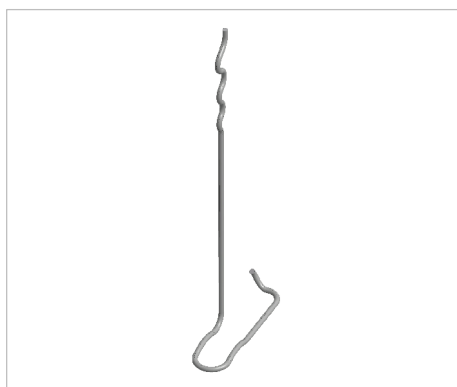
B.S. Italy reserves the right to make design changes concerning components and / or accessories and / or flow rates at any time, without prior notice.

THE CALCULATION

For the design of the inserts and fixtures it is necessary to strictly follow the instructions in this manual. It is however the responsibility of the designer of concrete products to choose the appropriate component of the OMEGA-X system, related to the application in question and the actions involved. For each project, according to the legal obligations, to whose total respect we refer, a security manager must be appointed and a detailed assembly plan drawn up and followed. This manual must always be available at the place where the system is used and delivered to the responsible persons: in production, storage and construction.



Description	Code
Omega-x	
Omega-x inox L=220mm	9000-22.I



Fork	
Inox fork H=255mm	FORC-X2



Fork	
Inox fork H=155mm	FORC-X3



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