

**IT**

## **Sulpack Natural Plus 300**



### **Istruzioni per il montaggio su superficie inclinata**

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## 1. Contenuto dell'imballo

Nell'imballo è contenuto il seguente materiale:

Rif.	Descrizione	Q.tà
1	Collettore solare vetrato piano	2
2	Bollitore in acciaio vetrificato	1
3	Barra telaio in acciaio zincato - lunghezza 2900 mm	2
4	Barra telaio in acciaio zincato - lunghezza 1440 mm	2
5	Barra telaio in acciaio zincato - lunghezza 1370 mm	2
6	Barra telaio in acciaio zincato - lunghezza 1120 mm	2
7	Staffa a U sostegno bollitore	2
8	Staffa a L sostegno bollitore	2
9	Barra fissaggio collettore in alluminio - lunghezza 2060 mm	2
10	Bandiera in acciaio forata - lunghezza 750 mm	4
11	Tubo in acciaio flessibile - lunghezza 670 mm	1
	Tubo in acciaio flessibile - lunghezza 2520 mm	1
12	Staffa a G per fissaggio tubo flessibile	1
13	Valvola di sicurezza acqua sanitaria - 6 bar	1
14	Valvola di sicurezza circuito solare - 3 bar	1
15	Curva 1/2" M x 1/2" M	2
	Curva a stringere con ogiva Ø 22 mm x 1/2" M	2
	Tappo a stringere con ogiva Ø 22 mm	2
	Giunzione a stringere con ogive Ø 22 mm x Ø 22 mm	2
	Tappo 1/2" M	2
	Nipple 1/2" M x 1/2" M	1
	Riduzione 1/2" M x 1/2" F	1
Guarnizione 1/2"	5	
16	Bullone M10x25	15
	Rondella M10	25
	Dado M10	27
	Bullone a testa svasata M10x20 con cava esagonale	5
	Vite di fissaggio M8x50	4
	Tassello per vite di fissaggio M8x50	4
17	Tanica d'liquido solare da 5 litri	1

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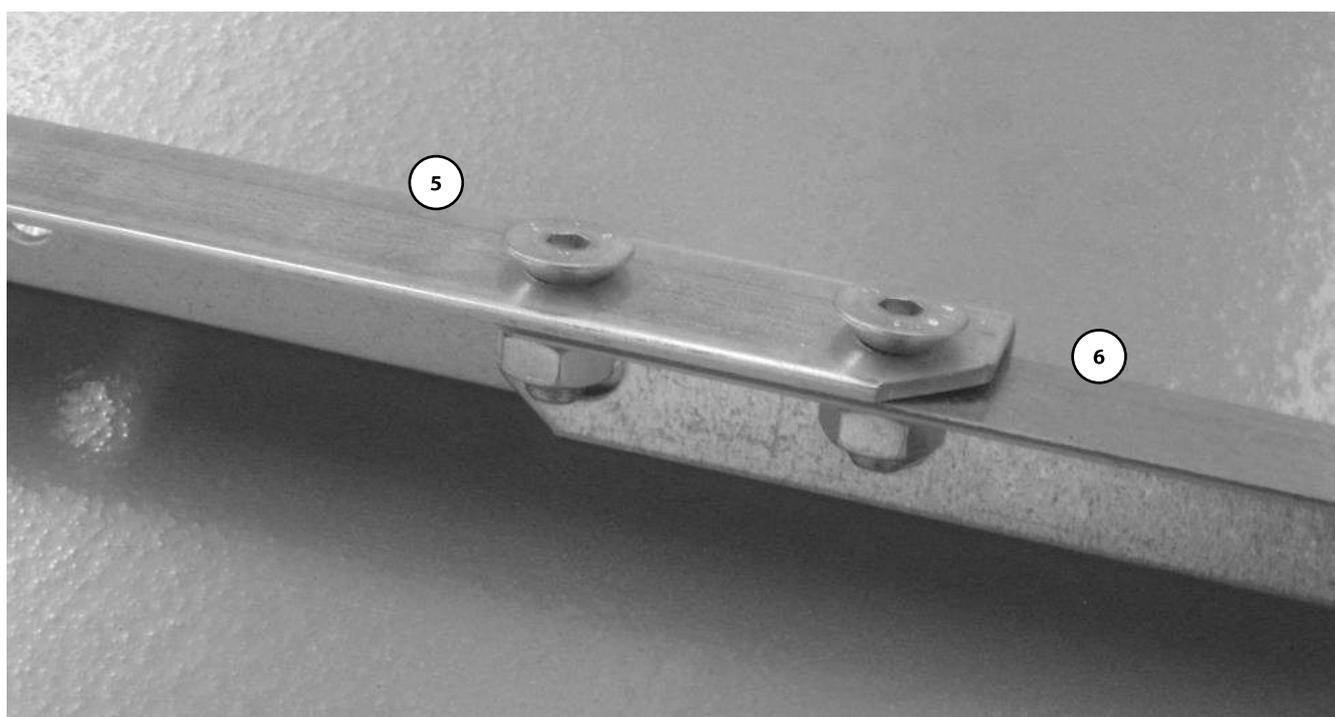
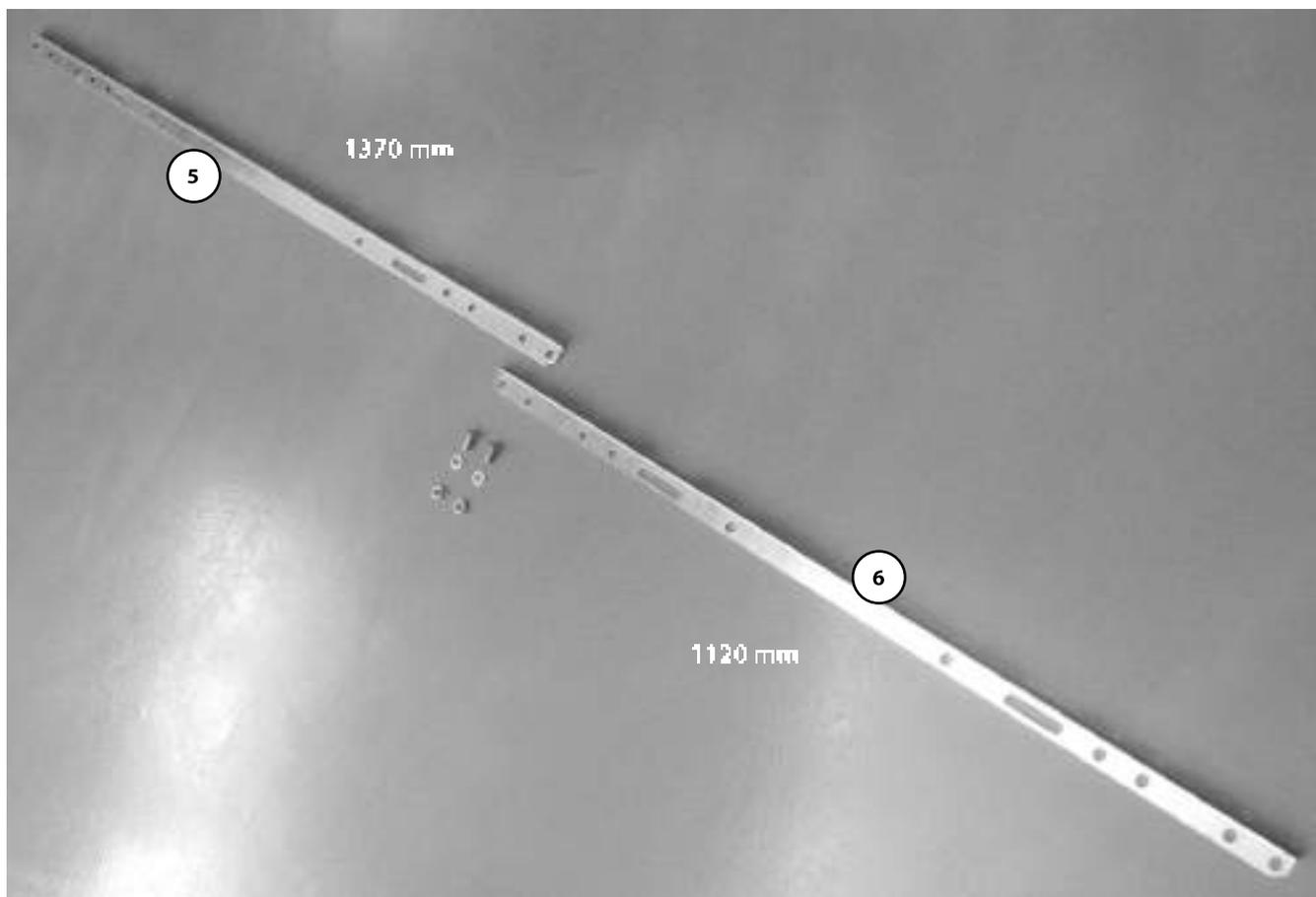
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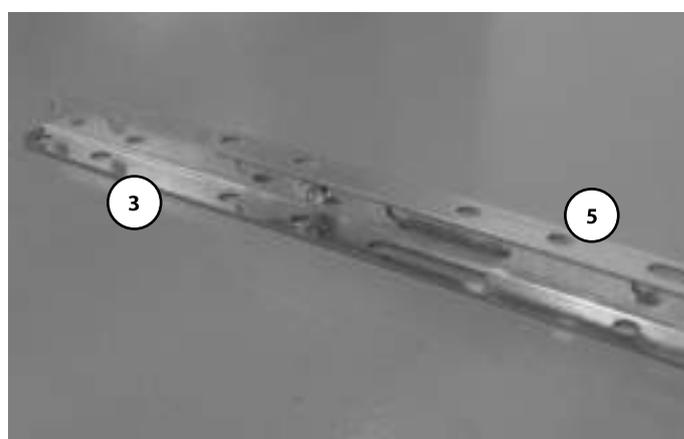
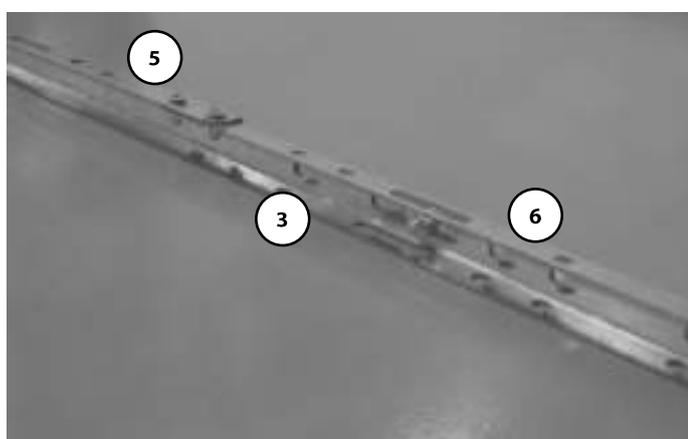
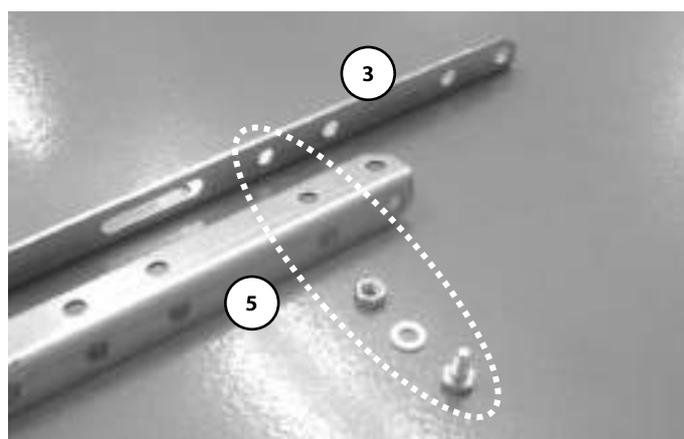
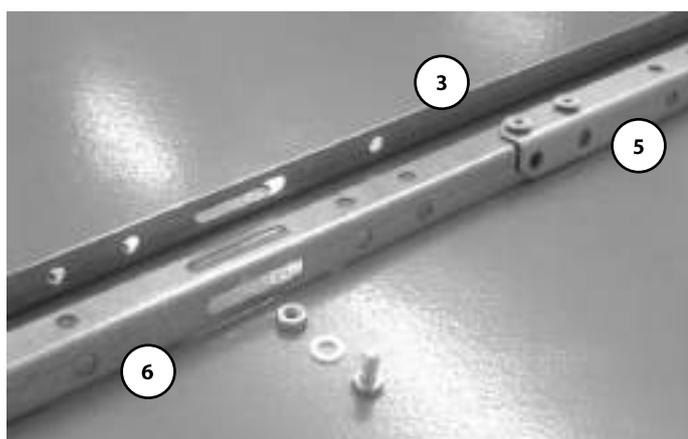
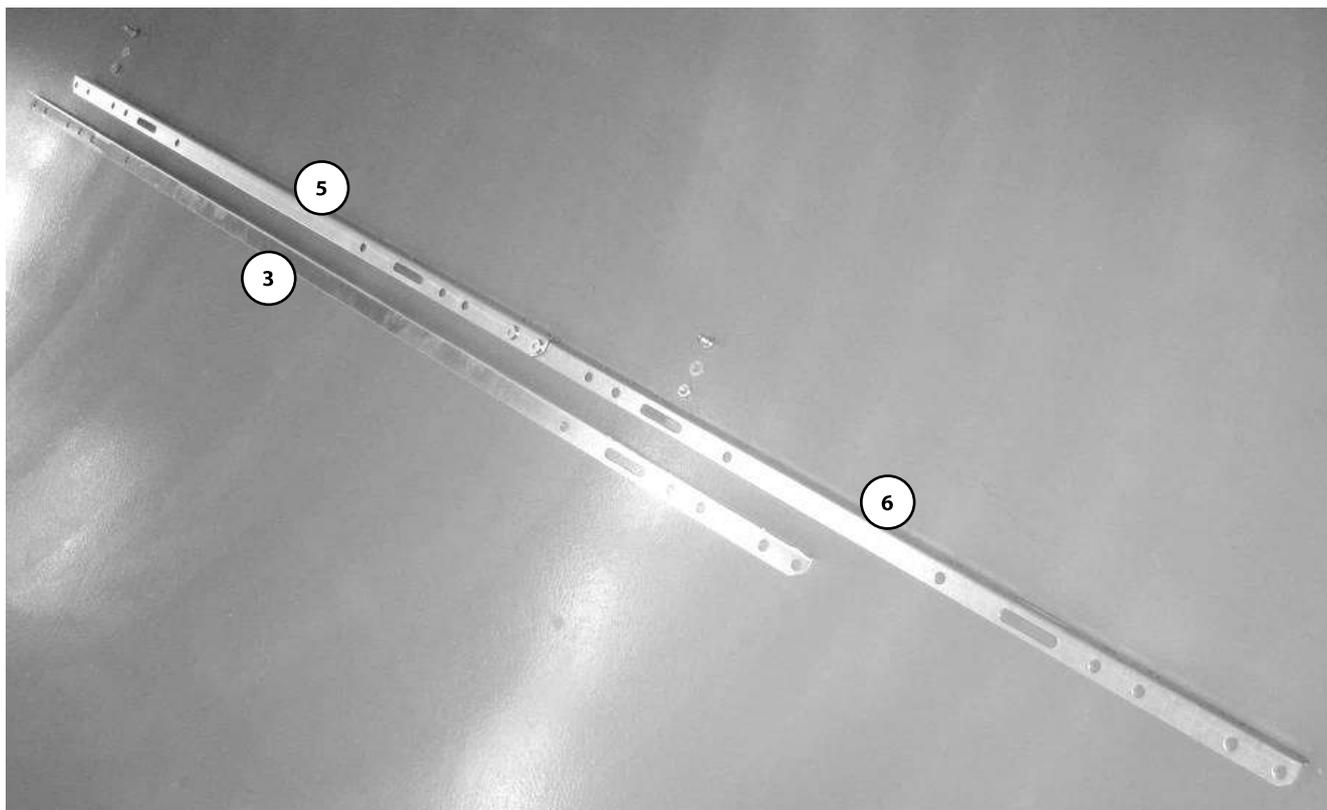
## 2. Montaggio della struttura

Per l'installazione della struttura di sostegno, seguire le seguenti istruzioni:

- Unire una barra di lunghezza 1370 mm (5) con una barra di lunghezza 1120 mm (6) utilizzando 2 bulloni a testa svasata, 2 dadi e 2 rondelle.  
La barra di lunghezza 1370 mm (5) dovrà sovrapporre la barra di lunghezza 1120 mm (6).



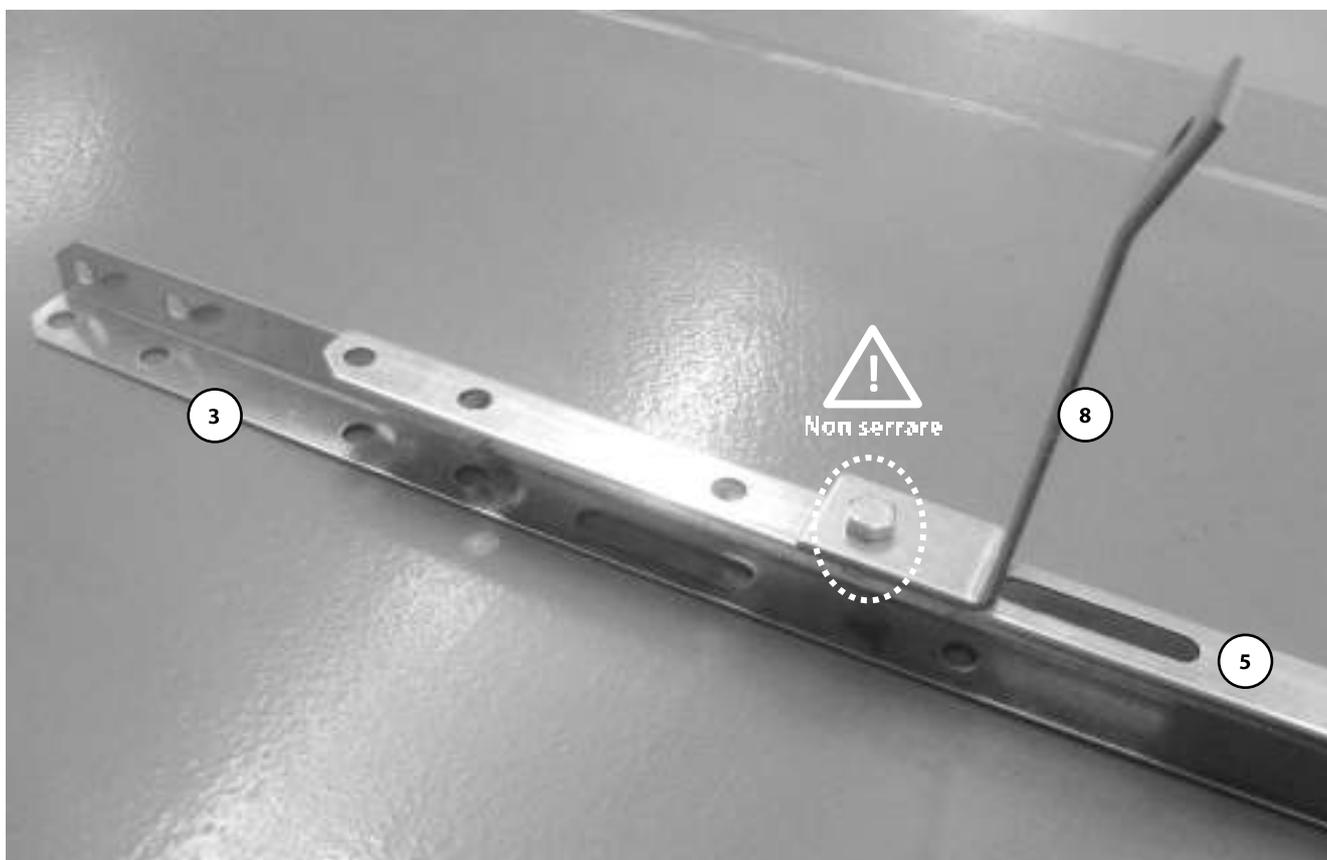
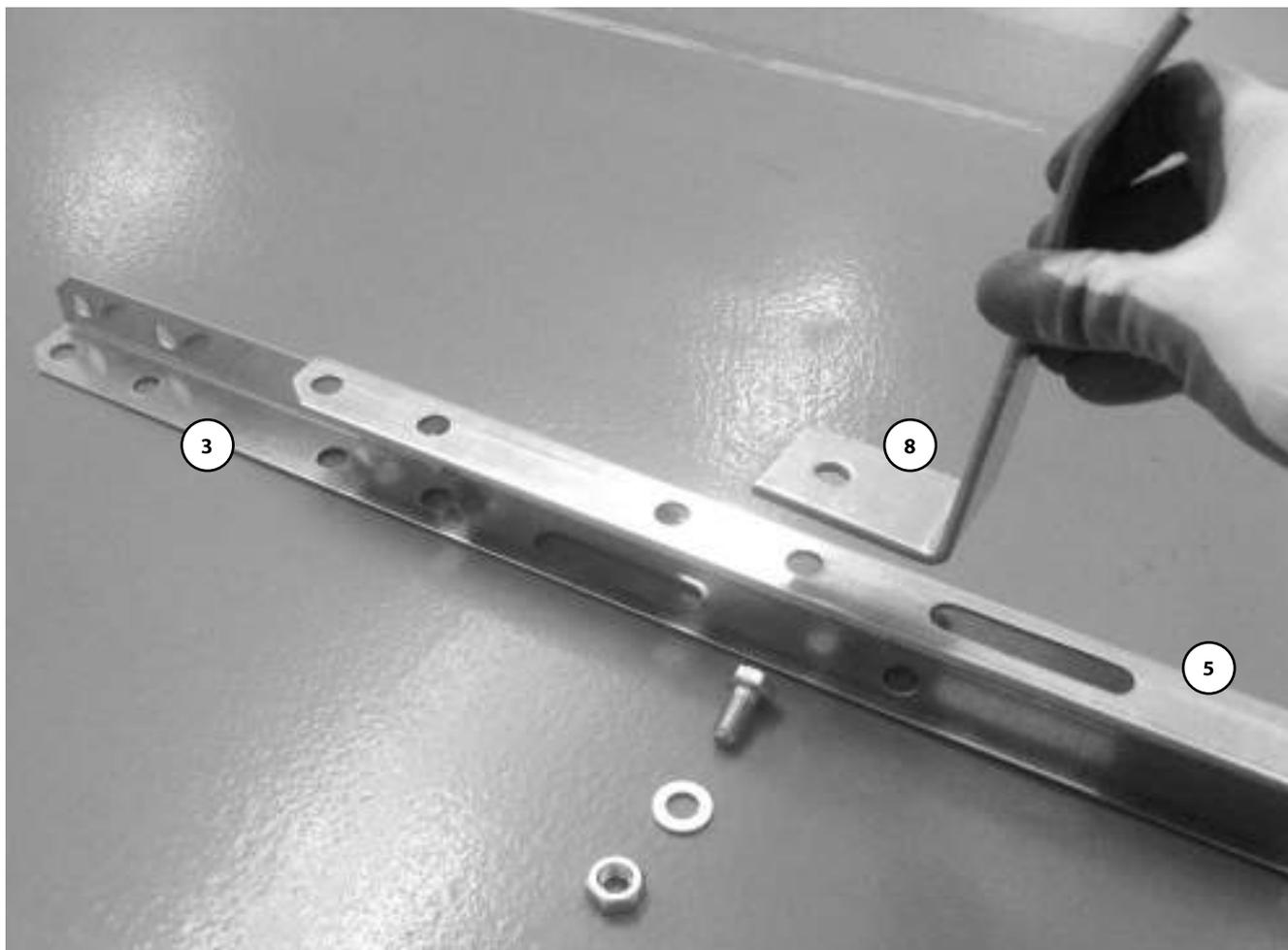
2.2. Unire la barra di lunghezza 2000 mm (3) alle barre unite precedentemente utilizzando 2 bulloni, 2 dadi e 2 rondelle.



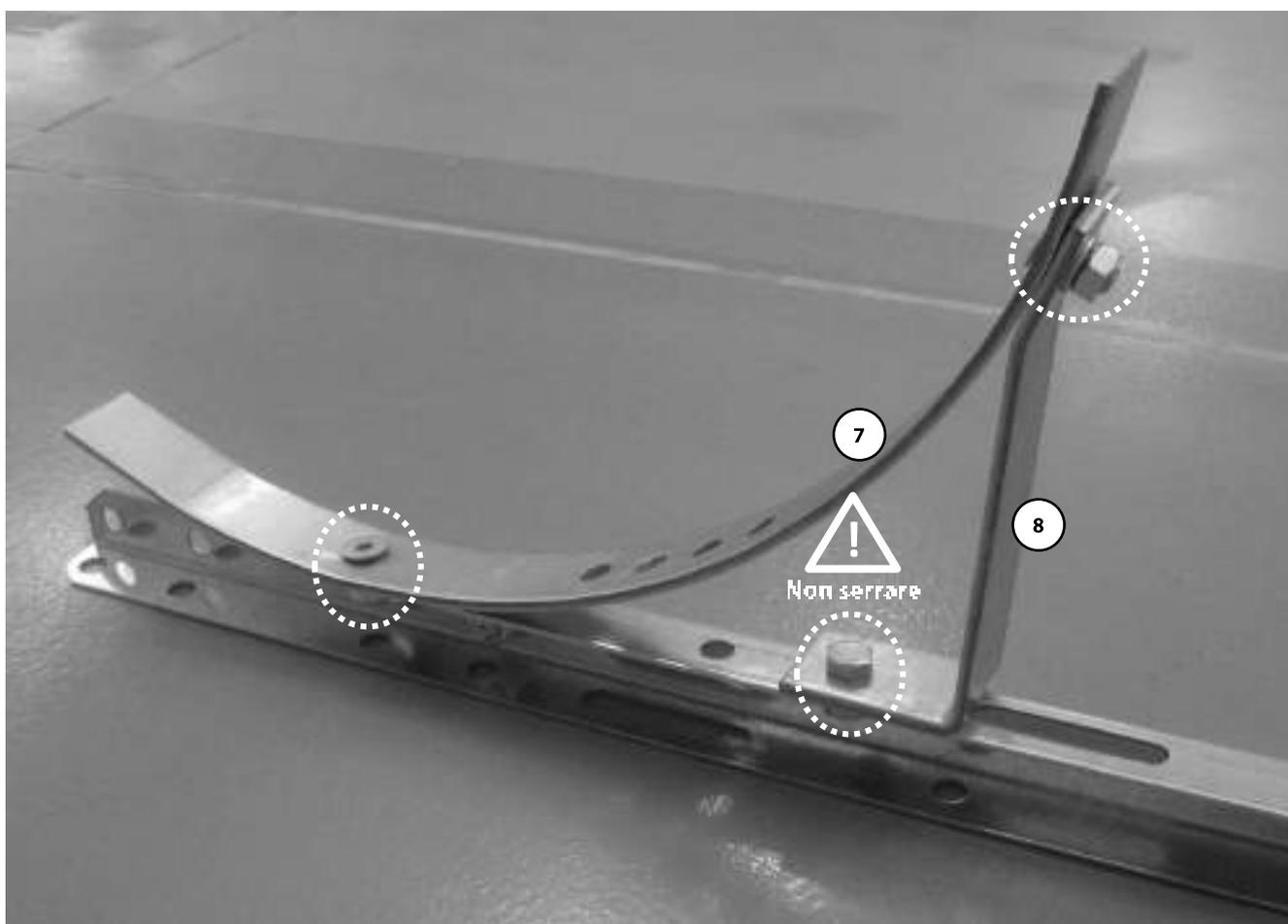
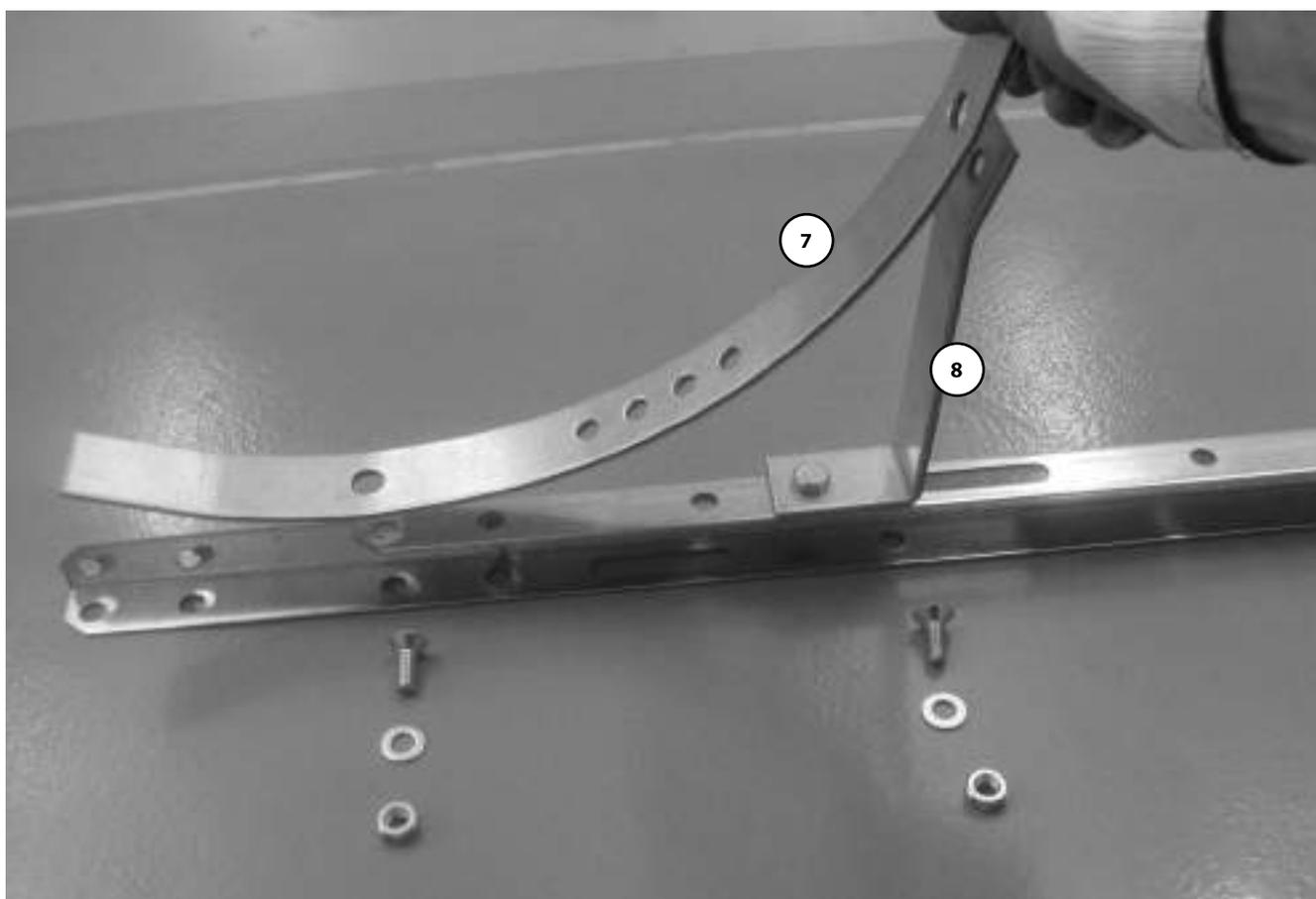
Una volta assemblata, la barra di lunghezza 2000 (3) spingerà dalle barre di lunghezza 1370 (5).

2.3. Alle barre appena assemblate fissare la staffa a L (8) utilizzando 1 bullone + dado e 1 rondella.

**ATTENZIONE:** per il momento non serrare completamente dado e bullone.



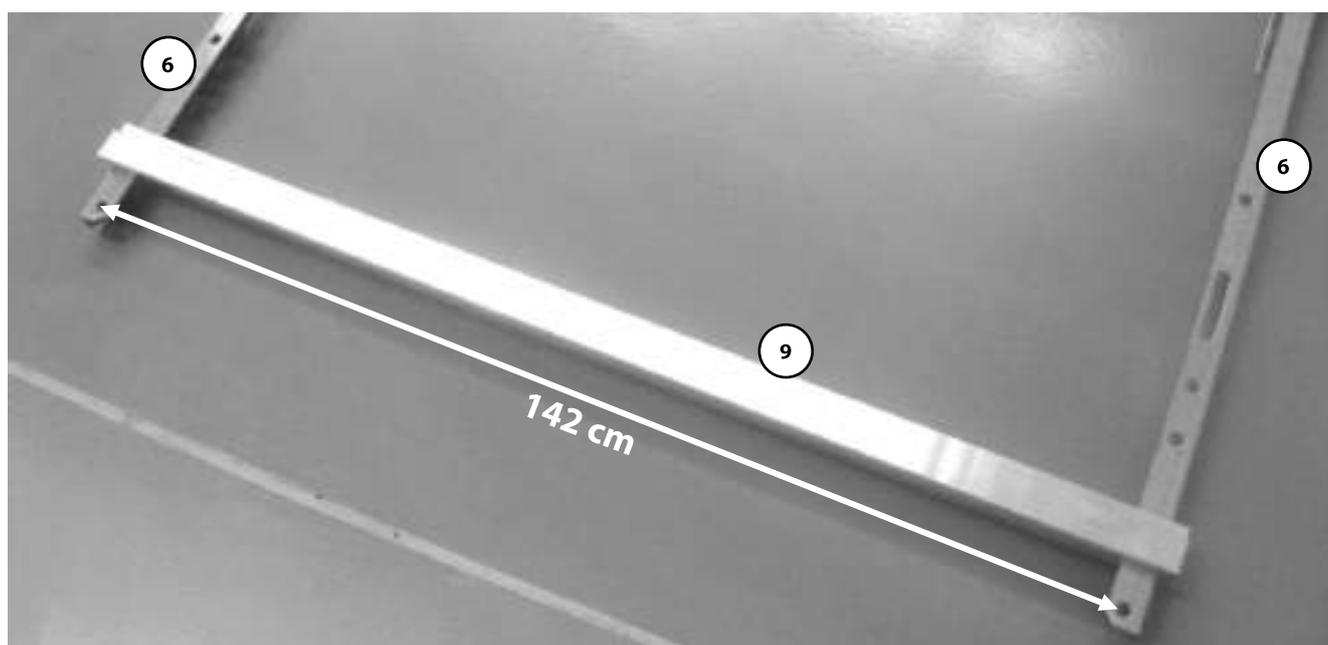
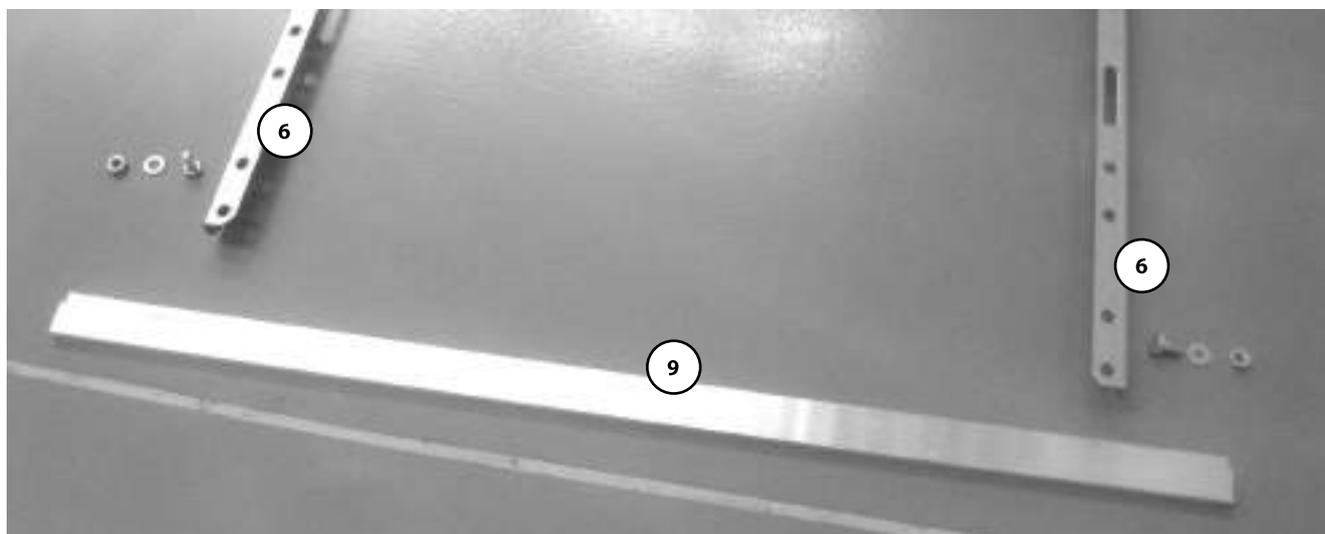
2.4. Fissare la staffa a U (7) utilizzando 2 bulloni a testa svasata, 2 dadi e 2 rondelle.



2.5. Ripetere i punti da 2.1 a 2.4 per preparare un'altra struttura come quella appena preparata, ma specchiata

Le immagini che seguono fanno riferimento all'installazione del modello da 150 litri, ma l'installazione avviene nello stesso modo.

2.6. Unire nella parte inferiore, le 2 strutture precedentemente preparate utilizzando una barra di fissaggio collettore di lunghezza 2060 mm (9), 2 bulloni, 2 dadi e 2 rondelle.



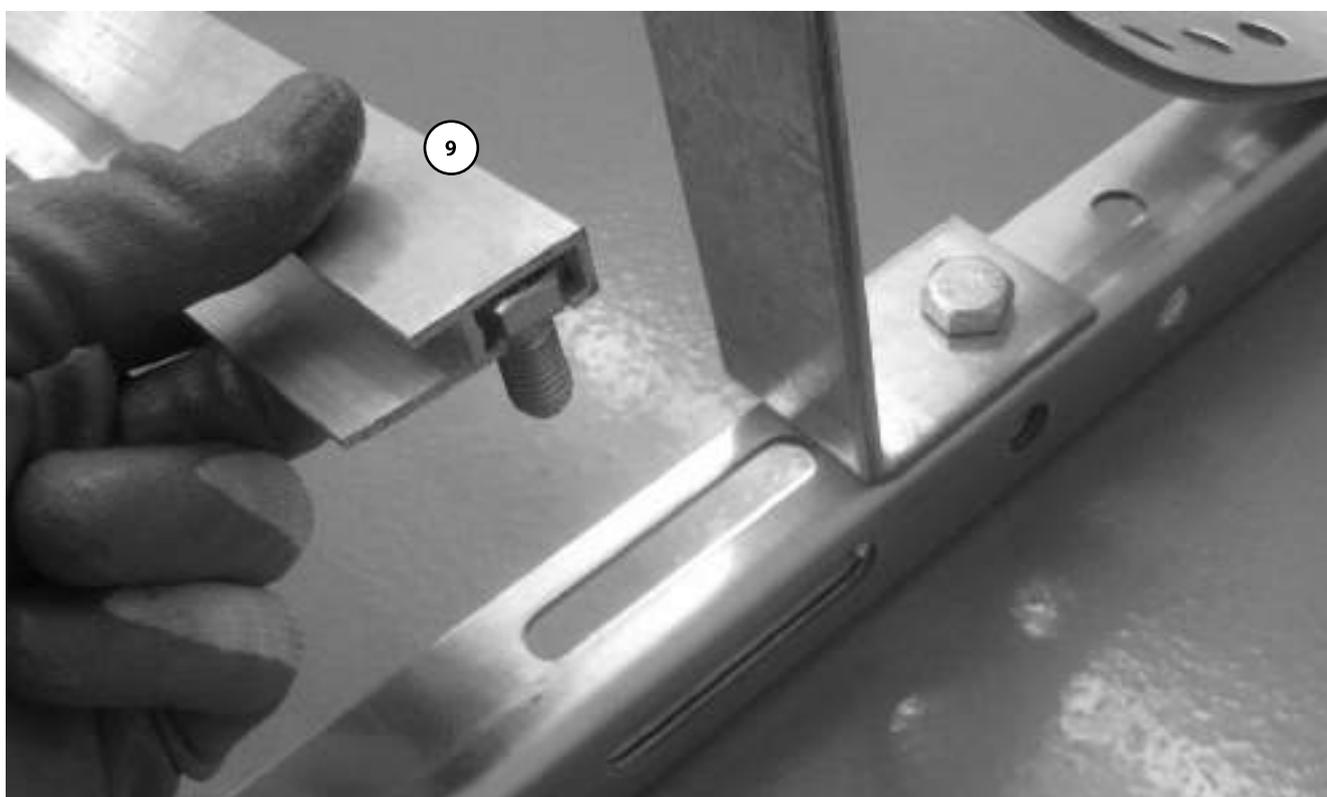
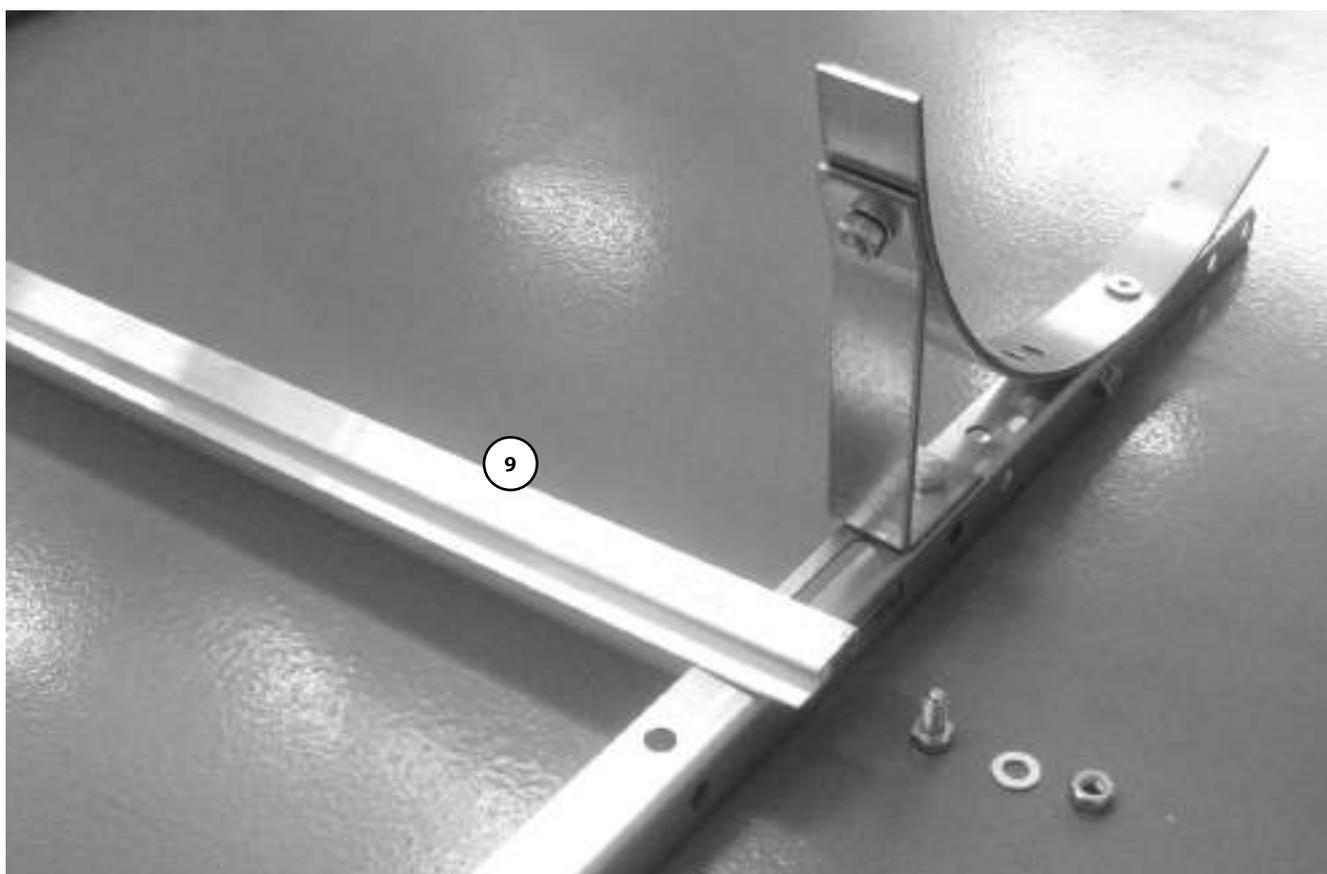
Una volta fissate, tra i fori del 2 barre dovrà essere una distanza di 142 cm

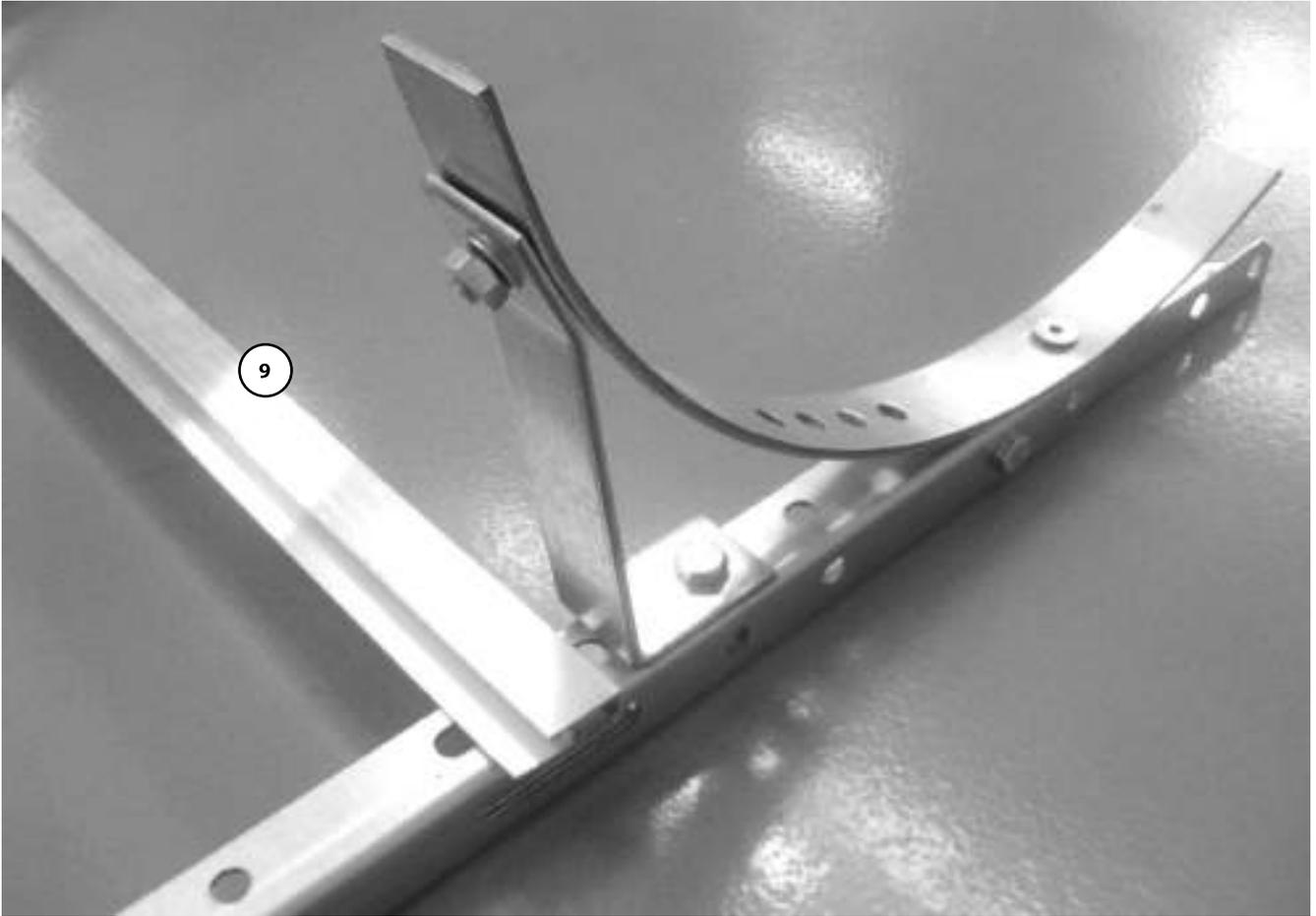
La barra fissaggio-collettore di lunghezza 2060 mm (9) dovrà essere centrata fra le 2 strutture.

2.7. Fissare nella parte alta della struttura, la seconda barra di fissaggio collettore di lunghezza 2060 mm (9), utilizzando 2 bulloni, 2 dadi e 2 rondelle.

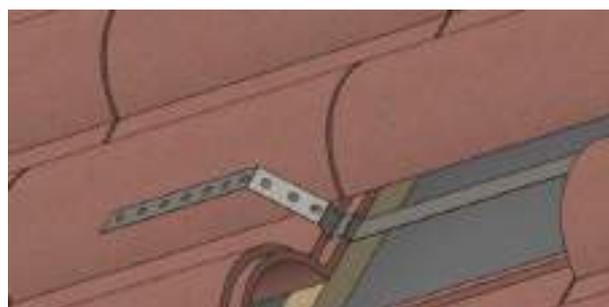
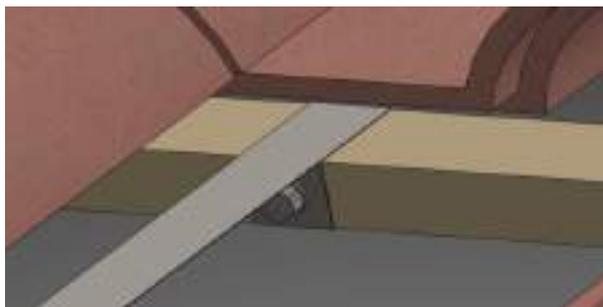
I bulloni non dovranno essere serrati finché non sarà stato inserito il pannello nella struttura.

La barra fissaggio collettore di lunghezza 2060 mm (9) dovrà essere centrata fra le 2 strutture

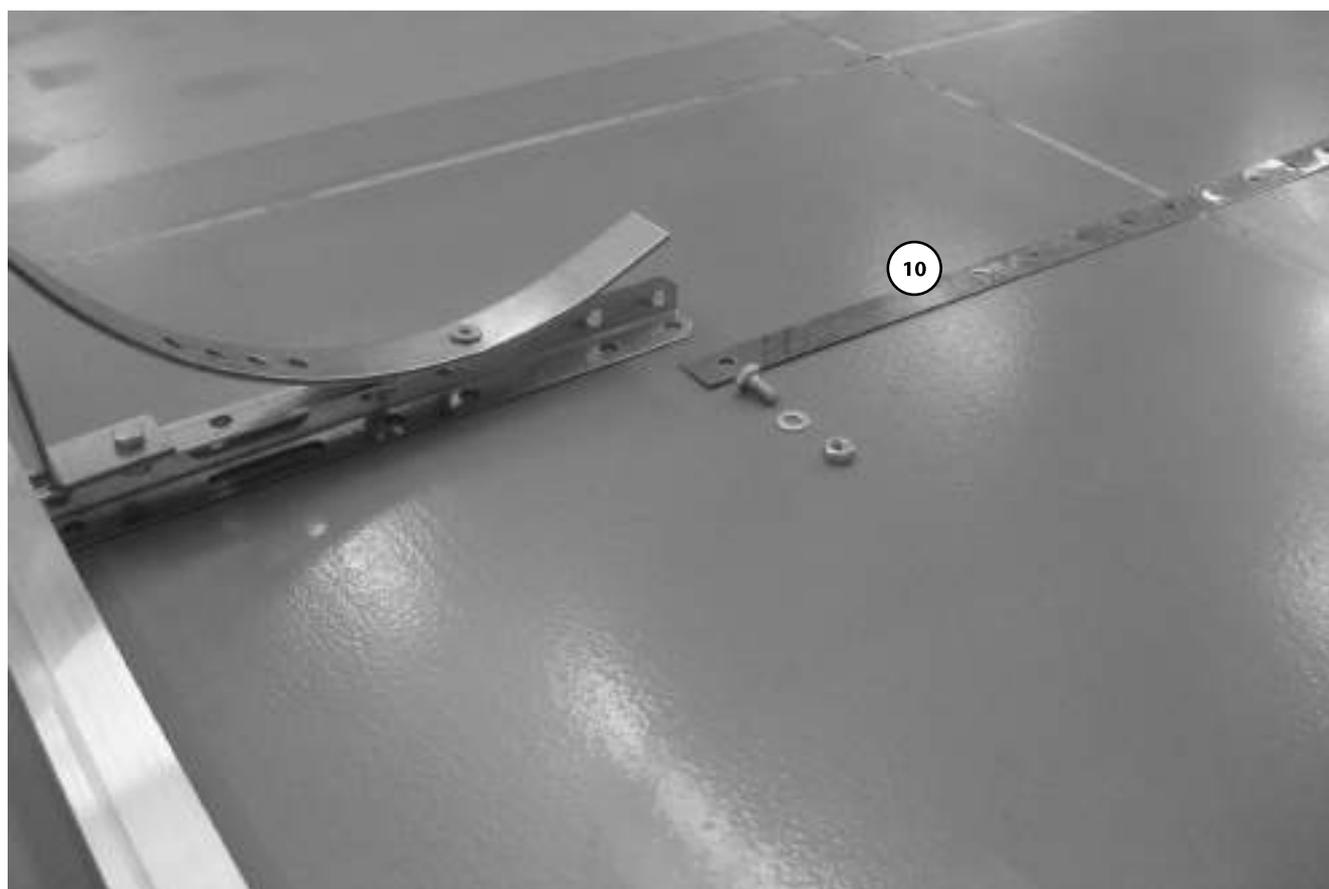


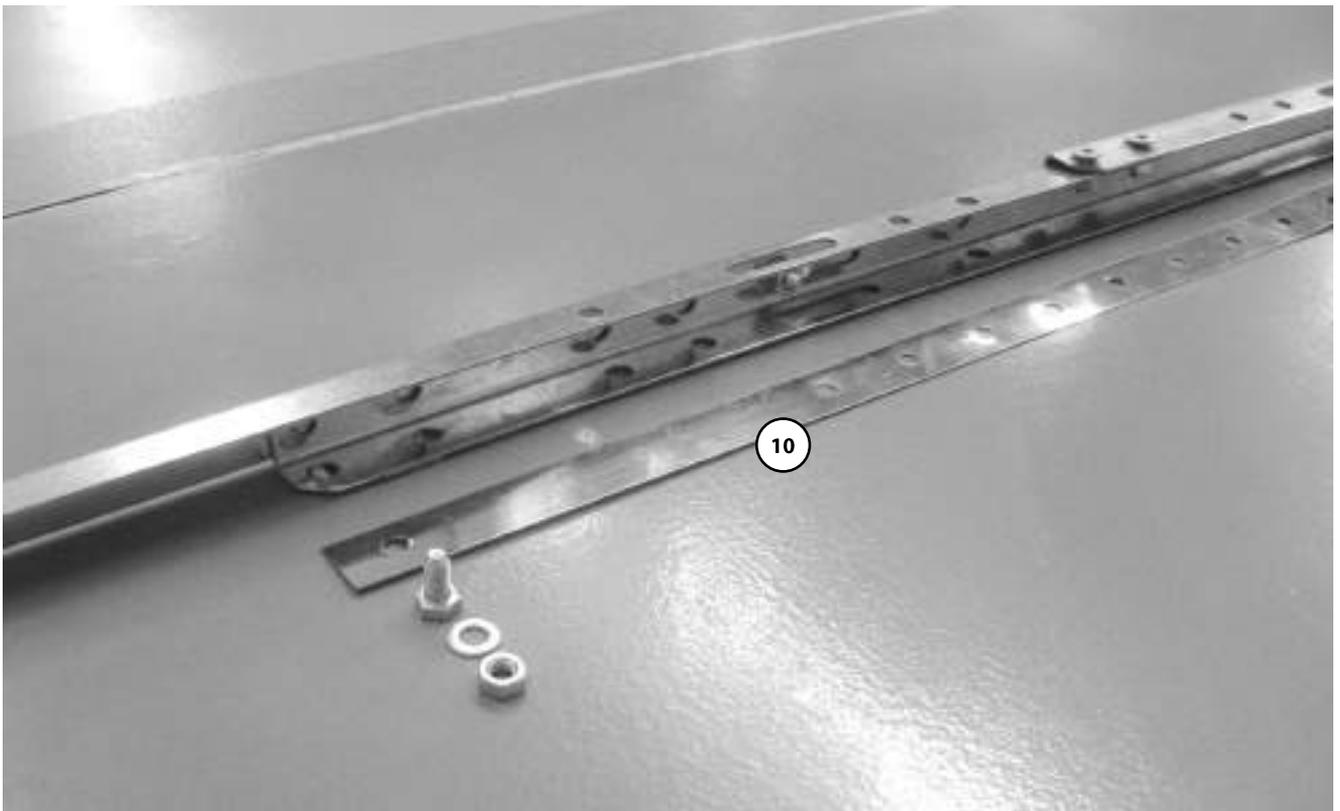
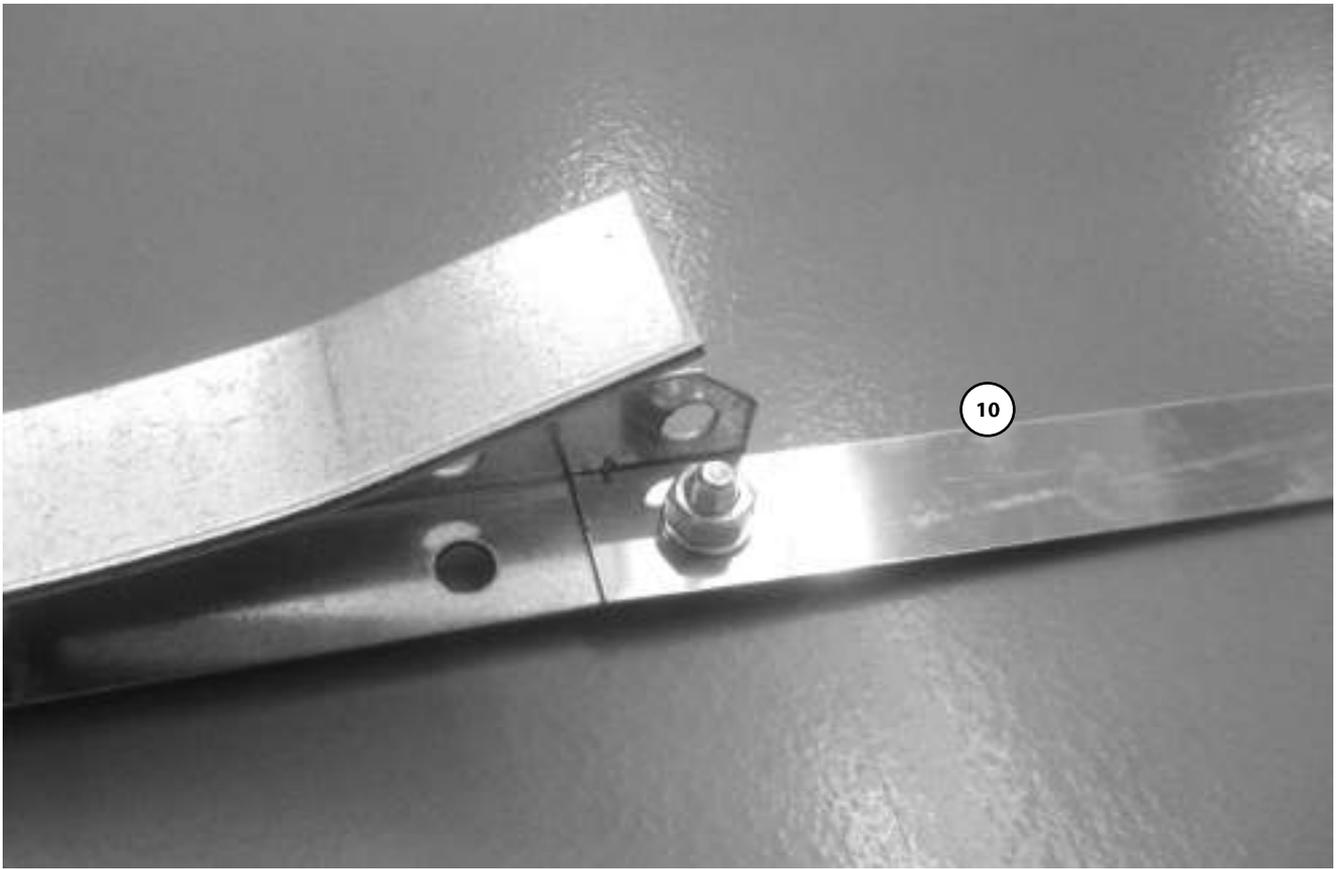


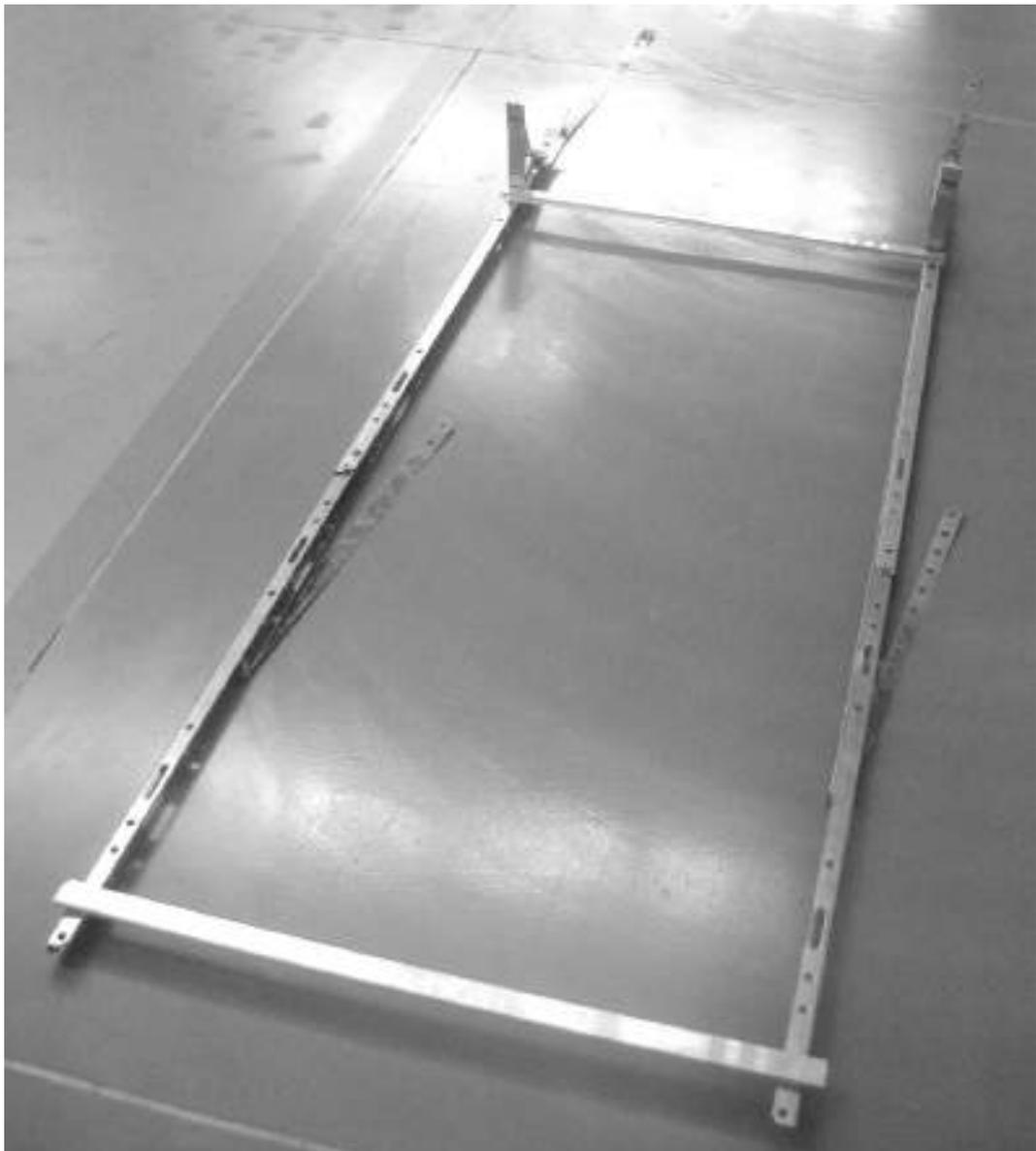
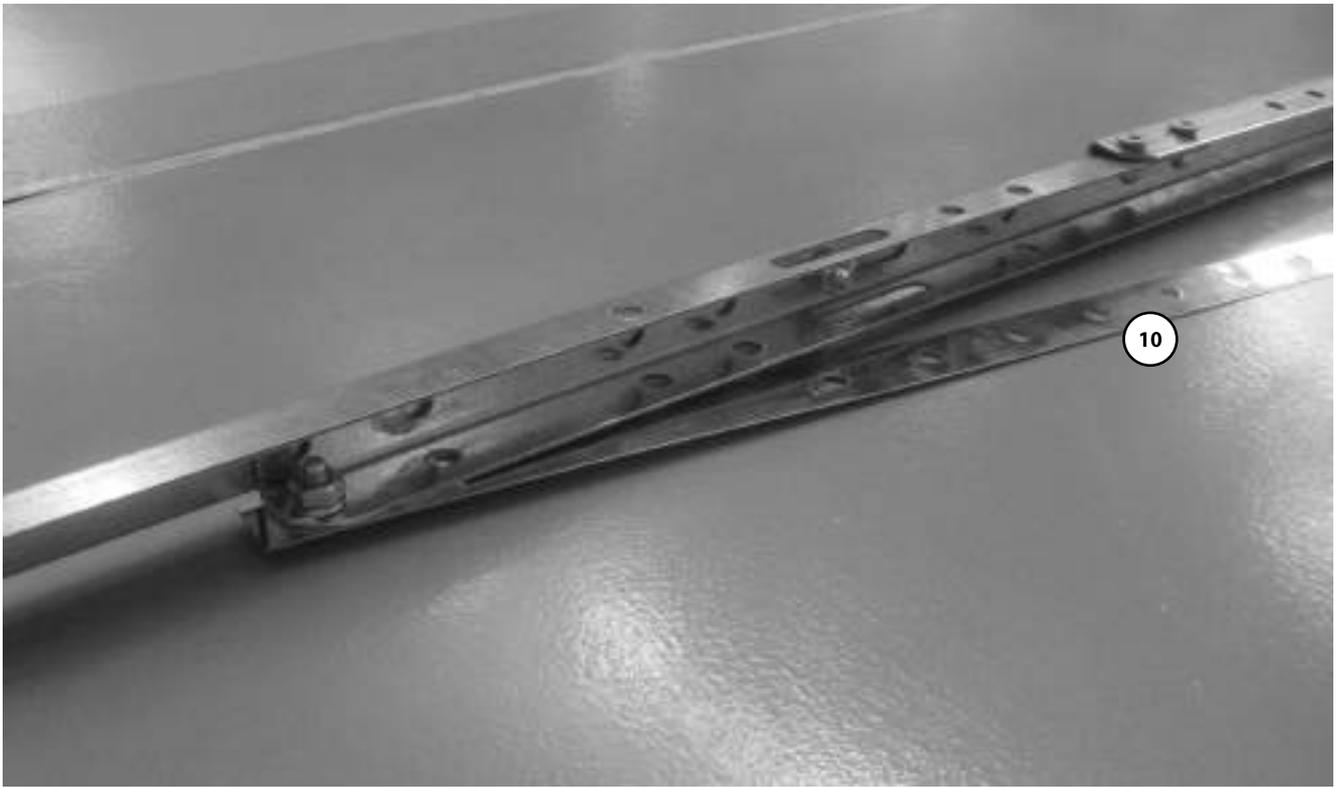
2.8. Fissare le 4 bandelle in acciaio forate 110i alla struttura del tetto, in corrispondenza dei fori scelti sul telaio appena montato (vedere anche le immagini dei punti successivi).



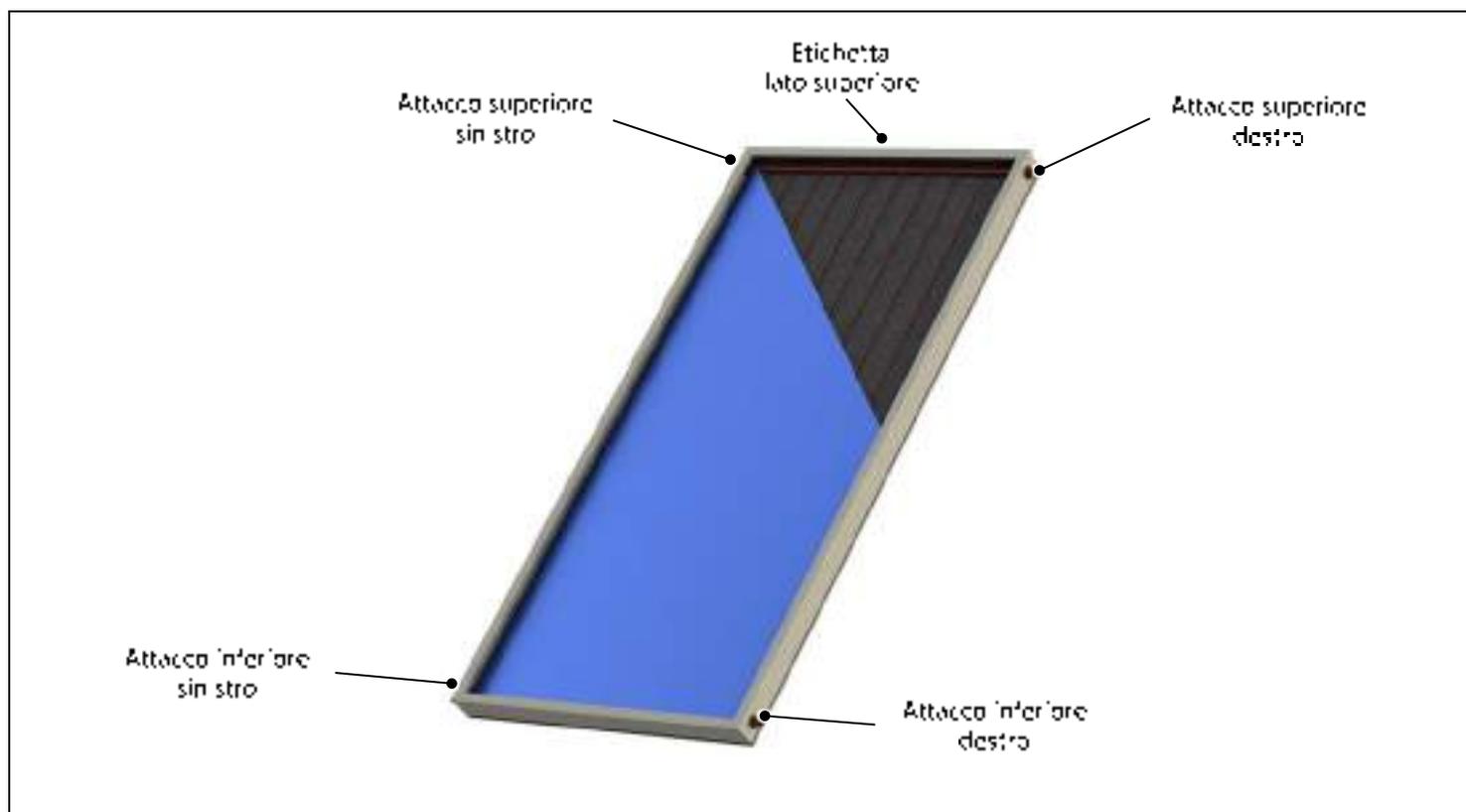
2.9. Fissare la struttura a le 4 bande le in acciaio forate 110i, utilizzando 4 bulloni, 4 cadi e 4 rondelle.







### 3. Installazione dei collettori solari



I collettori hanno un verso di installazione.  
Il lato superiore è indicato da un'etichetta

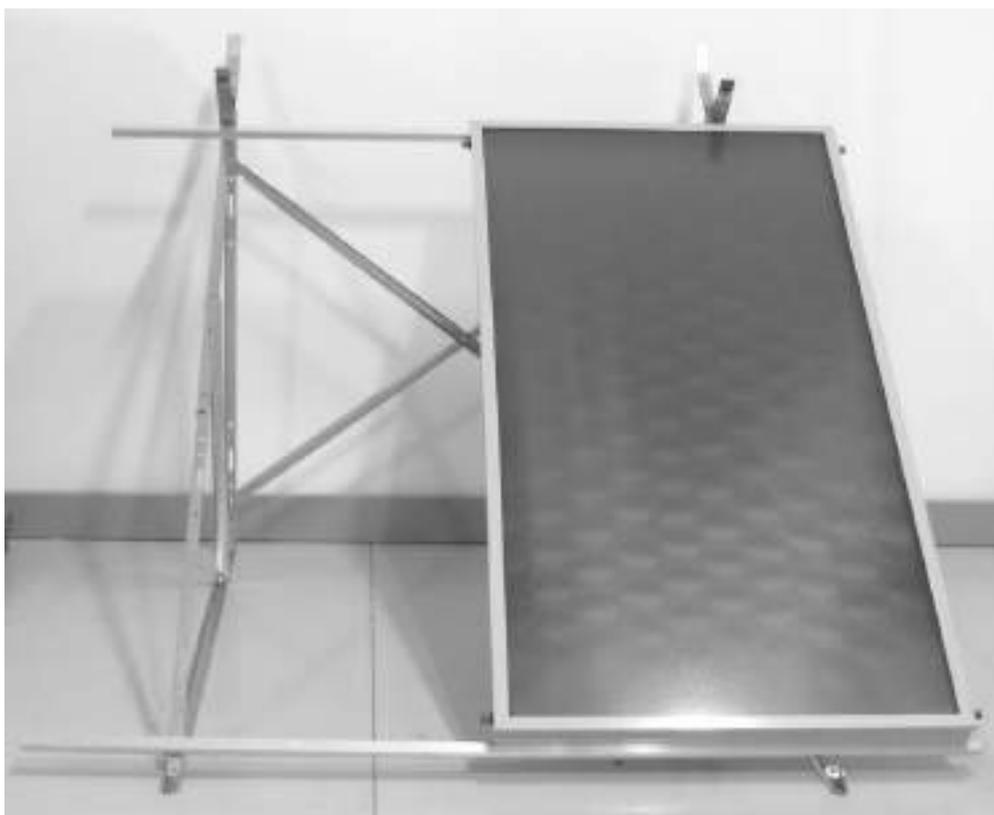


Le immagini che seguono fanno riferimento all'installazione su struttura per tetti piani, ma l'inserimento del collettore e del bollitore avvengono nello stesso modo anche su struttura per tetti inclinati.

3.1. Inserire il primo collettore solare nella parte destra della barra di fissaggio collettore inferiore (9) assicurandosi che si incastrino come in figura.

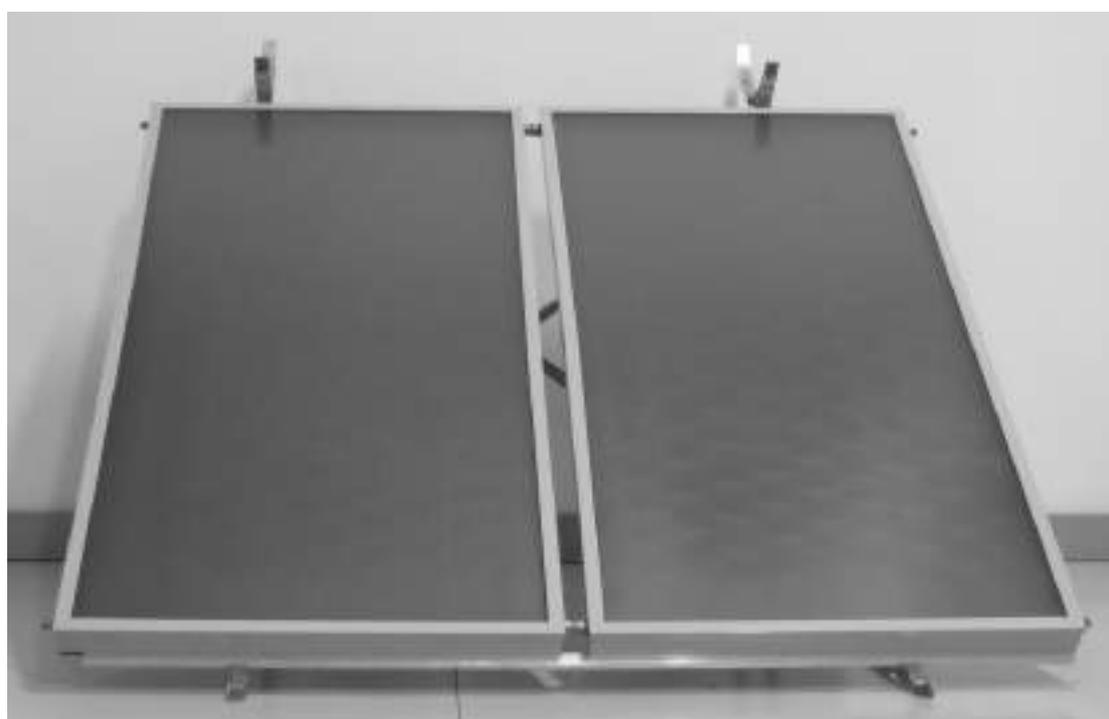


3.2. Inserire il collettore solare nella barra di fissaggio collettore superiore (9) facendo scivolare verso l'alto.



3.3. Ripetere le operazioni 3.1 e 3.2 per inserire il secondo collettore nella parte sinistra della struttura.

3.4. Utilizzando le 2 giunzioni a stringere con ogive  $\varnothing 22\text{ mm} \times \varnothing 22\text{ mm}$  collegare i 2 collettori solari, in alto e in basso.

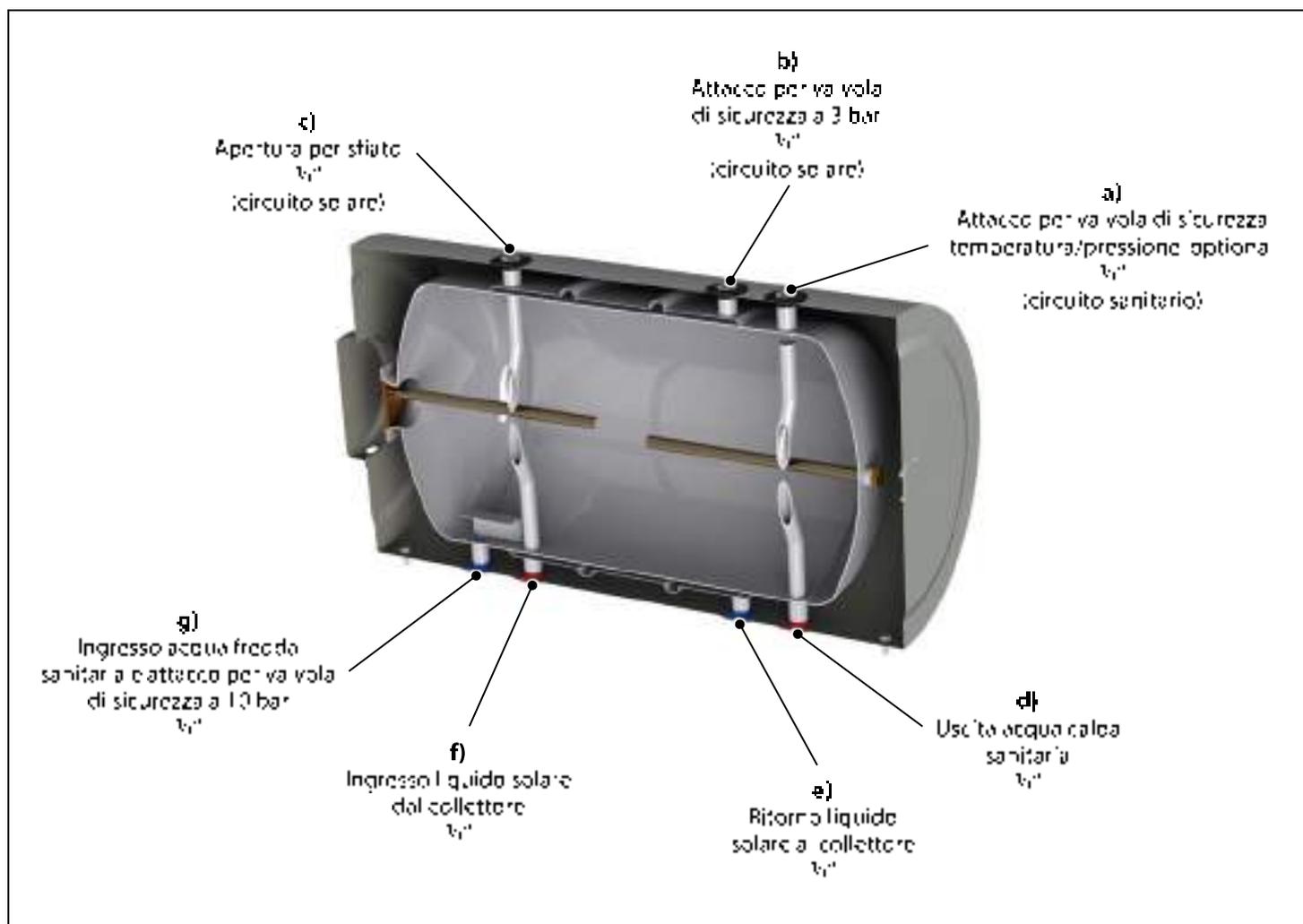


**Attenzione: i 2 collettori dovranno essere centrati nella struttura.**

3.5. Spingere la barra fissaggio collettore superiore (9) verso il basso fino ad incastrarla nei collettori, quindi serrare i dadi.



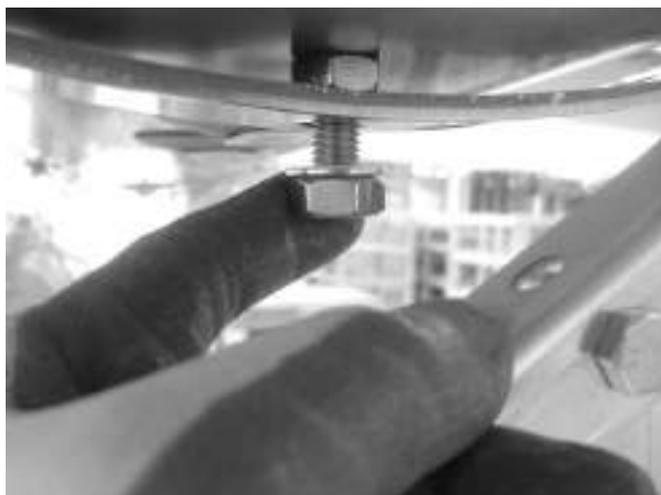
#### 4. Installazione del bollitore e dei collegamenti idraulici



- 4.1 Inserire il bollitore nella struttura facendo appoggiare su le staffe a U.  
Il bollitore è dotato di due inserti filettati M10 che dovranno essere inseriti nei **primi fori** delle staffe a U.



Fixare il bollitore utilizzando 2 dadi e 2 rondelle.



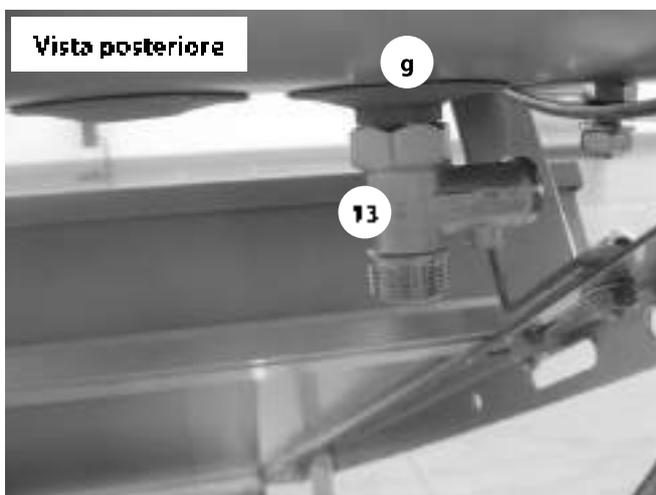
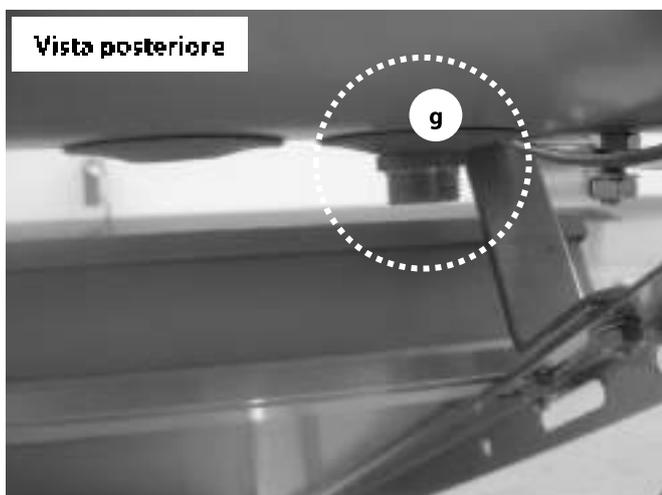
4.2. Fixare i due tappi a stringere Ø 22 mm sulle connessioni in alto a destra e in basso a sinistra della coppia di collettori solari.



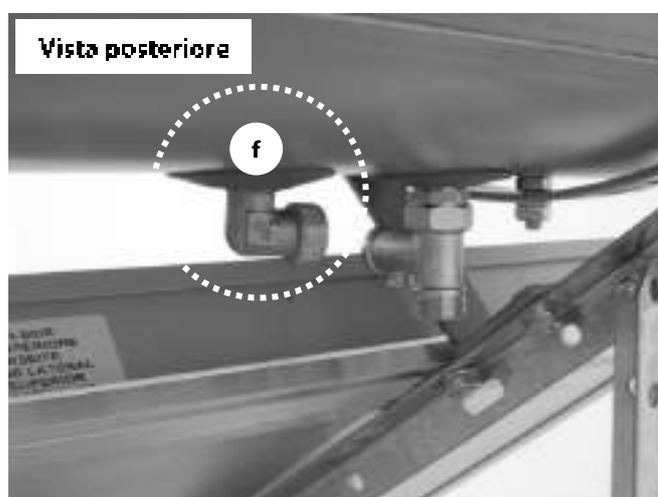
- 4.3 Fissare le due curve a stringere  $\varnothing 22$  mm x  $\frac{1}{2}$ " M sulle connessioni in alto a sinistra e in basso a destra della coppia di collettori sovrari.



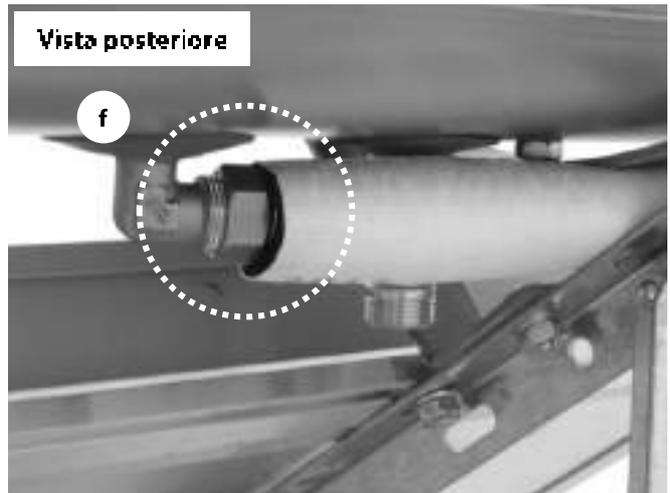
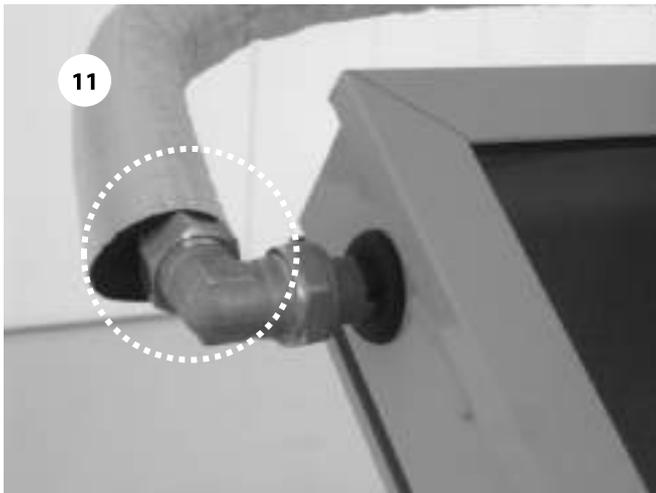
- 4.4 Utilizzando un nipple  $\frac{1}{2}$ " M  $\frac{1}{2}$ " M collegare la valvola di sicurezza acqua sanitaria a 6 bar (13) all'ingresso acqua fredda sanitaria del bollitore (g).  
Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.



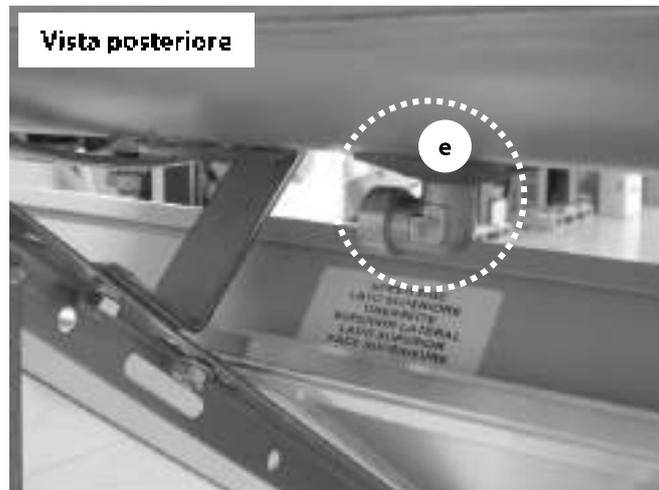
- 4.5 Inserire una curva  $\frac{1}{2}$ " M x  $\frac{1}{2}$ " M all'ingresso liquido solare del bollitore (f).  
Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.



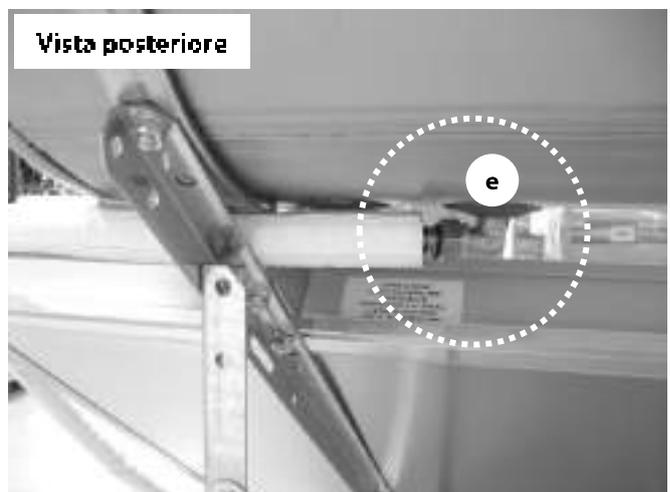
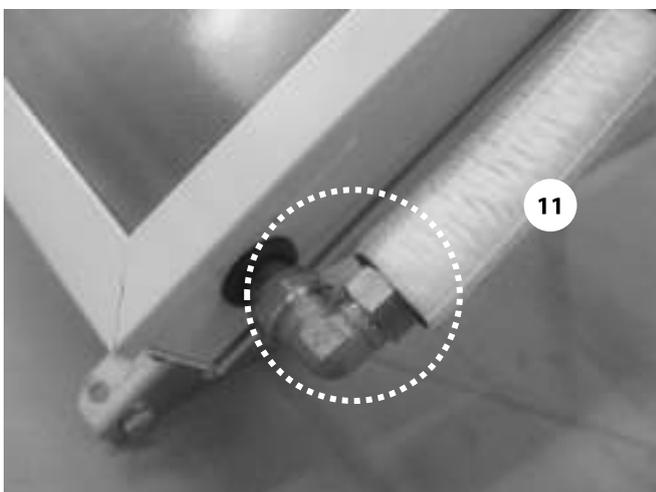
- 4.6 Utilizzando due guarnizioni 18" collegare il tubo in acciaio flessibile e lunghezza 670 mm (11) alla connessione in alto a sinistra del collettore solare sinistro e a l'ingresso liquido solare del bollitore (f).  
Il tubo in acciaio flessibile dovrà avere un andamento verso l'alto partendo dall'attacco del collettore verso l'attacco del bollitore (f).



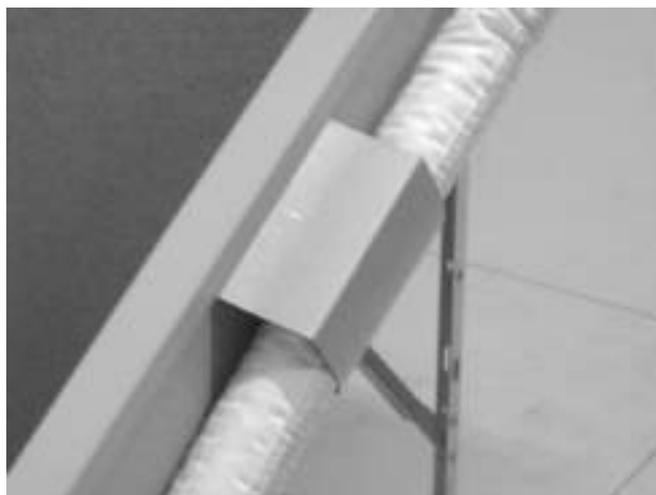
- 4.7 Inserire una curva 18" M x 18" M al ritorno liquido solare del bollitore (e).  
Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.



- 4.5 Utilizzando due guarnizioni 18" collegare il tubo in acciaio flessibile e lunghezza 2620 mm (11) alla connessione in basso a destra del collettore solare destro e al ritorno liquido solare del bollitore (e).

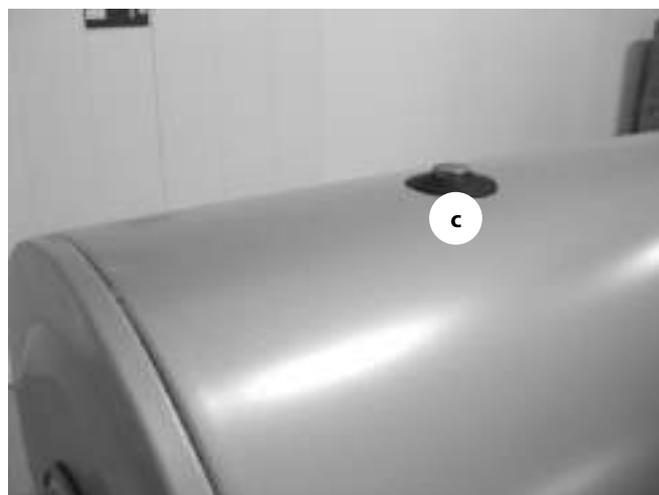
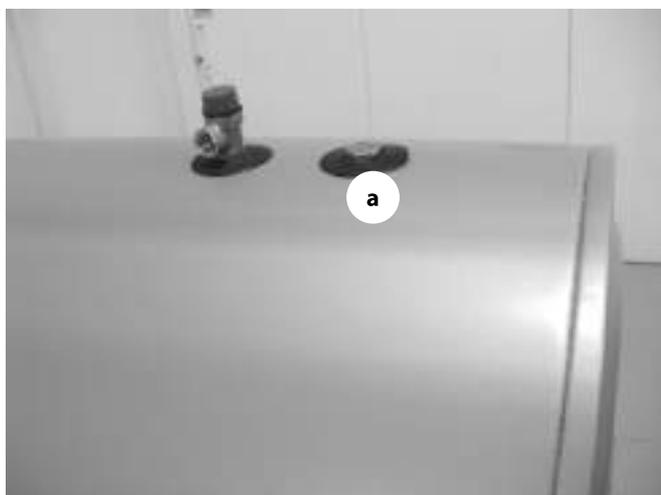
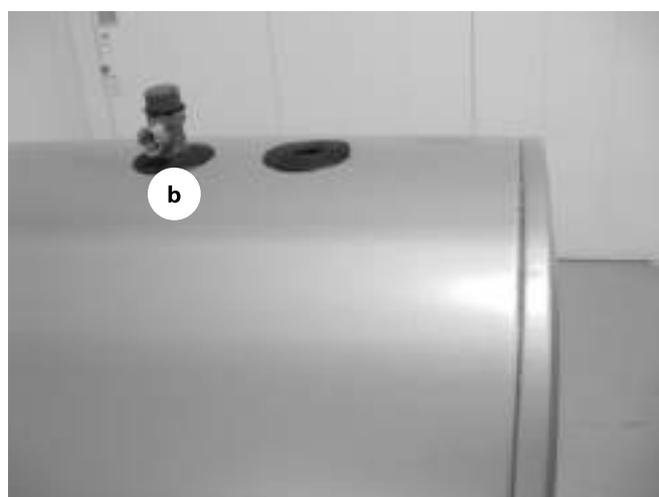
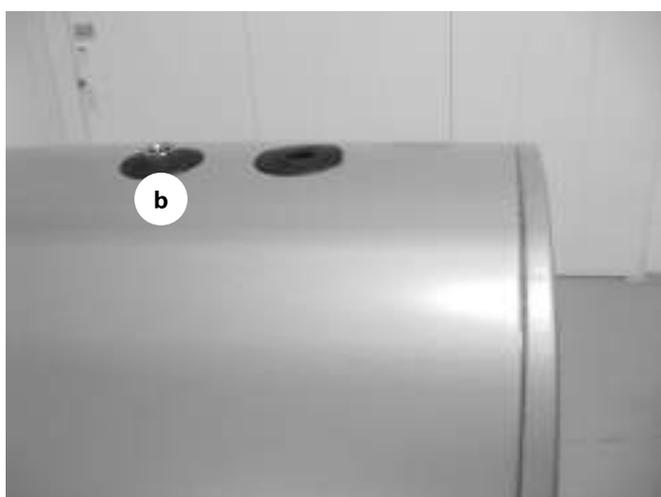


4.9 Fissare il tubo lunghezza 2620 mm (11) al collettore utilizzando la Staffa a  $\Omega$  (12).



4.10 A questo punto è possibile fissare la struttura sulla superficie d'appoggio utilizzando le 4 viti e i 4 tasselli forniti a corredo (16) e (20). Nel caso in cui i tasselli forniti non fossero necessari o adatti al tipo di superficie, procurarsi tasselli adatti allo scopo.

- 4.11 Collegare l'ingresso acqua fredda e l'uscita acqua calda ai rispettivi attacchi sul bollitore, (gi e id) rispettivamente.
- 4.12 Procedere al riempimento del bollitore, lato acqua sanitaria come da capitolo **Riempimento dell'impianto del Manuale di installazione, uso e manutenzione.**
- 4.13 Una volta riempito il bollitore, installare una valvola di sicurezza temperatura/pressione (optional, se prevista) nell'attacco corrispondente del bollitore (a). In caso contrario tappare questo foro con il tappo 1/2" M. Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filletti.
- 4.14 Dopo aver miscelato il glicole propileno, procedere al riempimento dei circuiti solari come da capitolo **Riempimento dell'impianto del Manuale di installazione, uso e manutenzione.**
- 4.15 Una volta riempito il circuito, installare la valvola di sicurezza a 3 bar nell'attacco corrispondente sul bollitore (b) utilizzando la riduzione 1/2" M x 1/2" F. Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filletti.
- 4.16 Installare il tappo 1/2" M nell'attacco (c).
- Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filletti.



**ES**

## **Sulpack Natural Plus 300**



**Instrucciones para el montaje  
en superficie inclinada**

 **fondital**

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## 1. Contenido del embalaje

El embalaje contiene el siguiente material:

Ref.	Descripción	Cant.
1	Colector solar plano de vidrio	2
2	Hervidor de acero vitrificado	1
3	Barra bastidor de acero galvanizado - longitud 2000 mm	2
4	Barra bastidor de acero galvanizado - longitud 1440 mm	2
5	Barra bastidor de acero galvanizado - longitud 1370 mm	2
6	Barra bastidor de acero galvanizado - longitud 1'20 mm	2
7	Sostén en U apoyo hervidor	2
8	Sostén en L apoyo hervidor	2
9	Barra de fijación de aluminio - longitud 2050 mm	2
10	Eje de acero perforado - longitud 750 mm	4
11	Tubo de acero flexible - longitud 670 mm	1
	Tubo de acero flexible - longitud 2620 mm	1
12	Sostén en $\Omega$ para fijación tubo flexible	1
13	Válvula de seguridad agua sanitaria - 6 bar	1
14	Válvula de seguridad circuito solar - 3 bar	1
15	Curva 1/2" M x 1/2" M	2
	Curva para ajustar con ojiva $\varnothing$ 22 mm x 1/2" M	2
	Tapón para ajustar con ojiva $\varnothing$ 22 mm	2
	Junta para ajustar con ojiva $\varnothing$ 22 mm x 22 mm	2
	Tapón 1/2" M	2
	Niple 1/2" M x 1/2" M	1
	Reducción 1/2" M x 1/2" H	1
Junta 1/2"	5	
16	Bulón M10x25	18
	Arandela M10	28
	Tuerca M10	27
	Bulón de cabeza avellanada M10x20 con ranura hexagonal	8
	Tornillo de fijación M8x50	4
	Tapa para tornillo de fijación M8x50	4
17	Bidón de líquido solar de 5 litros	1

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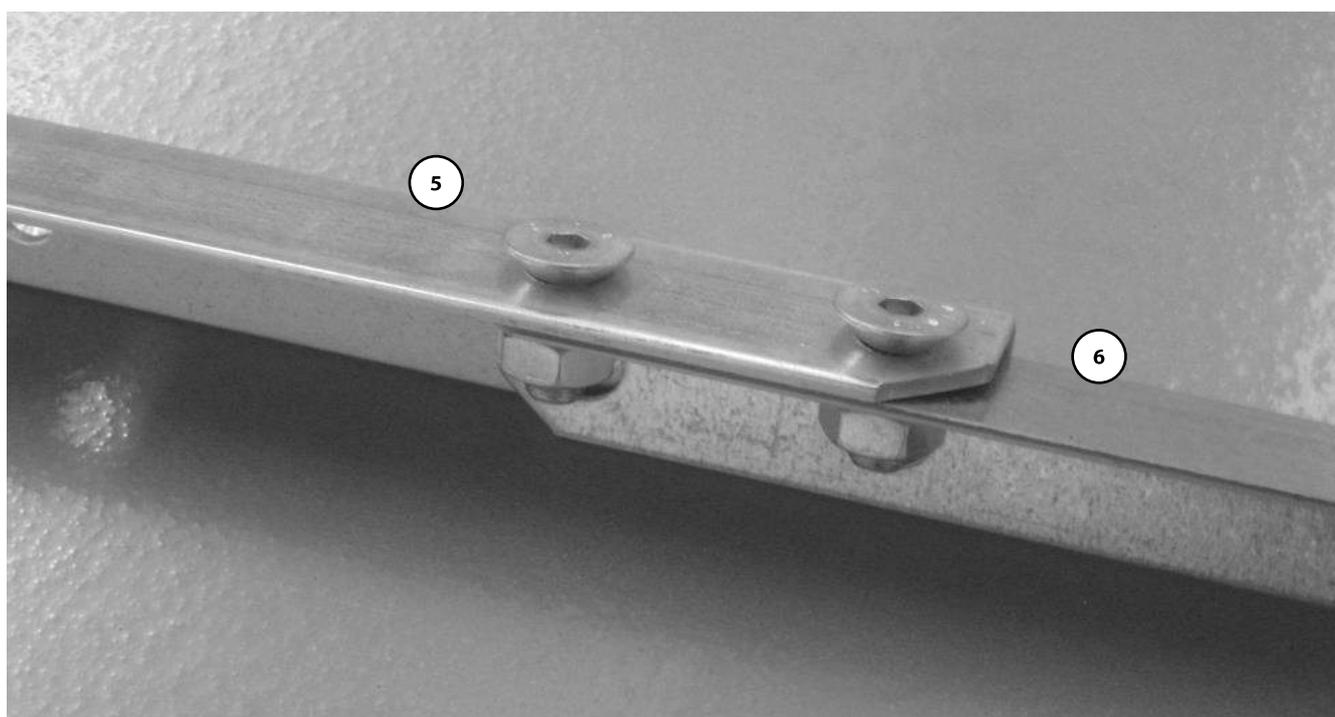
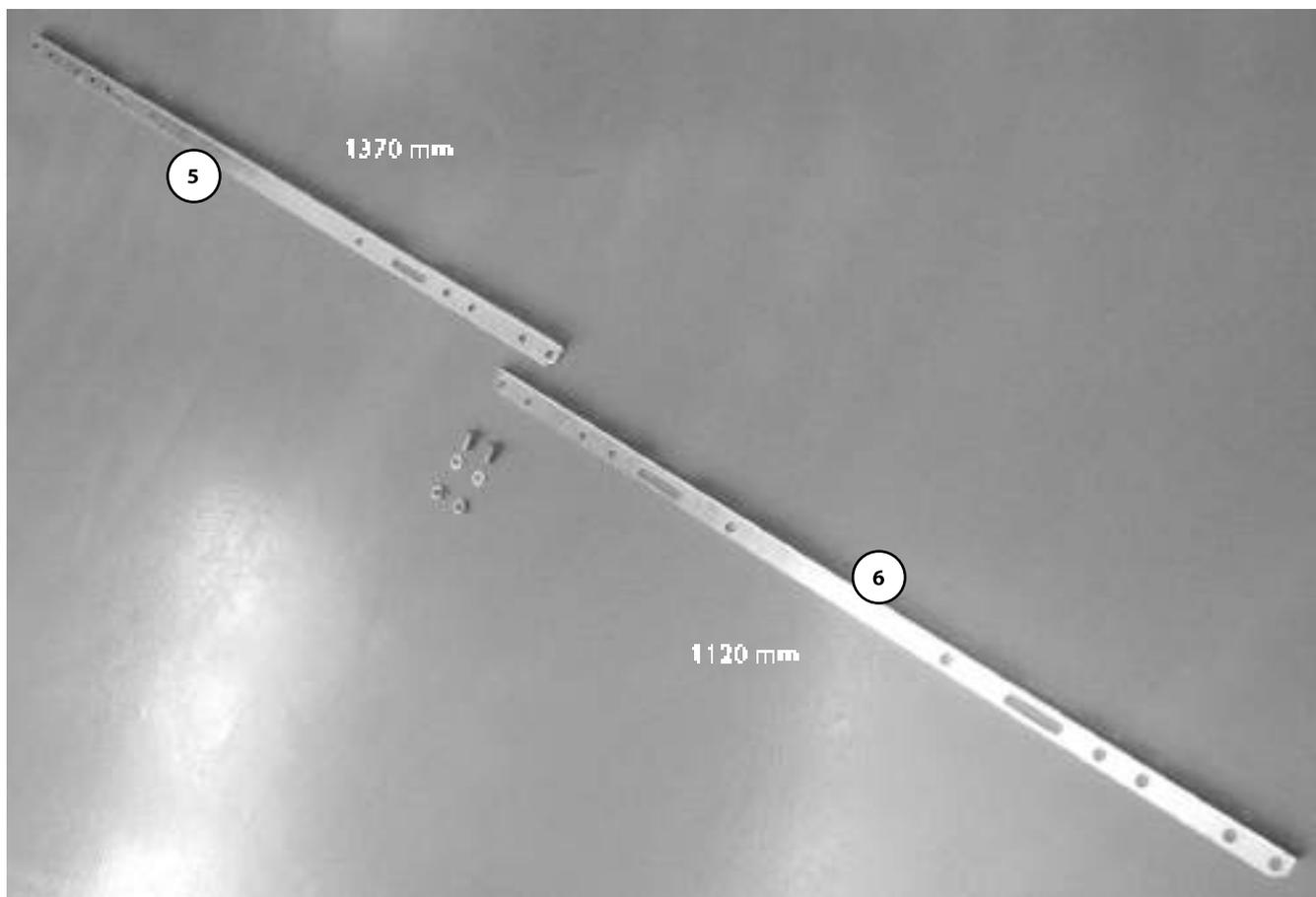
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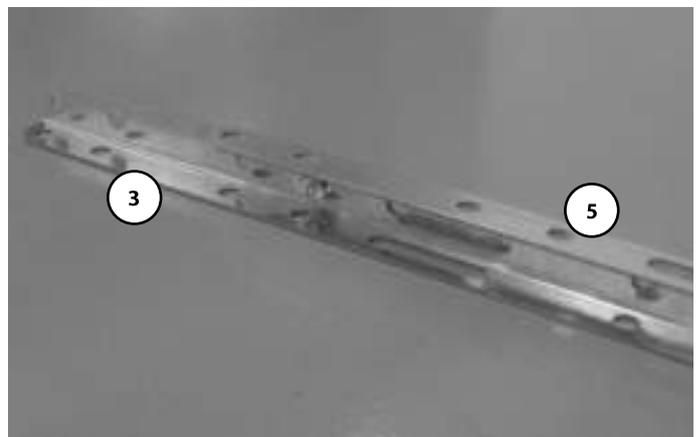
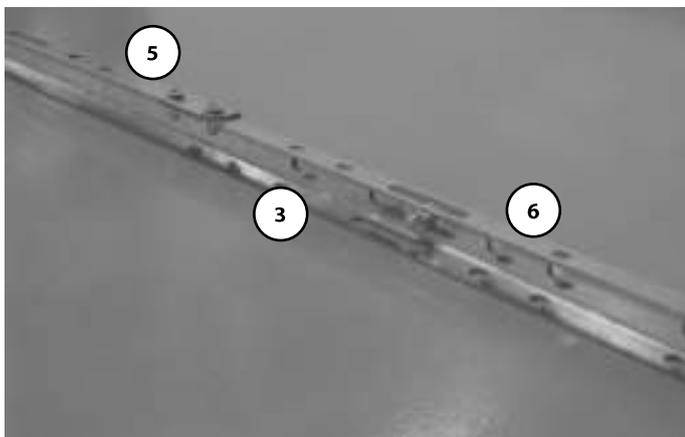
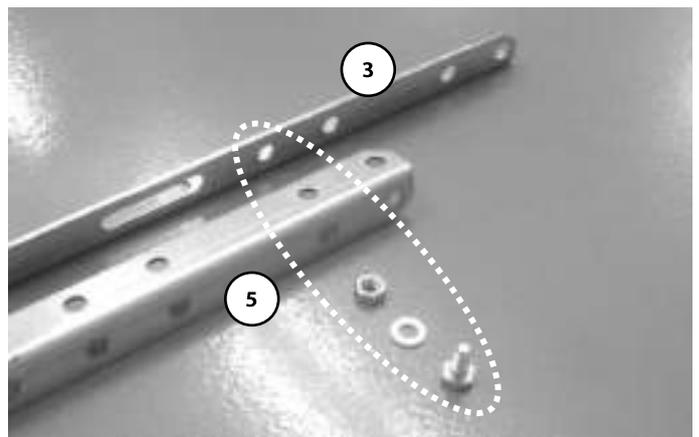
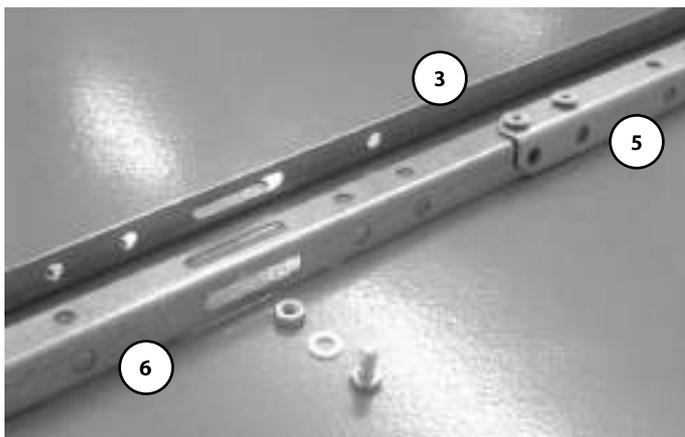
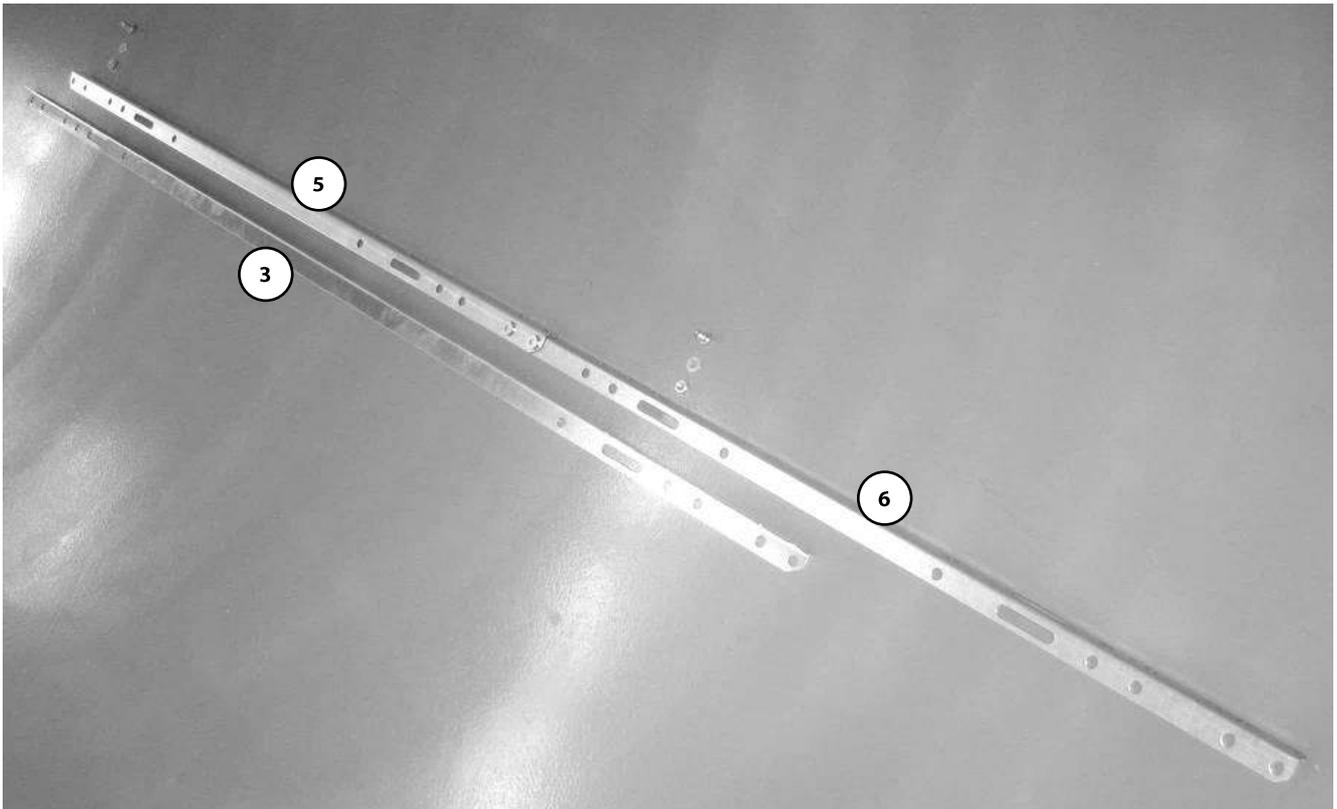
## 2. Montaje de la estructura

Para la instalación de la estructura de apoyo, seguir las indicaciones a continuación:

- 2.1. Unir una barra de longitud 1370 mm (5) con una barra de longitud 1120 mm (6) utilizando 2 bulones de cabeza avellanada, 2 tuercas y 2 arandelas.  
La barra de longitud 1370 mm (5) deberá superar la barra de longitud 1120 mm (6).

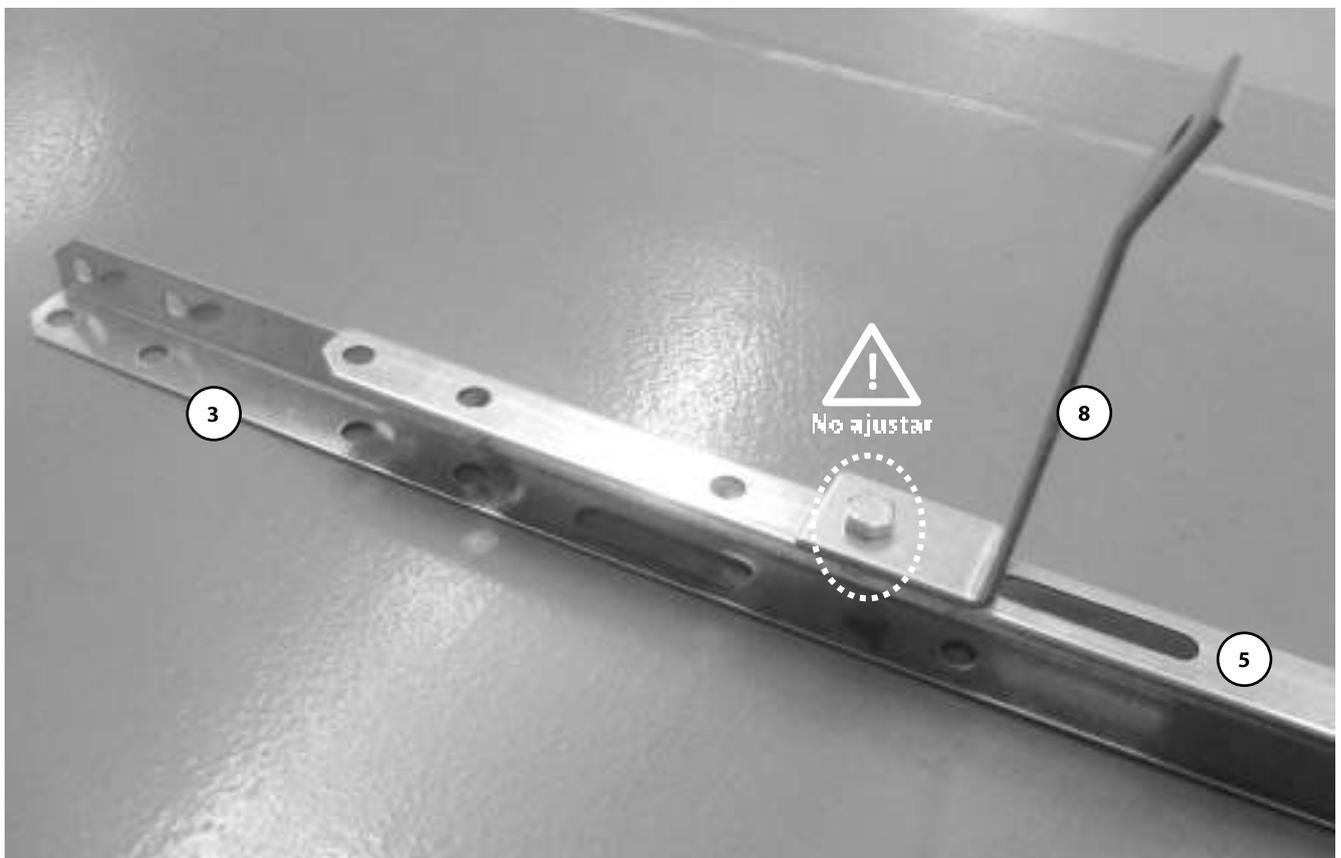
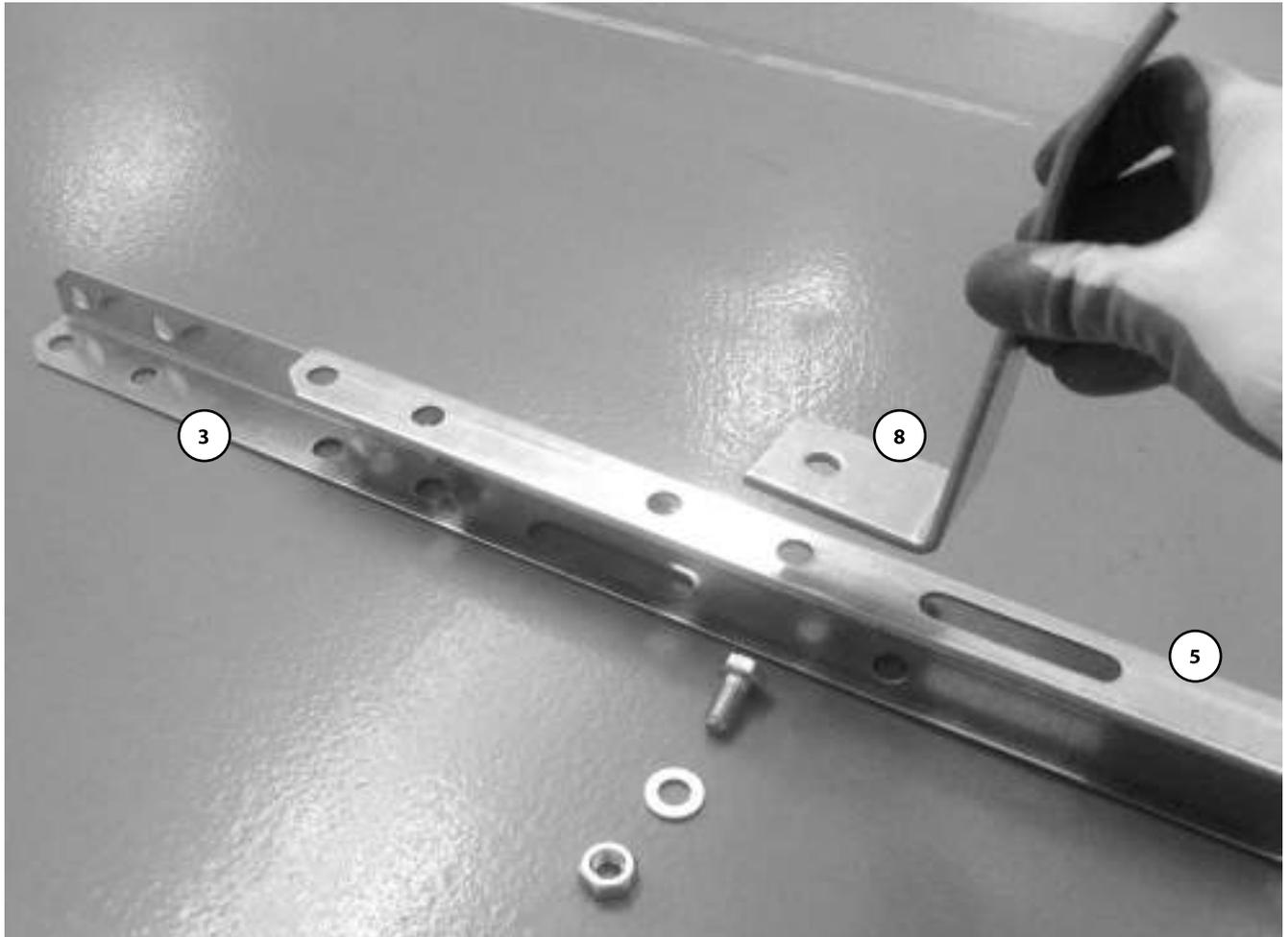


2.2. Unir la barra de longitud 2000 mm (3) con las barras previamente unidas utilizando 2 bulones, 2 tuercas y 2 arandelas

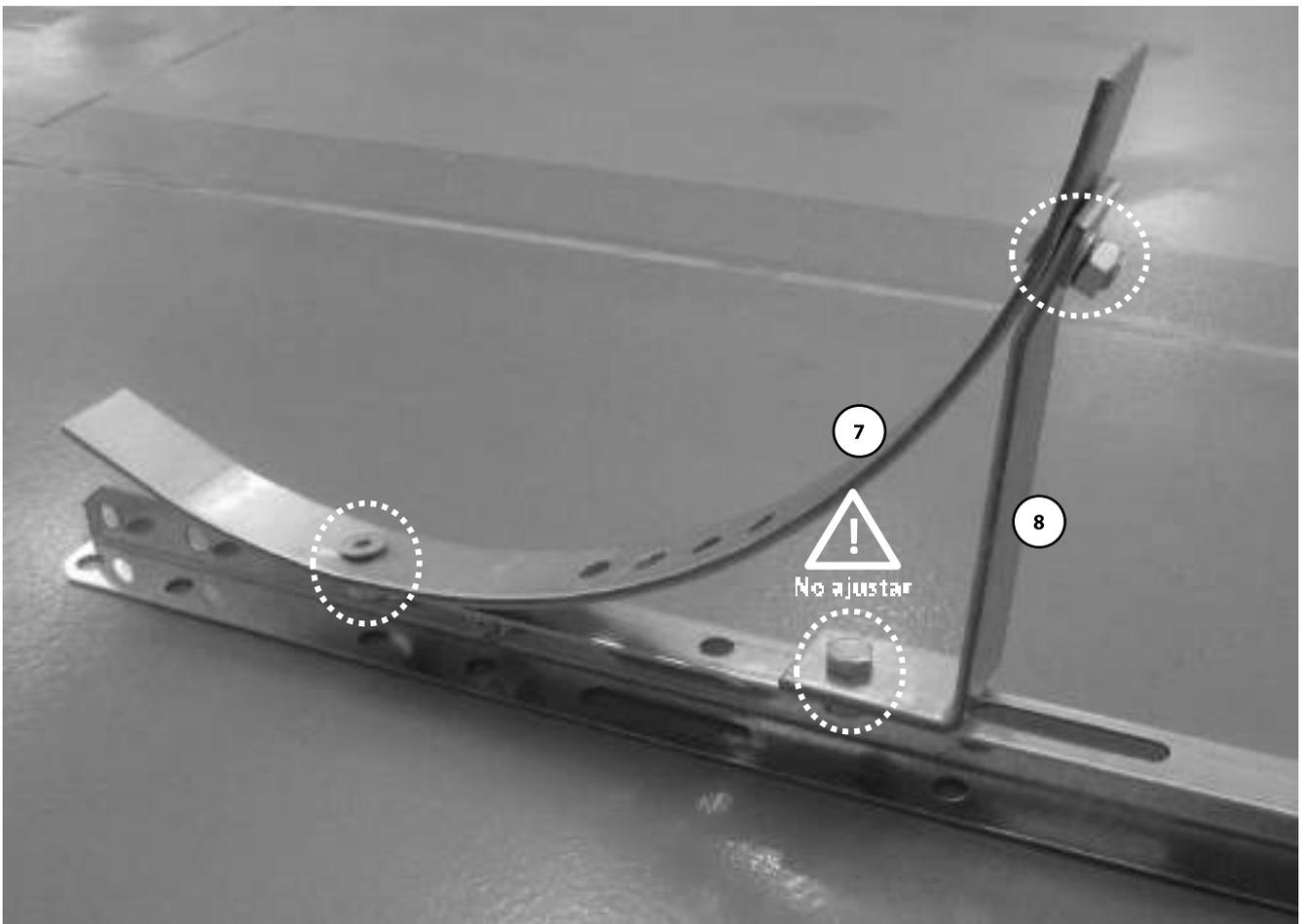
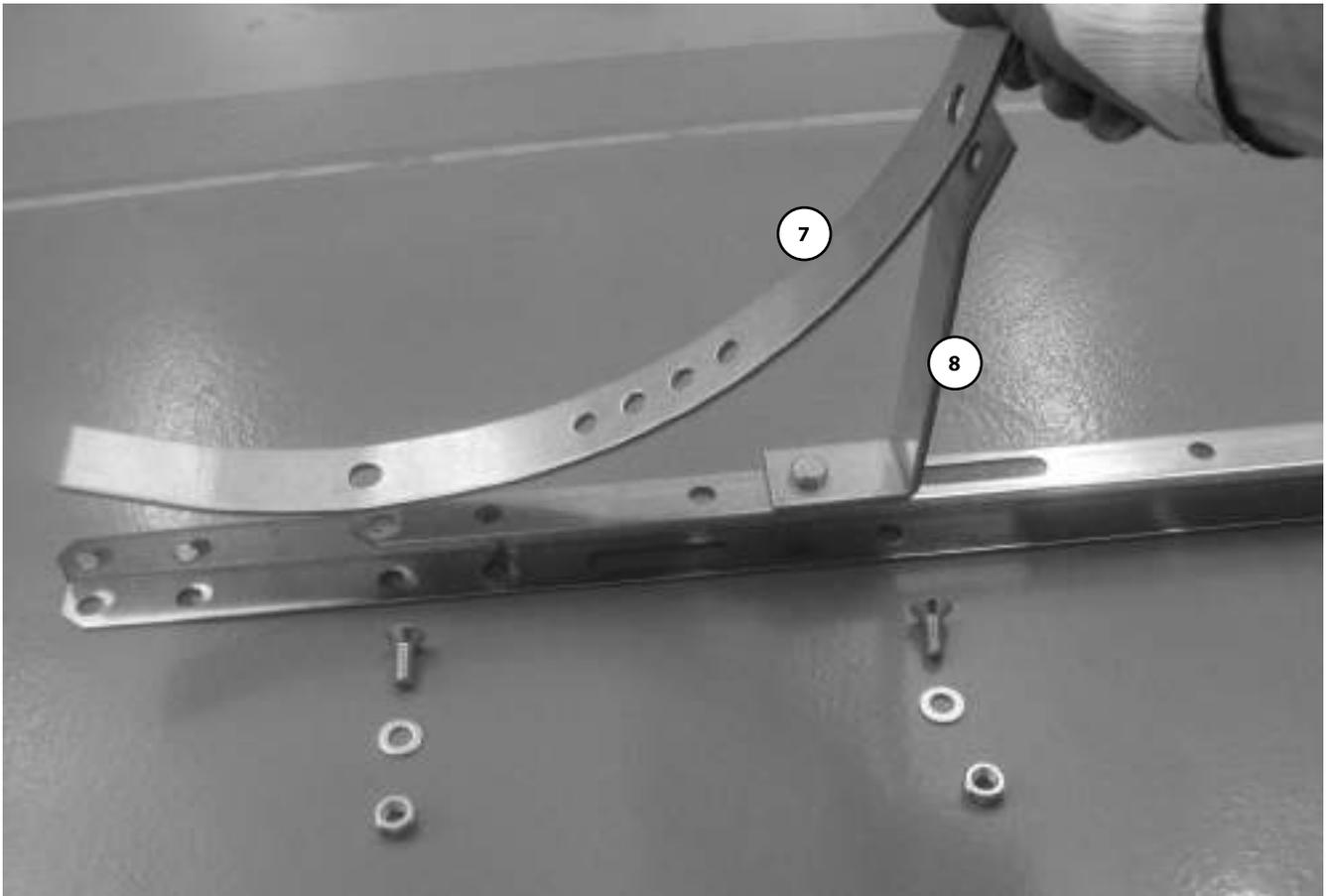


Una vez montada la barra de longitud 2000 (3) sobresa de la barra de longitud 1370 mm (5).

2.3. En las barras que se han montado fíjese sostenes en L10; utilizando 1 bulón, 1 tuerca y 1 arandela  
**ATENCIÓN:** por el momento no ajustar completamente la tuerca ni el bulón.



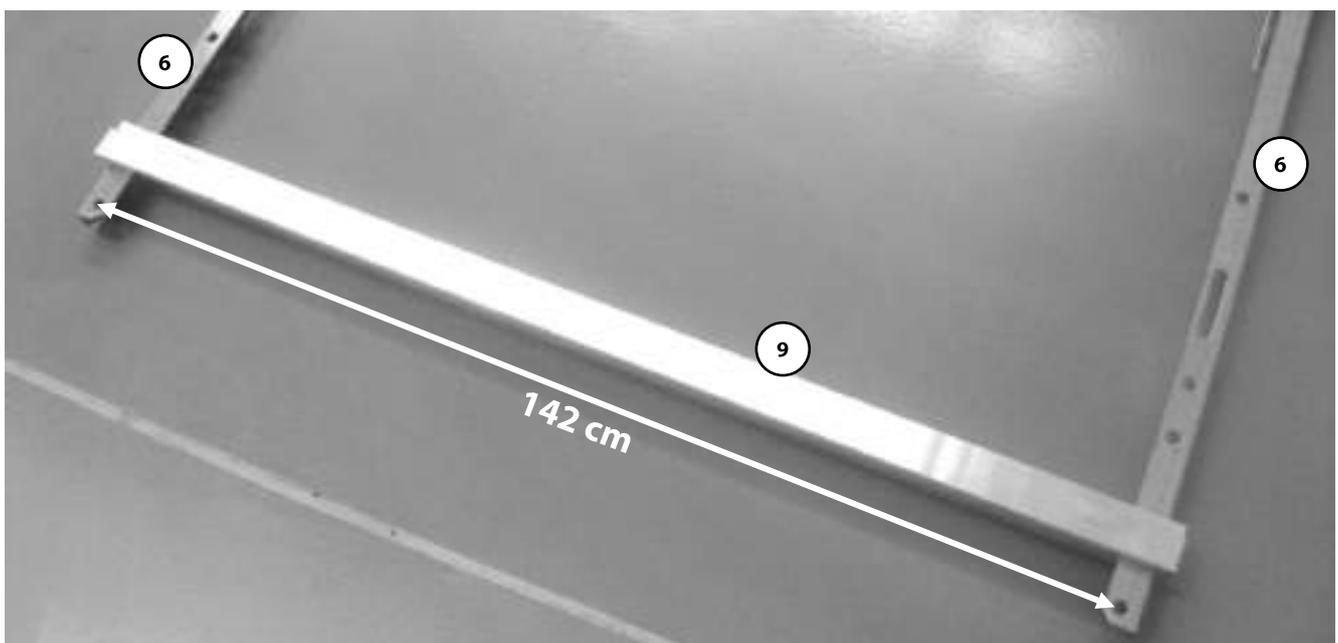
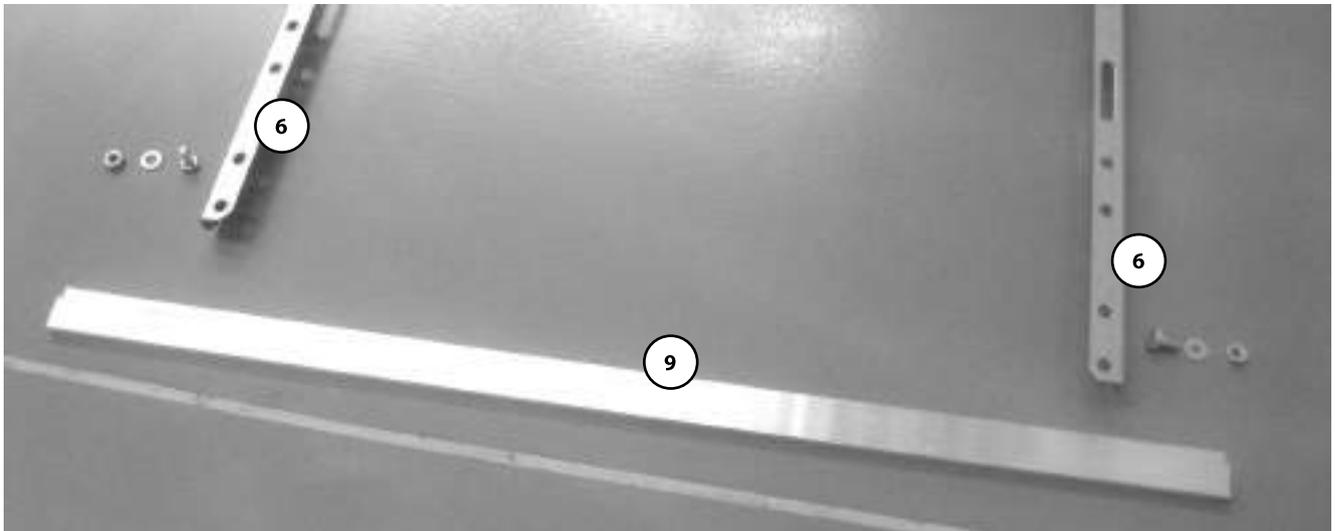
2.4. Fijar el sostén en U (7) utilizando 2 bulones de cabeza avellanada, 2 tuercas y 2 arandelas



2.5. Repetir los puntos 2.1 a 2.4 para preparar otra estructura como a que se ha preparado, pero espejada.

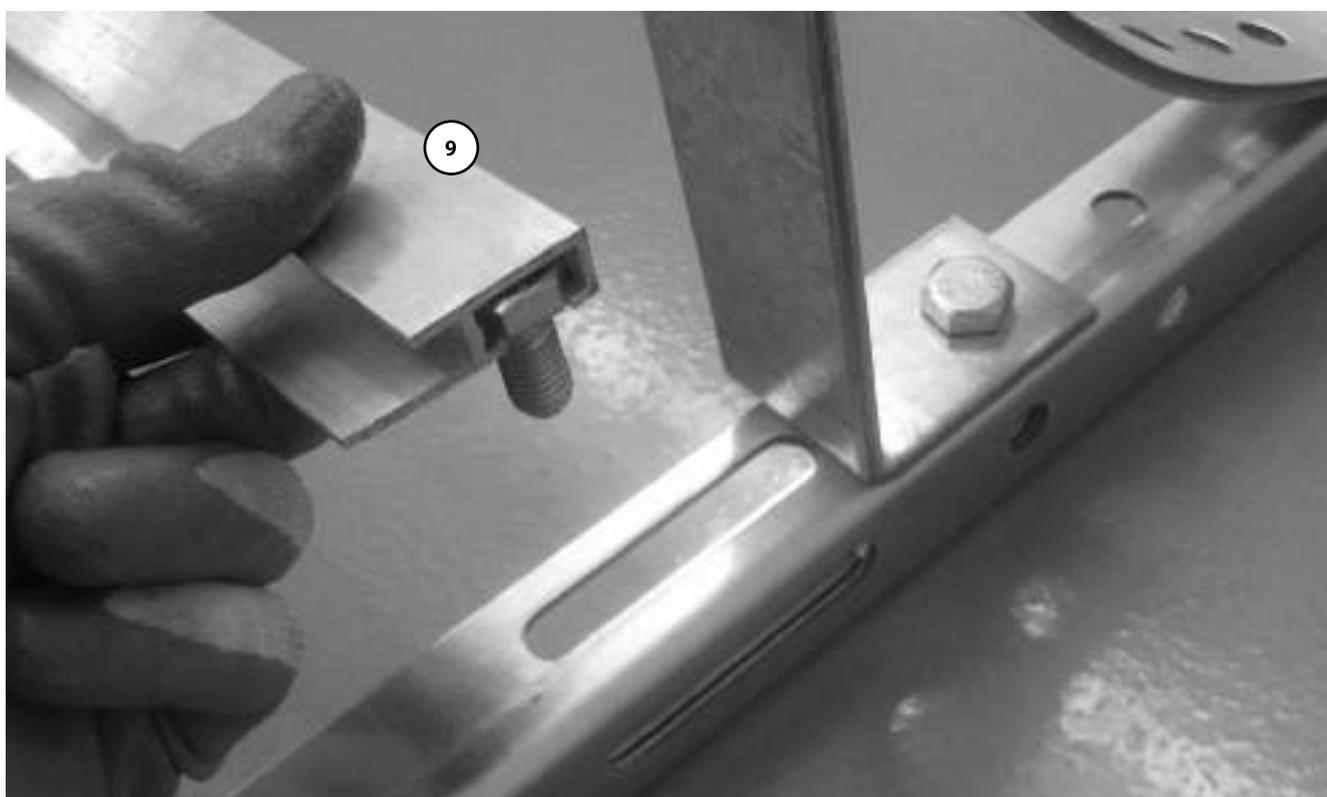
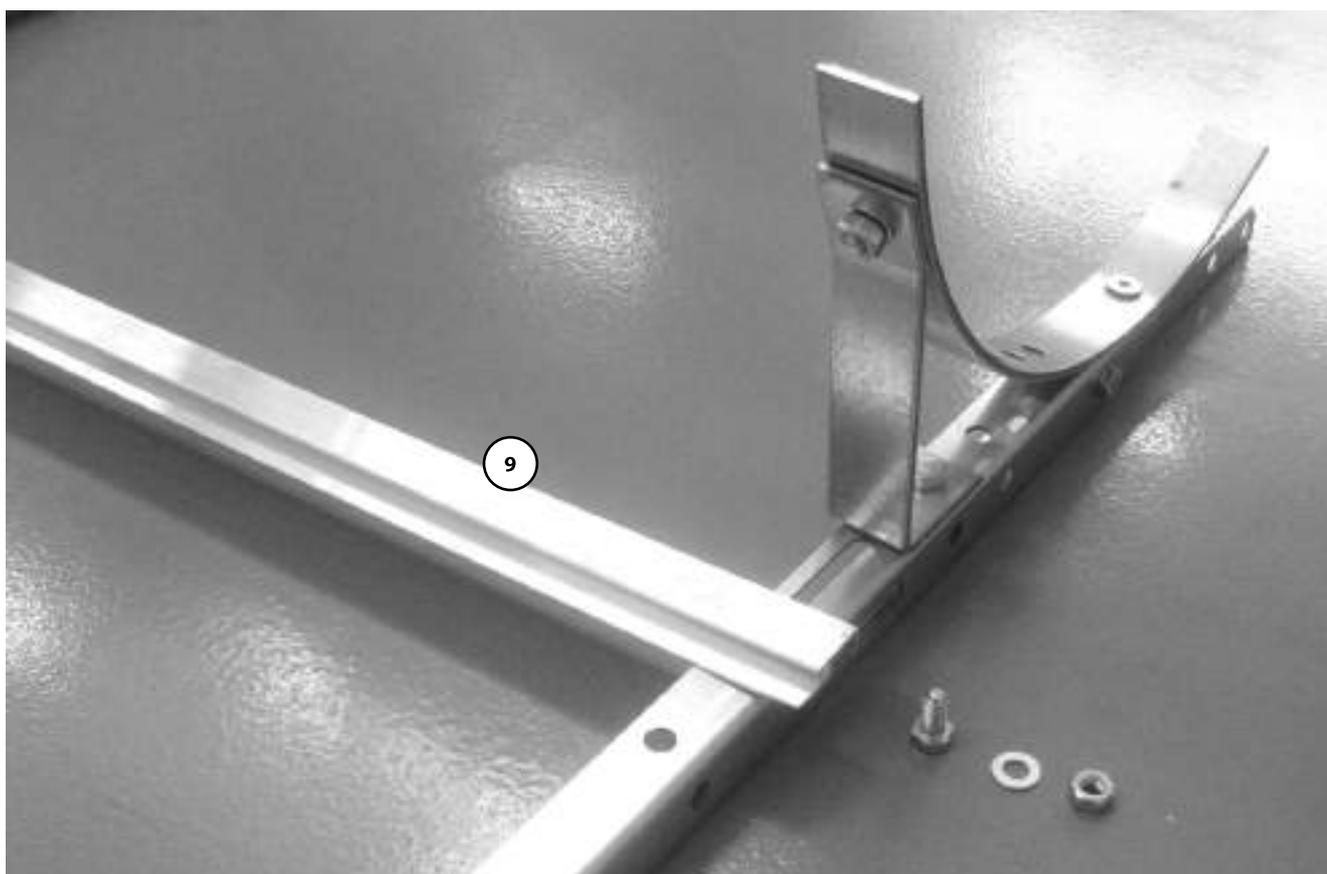
Las imágenes siguientes se refieren a la instalación del modelo de 150 litros, pero la instalación se realiza del mismo modo.

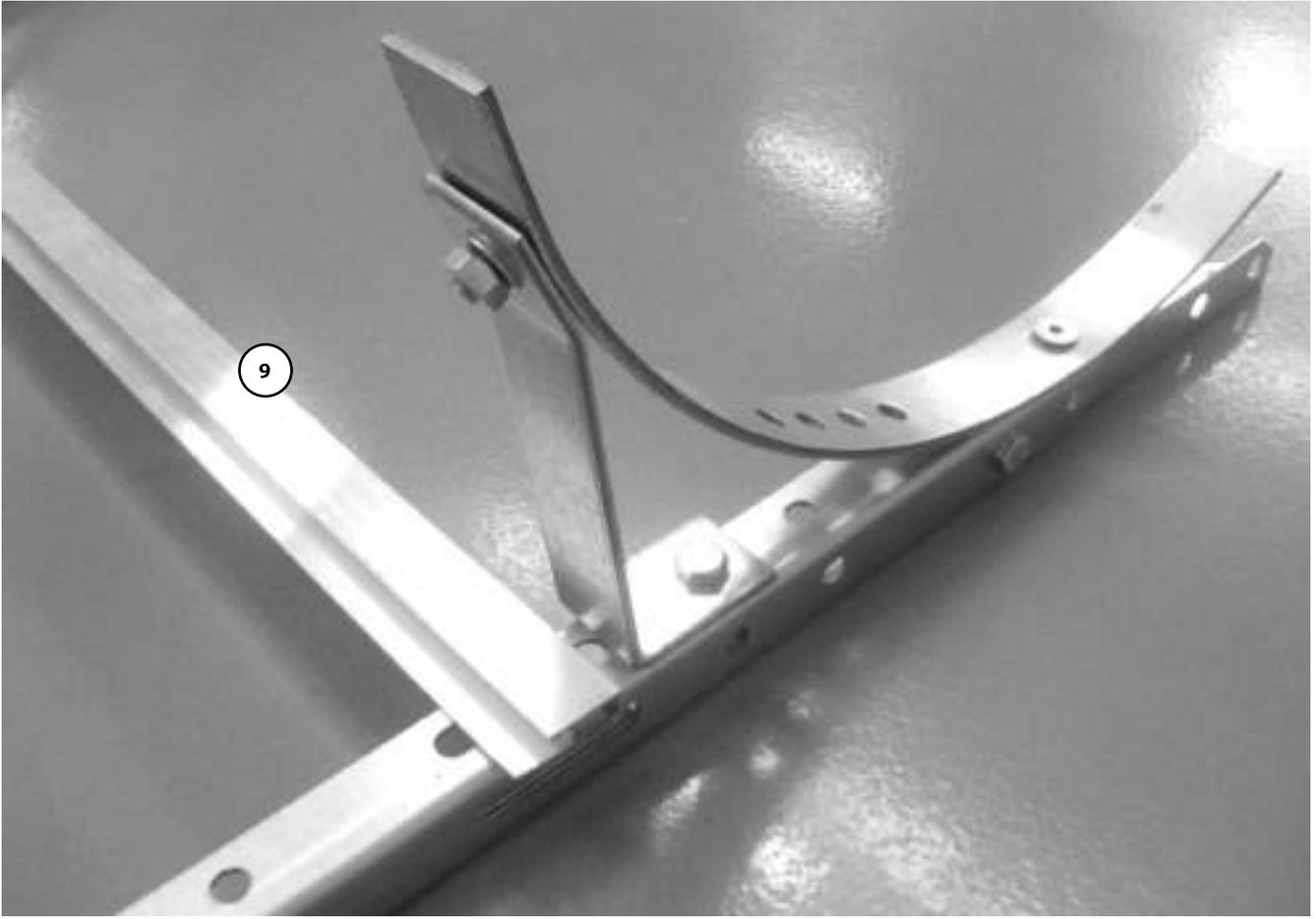
2.6. Unir, en la parte inferior, las 2 estructuras previamente preparadas utilizando una barra de fijación colector de longitud 2060 mm (9), 2 bulones, 2 tuercas y 2 arandelas.



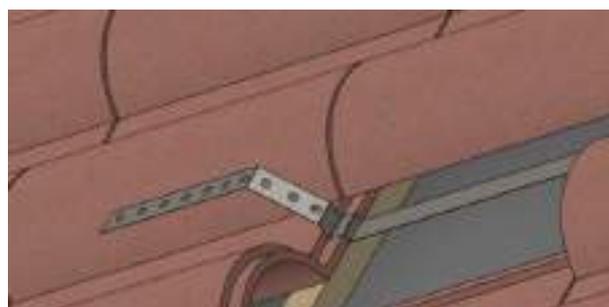
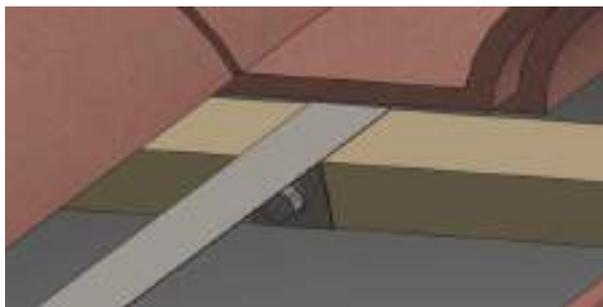
Una vez fijadas, deberá haber una distancia de 142 cm entre los orificios de las 2 barras.  
La barra de fijación colector de longitud 2060 mm (9) deberá estar centrada entre las 2 estructuras.

- 2.7. Fijar en la parte superior de la estructura la segunda barra de fijación colector de longitud 2060 mm (9), utilizando 2 bulones, 2 tuercas y 2 arandelas.  
No se deberán ajustar los bujones hasta que no se haya introducido el panel en la estructura.  
La barra de fijación colector de longitud 2060 mm (9) deberá estar centrada entre las 2 estructuras.

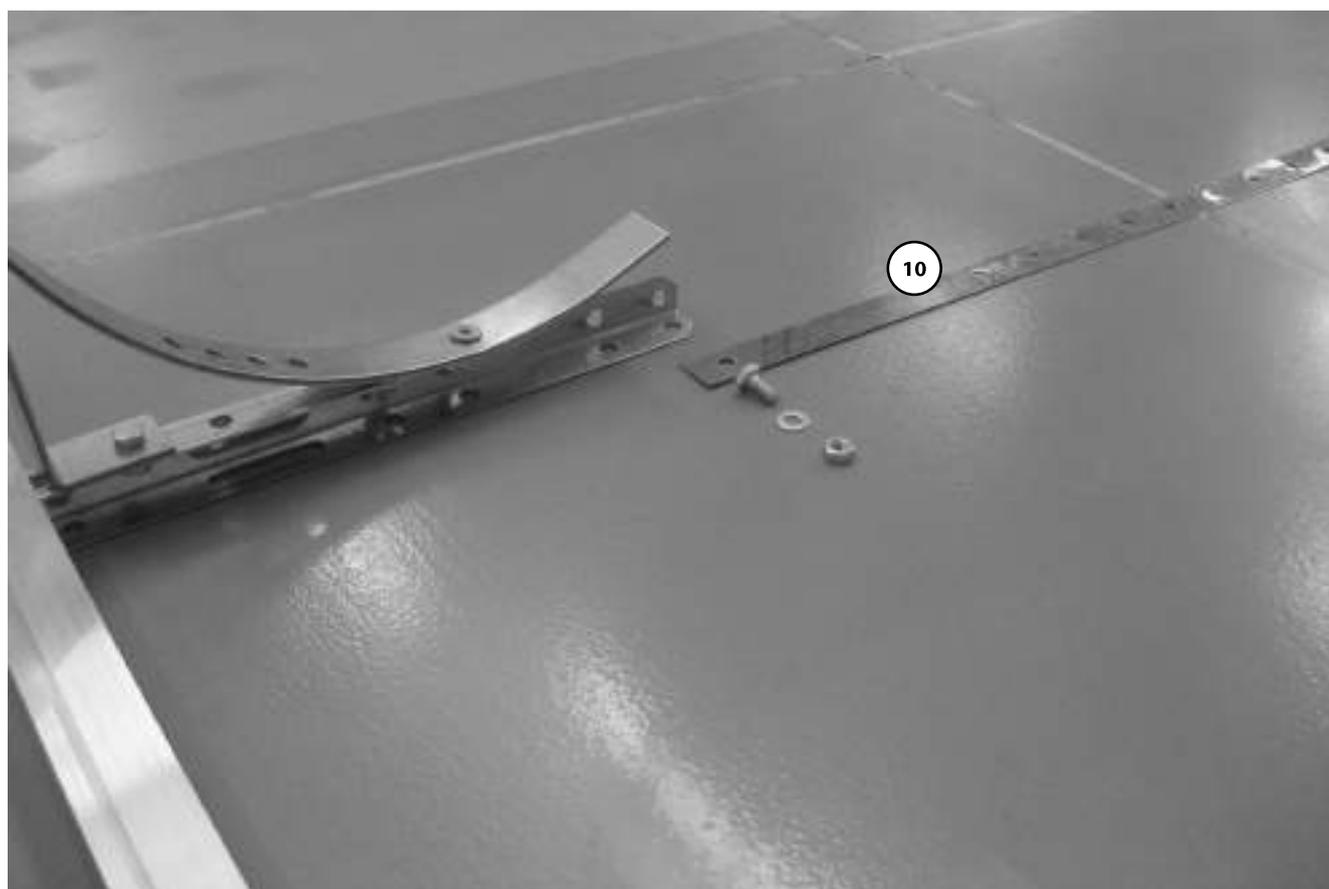


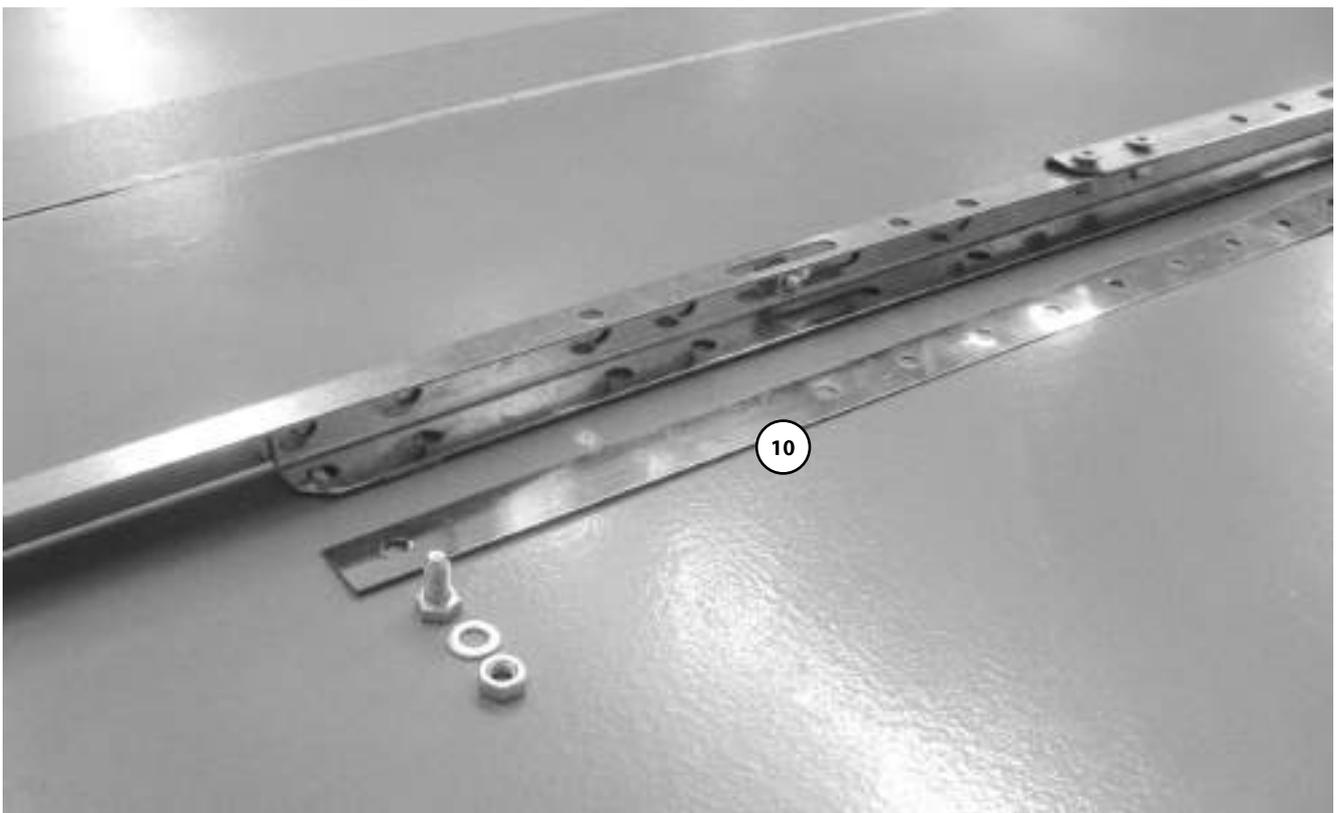
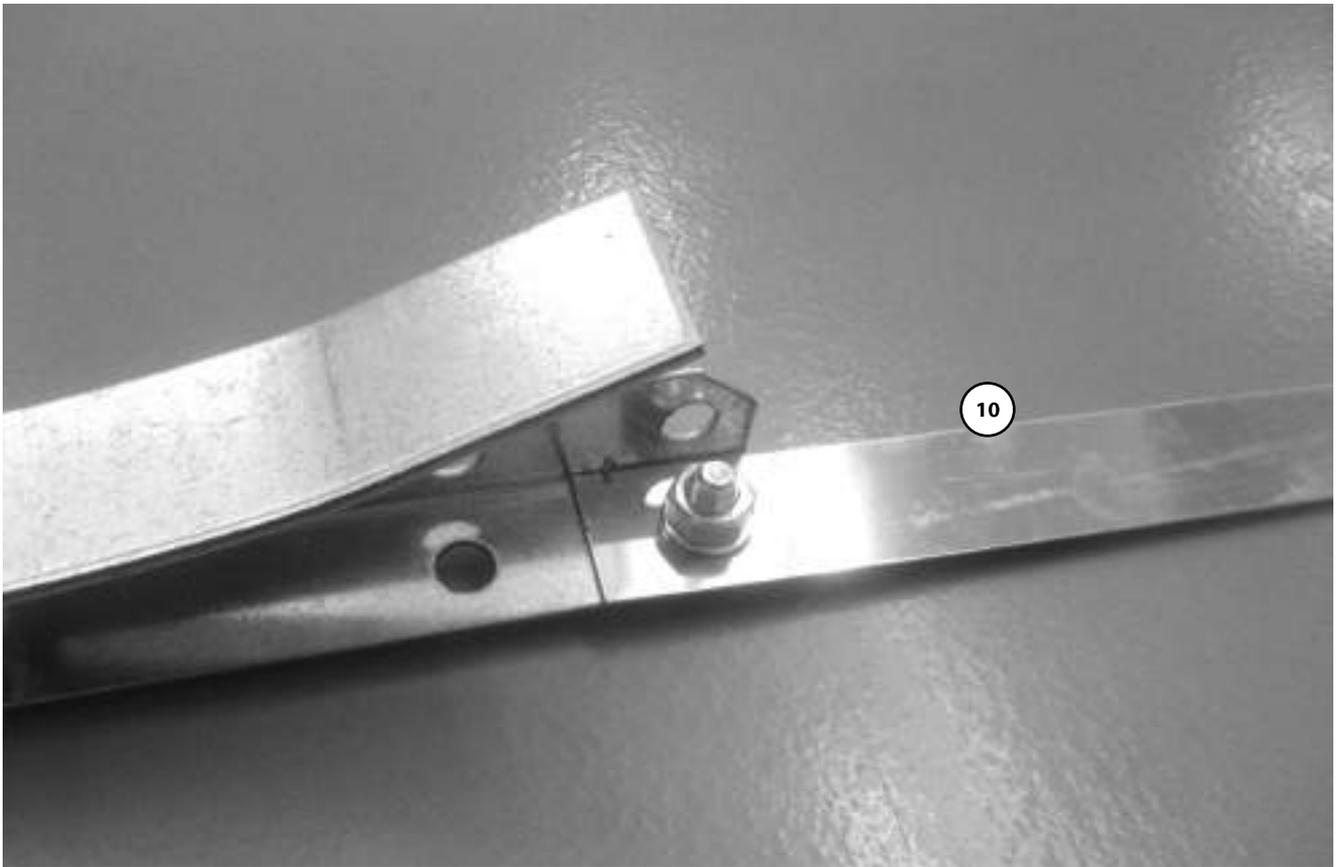


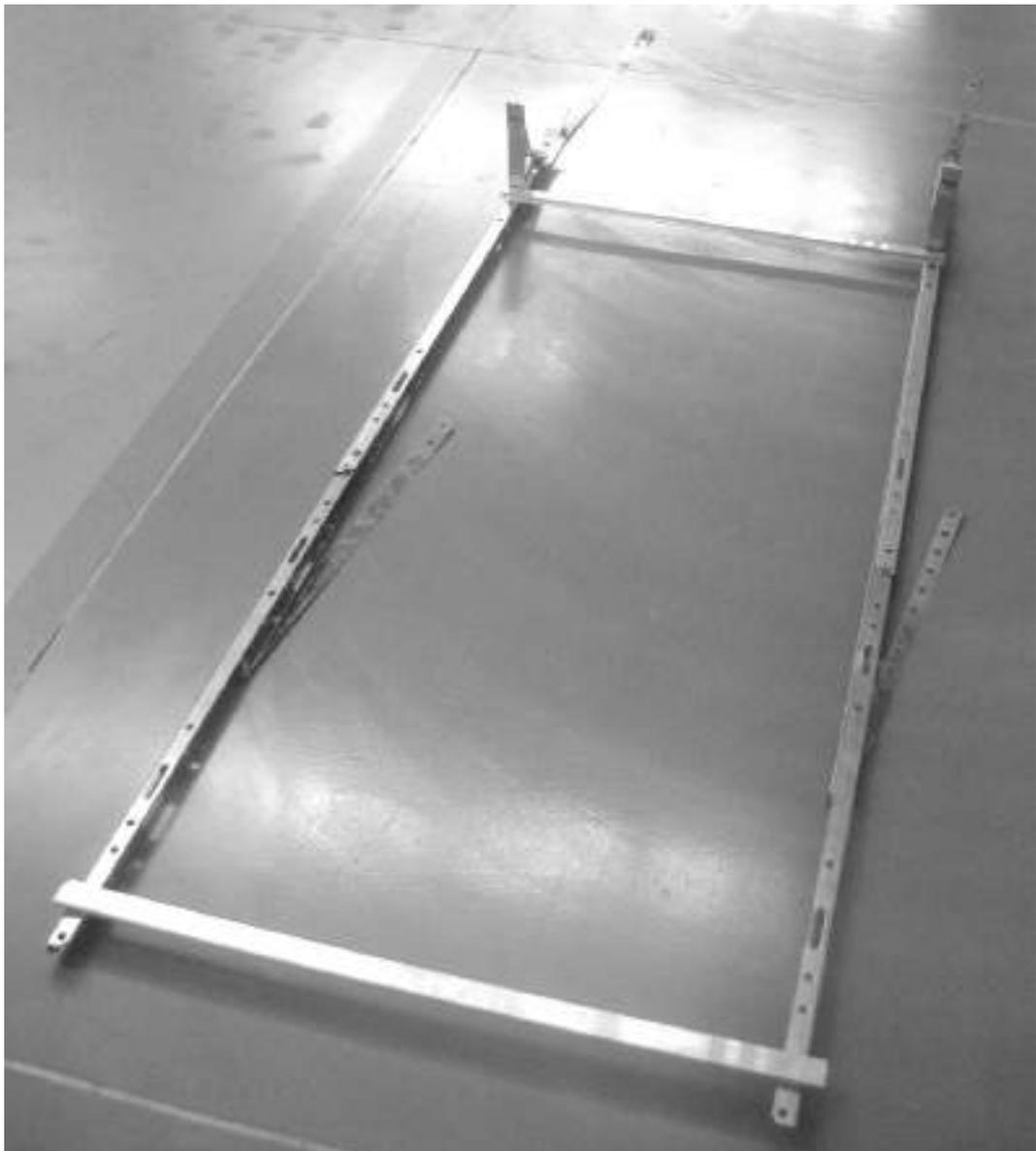
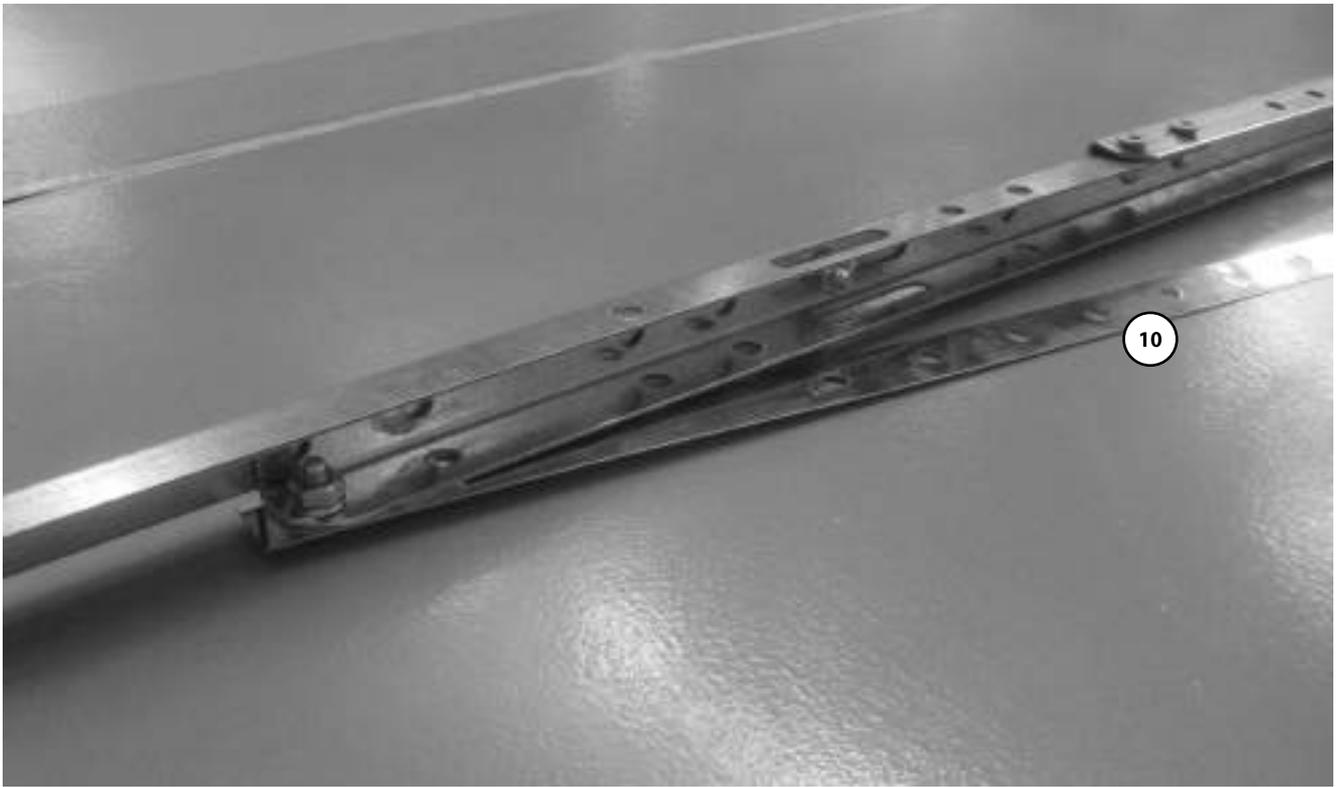
2.8. Fijar los 4 flejes de acero perforados (10) a la estructura del techo, en correspondencia con los orificios elegidos en el bastidor recién montado (ver también las imágenes de los puntos siguientes)



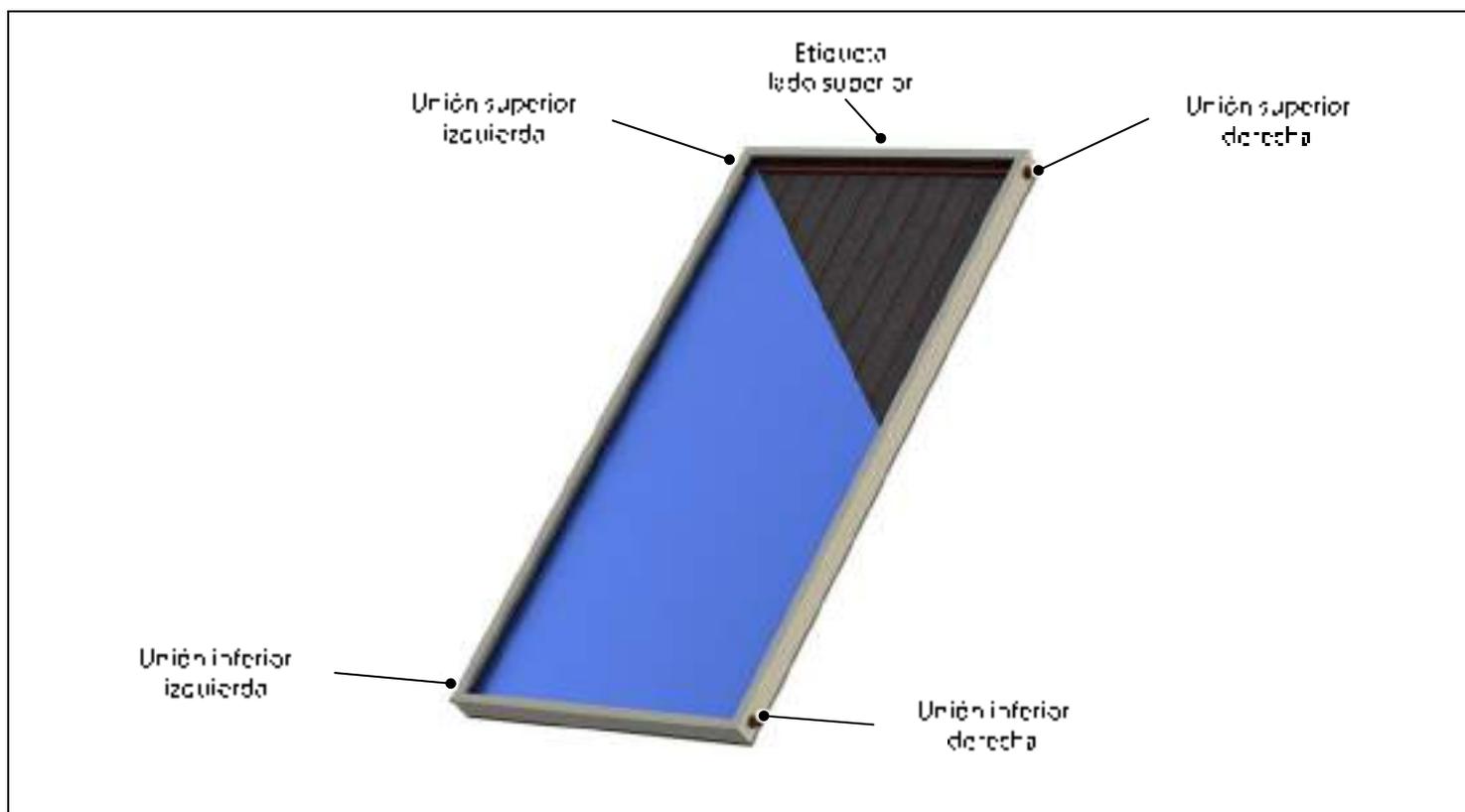
2.9. Fijar a estructura a los 4 flejes de acero perforados (10), utilizando 4 bulones, 4 tuercas y 4 arandelas







### 3. Instalación de los colectores solares



Los colectores tienen un sentido de instalación. El lado superior está indicado por una etiqueta.

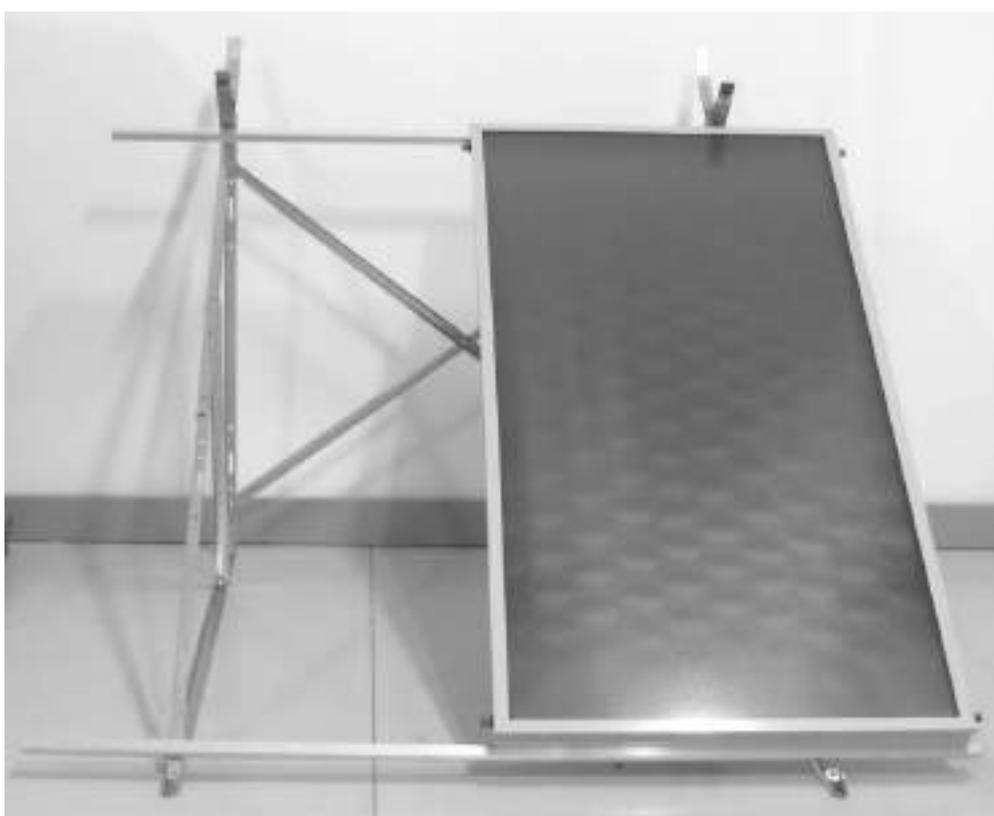


Las imágenes siguientes se refieren a la instalación en estructura para techos planos, pero la introducción del colector y del hervidor se realiza del mismo modo también en estructura para techos inclinados.

3.1. Introducir el primer colector solar en la parte derecha de la barra de fijación colector inferior (9) asegurándose de que se encastra como en la figura

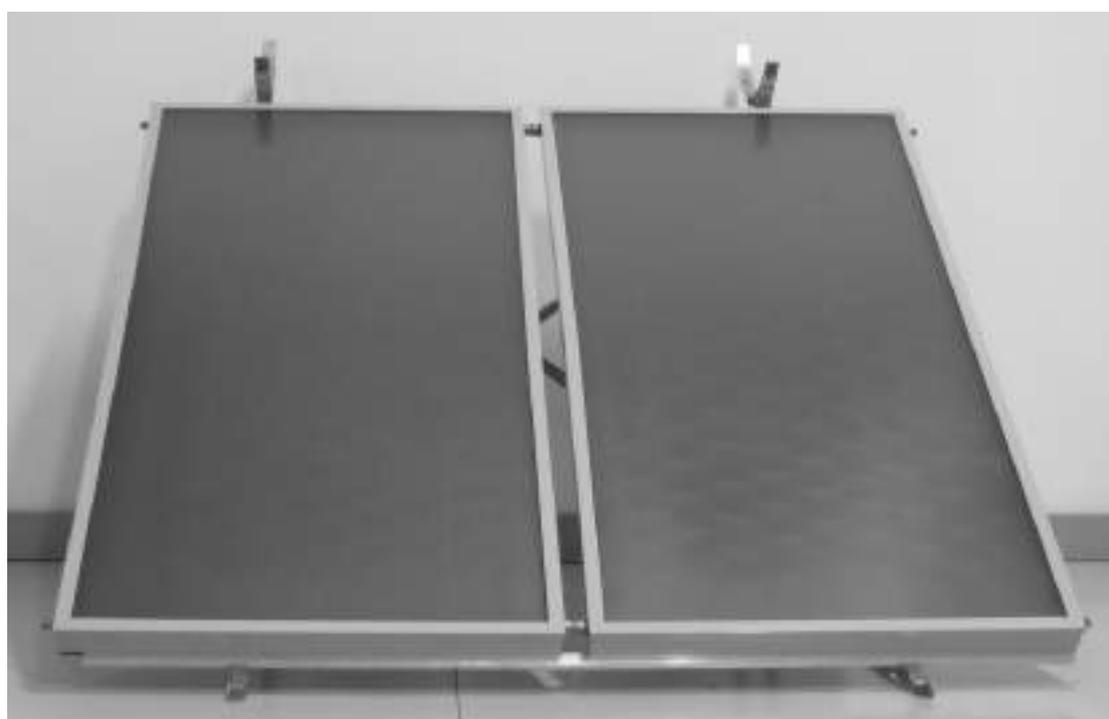


3.2. Introducir el colector solar en la barra de fijación colector superior (9) desplazándola hacia arriba.



3.3. Repetir las operaciones 3.1 y 3.2 para introducir el segundo colector en la parte izquierda de la estructura

3.4. Utilizando las 2 juntas para ajustar con ojivas de  $\varnothing 22 \text{ mm} \times \varnothing 22 \text{ mm}$  conectar los 2 colectores superior y abajo

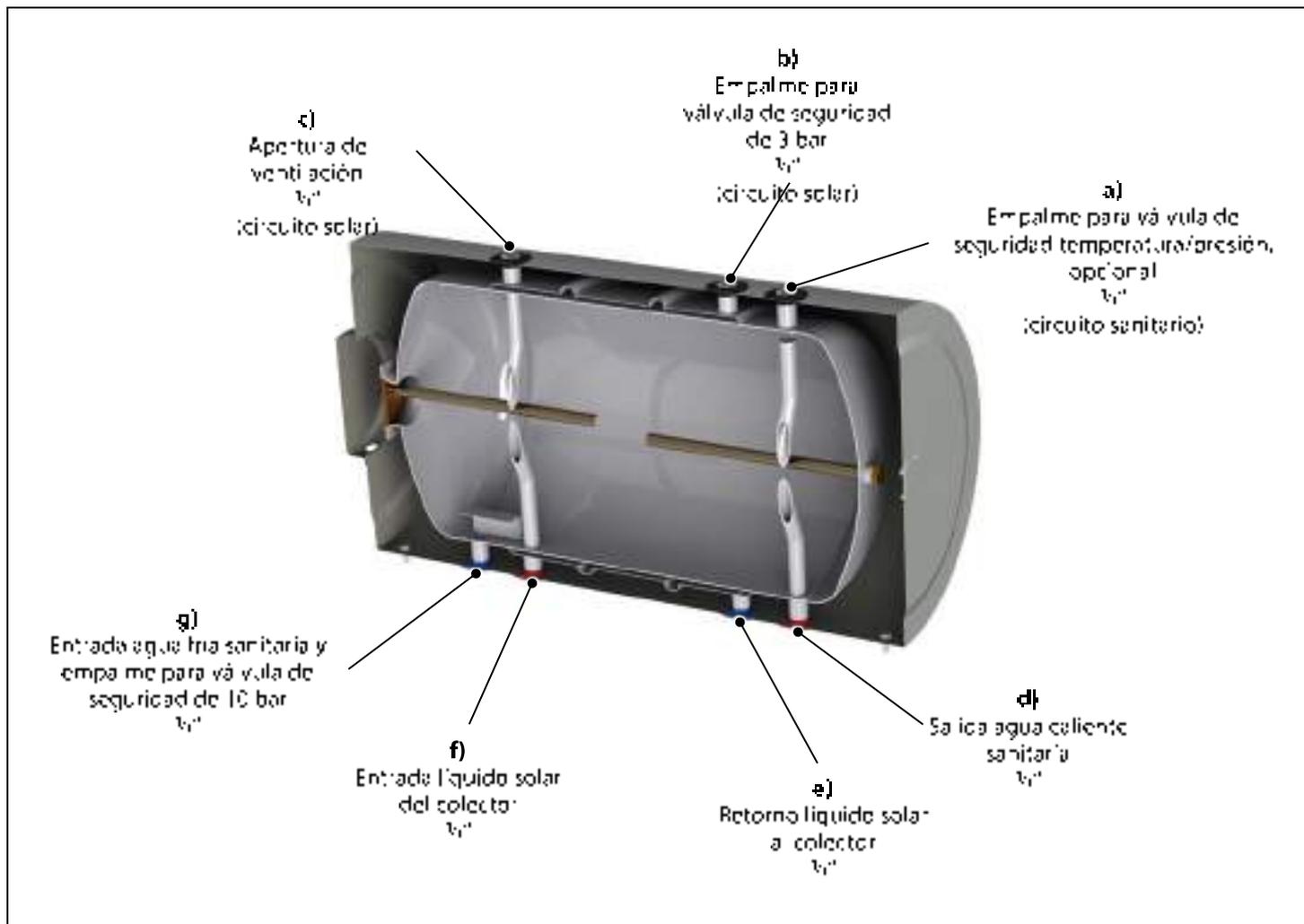


**Atención: se deben centrar los 2 colectores en la estructura.**

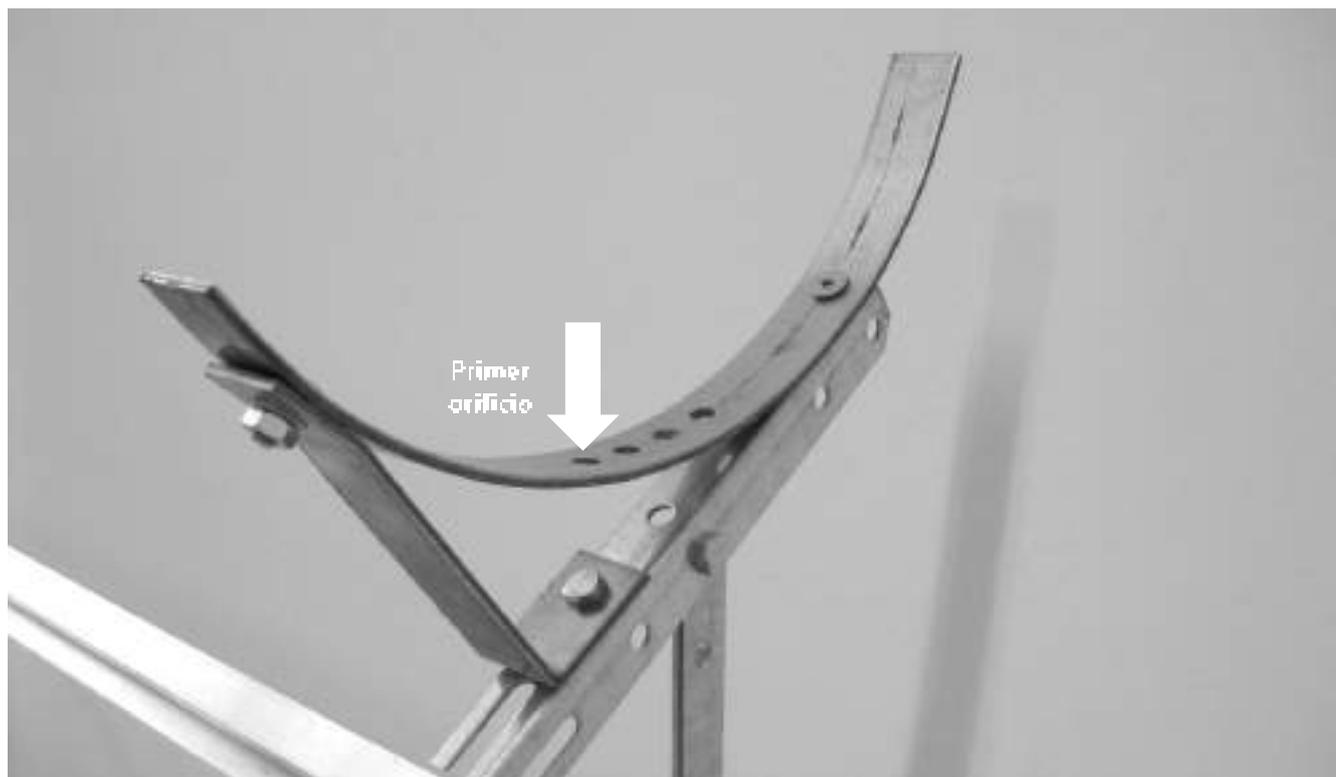
3.5. Empujar la barra de fijación colector superior (9) hacia abajo hasta encastrarla en los colectores, luego ajustar las tuercas



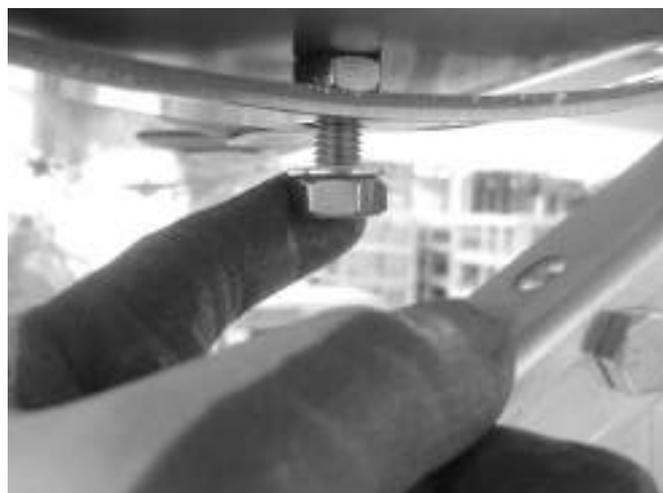
#### 4. Instalación del hervidor y de las conexiones hidráulicas



- 4.1 Introducir el hervidor en la estructura apoyándolo en los sostenes en U.  
El Hervidor está dotado de dos aplicaciones roscadas M10 que deberán ser introducidas en los **primeros orificios** de los sostenes en U.

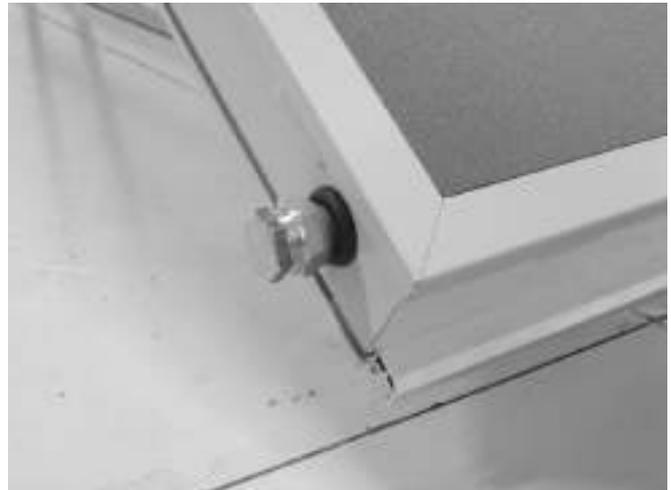


Fijar el hervidor utilizando 2 tuercas y 2 arandelas.

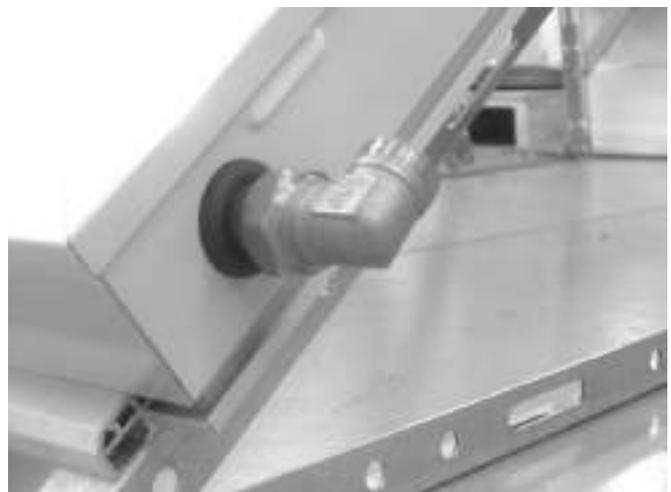




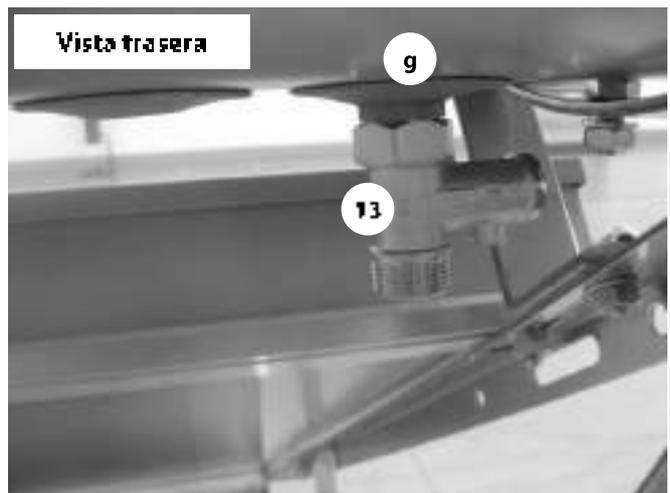
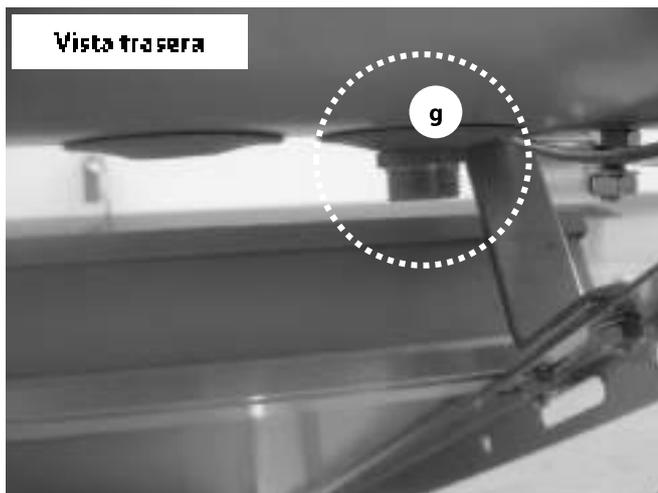
- 4.2 Fijar las dos tapas para ajustar de  $\varnothing 22$  mm a las conexiones superiores derecha e interior izquierda de par de colectores solares.



- 4.3 Fijar las dos curvas para ajustar de  $\varnothing 22$  mm x  $1\frac{1}{2}$ " a las conexiones superiores izquierda e interior derecha de par de colectores solares.



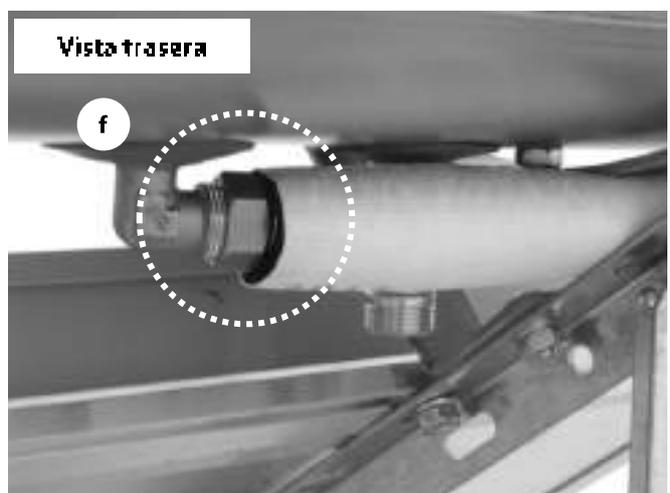
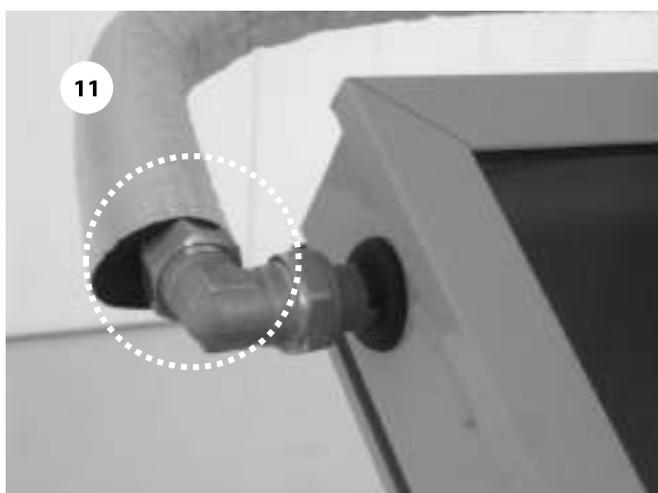
- 4.4 Utilizando un niple  $1\frac{1}{2}'' M \times 1\frac{1}{2}'' M$  conectar la válvula de seguridad agua sanitaria de 6 bar (13) a la entrada de agua fría sanitaria de hervidor (g).  
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.



- 4.5 Introducir una curva  $1\frac{1}{2}'' M \times 1\frac{1}{2}'' M$  en la entrada del líquido solar del hervidor (f).  
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.



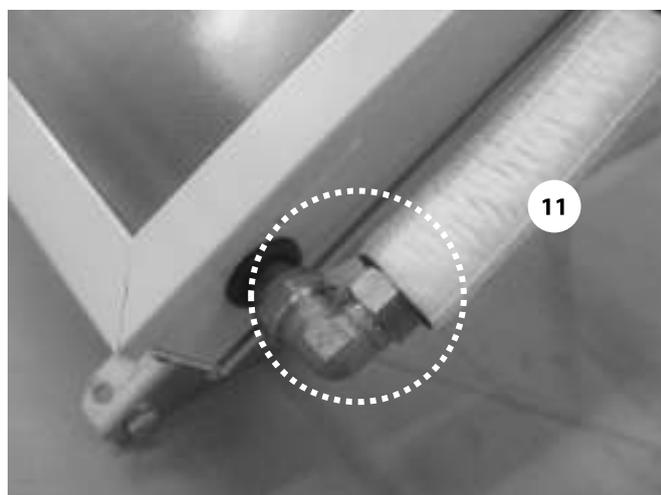
- 4.6 Utilizando dos juntas  $1\frac{1}{2}''$  conectar el tubo de acero flexible de longitud 670 mm (11) a la conexión superior izquierda del colector solar izquierdo y a la entrada de líquido solar del hervidor (f).  
El tubo de acero flexible deberá tener una tendencia hacia arriba comenzando por el empaque del colector hacia el empaque del hervidor (f).



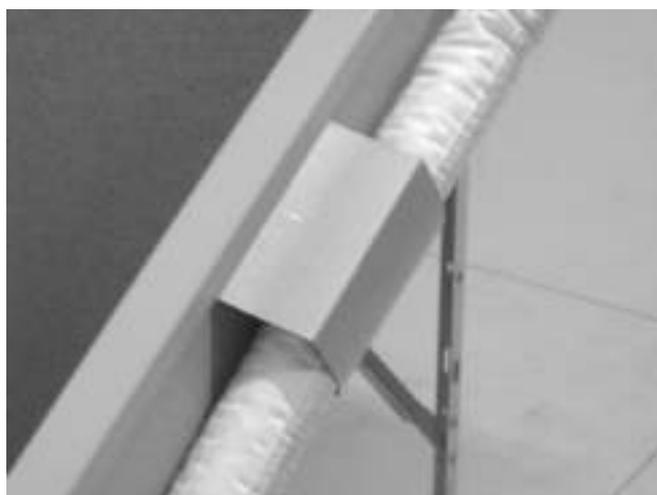
- 4.7 Introducir una curva 1/2" M x 1/2" M en el retorno líquido solar del hervidor (e).  
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.



- 4.8 Utilizando dos juntas 1/2" conectar el tubo de acero flexible de longitud 2620 mm (11) a la conexión inferior derecha del colector solar derecho y al retorno de líquido solar del hervidor (e).



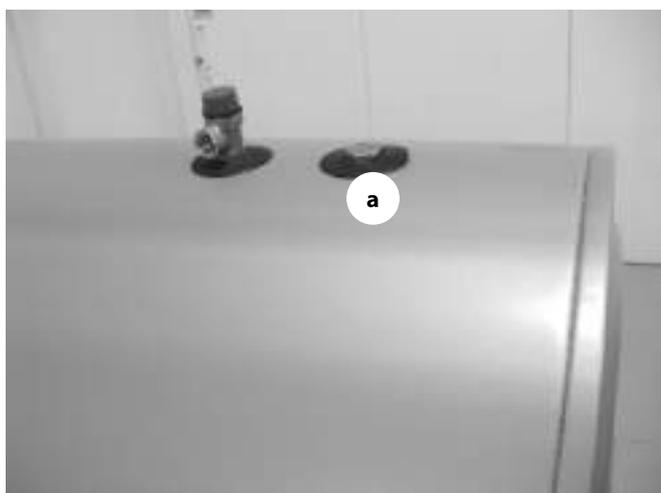
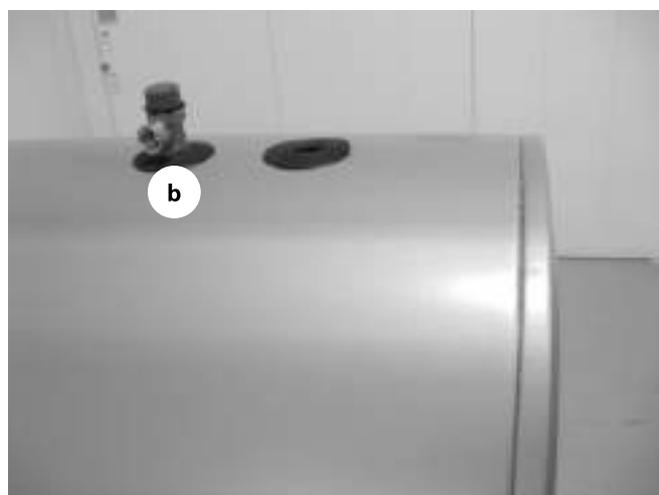
- 4.9 Fijar el tubo de longitud 2620 mm (11) al colector utilizando el sostén en (12).





4.10 Ahora es posible fijar la estructura a la superficie de apoyo utilizando los 4 tornillos y los 4 tacos suministrados (16) y (20). En caso de que los tacos suministrados no fuesen necesarios o fuesen inadecuados para el tipo de superficie usar tacos idénticos para ello.

- 4.11 Conectar la entrada de agua fría y la salida de agua caliente a las respectivas conexiones del hervidor, (g) y (d) respectivamente.
- 4.12 Llenar el hervidor del lado de agua sanitaria como se indica en el capítulo **Llenado del sistema** del **Manual de instalación, uso y mantenimiento**.
- 4.13 Después de llenar el hervidor, instalar una válvula de seguridad temperatura/presión (opcional, si está prevista) en la conexión correspondiente del hervidor (a). De lo contrario, cerrar este orificio con el tapón 1/2" M.  
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.
- 4.14 Después de haber mezclado el glicol de propileno llenar el circuito solar como se indica en el capítulo **Llenado del sistema** de **Manual de instalación, uso y mantenimiento**.
- 4.15 Después de llenar el circuito, instalar la válvula de seguridad de 3 bar en la conexión correspondiente del hervidor (b) utilizando la reducción 1/2" M. x 1/2" H.  
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.
- 4.16 Instalar el tapón 1/2" M en el empalme (c).  
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.





**EN**

## **Sulpack Natural Plus 300**



### **Instructions for installation on an inclined surface**

 **fondital**

## Contents

1. Package contents.....	53
2. Structure assembly.....	56
3. Installation of the solar collectors.....	66
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## 1. Package contents

The packaging contains the following material:

Ref.	Description	Qty
1	Flat glazed solar collector	2
2	Vitrified steel boiler	1
3	Galvanised steel frame bar - length 2000 mm	2
4	Galvanised steel frame bar - length 1440 mm	2
5	Galvanised steel frame bar - length 1370 mm	2
6	Galvanised steel frame bar - length 1120 mm	2
7	Boiler support U-bracket	2
8	Boiler support L-bracket	2
9	Aluminium collector fastening bar - length 2060 mm	2
10	Perforated steel strip - length 750 mm	4
11	Flexible steel pipe - length 670 mm	1
	Flexible steel pipe - length 2620 mm	1
12	Q-bracket for flexible pipe fastening	1
13	DH-W safety valve - 6 bar	1
14	Solar circuit safety valve - 3 bar	1
15	Elbow 1/2" M x 1/2" M	2
	Compression elbow coupling with ogive Ø 22 mm x 1/2" M	2
	Compression cap with ogive Ø 22 mm	2
	Compression coupling with ogive Ø 22 mm x Ø 22 mm	2
	Cap 1/2" M	2
	Nipple 1/2" M x 1/2" M	1
	Adapter 1/2" M x 1" F	1
Gasket 1 1/2"	5	
16	Bolt M10x25	15
	M10 washer	25
	Nut M10	27
	Hex socket countersunk bolt M10x20	5
	Fastening screw M8x50	4
	Anchor for fastening screw M8x50	4
17	5-litre jug of solar liquid	1

1



2



3



4



5



6



7



8



9



10



11



12



13



14



15



16



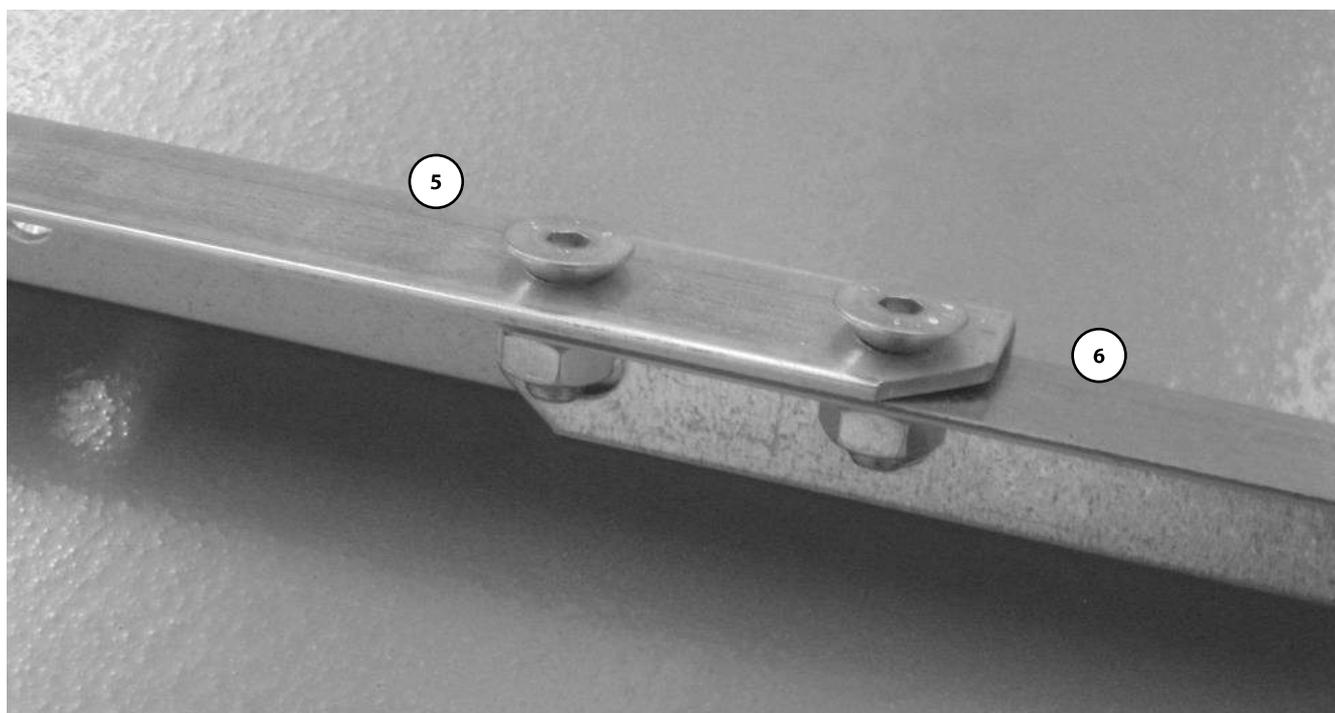
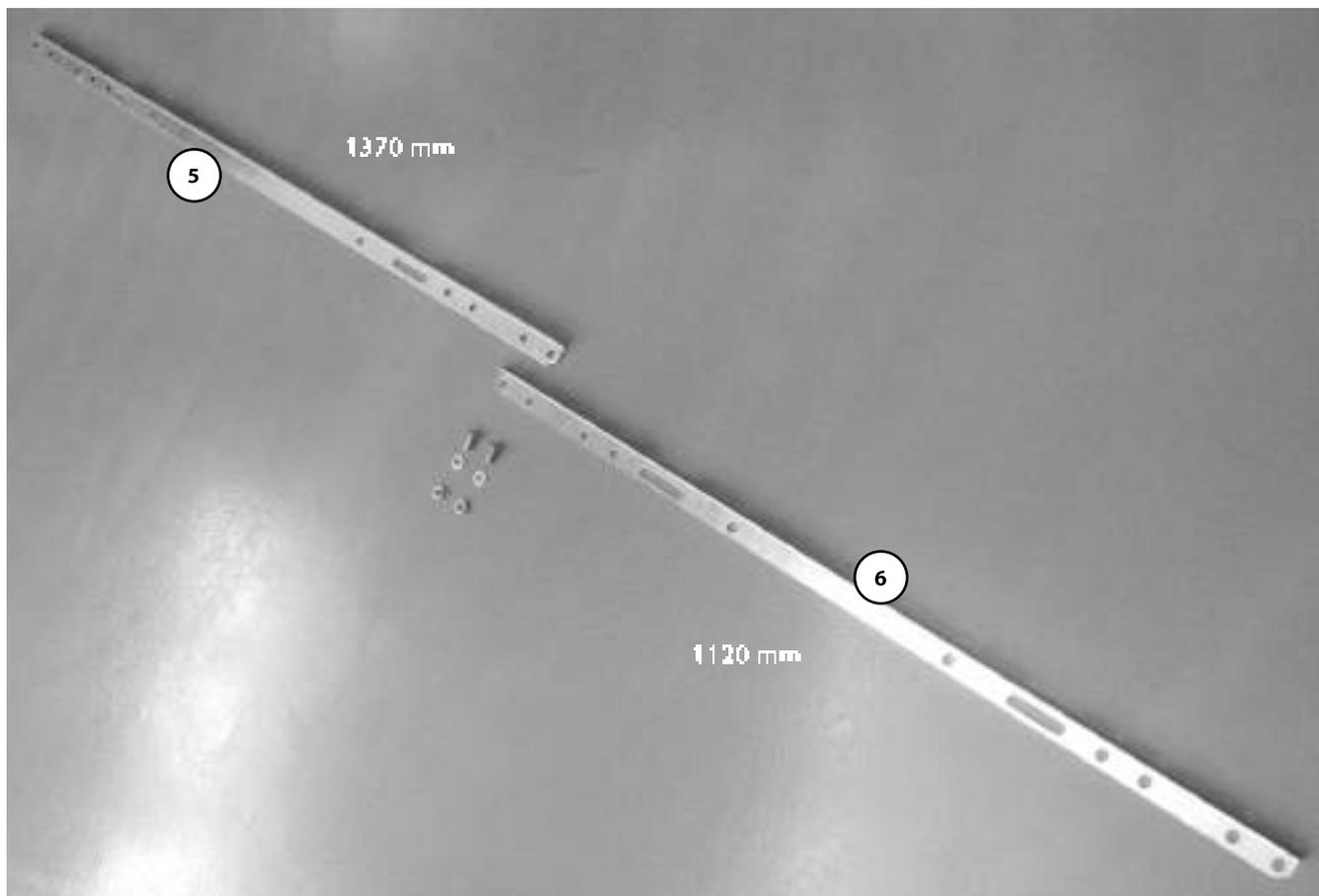
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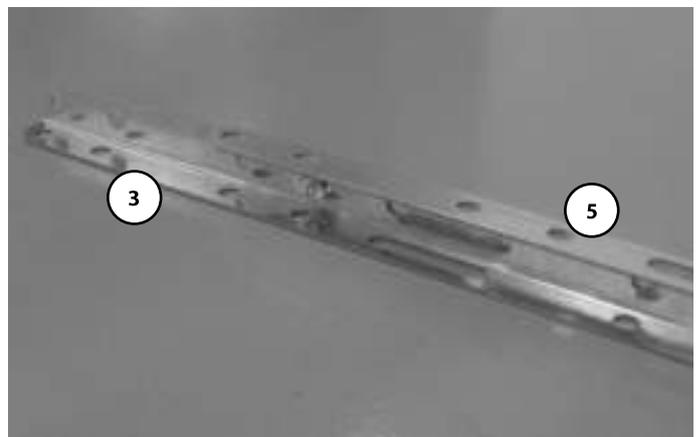
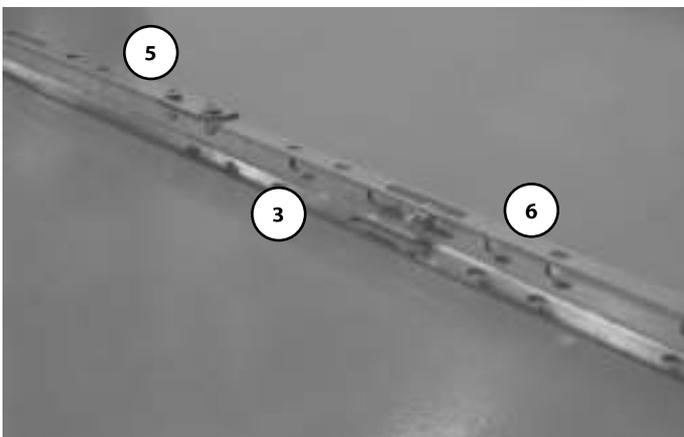
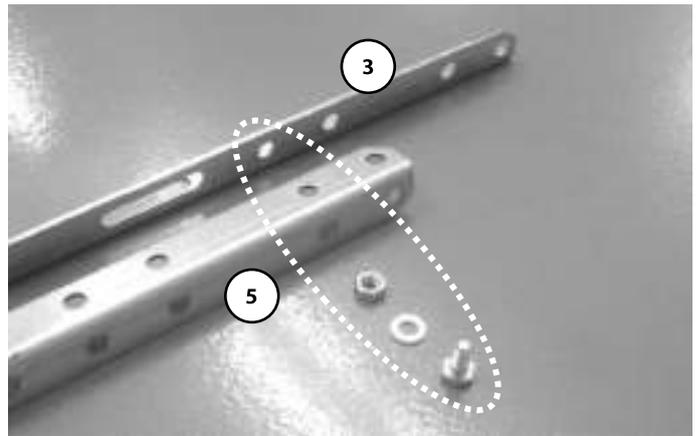
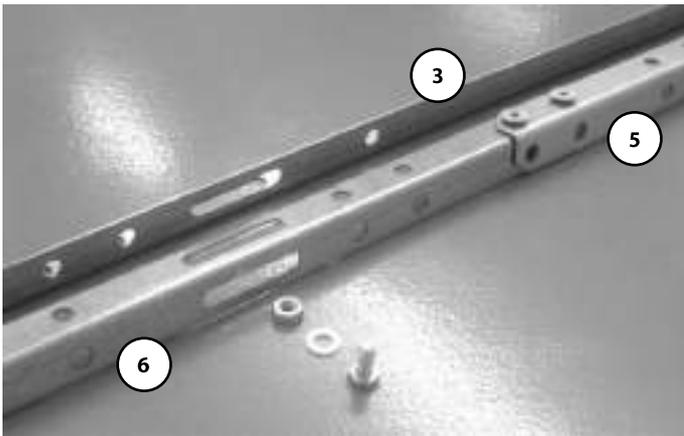
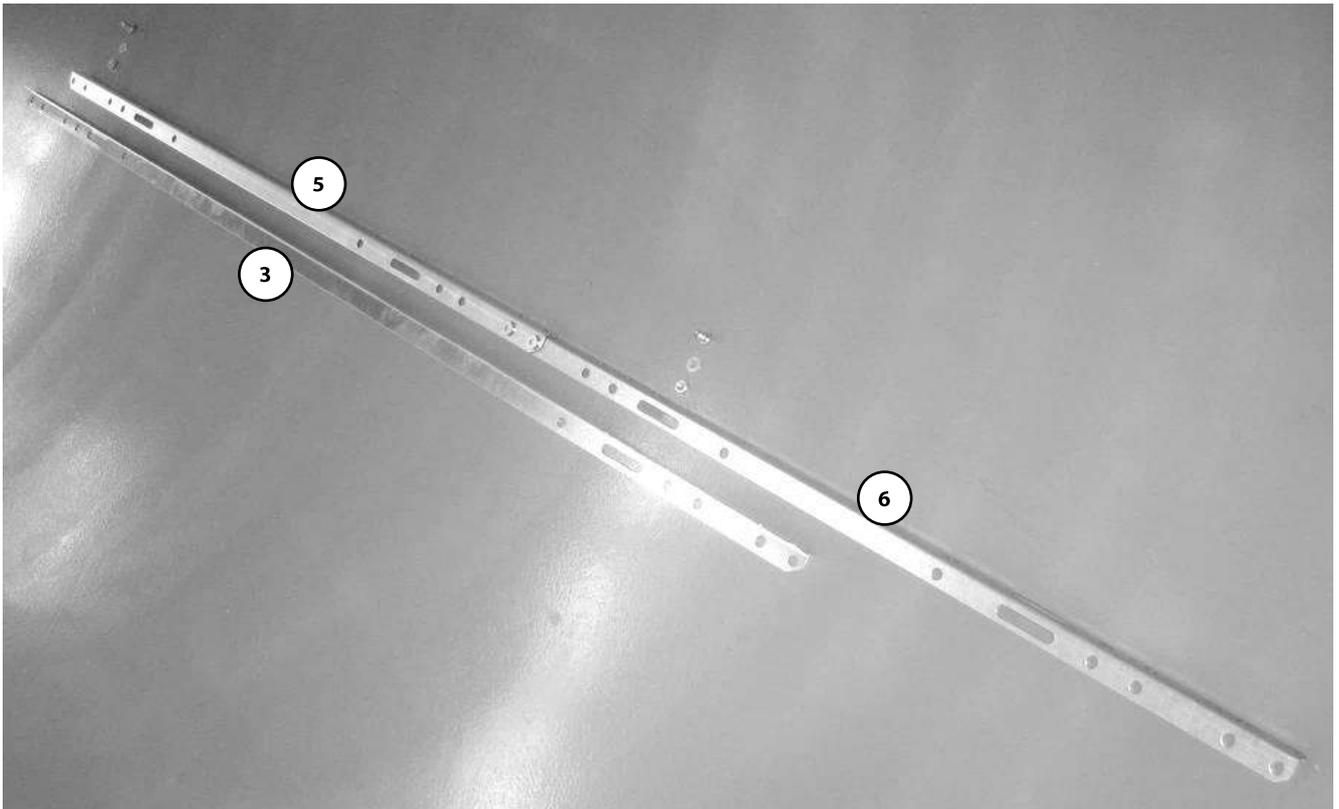
## 2. Structure assembly

For the support structure's installation, follow the instructions below:

- 2.1. Couple a 1370 mm long bar (5) with a 1120 mm long bar (6) using 2 countersunk bolts, 2 nuts and 2 washers. The 1370 mm long bar (5) should overlap the 1120 mm long bar (6).

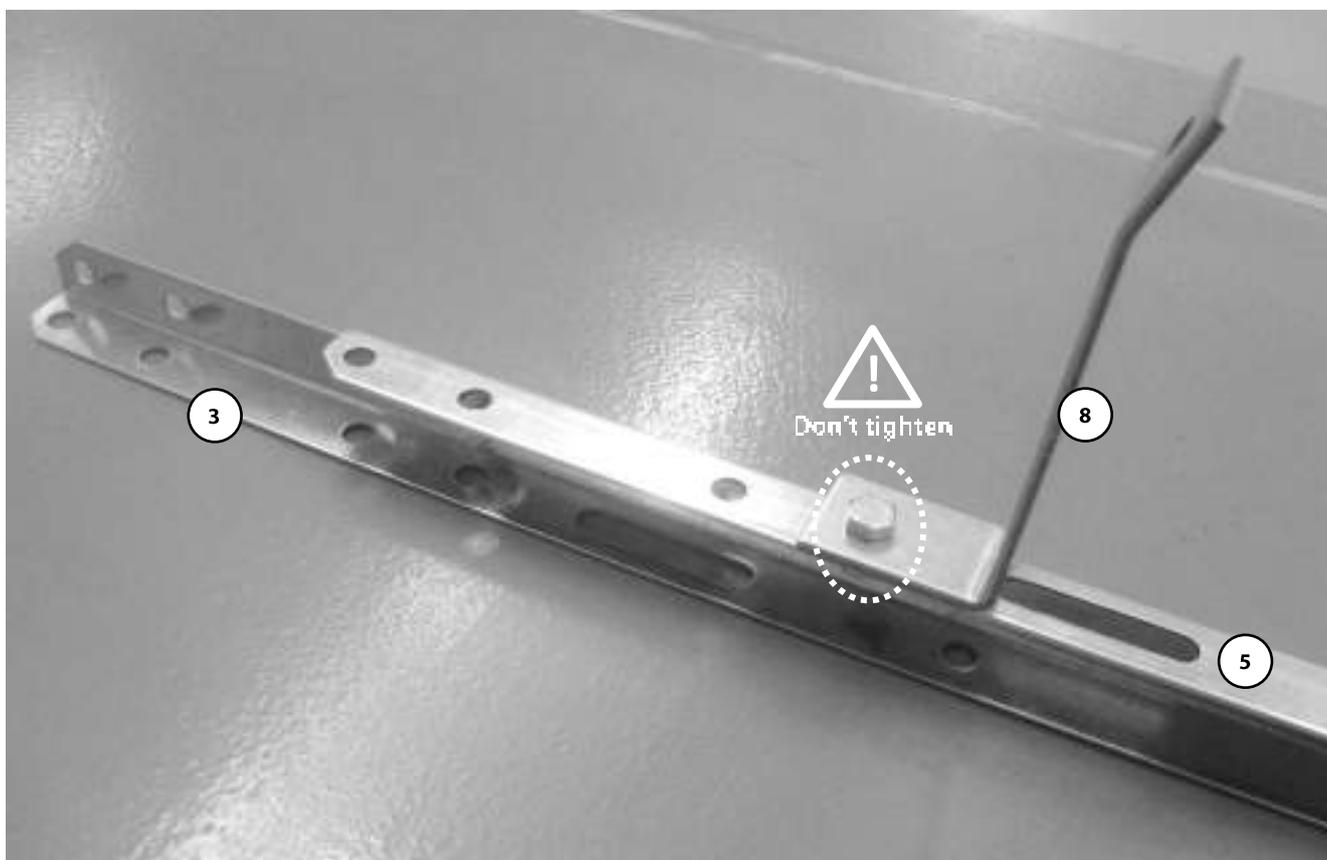
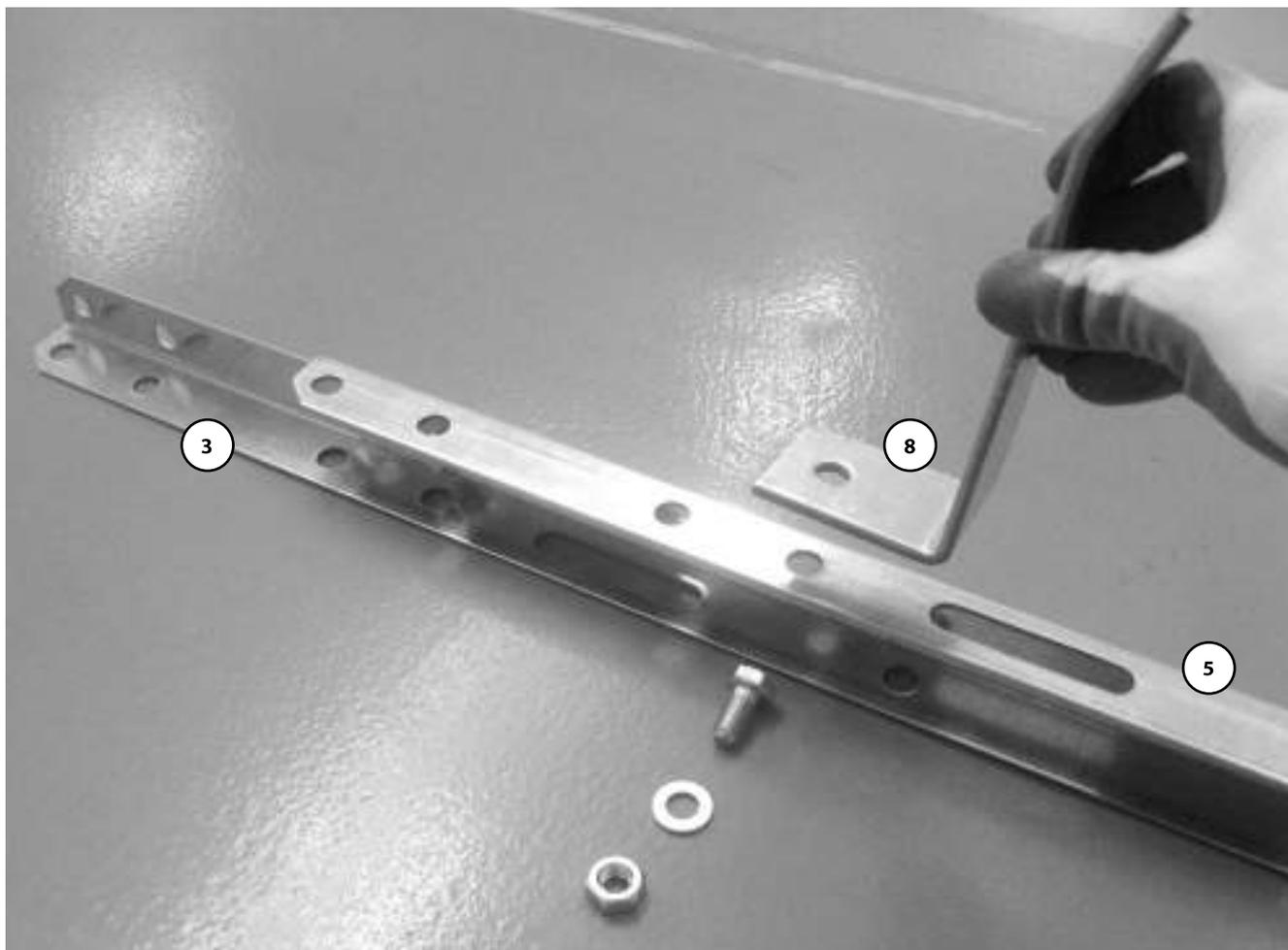


2.2. Couple the 2000 mm long bar (3) to the bars previously coupled using 2 bolts, 2 nuts and 2 washers

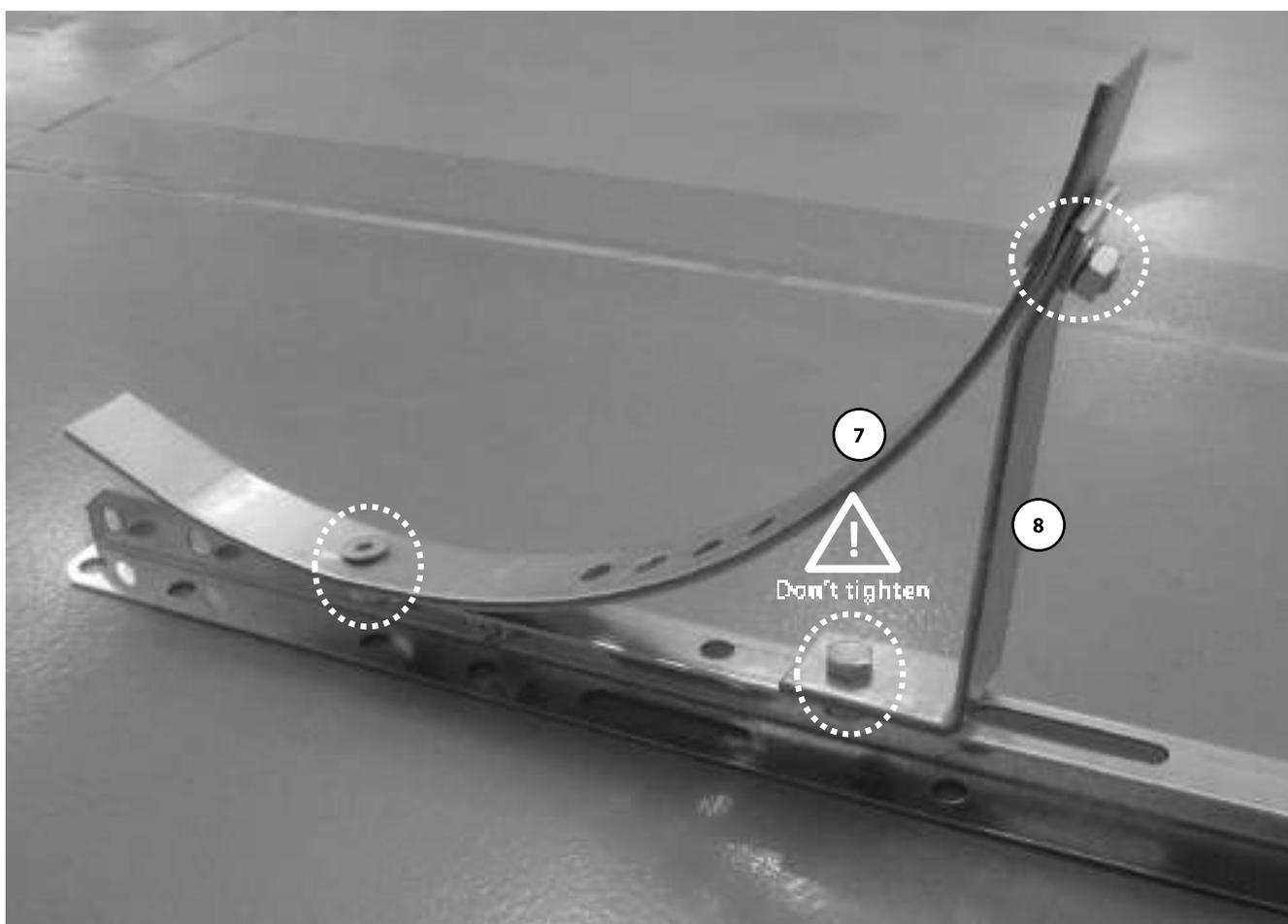
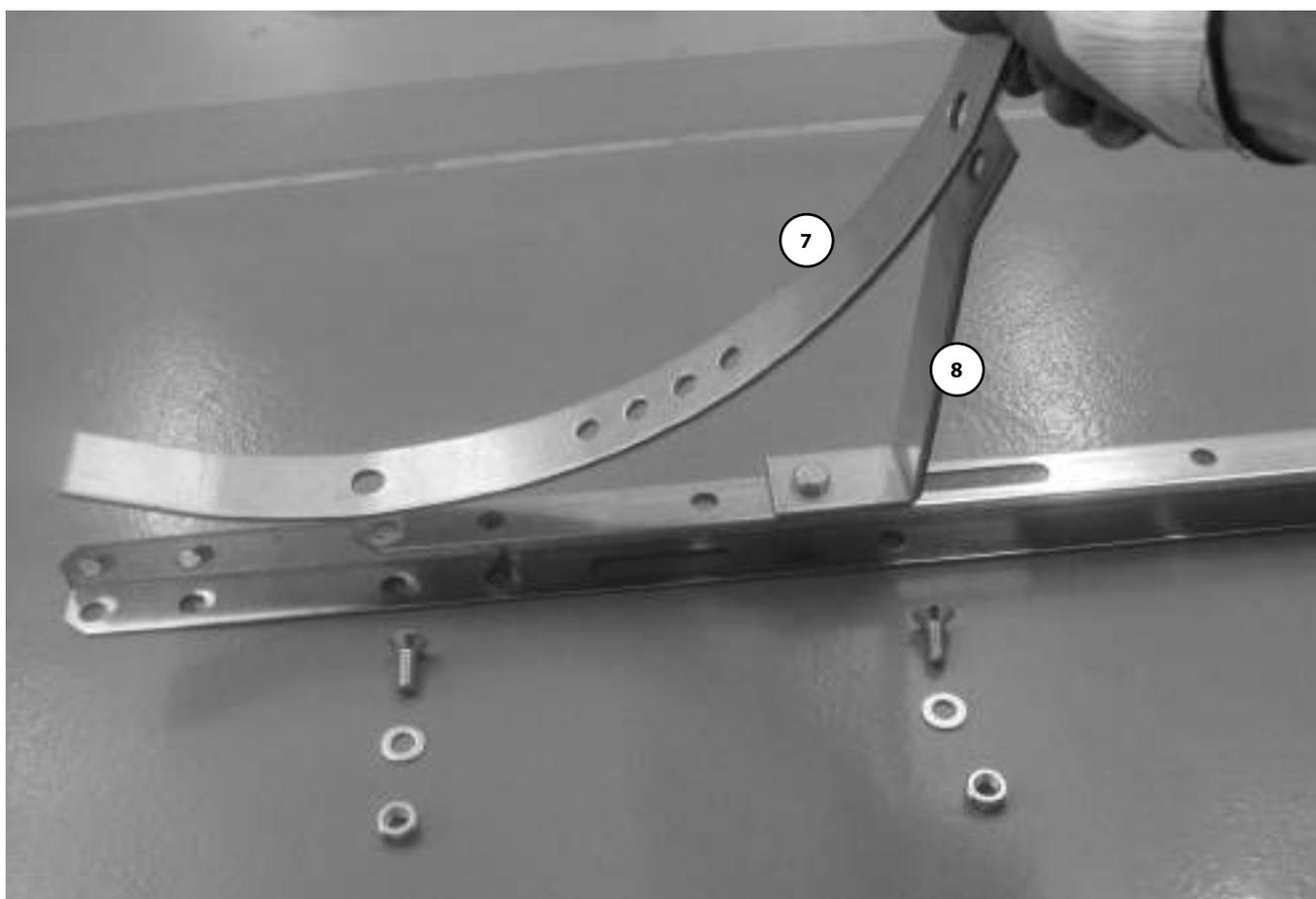


Once assembled, the 2000 mm long bar (3) will protrude from the 1370 mm long bar (5).

- 2.3. Fasten the L-bracket (8) to the bars just assembled using 1 bolt, 1 nut and 1 washer  
**WARNING:** don't tighten the nut and bolt completely for the time being.



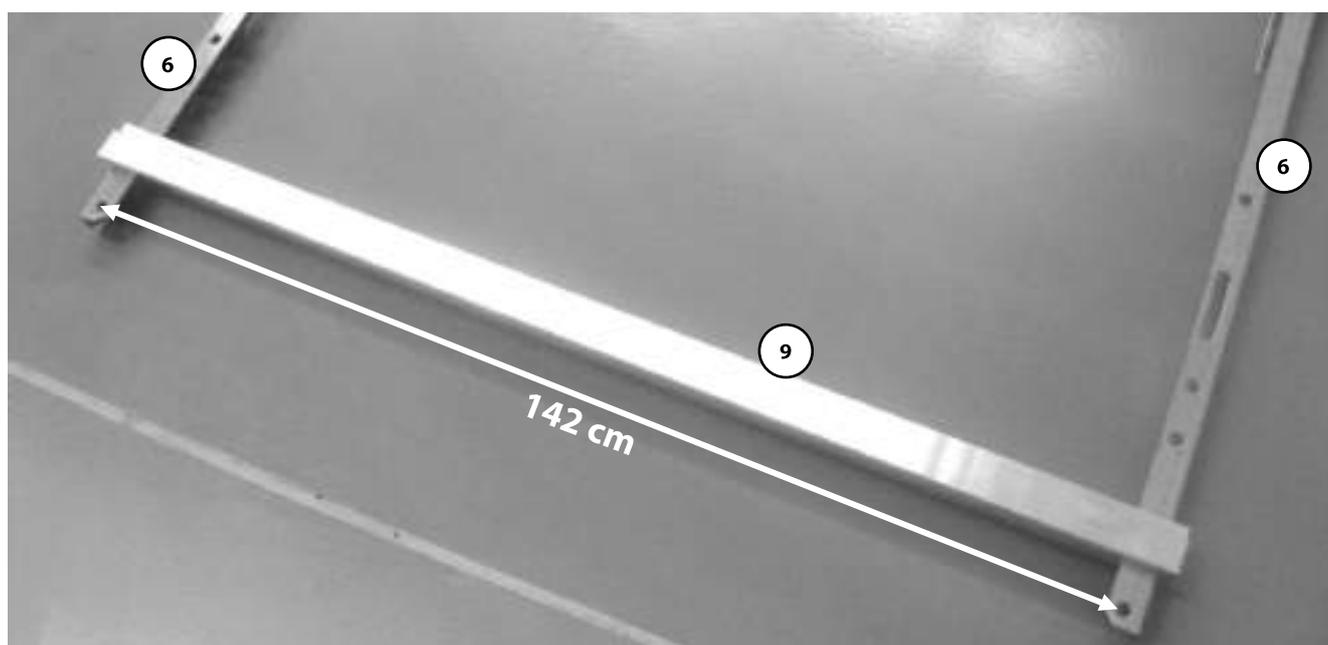
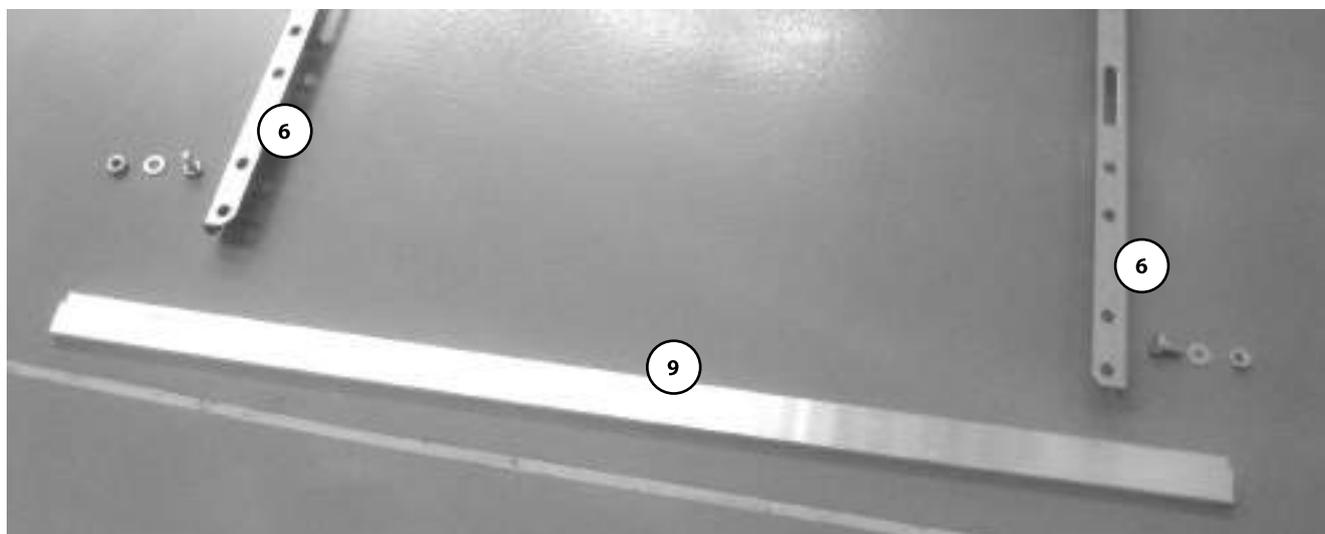
2.4. Fasten the U-bracket (7) using 2 countersink bolts, 2 nuts and 2 washers



2.5. Repeat points 2.1 through 2.4 to prepare another structure like that just prepared, but in the reverse manner.

Although the following images refer to the installation of the 150 litre model, the installation is carried out in the same manner.

2.6. Couple a 2060 mm long collector fastening bar (9) to the lower part of the 2 previously prepared structures using 2 bolts, 2 nuts and 2 washers.

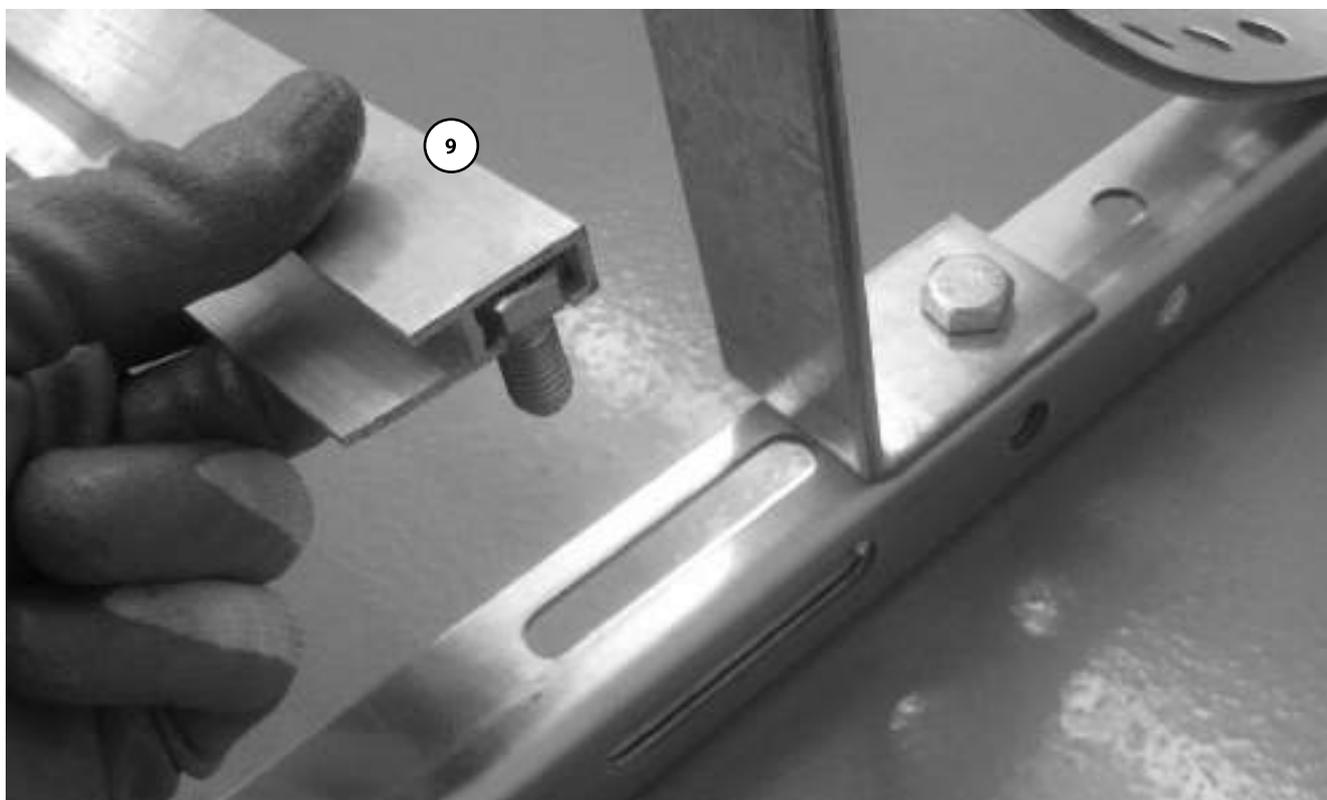
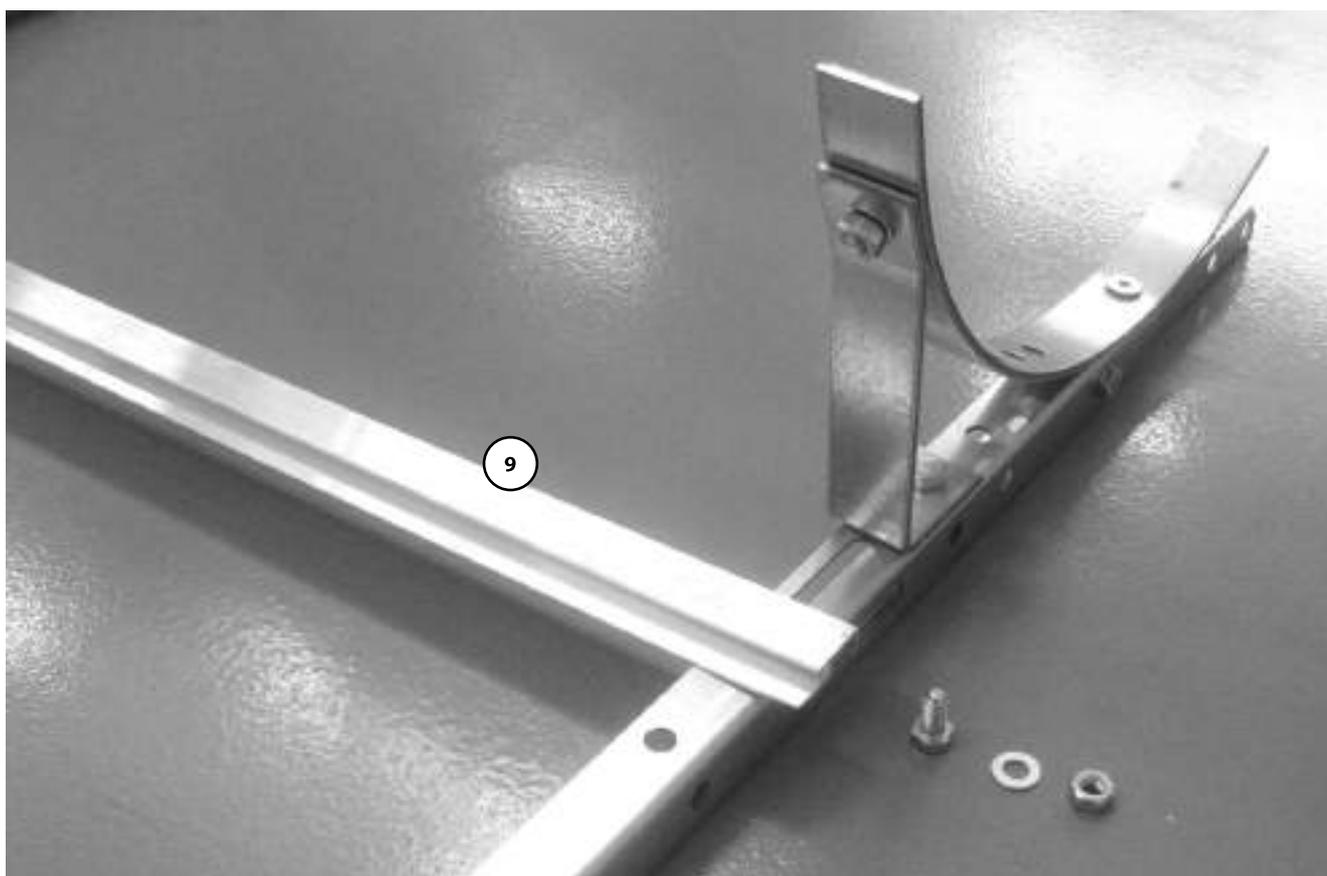


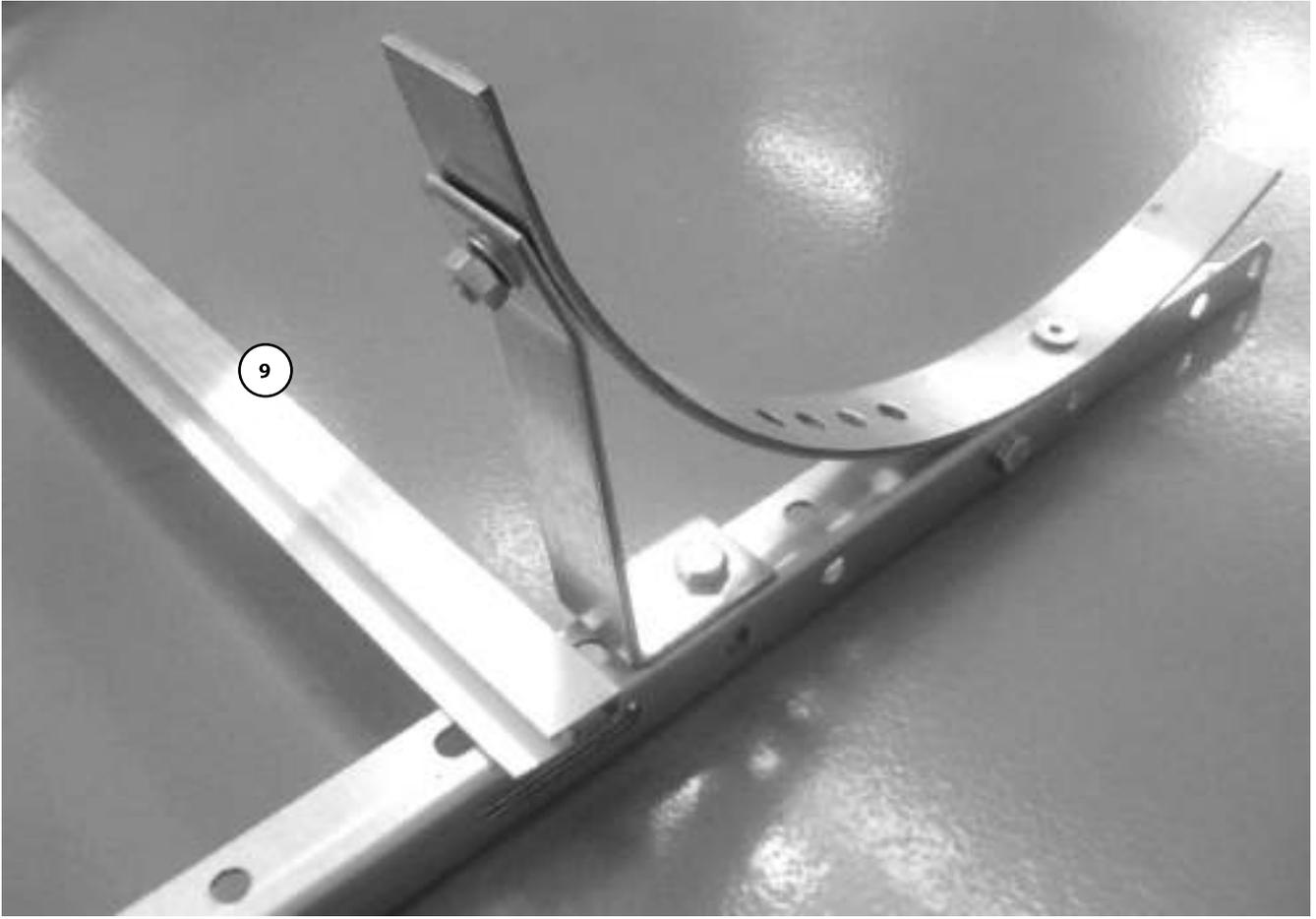
Once fastened, there should be a distance of 142 cm between the holes on the 2 bars.  
The 2060 mm long collector fastening bar (9) must be centred between the 2 structures.

2.7. Fasten the other 2060 mm long collector fastening bar (9) to the upper part of the structure using 2 bolts, 2 nuts and 2 washers.

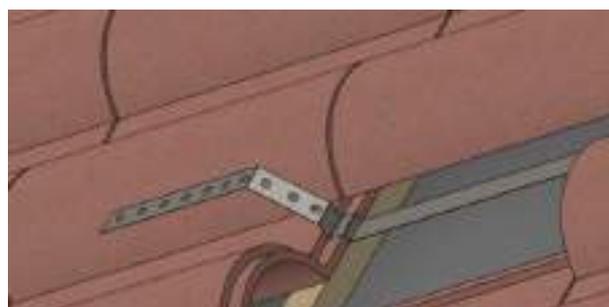
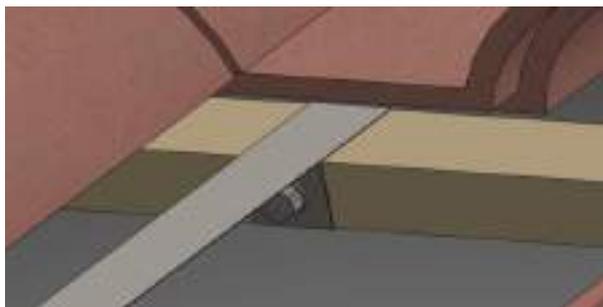
The bolts mustn't be tightened until the panel has been inserted into the structure

**The 2060 mm long collector fastening bar (9) must be centred between the 2 structures**

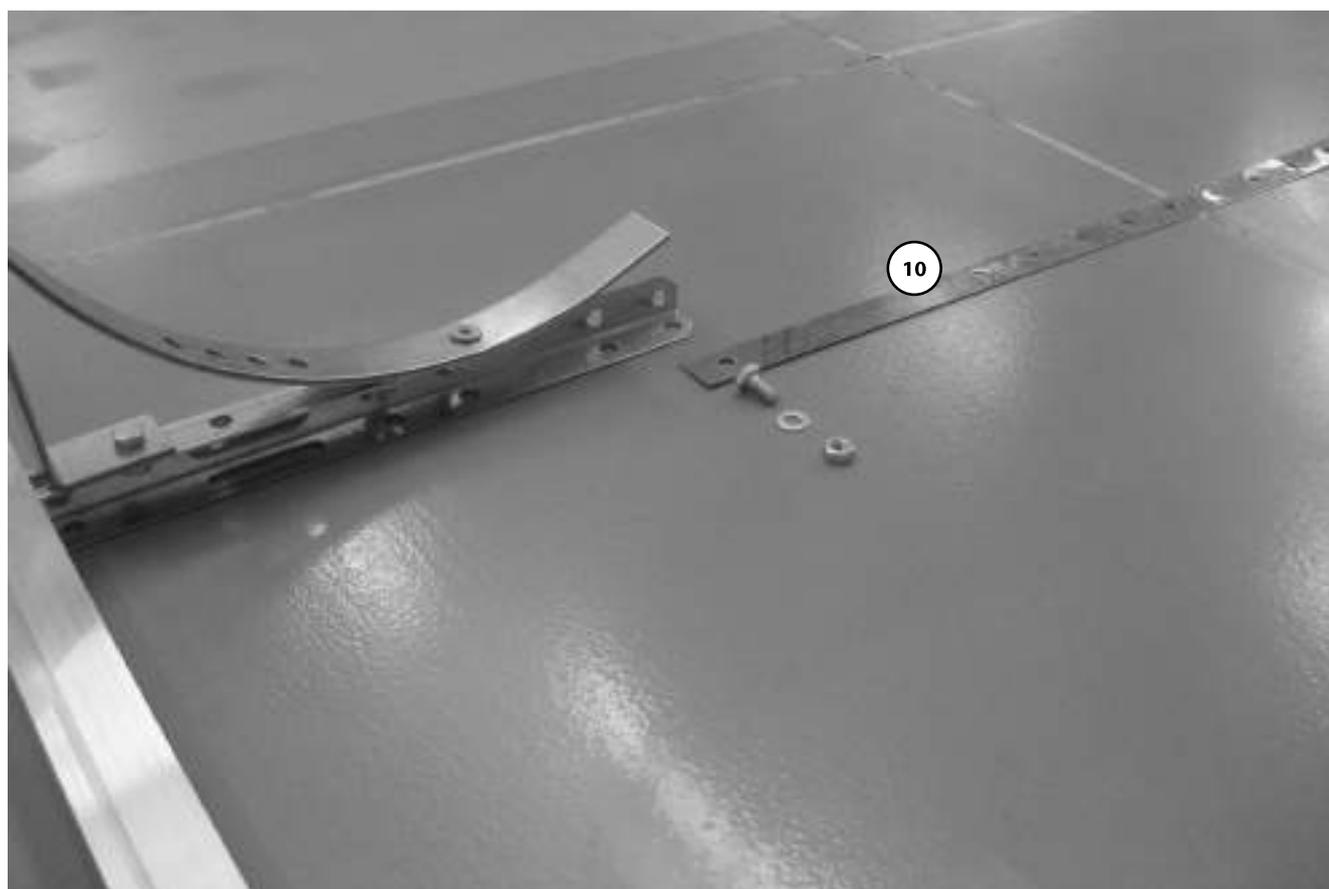


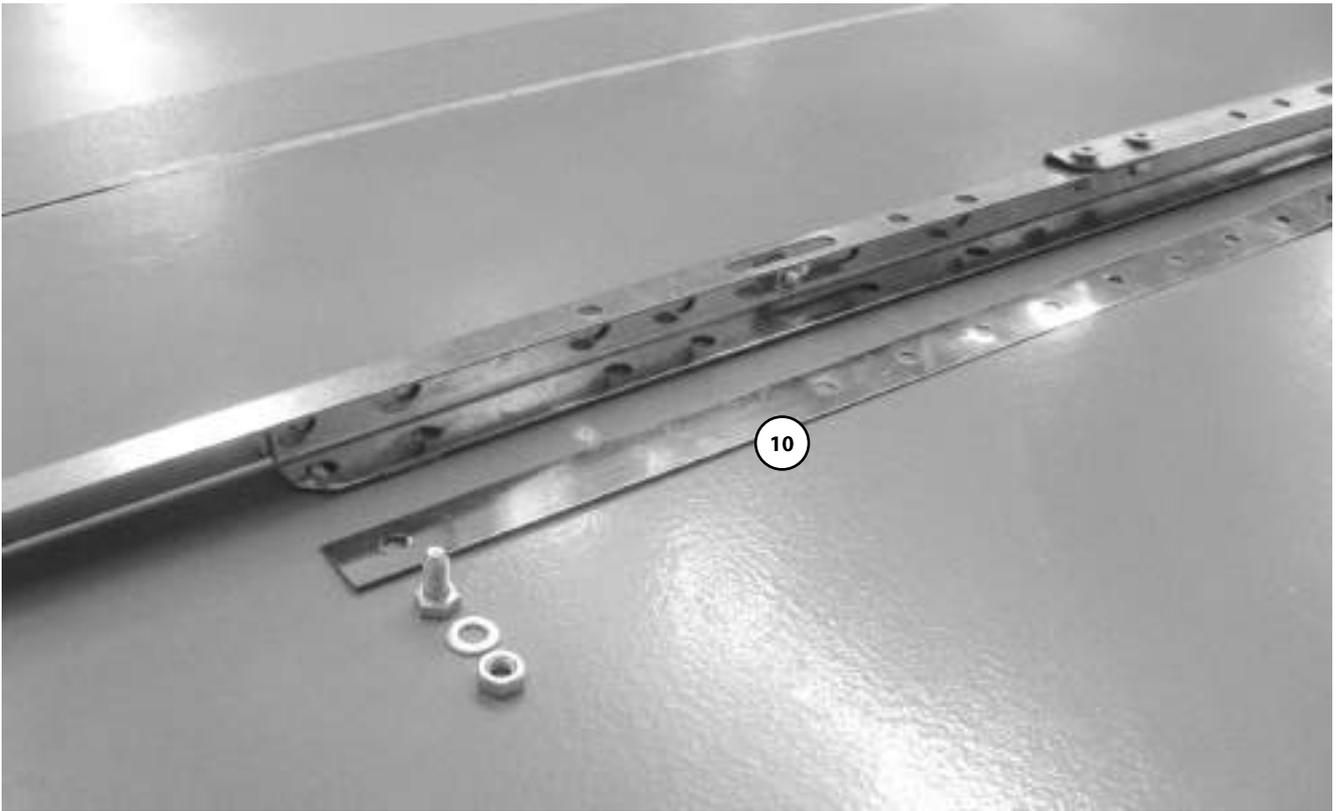
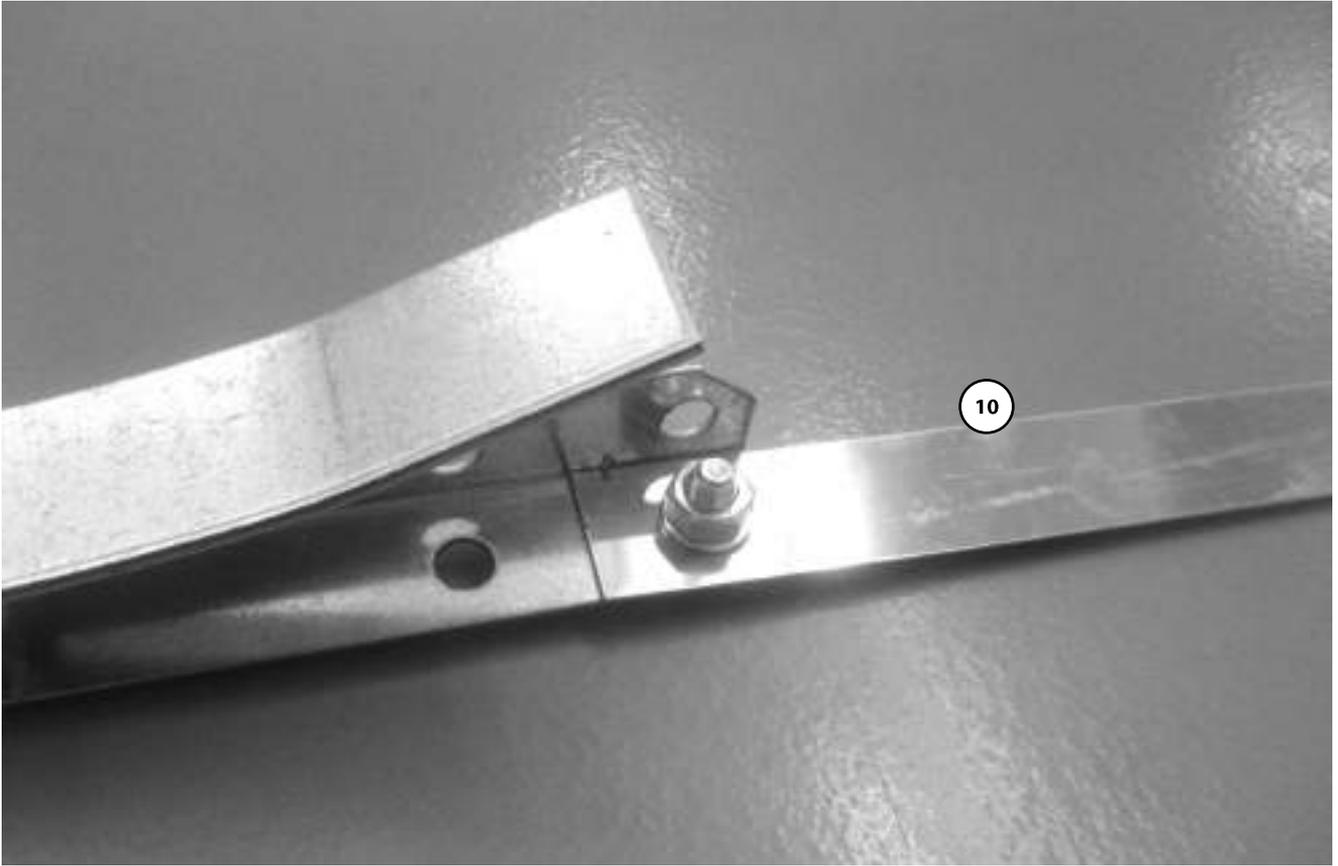


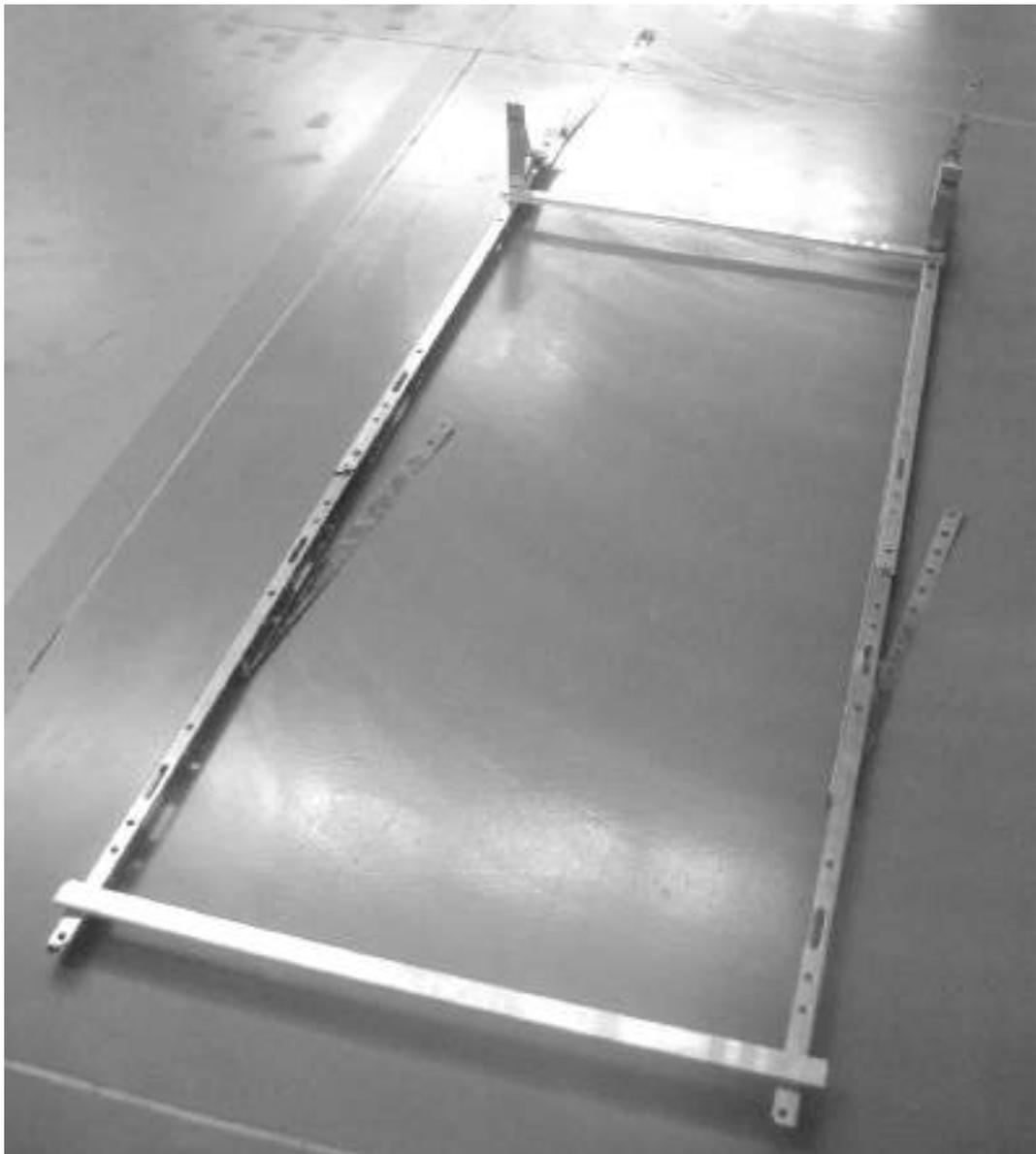
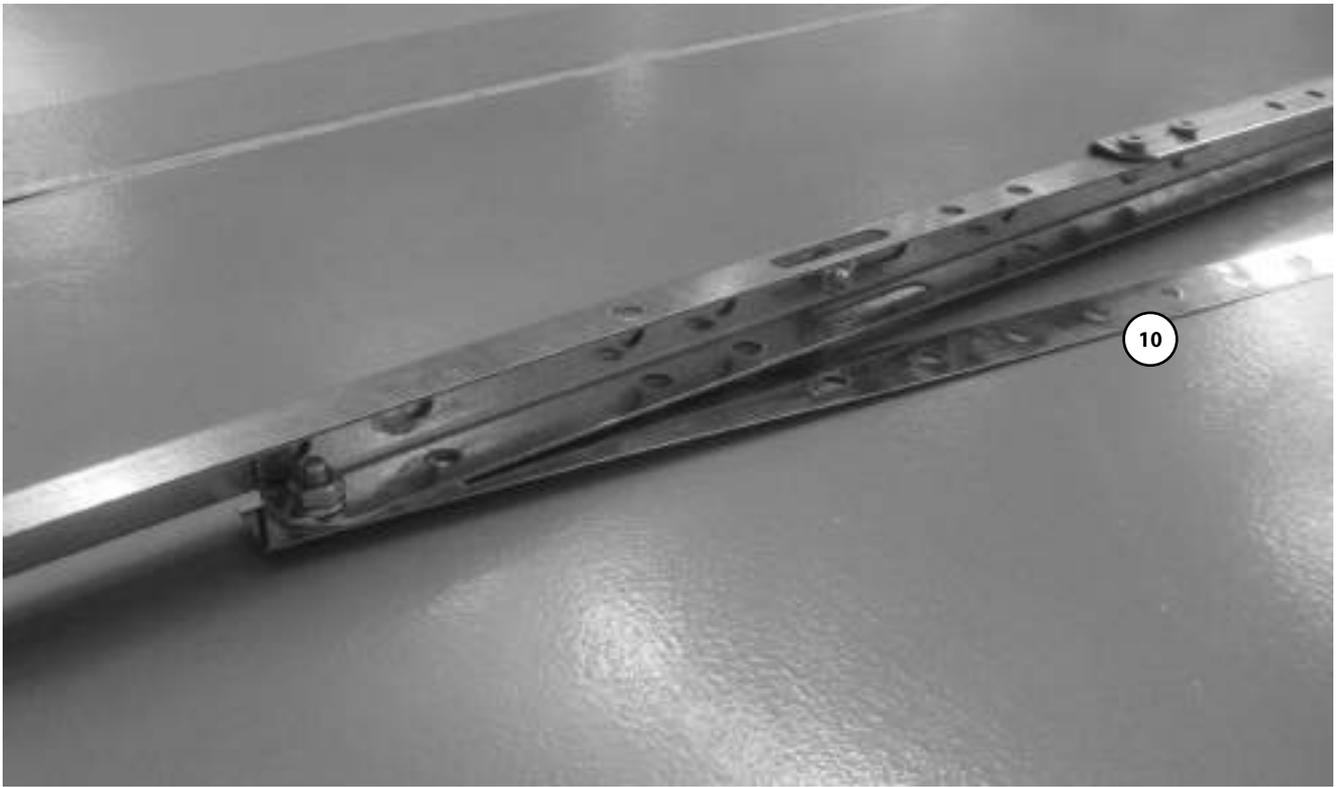
2.8. Fasten the 4 perforated steel strips (10) to the structure of the roof using the selected holes on the frame that was just mounted (see the images in the following points as well)



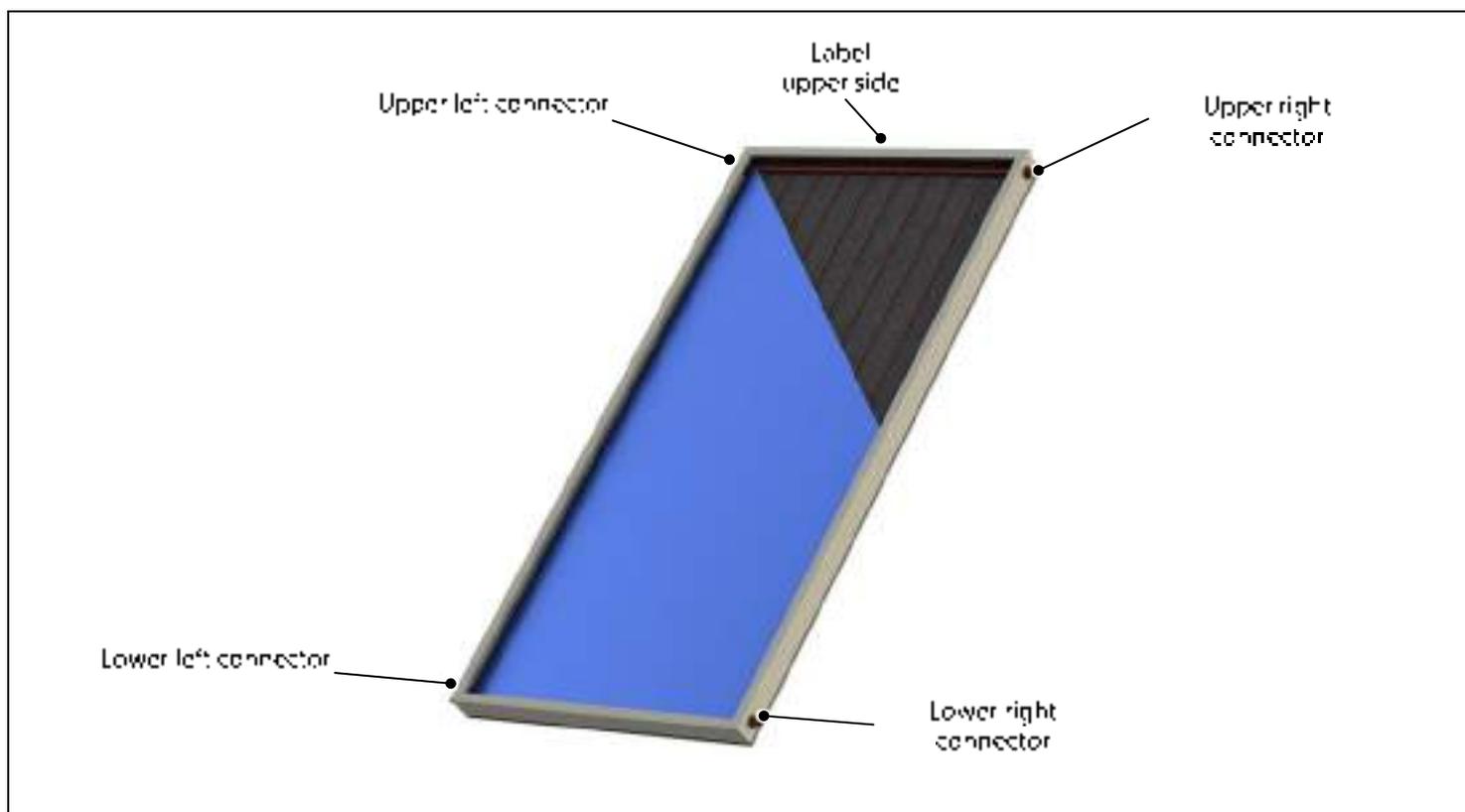
2.9. Fasten the structure to the 4 perforated steel strips (10) using 4 bolts, 4 nuts and 4 washers







### 3. Installation of the solar collectors

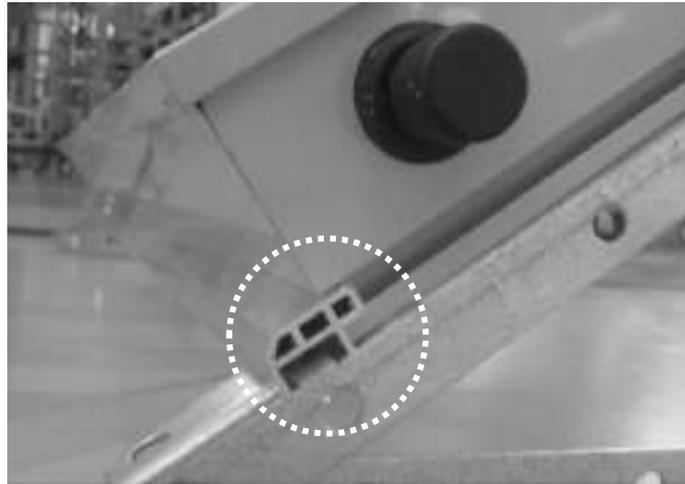


The collectors have a designated direction of installation  
The top is indicated by a label .

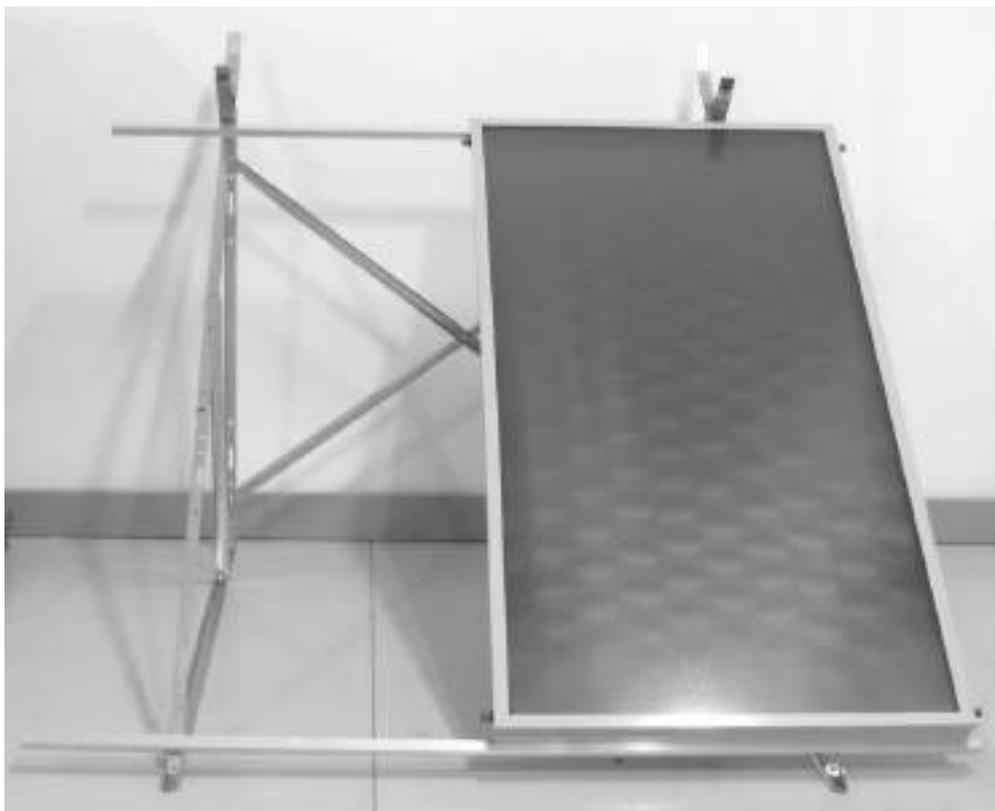
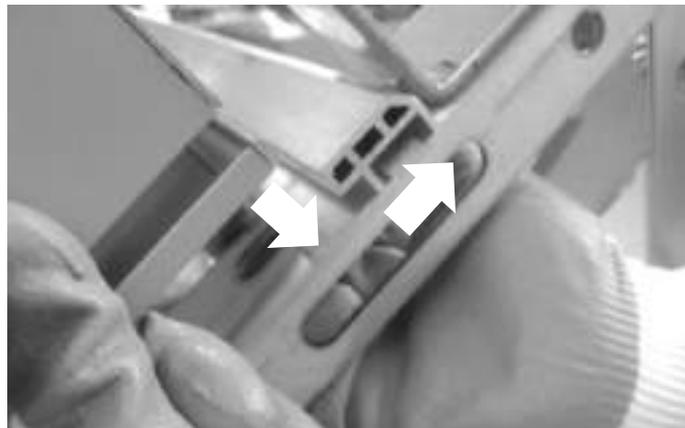


Although the following images refer to installation on the structure for flat roofs, the insertion of the collector and the boiler is also carried out in the same manner on the structure for inclined roofs.

3.1. Insert the first solar collector into the right part of the lower collector fastening bar (9i) and make sure that it fits as shown in the figure



3.2. Insert the solar collector into the upper collector fastening bar (9i) by sliding it upwards



3.3. Repeat operations 3.1 and 3.2 to insert the second collector into the left part of the structure.

3.4. Using the 2 compression couplings with gaskets  $\varnothing 22 \text{ mm} \times \varnothing 22 \text{ mm}$  connect the 2 solar collectors at the top and bottom.

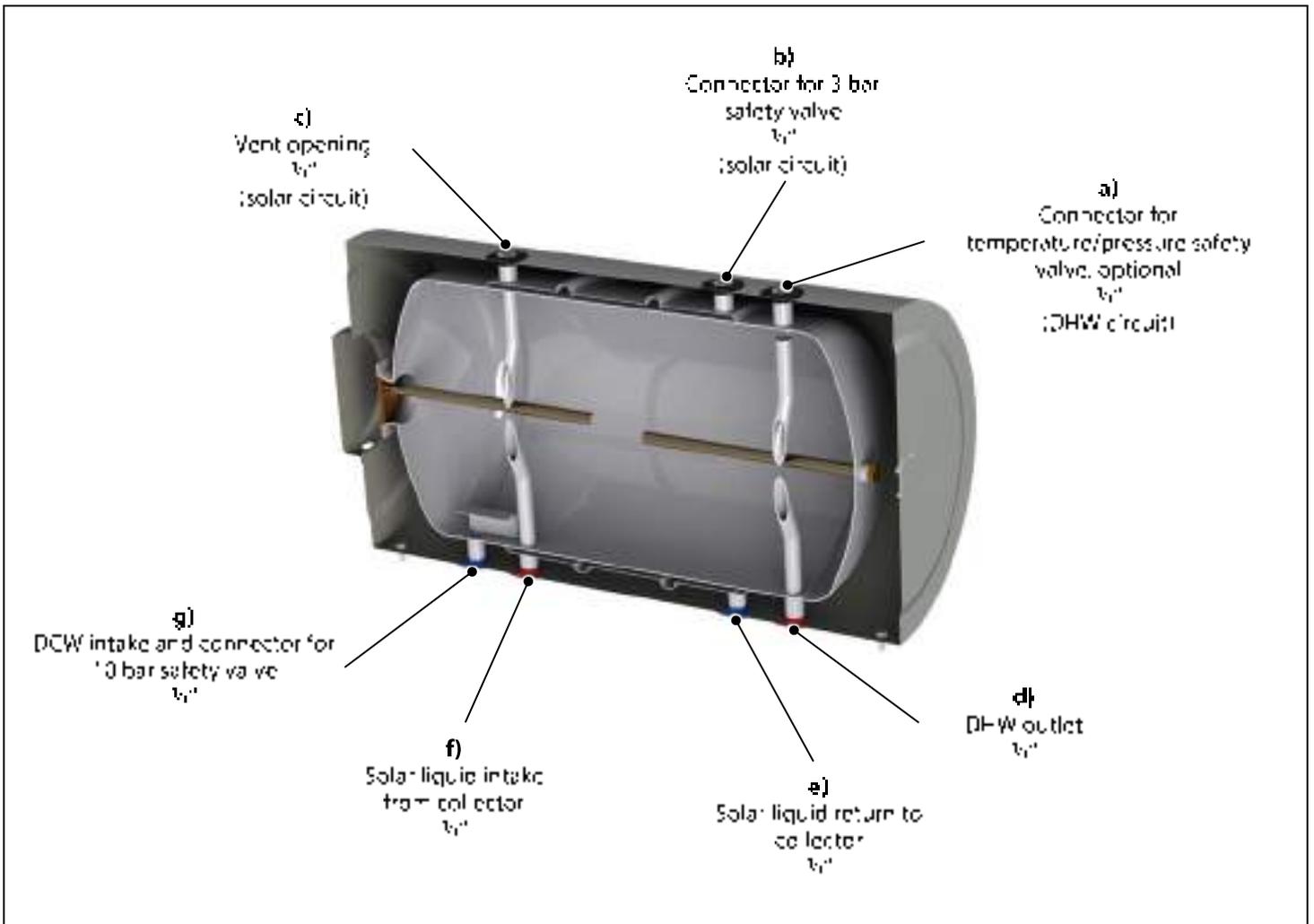


**Warning: the 2 collectors must be centred in the structure.**

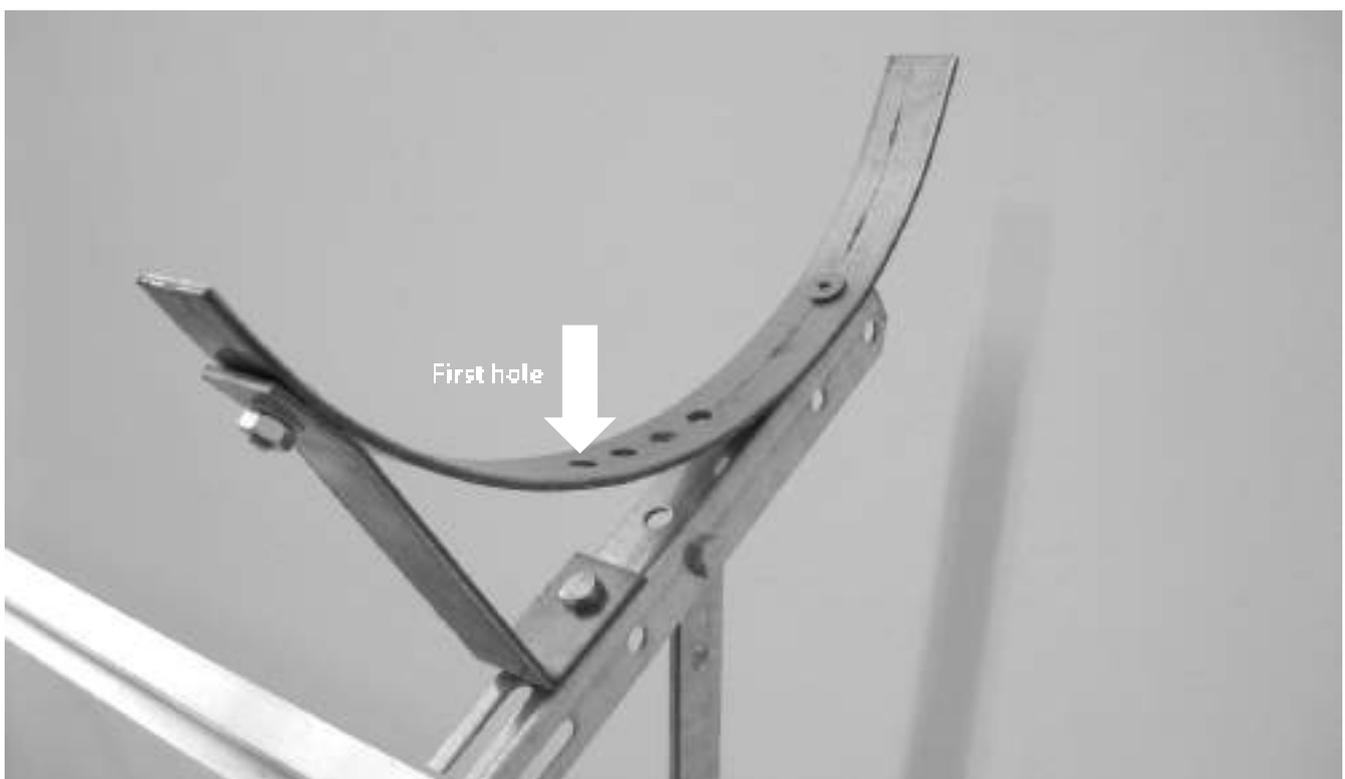
3.5. Push the upper collector fastening bar (9) downward until it fits into the collectors, then tighten the nuts.



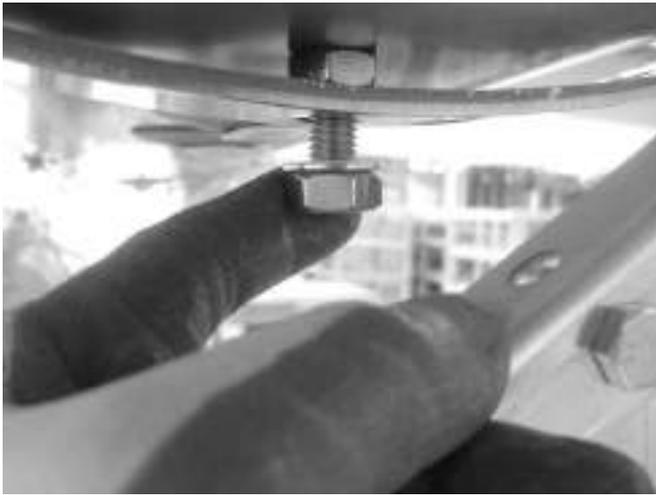
#### 4. Boiler installation and water connections



- 4.1 Insert the boiler into the structure and rest it on the U-brackets.  
The boiler has two threaded M10 inserts, which must be inserted into the U-brackets' first holes.



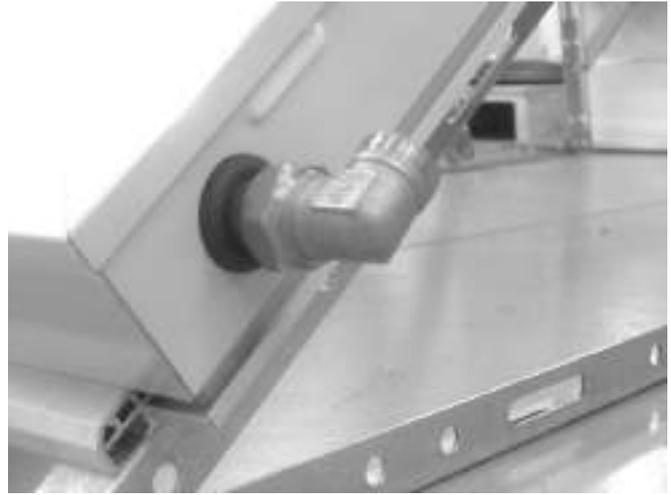
Fasten the boiler using 2 nuts and 2 washers



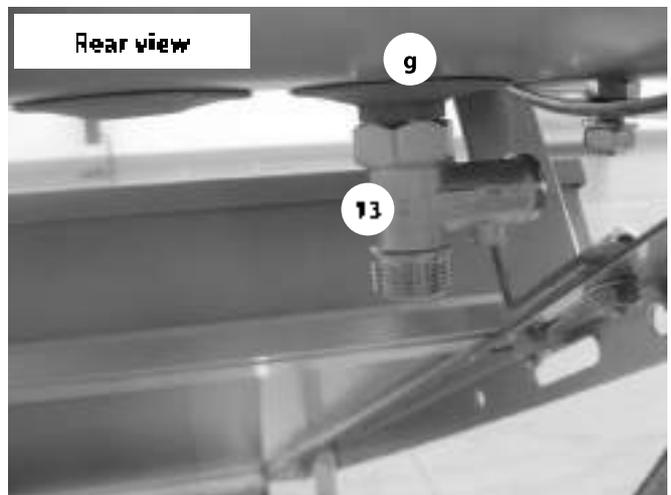
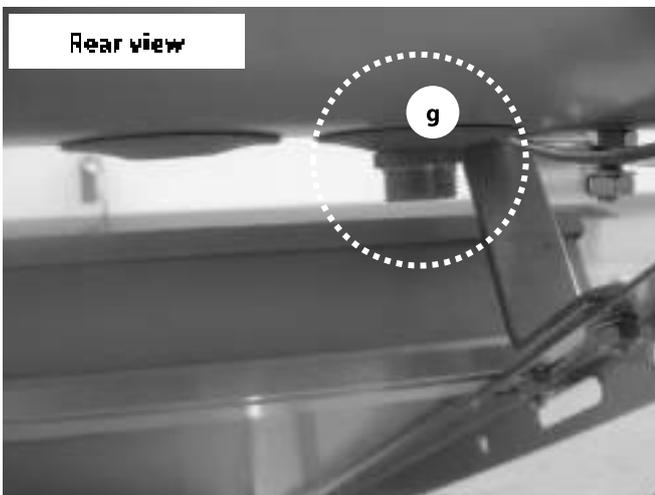
4.2 Fasten the two  $\varnothing 22$  mm compression caps on to the two solar collectors' upper right and lower left connections.



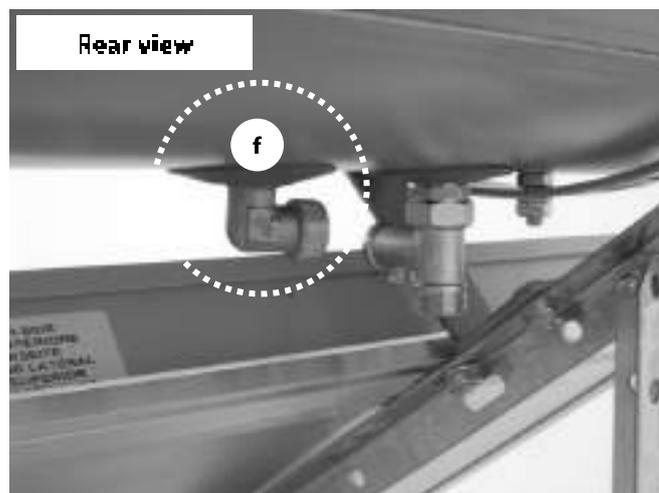
- 4.3 Fasten the two  $\varnothing 22$  mm x  $\frac{1}{2}$ " M. compression elbow couplings onto the two solar collectors' upper left and lower right connections.



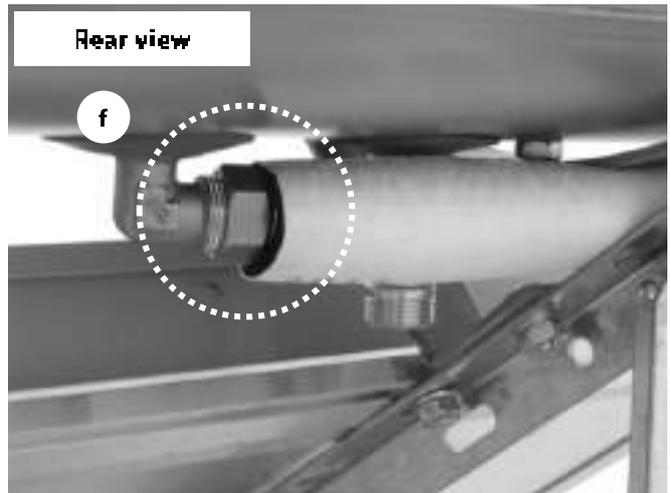
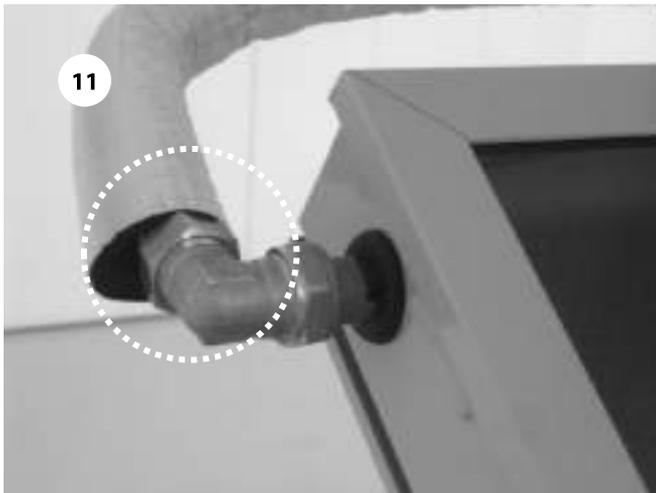
- 4.4 Using a  $\frac{1}{4}$ " M x  $\frac{1}{2}$ " M nipple, connect the 6 bar domestic water safety valve (13) to the boiler's DCW intake (g). Seal the threads using a thread seal tape suitable for high temperatures.



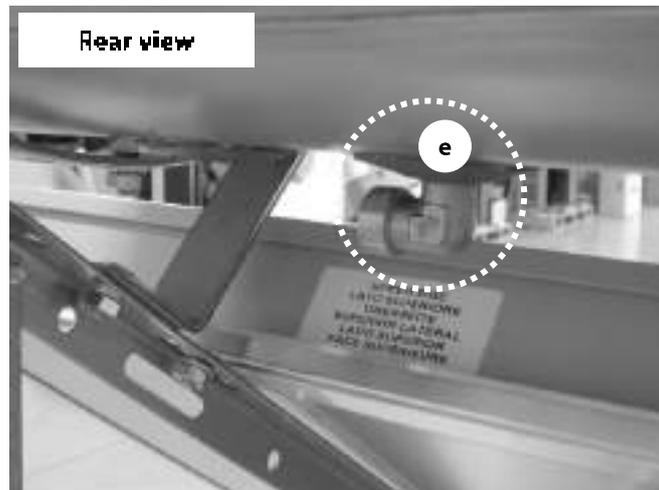
- 4.5 Insert a  $\frac{1}{4}$ " M x  $\frac{1}{2}$ " M elbow coupling at the boiler's solar liquid intake (f). Seal the threads using a thread seal tape suitable for high temperatures.



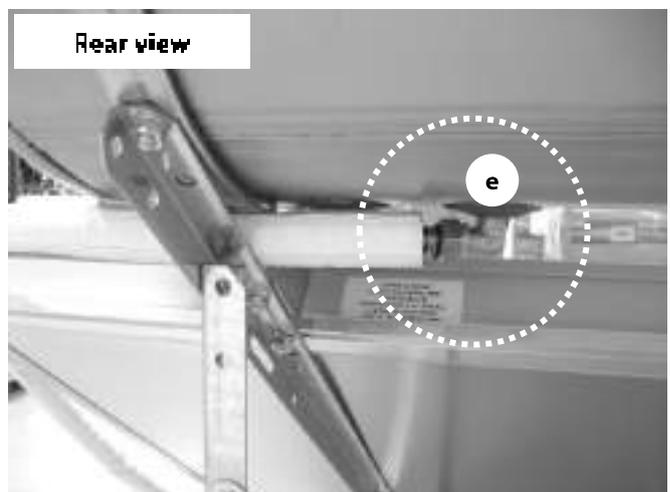
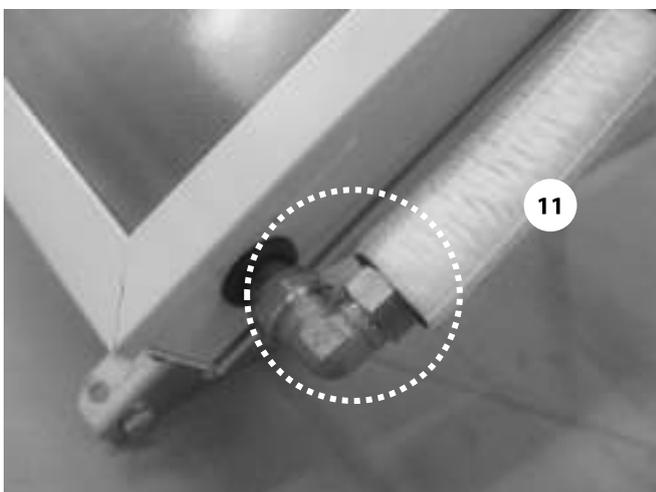
- 4.6 Using two 1/2" gaskets, connect the 670 mm long flexible steel pipe (11) to the left solar collector's upper left connection and to the boiler's solar liquid intake (f). The flexible steel pipe must proceed in an upward direction from the connector on the collector to the connector on the boiler (f).



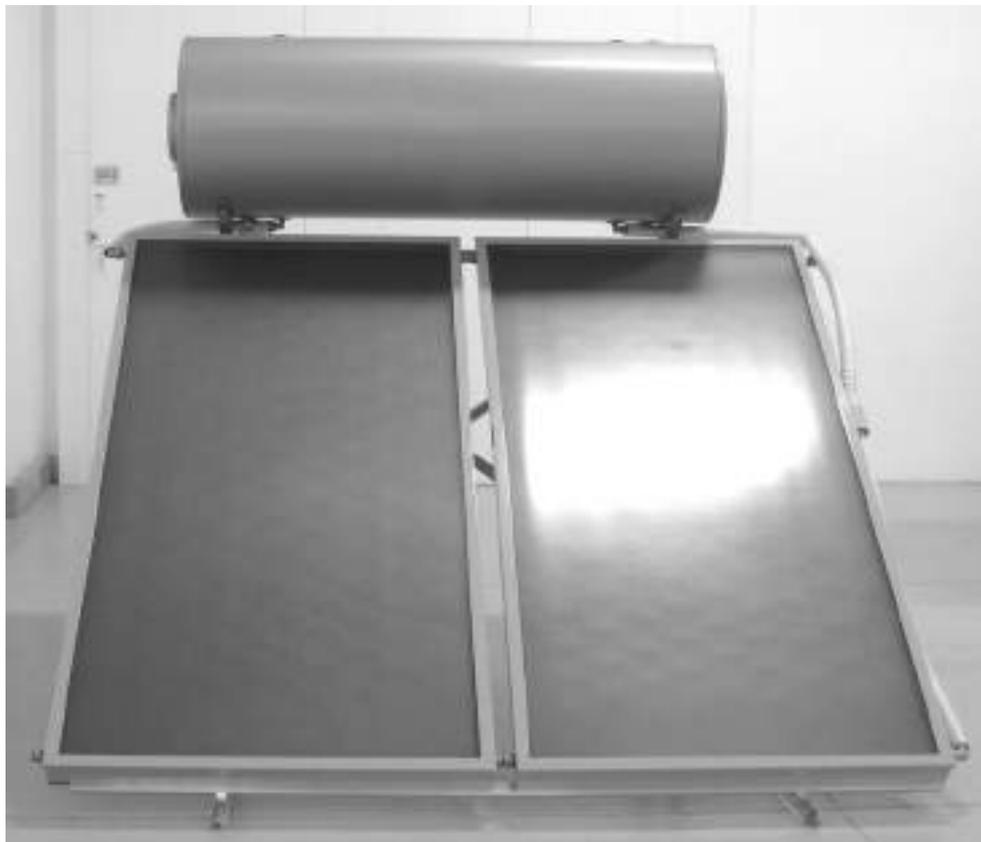
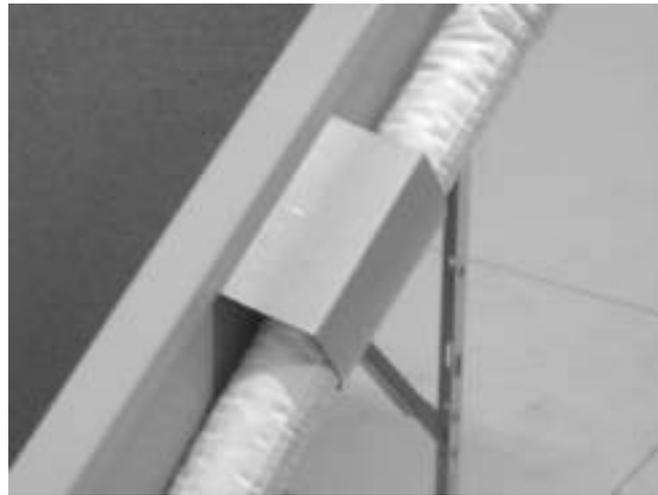
- 4.7 Insert a 1/2" M x 1/2" M elbow coupling at the boiler's solar liquid return (e). Seal the threads using a thread seal tape suitable for high temperatures.



- 4.5 Using two 1/2" gaskets, connect the 2620 mm long flexible steel pipe (11) to the right solar collector's lower right connection and to the boiler's solar liquid return (e).

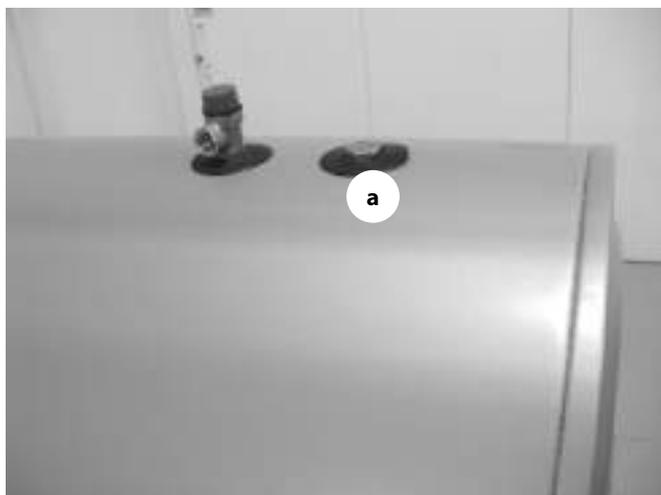
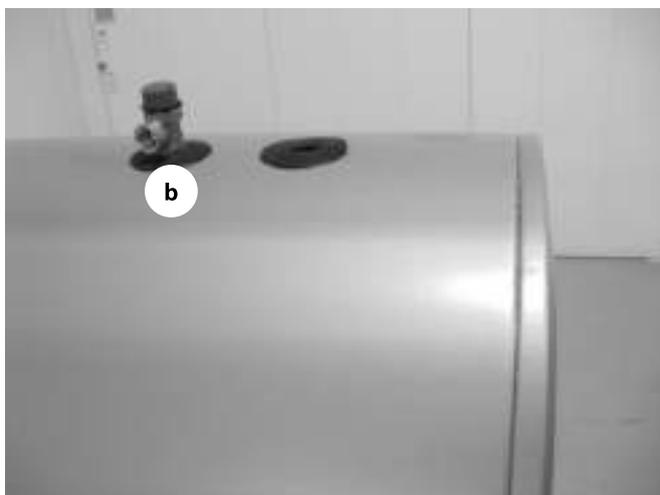
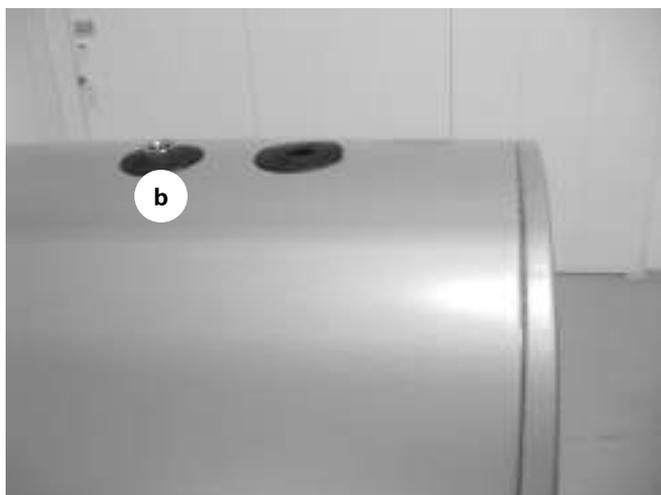


4.9 Fasten the 2620 mm long pipe (11) to the collector using the Q-bracket (12).



4.10 At this point the structure can be fastened to the support surface using the 4 screws and 4 anchors provided (16) and (20). If the supplied anchors are unnecessary or unsuitable for the type of surface in question, arrange for appropriate anchors to be provided.

- 4.11 Connect the cold water intake and the hot water outlet to the respective connectors on the boiler (g) and (d).
- 4.12 Fill the boiler on the domestic water side, as described in the **Filling the system** section of the **Installation, use, and maintenance manual**.
- 4.13 Once the boiler has been filled, install a temperature/pressure safety valve (optional, if required) on the boiler's corresponding connector (a). Otherwise cap the relative hole with the 1/2" M cap. Seal the threads using a thread seal tape suitable for high temperatures.
- 4.14 After having mixed the propylene glycol, fill the solar circuit as described in the **Filling the system** section of the **Installation, use, and maintenance manual**.
- 4.15 Once the circuit has been filled, install the 3 bar safety valve on the boiler's corresponding connector (b) using the 1/2" M x 1/2" F adapter. Seal the threads using a thread seal tape suitable for high temperatures.
- 4.16 Install the 1/2" M cap on the connector (c).







P S L I B R I T O 4



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