MEDITERRANEA

C.P.A. s.r.l.

PISCINA MEDITERRANEA

WITH SELF-SUPPORTING STRUCTURE

INSTALLATION MANUAL

READ THE MANUAL AND KEEP IT FOR A FUTURE USE

SUMMARY

1. Premise

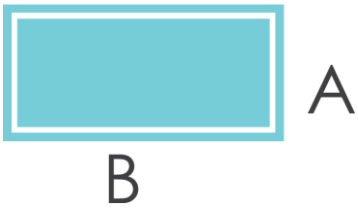
For the installation of a MEDITERRANEAN KIT it is recommended to proceed following these instructions, so as to obtain an efficient and quality product.In order to perform a quick and effective assembly, we recommend that you have the following equipment available:

- ✓ Cordless screwdriver with cross inserts
- ✓ Fix Keys 17 — q. tà 2
- ✓ Fix Keys 19 — q. tà 2
- ✓ Ratchet wrench 17 e 19
- ✓ Phillips screwdriver
- ✓ Metric wheel
- ✓ Cutter
- ✓ Level

2. Features

- It is made with a modular system structure1 in galvanized steel panels.
- It is equipped with an internal pre-welded PVC coating, for the hydraulic seal of the basin, which guarantees its durability over the years and a perfect aesthetic finish as well as making it immune to diluted acids and saline and chlorinated solutions.
- It is equipped with a complete and equipped technical compartment positioned in the head of the swimming pool.
- It is accessorise with a counter-current swimming kit and RGB LED lighting system.
- It is equipped with an external coating in hot painted sheet metal that guarantees its immunity from any type of external aggression: from natural ones such as insects, termites, fungi and other micro-organisms to rain, hail, snow and UV rays.

3. Encumbrance and dimensions



External encumbrance [m]

Internal dimensions[m]

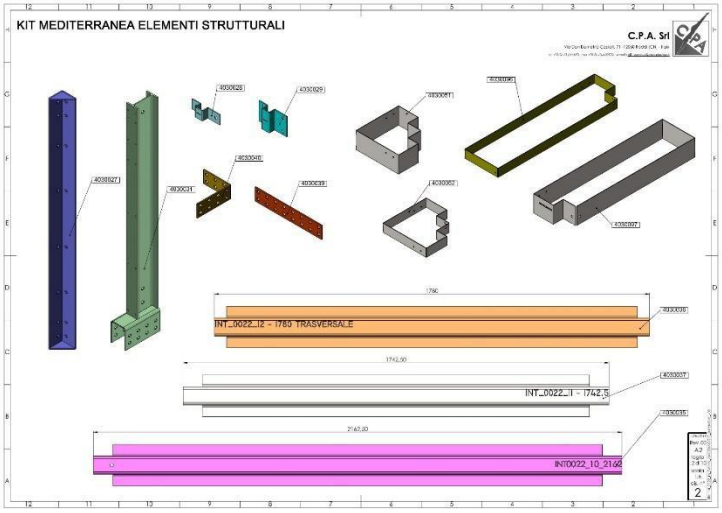
CODICE	A	B	H	A	B	H
4030062	3,60	4,10	1,37	3,00	3,00	1,25
4030063	3,60	5,60	1,37	3,00	4,50	1,25
4030064	3,60	7,10	1,37	3,00	6,00	1,25
4030065	3,60	8,60	1,37	3,00	7,50	1,25
4030071	3,60	10,10	1,37	3,00	9,00	1,25
4030114	3,60	11,60	1,37	3,00	10,50	1,25

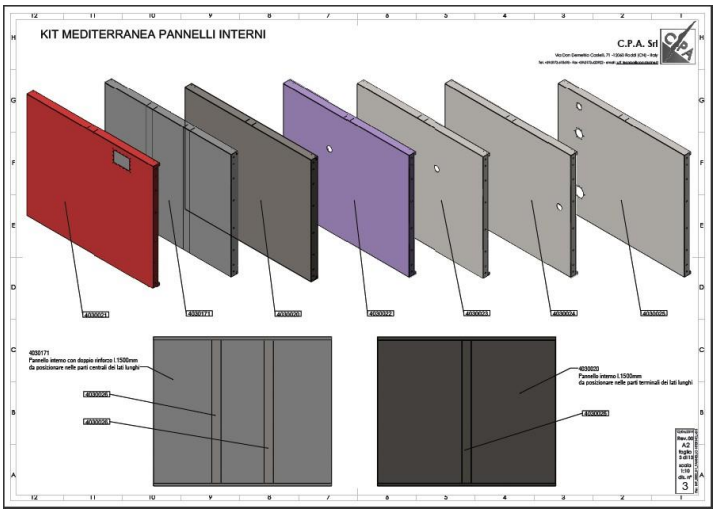
[1] The covering panels are included in the supply of the Mediterranea kit, the upper finishing edges are excluded

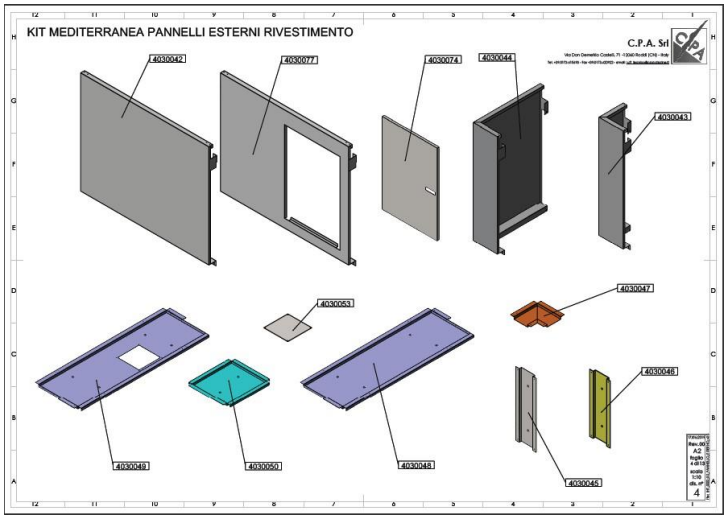
4. The structural kit elements deMediterranea

The structure of the Mediterranea is assembled on site, composing the modular elements that constitute the kit, as foundation beams, uprights, internal and external panels , mechanicalthrought coupling of the parts with bolts, nuts and interlocking joints.

For the component details look at TAV. 02, 03 e 04 Following attached document







Following the phases and operations necessary for a correct assembly of the Mediterranea

THE BASE STRUCTURE

5. Laying on the ground: tracing and excavation

The structure of the Mediterranea formed by omega beams allows laying on a cement base, but also on stabilized soil2. Therefore, if it is installed directly on the ground, it is necessary to carry out an excavation with a forced section 12 cm deep, that takes up the dimensions of the

bearing structuree. look TAV. 05 The attached document.

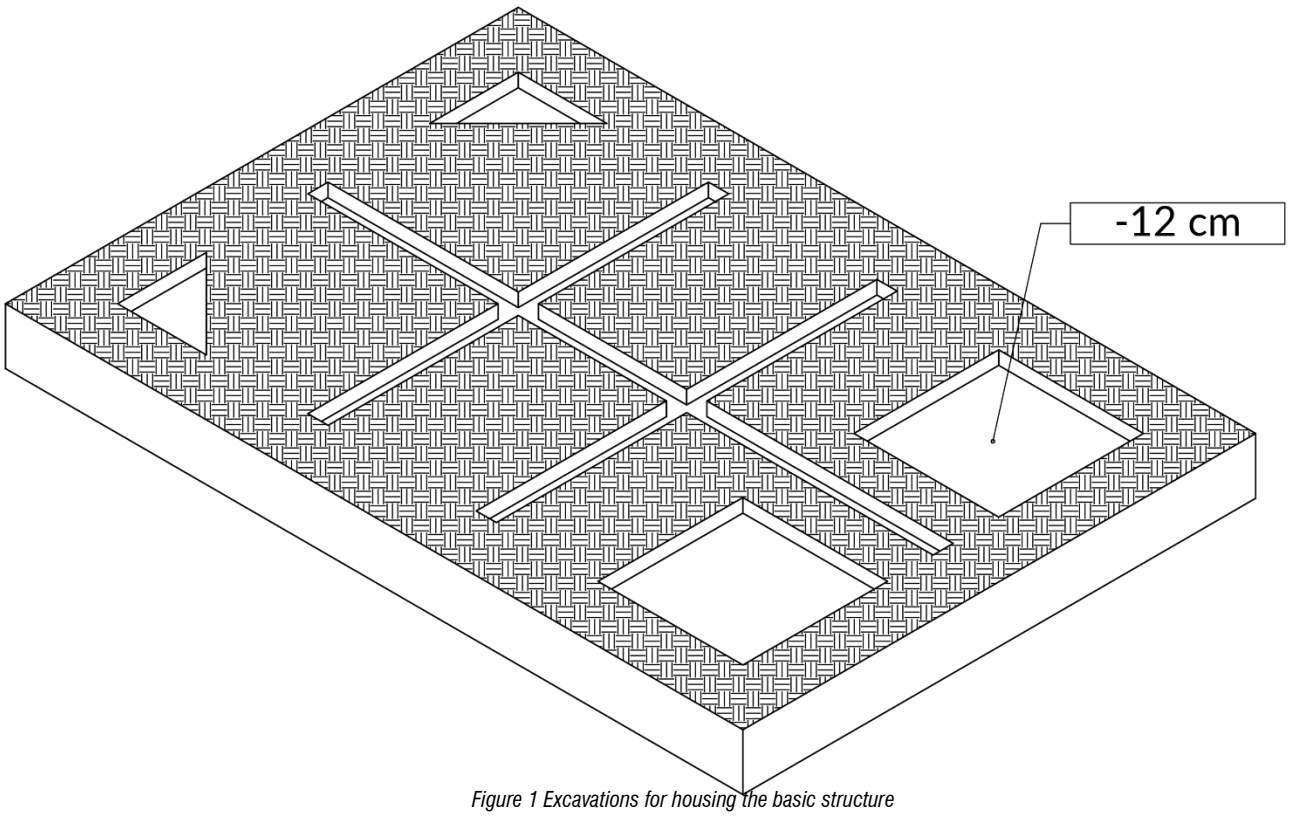


Figure 1 Excavations for housing the basic structure

Once the excavation operations have been completed, remove the loose earth from the ground, taking care to remove stones or elements from the laying surface that could subsequently damage the PVC covering inside the tank. Then proceed with a leveling of the laying area, checking that the ground is level and free of slope.

WARNING

For an optimal result, we suggest weeding the area of installation.

In the end of the base kit structural assembly, as indicated on the folllowing manual, will be necessary to cover the the beams with the land previously moved, to level it again. The upper face of the Omega beams will determine the finished portion of the bottom / top of the tank.

WARNING

For an optimal result, once the basement of the base structure is finished, we recommend laying an ultra-fine quartz sand bed3 of about 1 - 1.5 cm inside the shape of the tank, to be leveled and made of homogeneous thickness by straightening. Then apply any non-woven fabric3, anti-root, if the possible regrowth of plant elements is assumed.

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[2] Laying on the land is not recommended due to the instability that the same may incur.

3 Not subject to delivery nel kit.

6. Layng on reinforced concrete foundation

In the event that the installation is performed on an existing or new construction concrete foundation, the KIT provides for the installation of a special base in high density EPS.

Before proceeding with the assembly of the structure, check that the laying surface is sound and that there are no cracks or detachment areas. It is good to check that the bottom is well leveled and smooth.

If the foundation does not comply with these conditions, it will be necessary to restore the surface by eliminating the defects, correcting their flatness.

The EPS base is made using modular elements to be positioned inside the tank

respecting the laying pattern,

look at TAV. 12A attached this document

MEDITERRANEA 600x300	
TIPO BASAMENTO	PZ
A	16
B	8
C	4
D	4

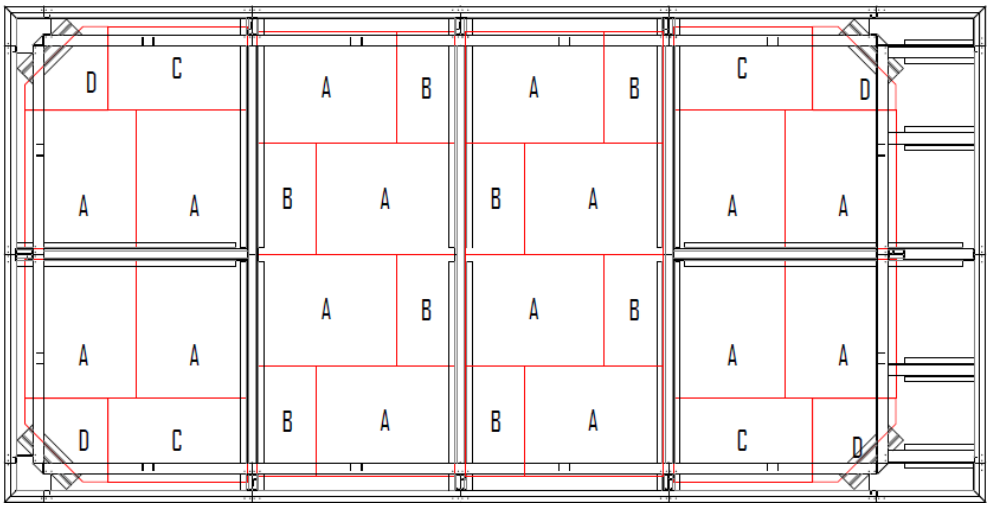


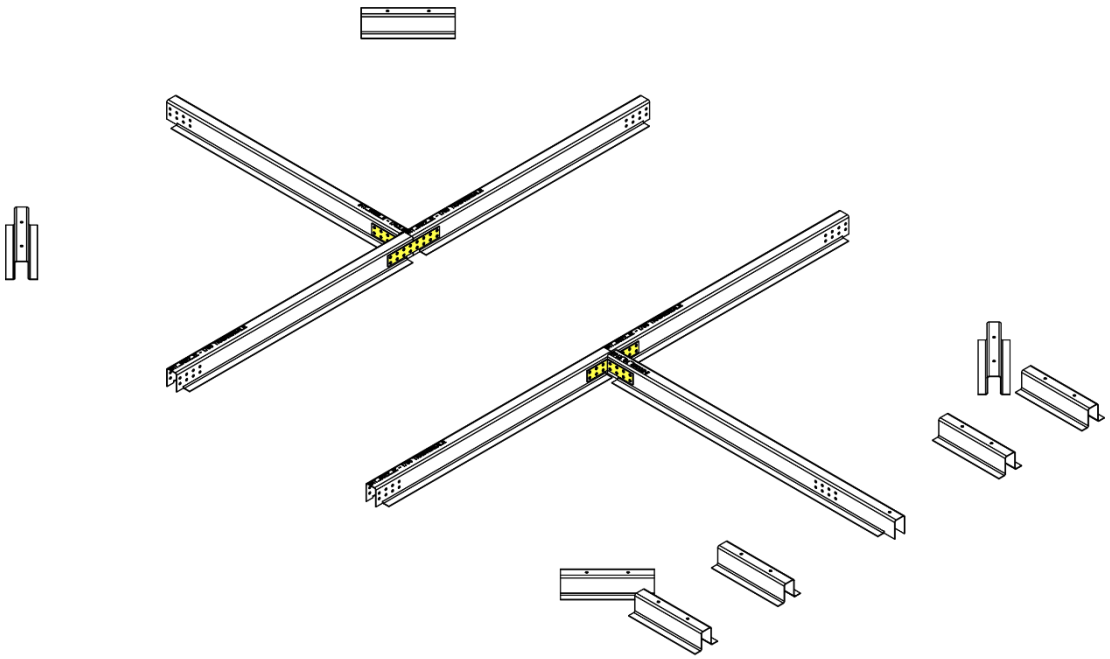
Figura 2 Schema basamento di posa

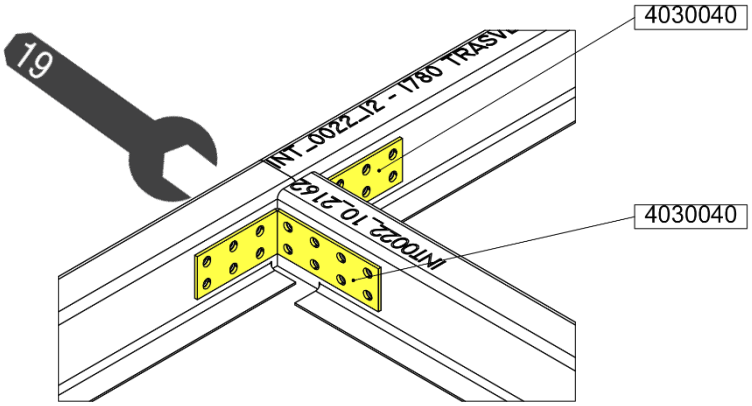
7. How to assembly the base structure

Arrange and mechanically connect together the elements that make up the basic structure. The specially drilled omega beams are coupled using linear and angular plates using M12x110 bolts. The basic structure is composed of the following elements, supplied in the indicated quantities:

STRUTTURA DI BASE		
Codice interno	Quantità	Componente
4030035	1	Trave omega 2162,5
4030036	6	Trave omega 1780
4030037	1	Trave omega 1742,5
4030038	8	Trave omega 500
4030039	4	Piastra lineare
4030040	4	Piastra angolo

The 500 mm long omega beams will be placed at the four corners of the swimming pool and on the side on which the technical compartment will stand, where they will serve as a support for the buttresses in support of the external finishing panels and the upper covering.
Look at attached TAV. 06.





The 1780 mm long omega beams will be arranged transversely to the shape of the swimming pool and coupled to each other, by means of linear plates (art. Code 4030039) and / or angular (art. Code 4030040).

In the longitudinal direction, the latter must be coupled with the 2162.5mm beam (item code 4030035) in correspondence with the technical compartment and with the 1742.5mm beam (item code 4030037) on the opposite short side.

The mechanical connections are made by means of M12x110 bolts, toothed washers and M12 nuts, using two 19 mm spanners.

For the details relating to the center distances and the distances to be respected, refer to the project documents, attached to the following manual.

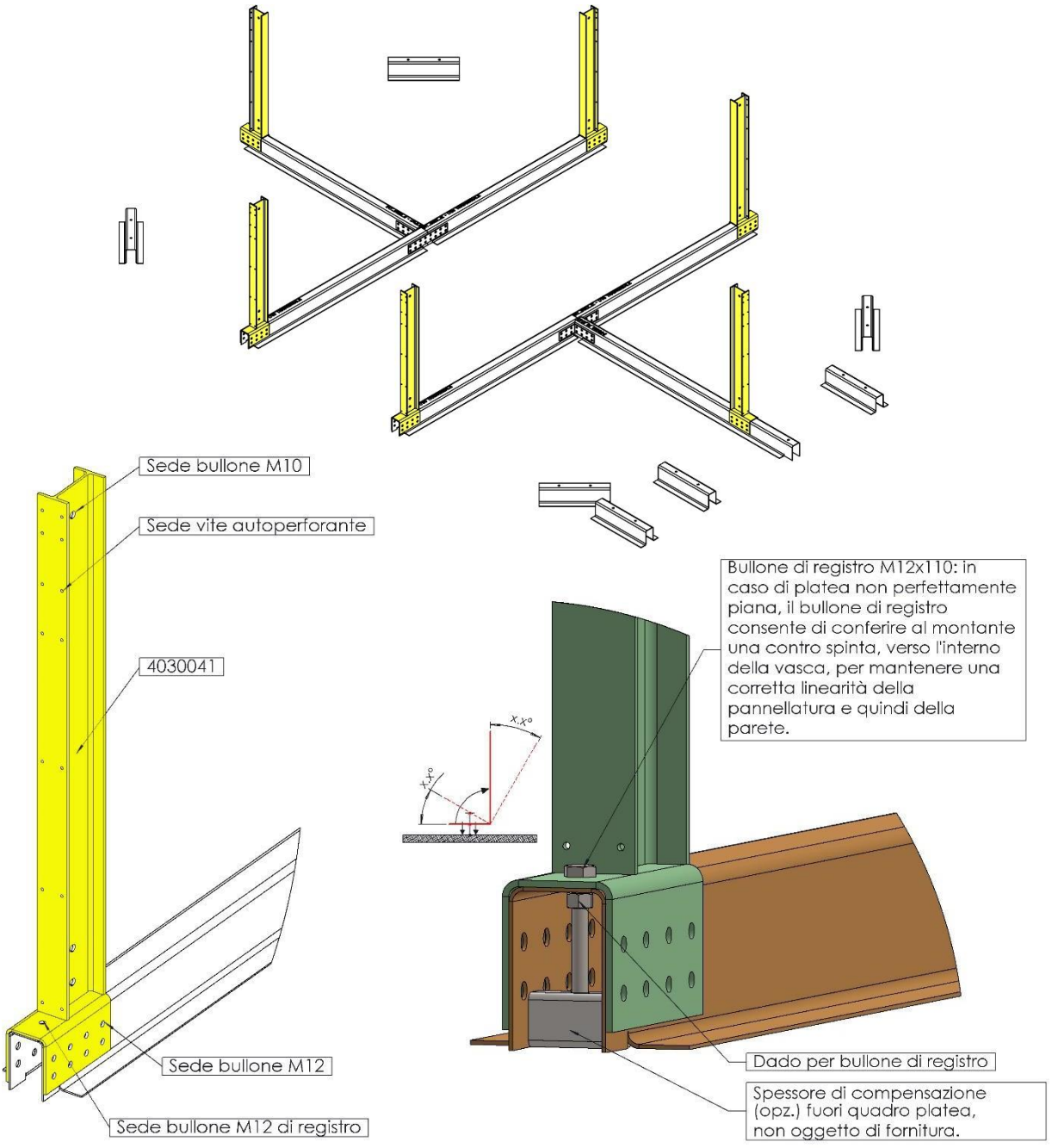
8. Structure connection

Once the basic structure has been prepared, it is possible to present and couple the uprights (art.cod.4030041) corresponding to the end parts of the beams 1780, 1742.5 and 2162.5mm, where the appropriate holes are provided.

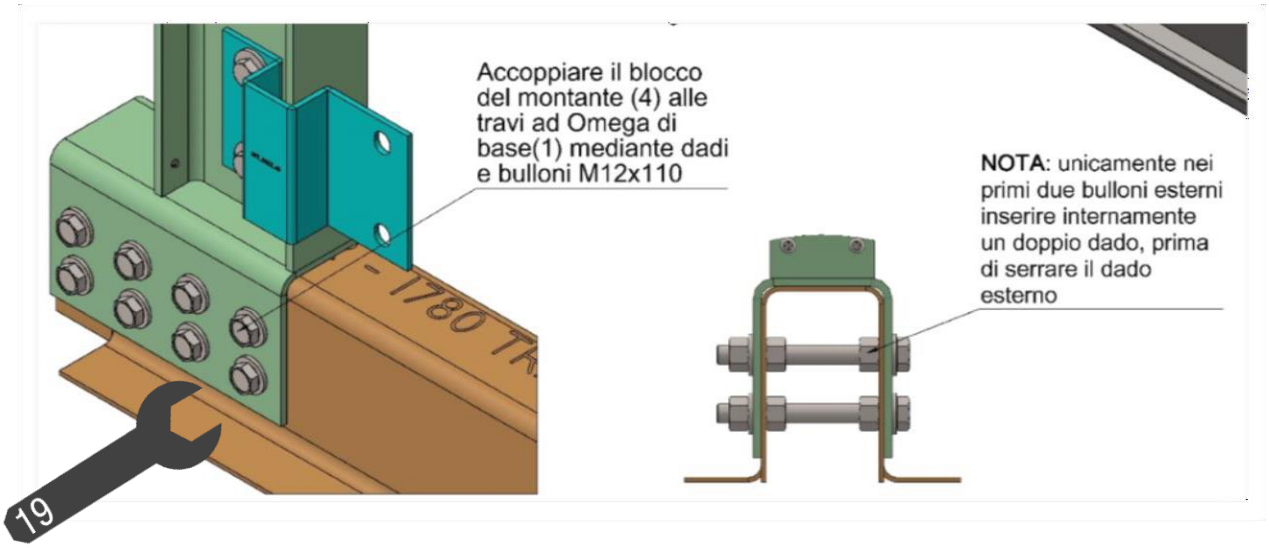
The vertical structure is composed as follows:

VERTICAL STRUCTURE		
Internal Code	Quantity	Component
4030028	8	Staffa d'ancoraggio singola
4030029	8	Staffa d'ancoraggio doppia
4030030	8	Profilo a U
4030031	8	Putrella IPE 120
4030041	8	Kit montante

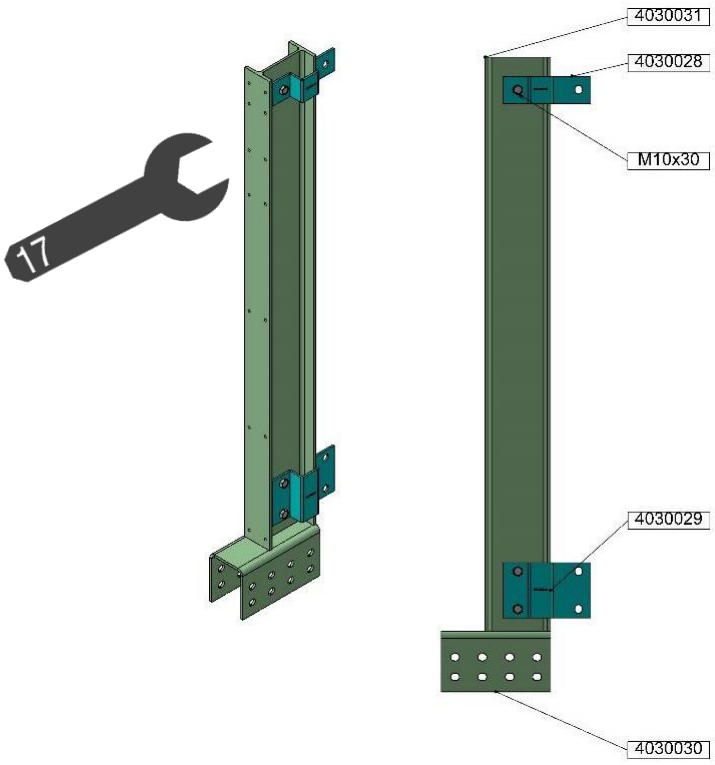
In the upright kit the U-profile and the IPE profile (art.cod. 4033030 and 4030031) are supplied saldati . It will therefore be necessary to connect this element with the underlying omega beams.
See in attachment. TAV. 06

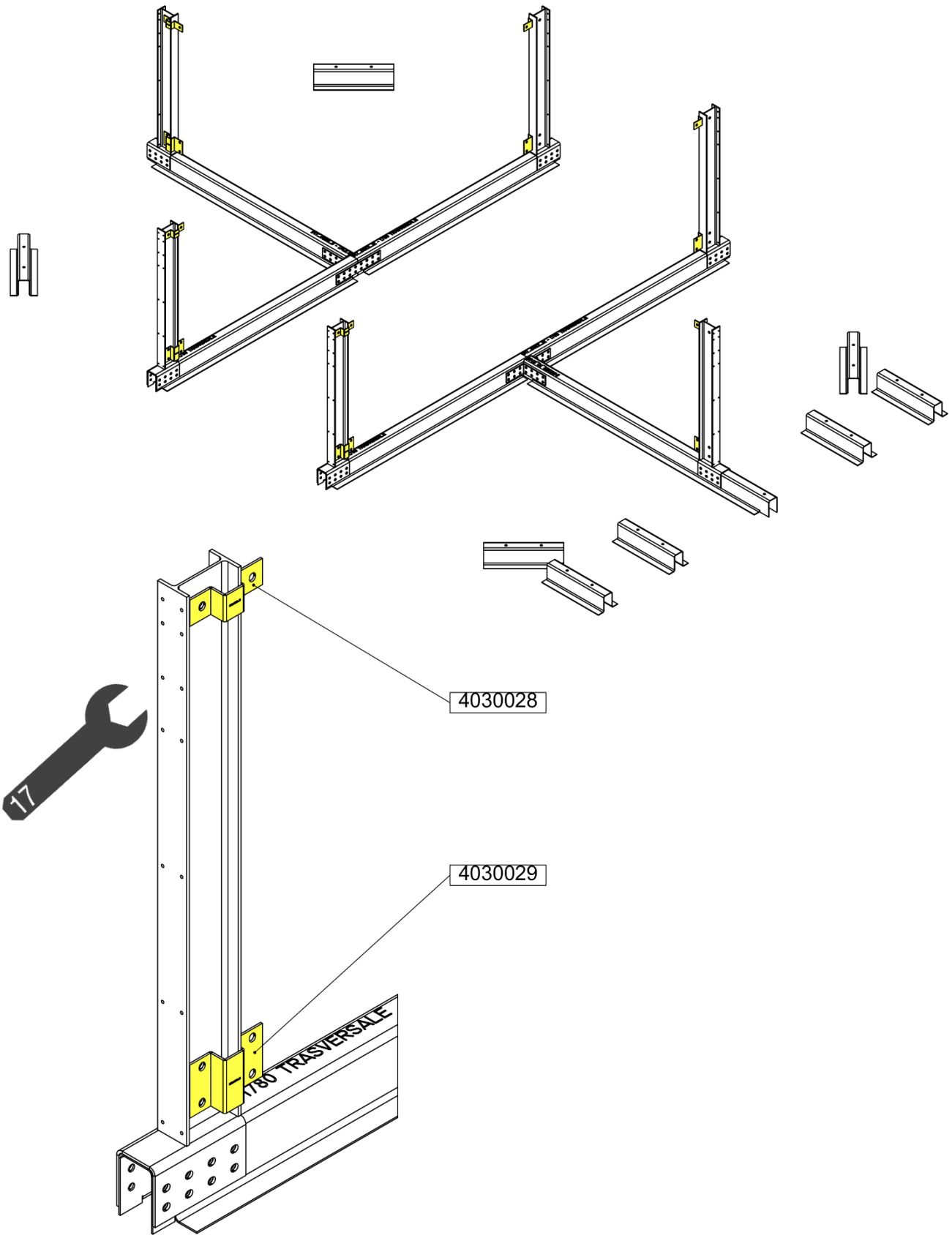


The U-profiles are connected to the base beams by means of 8 M12x110 through bolts, 8 round toothed bolts and 12 lock nuts.



Once the vertical elements have been fixed, it is necessary to prepare 1 bracket for each upright ancoraggio superior (art. cod.4030028) and n.1 lower anchoring using bracket e (art. cod.4030029) and Connect it M10x30 bolts, using the fixed wrenches 17.





These brackets will be used later for fixing the paneling interna.

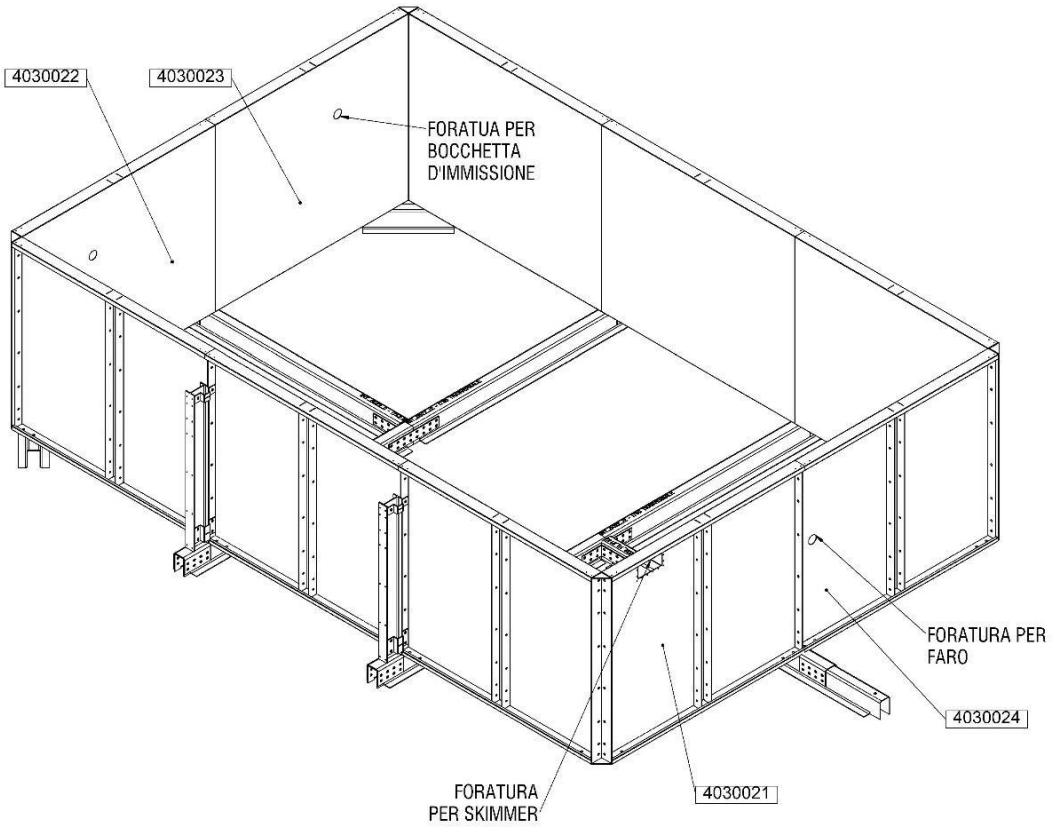
9. Assembly of the structure

The internal structure of the swimming pool is made up of internal panels, corner pillars, ribs and finally the buttresses, as listed below:

INTERNAL STRUCTURE		
Internal Code	Quantity	Component
4030020	4	Inside panel 1500
4030171	4	Inside panel double reinforcement 1500
4030021	1	Skimmer Panel 1500
4030022	1	Right vent panel 1500
4030023	1	Left vent panel 1500
4030024	1	Panel light 1500
4030025	optional	Bellow jet Panel 1500
4030026	16	Reinforcement Panel 1500
4030027	4	Pillar corner
4030051	2	Centring top corner
4030052	2	Centring lower corner
4030096	2	Centring upper technical compartement
4030097	2	Centring lower technical compartement

The main elements that make up the internal structure of the Mediterranean are the 20/10 mm thick galvanized steel panels. These elements, 1500 mm long and 1225 mm high, can have holes in which to accommodate the pool accessories, such as intake vents, skimmers, lights and possibly swimming against the current model Bellow Jet (optional). The panels have holes on both the lateral and upper and lower wings to allow the connection between the various elements.

The panels with the predisposition for accessories such as skimmer, lighthouse, intake vents will be installed on the short sides of the pool. The panels with the predispositions for skimmer and lighthouse from the side where the technical compartment will be made. Those without holes (cod.art.4030020) will be installed in the end parts of the long sides, in contact with the corner posts (cod.art.4030027). Finally, those with double reinforcement (code art. 4030171) will be positioned in the central parts of the same sides.

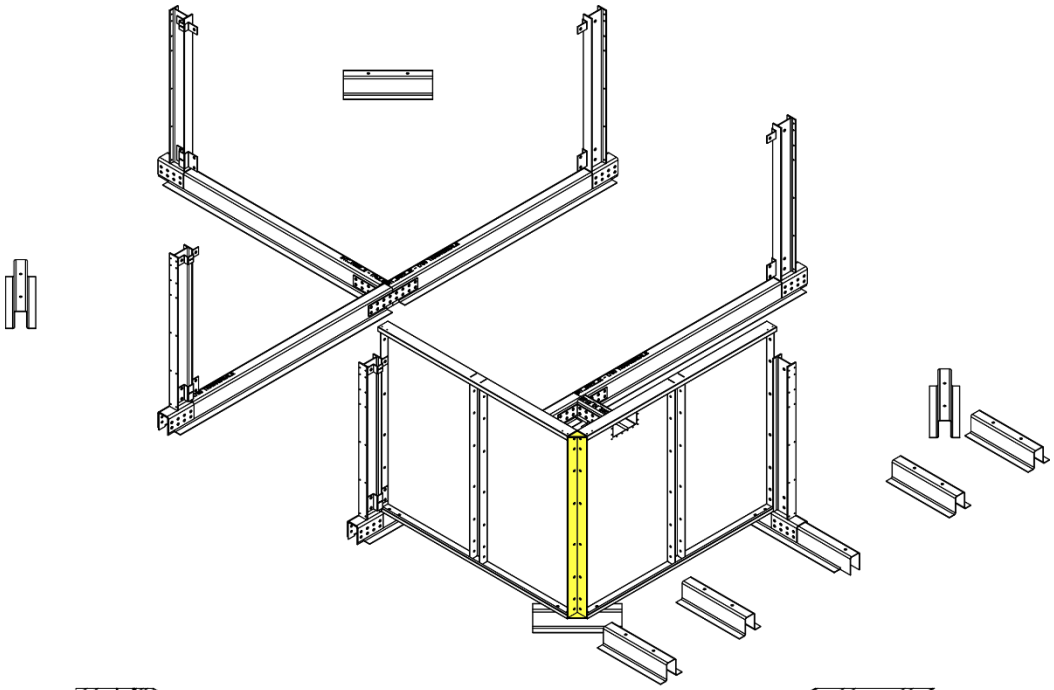


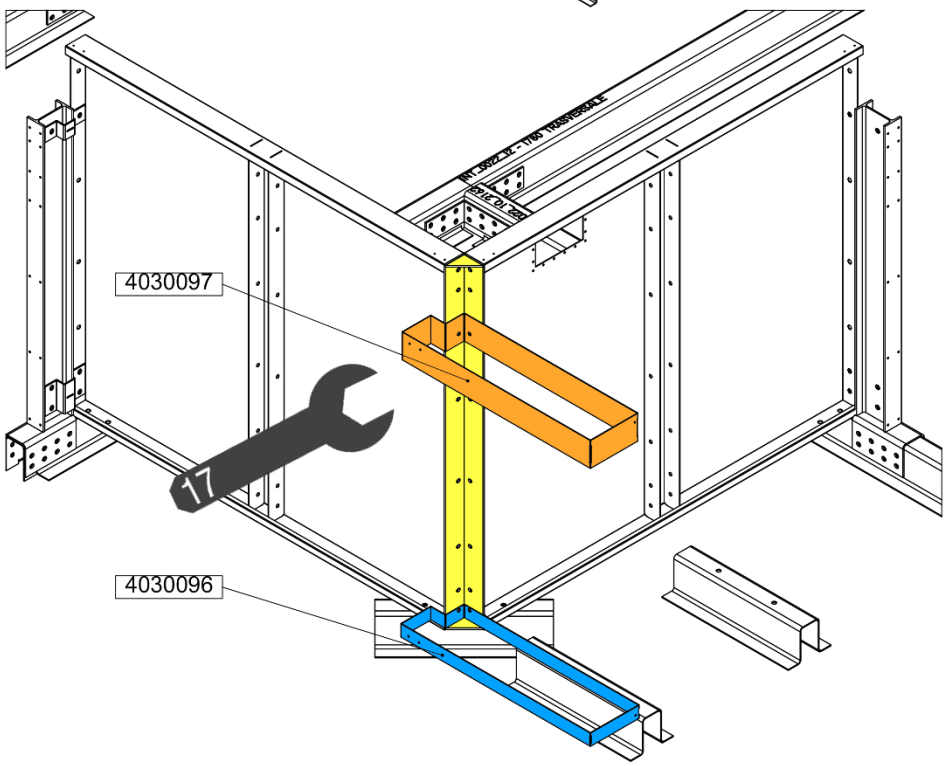
Position the internal structure starting from the perforated panel for housing the skimmer and proceed clockwise, positioning the first corner pillar (art. Code 4030027) between the short and long sides. In each change of direction an angular pillar will be inserted, a very rigid element with a triangular section. The coupling is performed by means of M10x30 bolts.

Pay particular attention to the unions to be made with the ribs as specified below.

WARNING

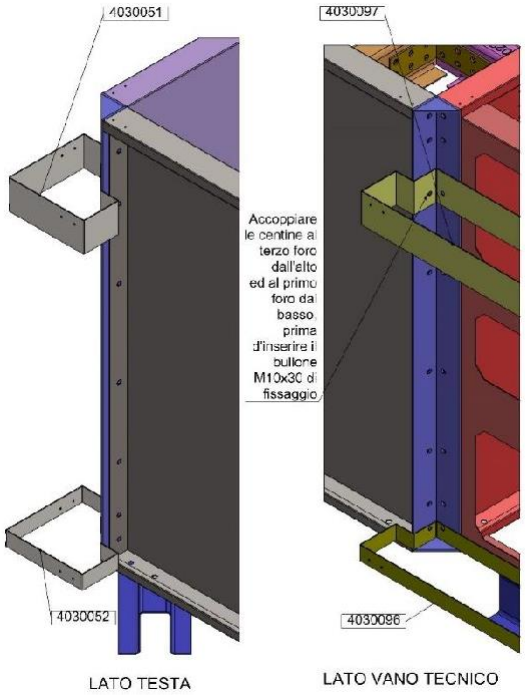
The panels that form the internal corner of the pool must be tied to the omega beams 500 mm long, previously positioned in the four corners with 45 ° inclination. It is necessary to couple these panels and the omega by means of n. 2 bolts M10x30.





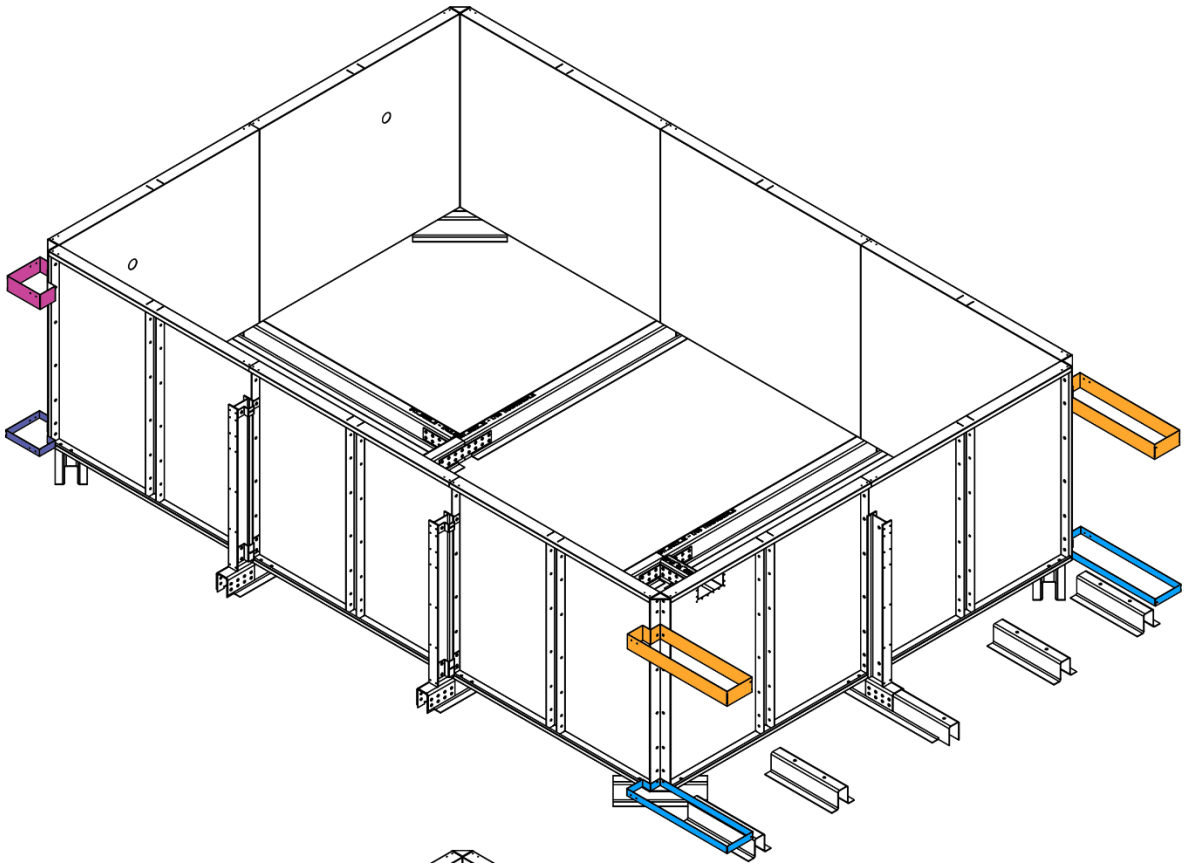
In correspondence with the short side where the technical compartment of the swimming pool will be located, it will be necessary to install n. 4 ribs coupling them directly to the internal profiles of the corner pillars. The ribs have different sizes

depending on whether they are positioned below or above (code art. 4030096 and 4030097 and also art. 4030051 and 4030052).



The upper ribs have a height of 95 mm and will be used to hook the external coating. The lower ribs instead have a height of 45 mm; the latter will be fixed by means of self-drilling screws on the external paneling, equipped, in the lower profile, with a special seat.

The upper ribs will be connected with the corner pillars at the third slotted hole starting from the top, while the lower ones must be coupled with the first hole starting from the bottom.



THE TECNICAL

10. The structure realization

Proceed with the construction of the technical compartment, using the following parts:

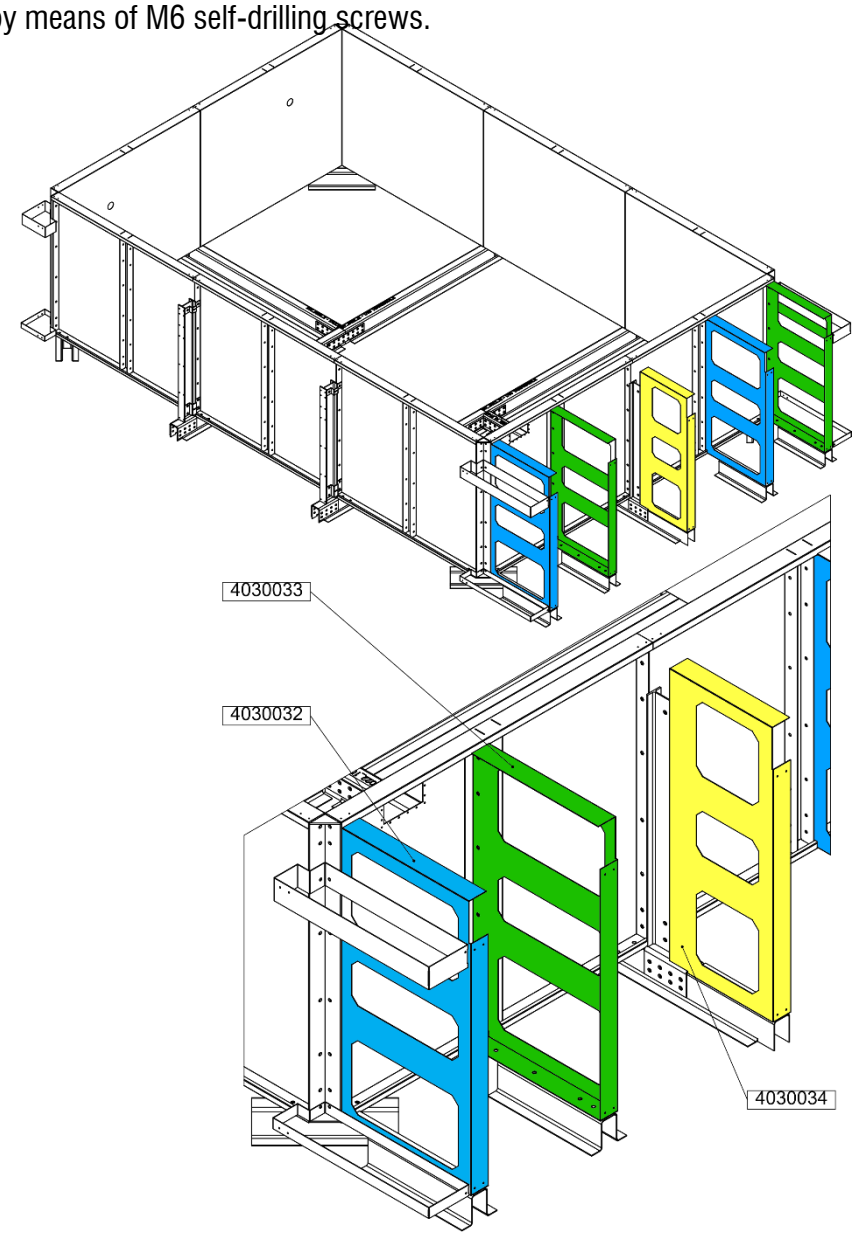
STRUCTURE – TECHNICAL COMPARTMENT		
Internal Code	Quantity	Component
4030032	2	Left headboard buttress
4030033	2	Right headboard buttress
4030034	1	Jolly headboard buttress

The structure that will house the technical compartment will be supported by n. 4 buttresses and n. 1 wildcard buttress to be positioned centrally at the omega beam of length 2162.5mm.

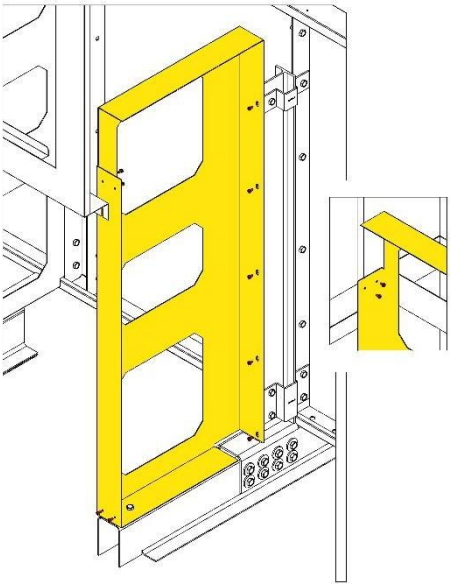
Look TAV. 10 attached.

All the headboard buttresses (art.cod. 4030032 and 4030033) will be connected both with the beams of the base structure (500 mm omega beams), and with the reinforcements of the internal panels by means of M10x30 bolts.

The wildcard buttress (art. Code 4030034), on the other hand, stands out because, positioned centrally to the structure, it will be anchored directly to the 2162.5 mm beam and frontally with the upright made up of IPE 120 by means of M6 self-drilling screws.



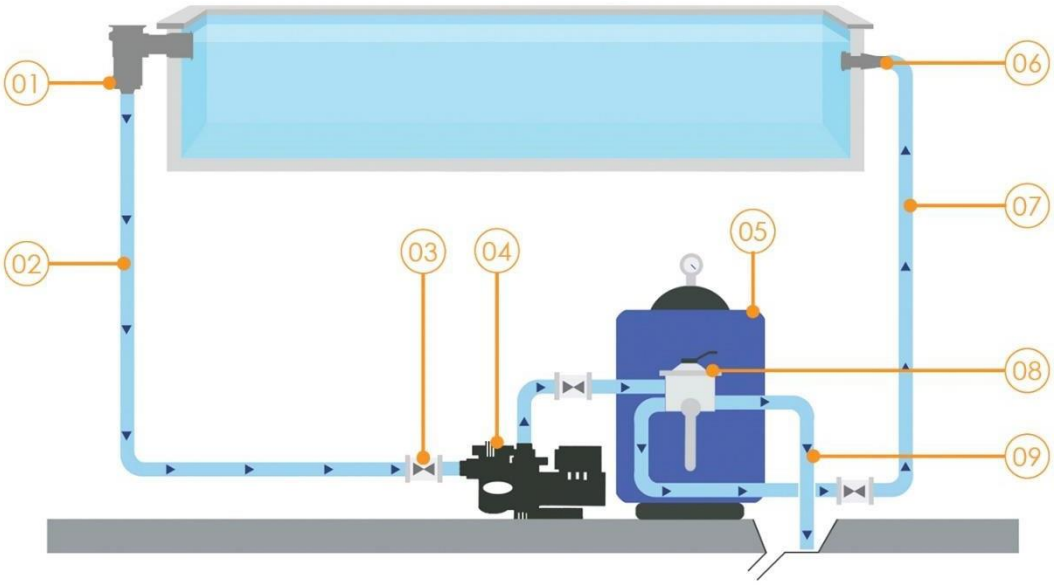
The screws must be inserted in the special pre-holes on the vertical face of the upright and once coupled with the slotted seats on the internal face of the jolly buttress (art. Cod. 4030034).



Once the internal structure is completed, it is necessary to install the hydraulic pipes and therefore the internal tank lining membrane.

L'IMPIANTO DI FILTRAZIONE

11. The principle of operation of the swimming pool hydraulic circuit

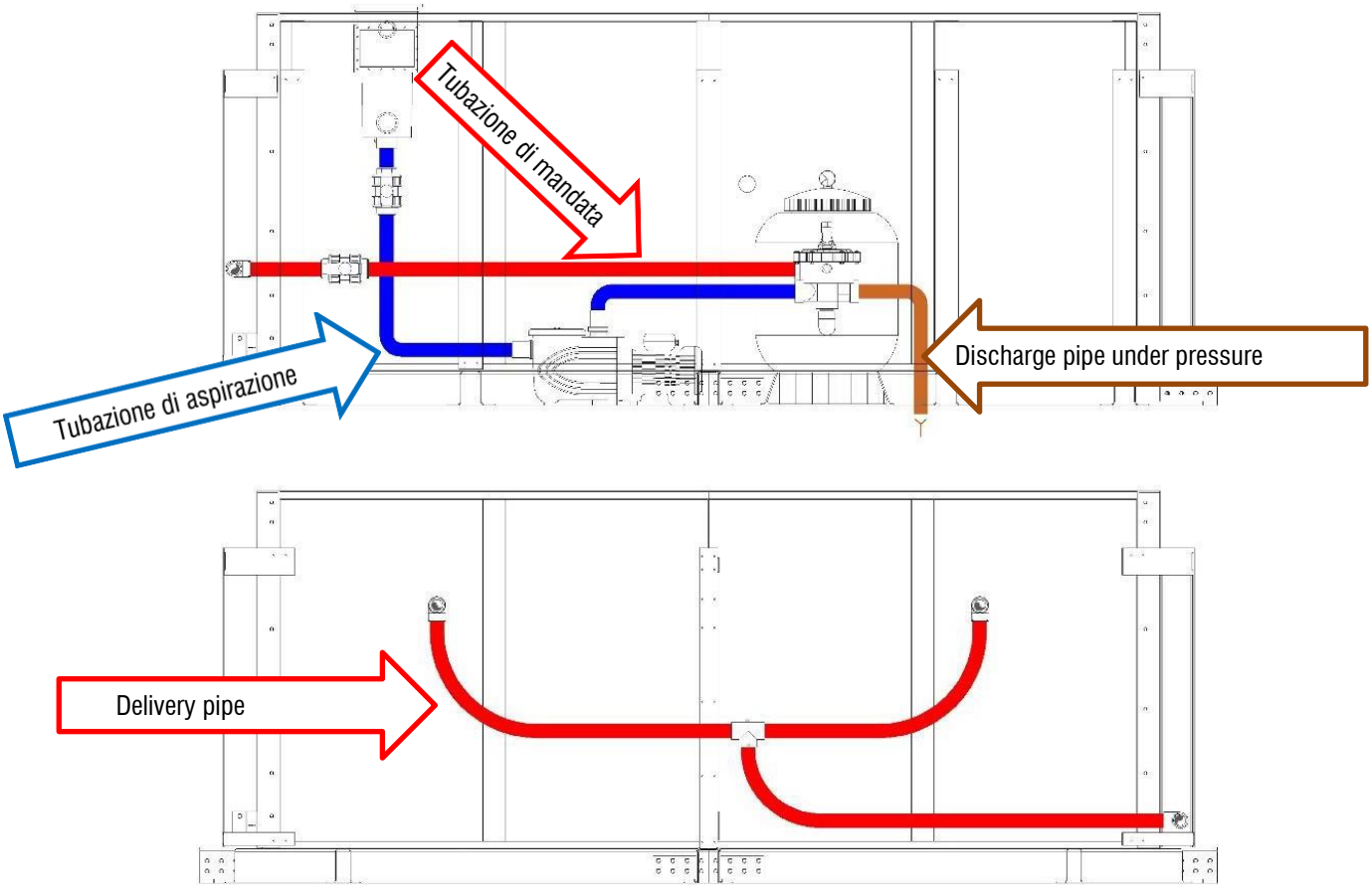


The water is sucked from the surface through the overflow skimmer (01), reaching the filter (05) by means of a Ø 50 mm flexible pipe (02) equipped with a sectioning ball valve (03) and returns to the swimming pool, after passing through the filter (05) using the intake vents (06). The intake vents are to be installed on the opposite side of the skimmer. The water that reaches the filter (05) passes through the filter medium, the quartz sand, circulating from top to bottom, so that this retains the suspended materials present in the water to be filtered. Once the filtration cycle has started, after a certain period, it will be necessary to wash the filter, to remove the deposited dirt from the sand, thus restoring the passage of water that had become obstructed. When the pressure in the filter is higher than 1.3 kg / cm2 (bar), the filter must be washed.

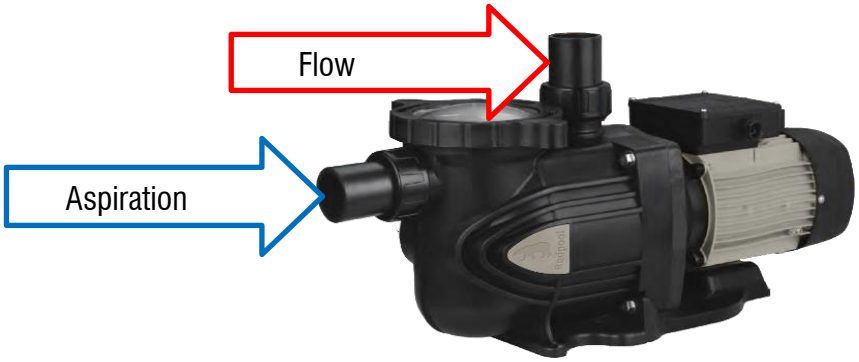
With the counter-current washing, the circulation of water in the filter is reversed and the waste material retained in the same is expelled to discharge. Keeping these important concepts in mind, there will be no difficulty in having efficiency in the whole swimming pool system4.

12. The idraulic circuit realization

Once the inlet and return accessories have been positioned on the poolside (skimmer and vents), proceed with the creation of the filtration system. The filtration system consists of a 500 mm diameter sand filter, with a six-way selector valve, and a 0.50 HP circulation pump with prefilter. The system will be built according to the following scheme: the intake vents will have to be connected first to each other, through a T-fitting and to the circuit delivery line.



The delivery line must be connected to the outlet of the circulation pump. The suction pipe will connect the outlet of the skimmer with the suction mouth of the circulation pump. All couplings are to be made with the Ø 50 mm PVC pipe supplied with the kit. The devices and accessories will be joined to the pipe by gluing.



For details of the operation of the circulation pump and filter, refer to the user manual of the same.

INTERNAL COATING

13. Laying the guides for anchoring the PVC Liner presaldato

It is now possible to proceed with the positioning of the aluminum guide for anchoring the Liner.

The guides will be positioned flush with the internal panels, using M6 self-drilling screws, going to drill the guide itself and the underlying panels with a regular step of max 60 cm.

To lay the guide in the corners of the tank, cut the head bars at an angle of 45 °, so that once coupled to the perimeter, a perfect continuity of the guide, seat of the covering, is obtained.

As the last phase of this process, the primary seals are installed on the accessories (vents, skimmers, headlights ...). Then clean the flanges and position the appropriate rear gaskets using, if present, the glued side.

14. Laying the PVC Liner presaldato

Place the pre-welded sheet on the bottom in a center of the tub and proceed to unwind it toward the wall

WARNING

Before unrolling the sheet, it is advisable to check that the laying area is homogeneous and flat, without the presence of protruding bodies or of a different nature of the foundation soil.

Once this operation is completed, the sheet, correctly positioned, will present the surfaces of the walls within its shape. The walls should be laid starting from any corner of the tank. Then proceed to fix the Liner to the aluminum guide progressively from the edge towards the center of the wall: insert the Liner strip in its seat and lock it with a PVC strap.

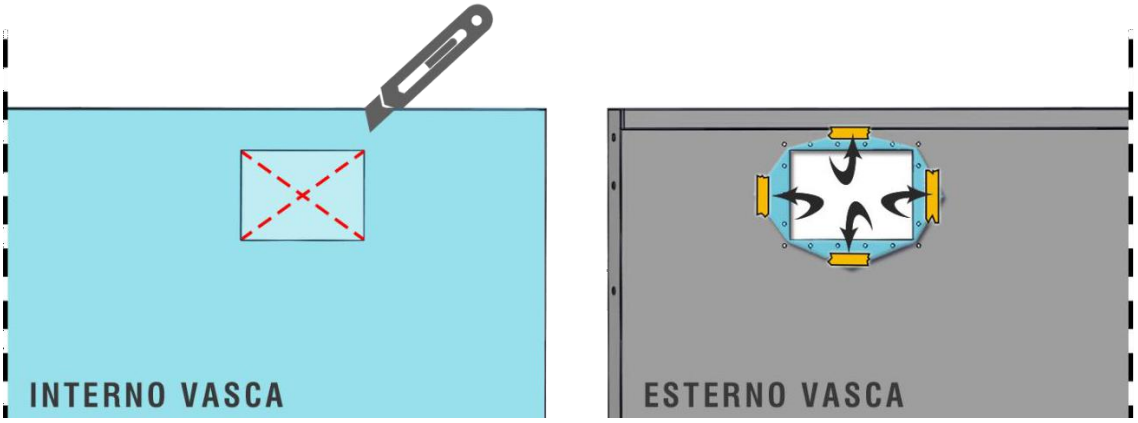
After fixing the corner, you can proceed to progressively hook the entire perimeter. The correctly laid Liner must appear under tension. Once the whole coating has been positioned, it will be necessary to accompany its surfaces with your hands and spread the bottom well: the Liner will still have folds and swellings.


in the end of these operations, the Liner will be well laid out and therefore you will be able to access the tub without shoes so as not to scratch the PVC sheet, to complete the installation of the accessories. You will need a screwdriver, a cutter and the screwdriver.

After checking again that there are no manufacturing imperfections, partially fill the pool using a garden rubber. It will be sufficient to fill the tank with about 10-15 cm of water.

Bring in tension Liner and accompany the foot of the towel in perfect adhesion with the surfaces of the tub. We proceed with the flanging of the accessories (skimmer, vents and headlight pass-through): a Phillips screwdriver, the cutter and the screwdriver with cross inserts will be needed.

Make a 45 ° cross cut with the cutter, starting from the center of the pre-drilling template on the panel.



4 wings will be generated at 45 °, which will be turned up on the rear face of the panel and fixed to it by means of adhesive tape, taking care that the Liner is well stretched on the surface.

Then proceeds with a partial fixing of the flange to the accessory, using the screws supplied with the latter. Once the correct correspondence with the holes on the accessory has been verified, the screws must be tightened.


Proceed with the flanging of the remaining accessories (vents and headlight loop) in the sequence indicated above.

WARNING

In the case of coating with reinforced PVC membrane5, installation is required by a specialized welder technician and therefore will not be treated in this manual.

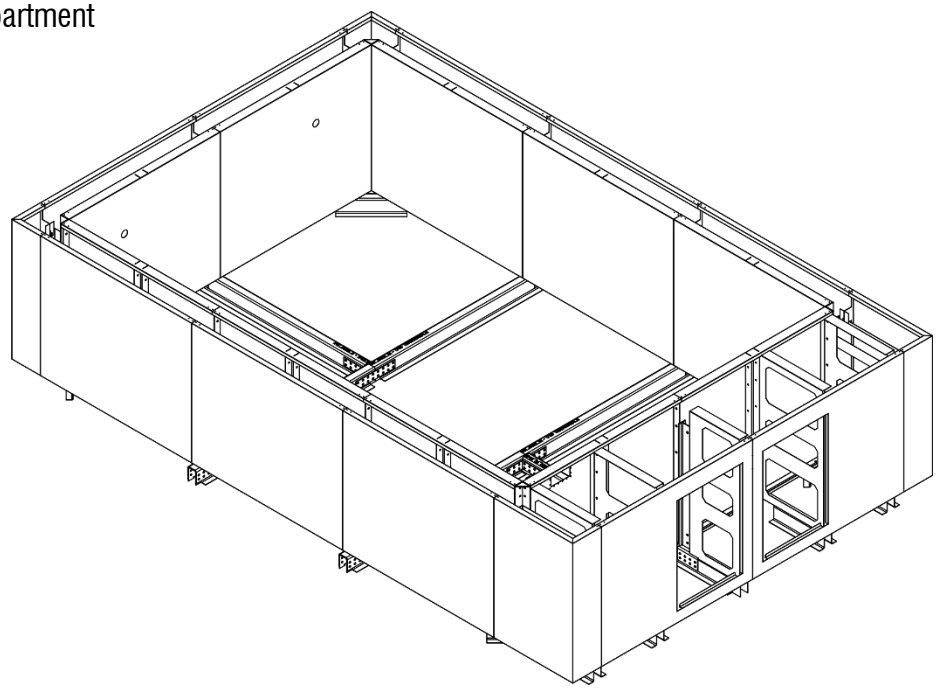
THE EXTERNAL COATING

15. External coating installation esterno

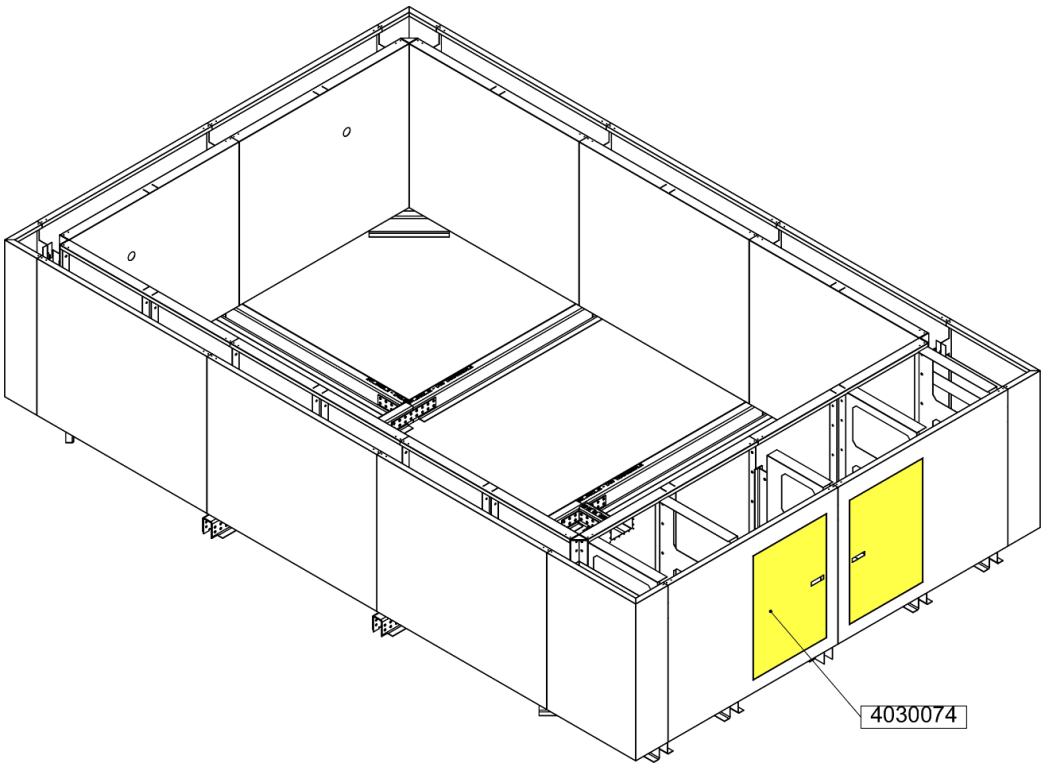
The external coating is made of thick hot-painted sheet metal panels 10/10 mm:

EXTERNAL COATING		
INTERNAL CODE	QUANTITY	COMPONENT
4030042	10	External panel 1500
4030073	1	External panel 1500 with left door
4030077	1	External panel 1500 with right door
4030043	2	Headboard short corner
4030044	2	technical compartment corner

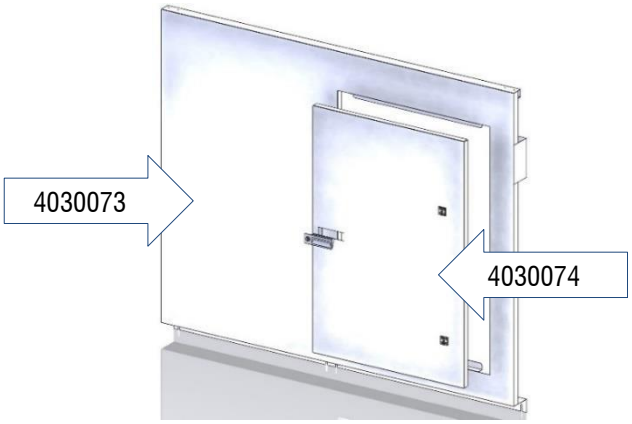
The external covering consists of linear, corner panels and panels for the technical compartment



[5] Su richiesta.

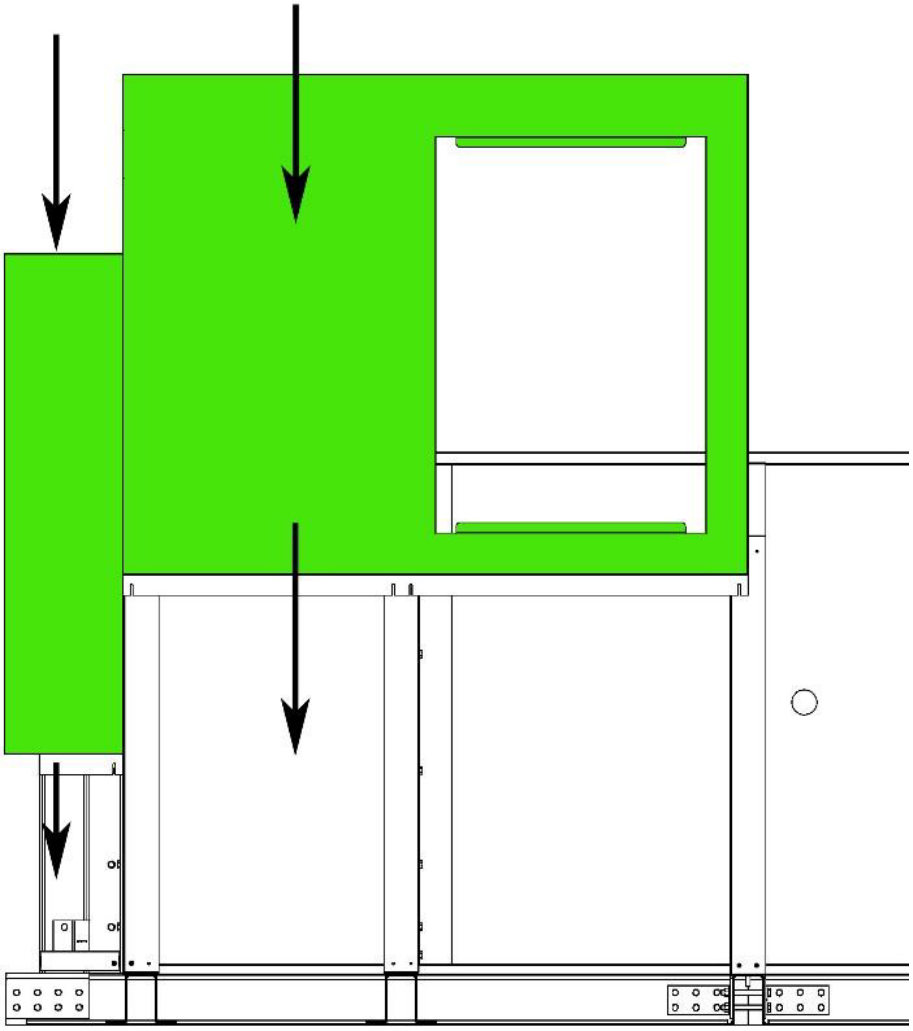


The latter are equipped with a door to allow maintenance operations in the technical compartment.

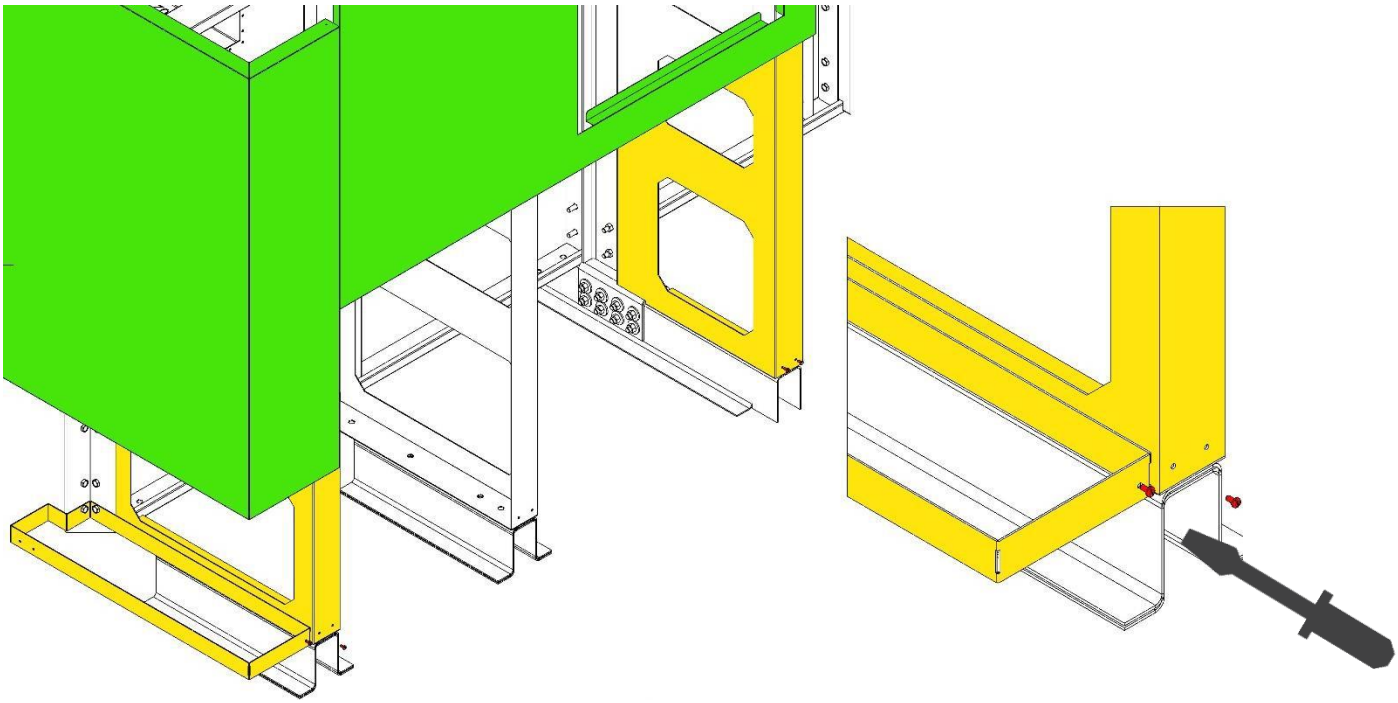


The coupling of the door with the appropriate perforated panel will be carried out on site using the KIT supplied with hinges and handles with key.

The covering panels must be mounted by sliding them from top to bottom, so as to hook them above the load-bearing elements installed up to here (ribs, uprights and buttresses). At the bottom, this movement will allow the special slots in the lower part of the covering to match the self-drilling M6 screws to be installed on the internal structural elements and on the lower ribs.



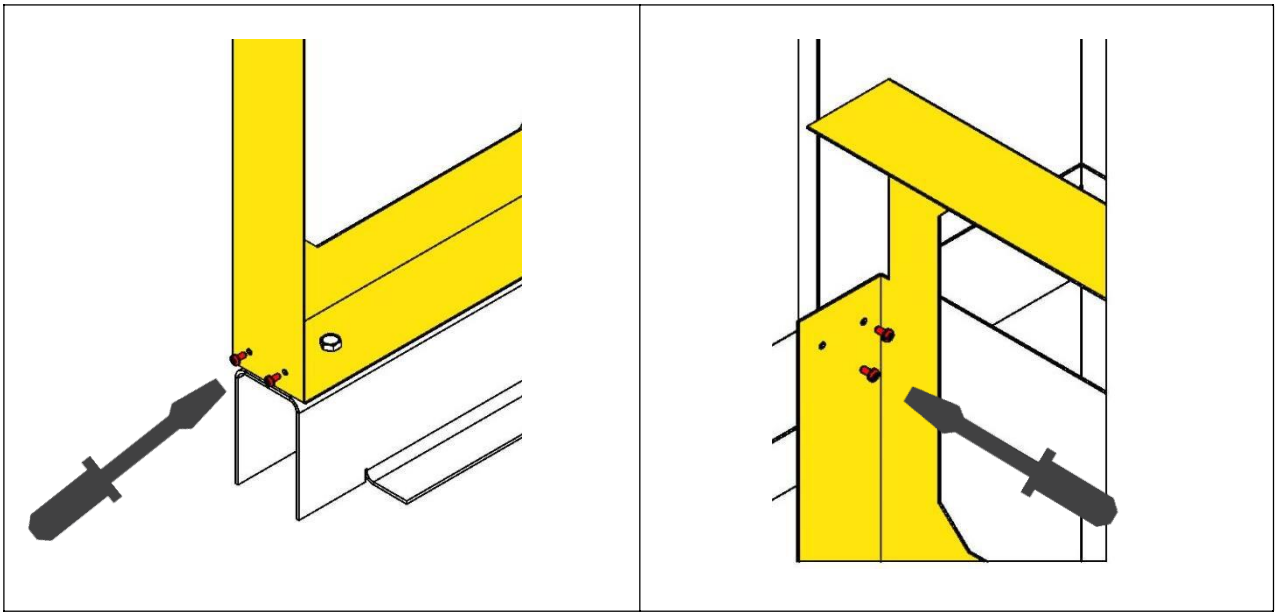
16. Insert the screws to support the external paneling



In order to facilitate assembly operations, it is advisable at this stage to place the self-drilling M6 screws in the appropriate holes provided on the uprights and lower ribs, without tightening them completely, but leaving a space of 2 mm between the hexagonal head of the screw and the element to which they are screwed. This will greatly facilitate the assembly of the external paneling. This distance must be tightened at the end of the installation of the external panels.

WARNING

In the buttresses of the technical compartment the self-tapping screws must be installed externally, in the lower pre-drilling and internally in the upper drilling as shown in the following image:



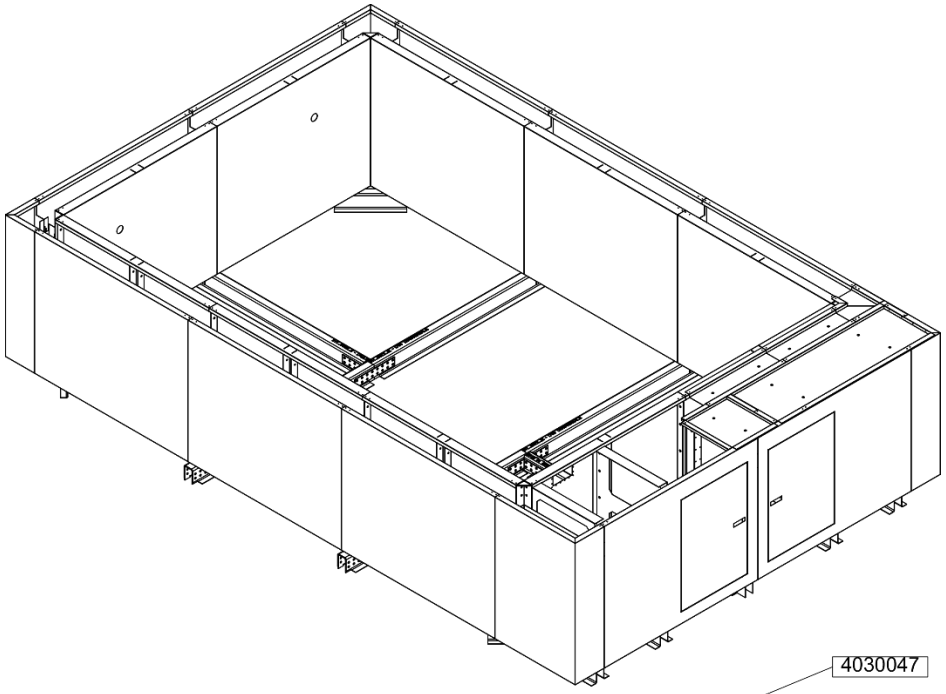
Once the correct coupling and alignment of the panels has been verified, the screws can be tightened completely with the cordless screwdriver, checking that the heads of the lower screws adhere well to the finishing panel.

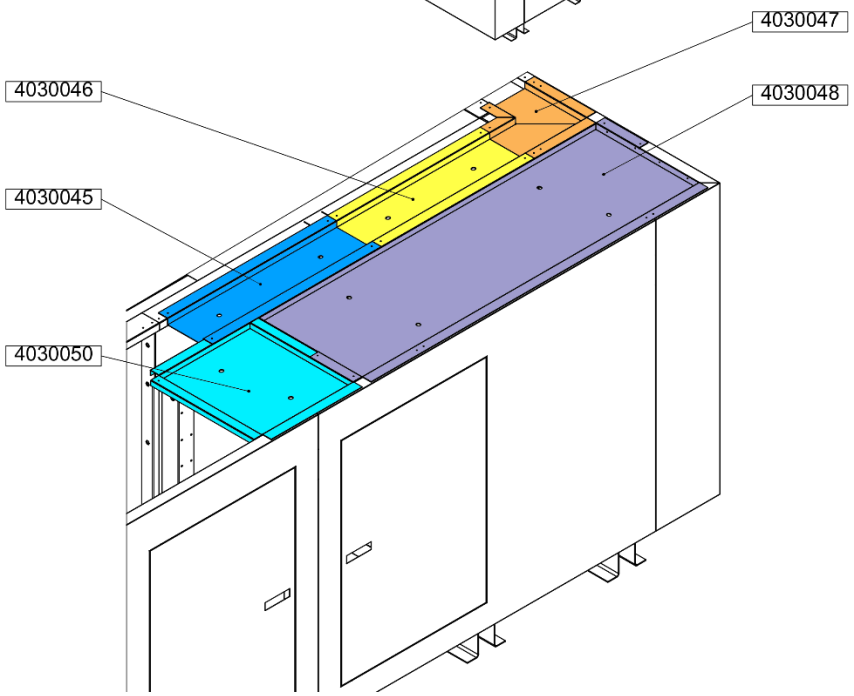
17. Laying the cladding superiore

The assembly of the structure ends with the laying and fixing of the upper covering elements, called trays, which act as a connection between the internal structure and the panels of the covering and as a support for finishing the edge (not supplied).

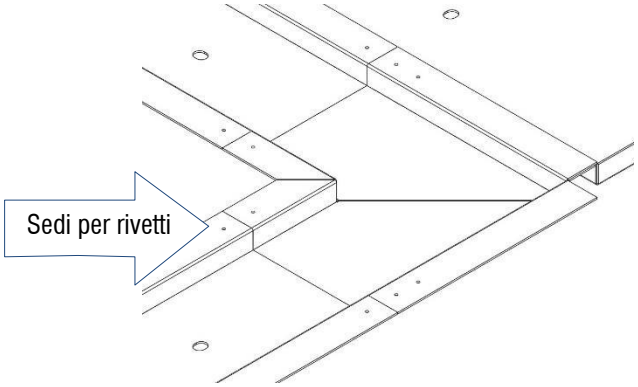
EXTERNAL SUPERIOR COATING		
Internal code	Quantity	Component
4030045	20	Tray 750
4030046	4	Tray 680 jolly
4030047	4	Corner Tray
4030048	1	Header Tray
4030049	1	Perforated skimmer head tray
4030050	1	Jolly head tray

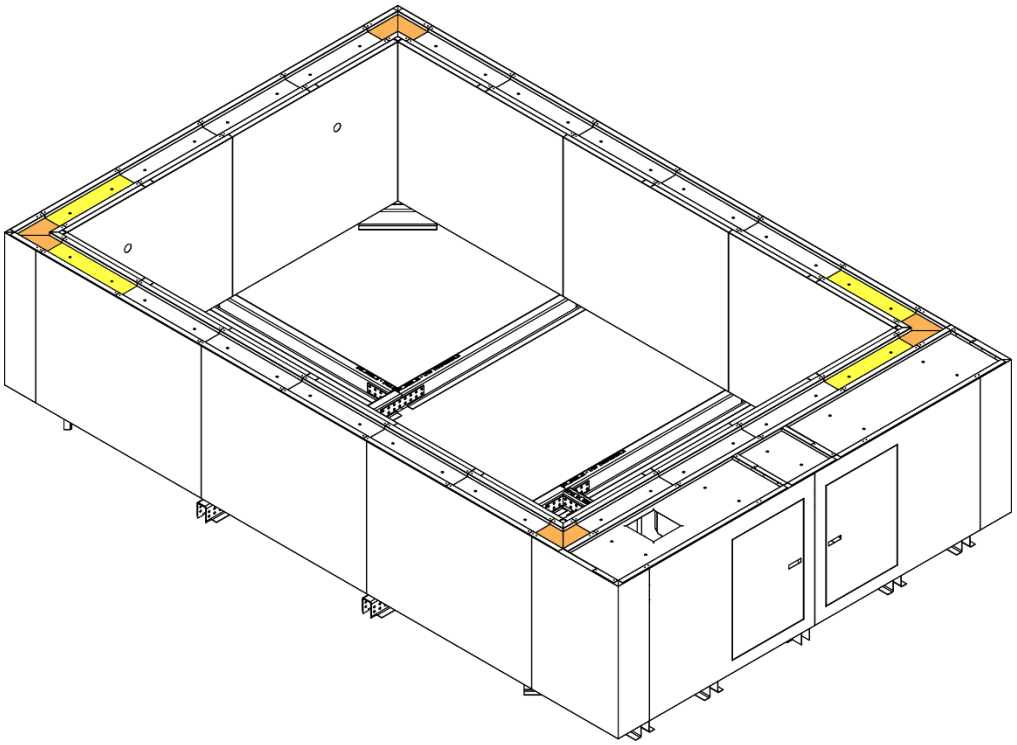
The trays will be positioned according to the sequence shown in the following diagram and in the tables Attached at this document, taking care to always place only one tray 680 jolly (art.cod.4030046) for each corner. Look TAV. Attached this manual.

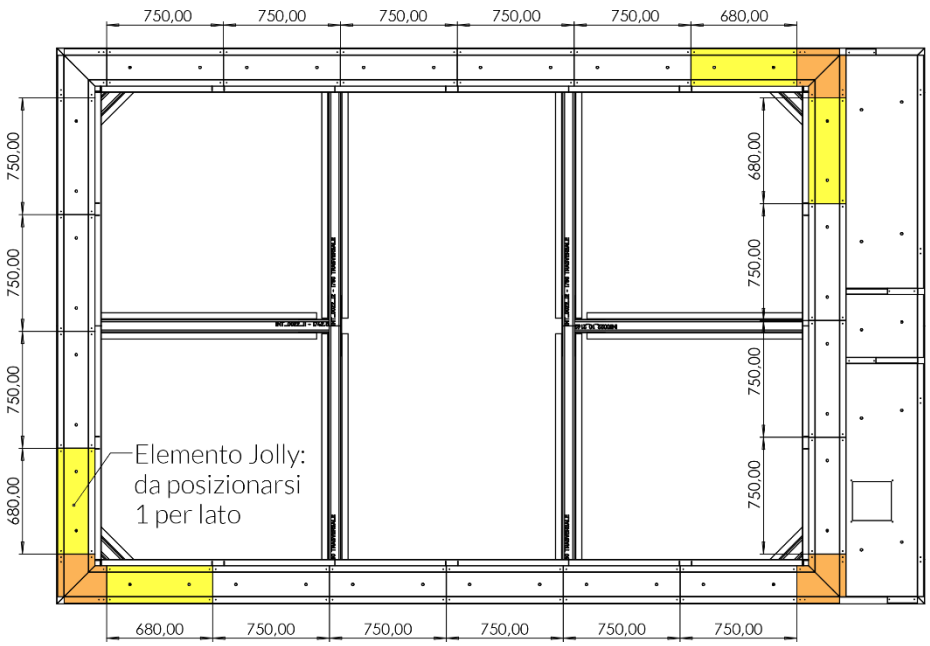




The trays have pre-drilled holes to be used for coupling them with the external panels and internal panels, also equipped with pre-drilled holes. The coupling will take place through the use of rivets supplied with the kit.







KIT MEDITERRANEA

KIT 4030064

ATTACHMENTS

DISTINTA MATERIALI DEL KIT

Kit code	4030064	3*6
Article	Description	Quantity
internal structure		
4030020	Internal panel l.1500mm	4
4030171	Internal panel with double reinforcement l.1500mm	4
4030021	Internal panel l.1500mm - skimmer	1
4030022	Internal panel l.1500mm – left nozzle	1
4030023	Internal panel l.1500mm – right nozzle	1
4030024	Internal panel l.1500mm - light	1
4030025	Internal panel l.1500mm- bellow jet	0
4030026	Panel reinforcement	16
4030123	Internal panel l.1000mm	0
4030144	Internal panel l.1000mm - skimmer + light	0
4030027	Corner pillar 90°	4
4030028	Single Anchor Bracket	8
4030029	Double Anchor Bracket	8
4030032	Left buttress	2
4030033	Right buttress	2
4030034	Buttress Jolly	1
4030035	Beam omega 2162,5	1
4030036	Beam omega1780	6
4030037	Beam omega 1742,5	1
4030038	Beam omega 500	8
40300124	Plate omega 1000	0
4030039	Plate linear	4
4030040	Corner plate 90°	4
4030041	Riser kit	8
External coating		
4030042	External coating panel l.1500mm	10
4030121	External coating panel l.1000mm	0
4030073	External coating panel l.1500mm – left door	1
4030077	External coating panel l.1500mm – right door	1
4030043	External coating panel short corner	2
4030044	External corner panel for technical compartment	2
4030045	Coating tray l.750 mm	20
4030046	Coating tray jolly l.680 mm	4
4030122	Coating tray jolly l.1000 mm	0
4030047	Coating tray corner	4
4030048	Coating tray technical room	1
4030049	Coating tray technical room - skimmer	1
4030098	Coating tray jolly technical room l.1000 mm	0
4030050	Coating tray jolly technical room	1
4030051	Upper corner rib	2
4030052	Lower corner rib	2
4030096	lower rib technical room	2
4030097	Upper rib technical room	2
4030074	Left door	1
4030078	Right door	1

KIT 403006

Kit code	4030064	3*6
Article	Description	Quantity
4030053	External cover skimmer	1
1036227	Inox screws self-drilling exagon head 6,3*20	64
1036226	Rivet 3,2*8 inox	138
4030149	Right door handle kit	1
4030150	Left door handle kit	1
bolts		
1035741	Bolts m10 x30	120
1035847	Bolts m12x110	136
1035806	Nut m12	168
1035848	Toothed washer m12	136
plant		
1070168	Panel nozzle/ liner rl-332	2
1072063	Adjustable jet for sand nozzle	2
1070169	Flat projector 30 white led 17.7w / 12v	1
1070219	Sand crown	1
1070206	Adapter with cable gland ø 50x3 / 4	1
1090395	Transformer 12 V A.C. shq100	1
1070008	Phase-displaced skimmer + extention depth 331 mm - rif. Sl-115-m	1
1072093	Flange cover for small-mouth skimmer	1
1080221	Mediterraneo top Filter 500	1
1035343	Rigid PVC pipe ø 50	12
1035018	Elbow to be glued at 45° ø 50	2
1035003	Elbow to be glued at 90° ø 50	14
1035013	Elbow to be glued at 90° m/f ø 50	3
1035037	Sleeve to be glued ø 50	1
1035106	Threaded adapter 50x63x2"	1
1035074	T equal female to be glued ø 50	1
1035055	Pipe stop collar vdl ø 50	6
1036001	Fast blu glue gr 250	1
1035292	Ball valve to be glued ø 50	2
2220264	Vienna 100	1
Liner coating PVC		
1050581	Aqualiner 75/100 - rectangular pools	45
1050412	Aluminum liner guide 43 mm	18
Base kit EPS (optional)		
4030054	EPS - modulo a	16
4030055	EPS - modulo b	8
4030056	EPS - modulo c	4
4030057	EPS - modulo d	4