

**IT**

# **Sulpack Natural Plus 150**

# **Sulpack Natural Plus 200**



## **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
<b>1</b>	Barra telaio in acciaio zincato - lunghezza 2000 mm	2
<b>2</b>	Barra telaio in acciaio zincato - lunghezza 1370 mm	2
<b>3</b>	Barra telaio in acciaio zincato - lunghezza 1120 mm	2
<b>4</b>	Staffa a U sostegno bollitore	2
<b>5</b>	Staffa a L sostegno bollitore	2
<b>6</b>	Barra fissaggio collettore in alluminio - lunghezza 1000 mm	2
<b>7</b>	Bandella in acciaio forata - lunghezza 750 mm	4
<b>8</b>	Tubo in acciaio flessibile - lunghezza 440 mm	1
	Tubo in acciaio flessibile - lunghezza 2220 mm	1
<b>9</b>	Valvola di sicurezza acqua sanitaria - 10 bar	1
<b>10</b>	Valvola di sicurezza circuito solare - 3 bar	1
<b>11</b>	Curva ¾" M x ¾" F	2
	Curva a stringere con ogiva Ø 22 x ¾" M	2
	Tappo a stringere con ogiva Ø 22 mm	2
	Tappo ¾" M	1
	Tappo ½" M	1
	Nipple ¾" M x ½" M	3
	Guarnizione ¾"	4
<b>12</b>	Bullone M10x25	17
	Rondella M10	22
	Dado M10	22
	Bullone a testa svasata M10x20 con cava esagonale	8
	Vite di fissaggio M8x50	4
	Rondella M8	4
<b>13</b>	Collettore solare vetrato piano	1
<b>14</b>	Bollitore in acciaio vetrificato	1
<b>15</b>	Tanica di liquido solare da 1 litro	<i>Sulpack Natural Plus 150</i> <i>Sulpack Natural Plus 200</i>
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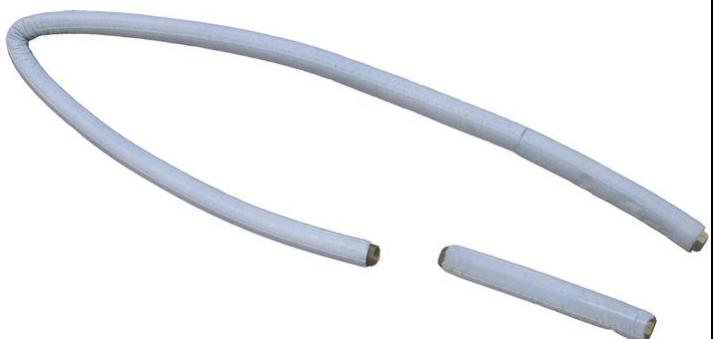
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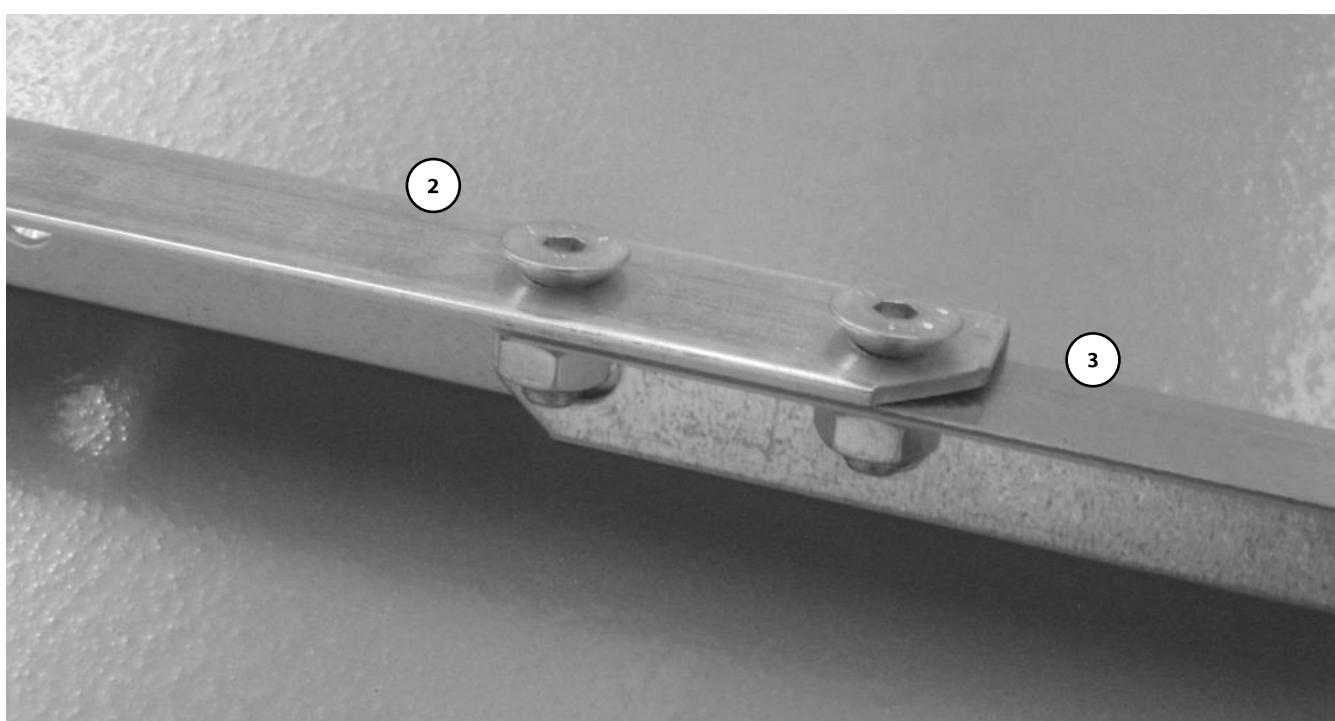
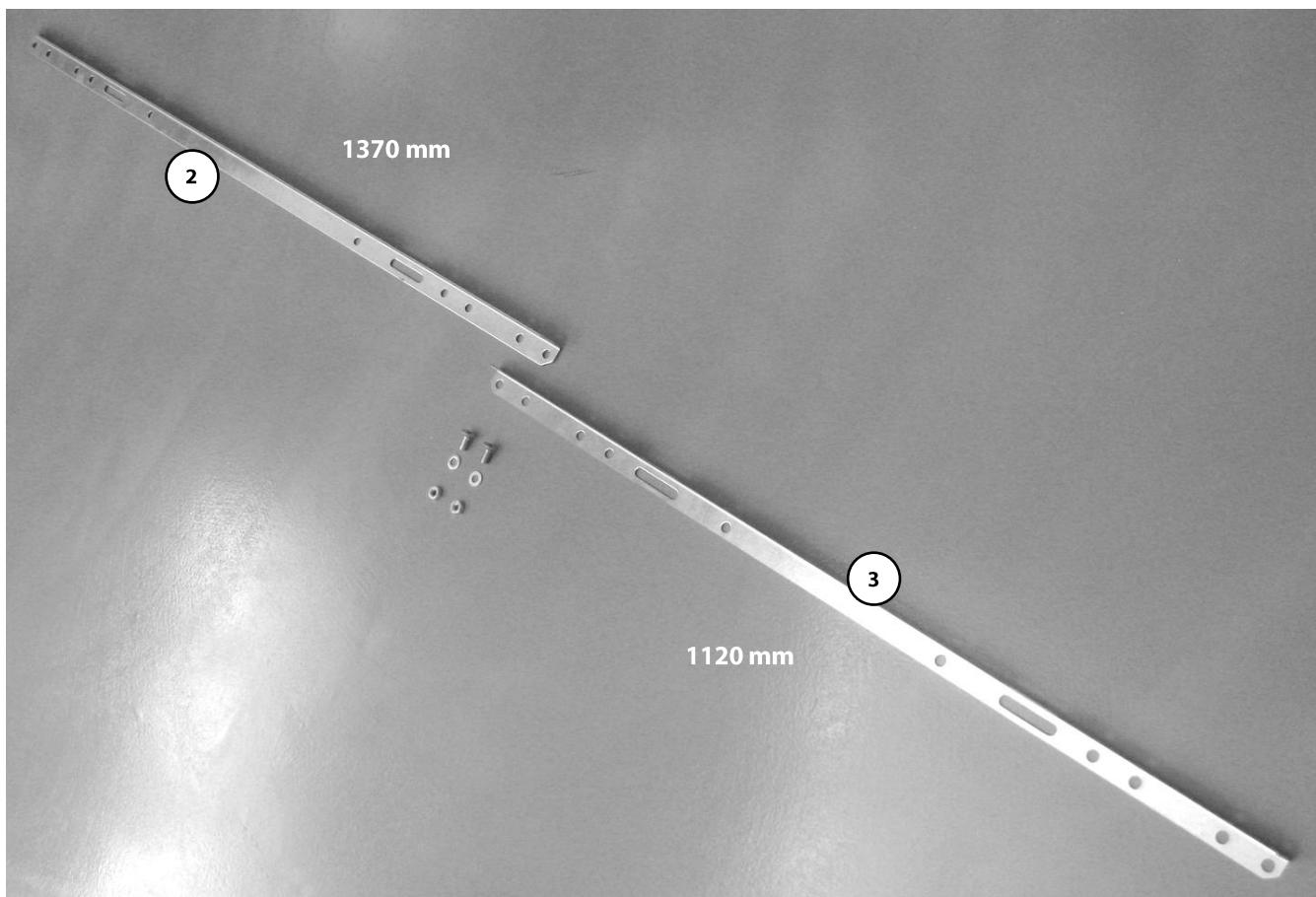


## 2. Montaggio della struttura

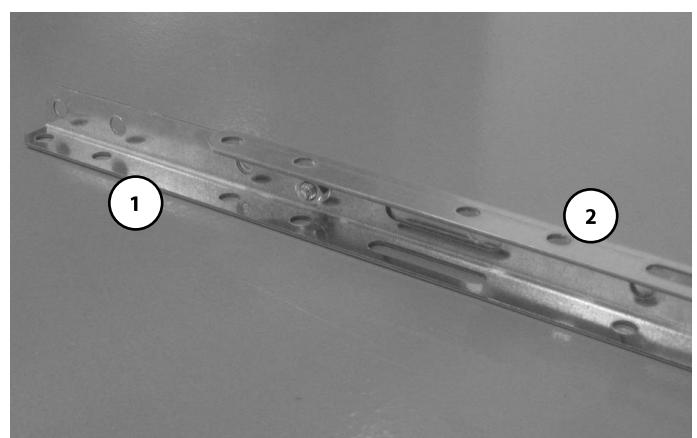
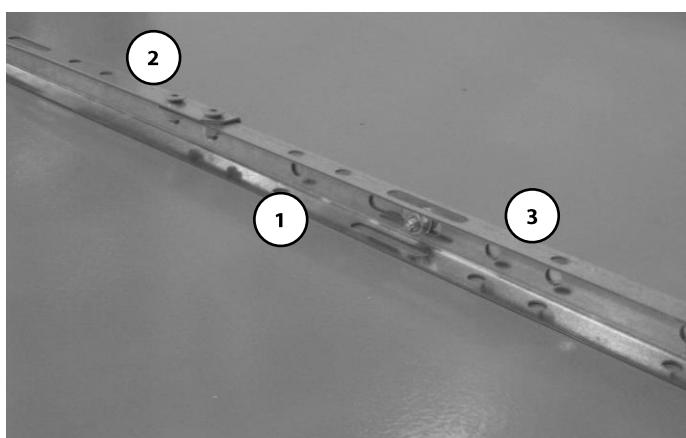
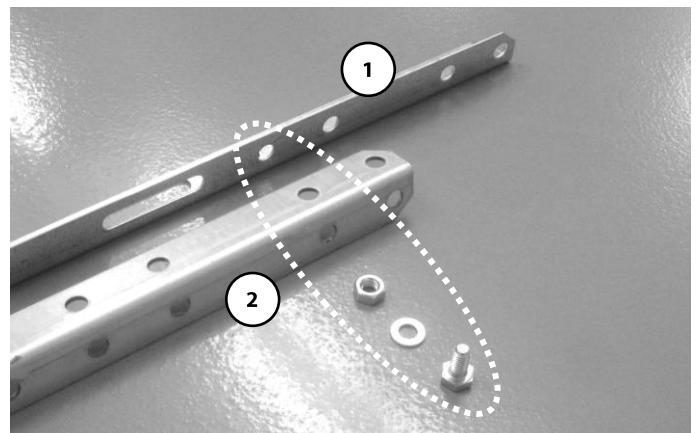
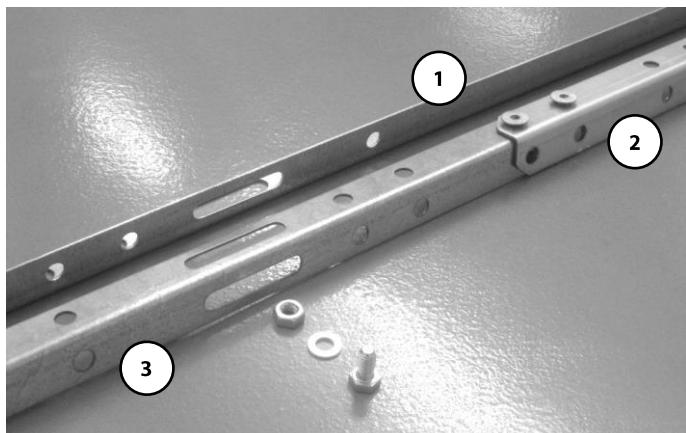
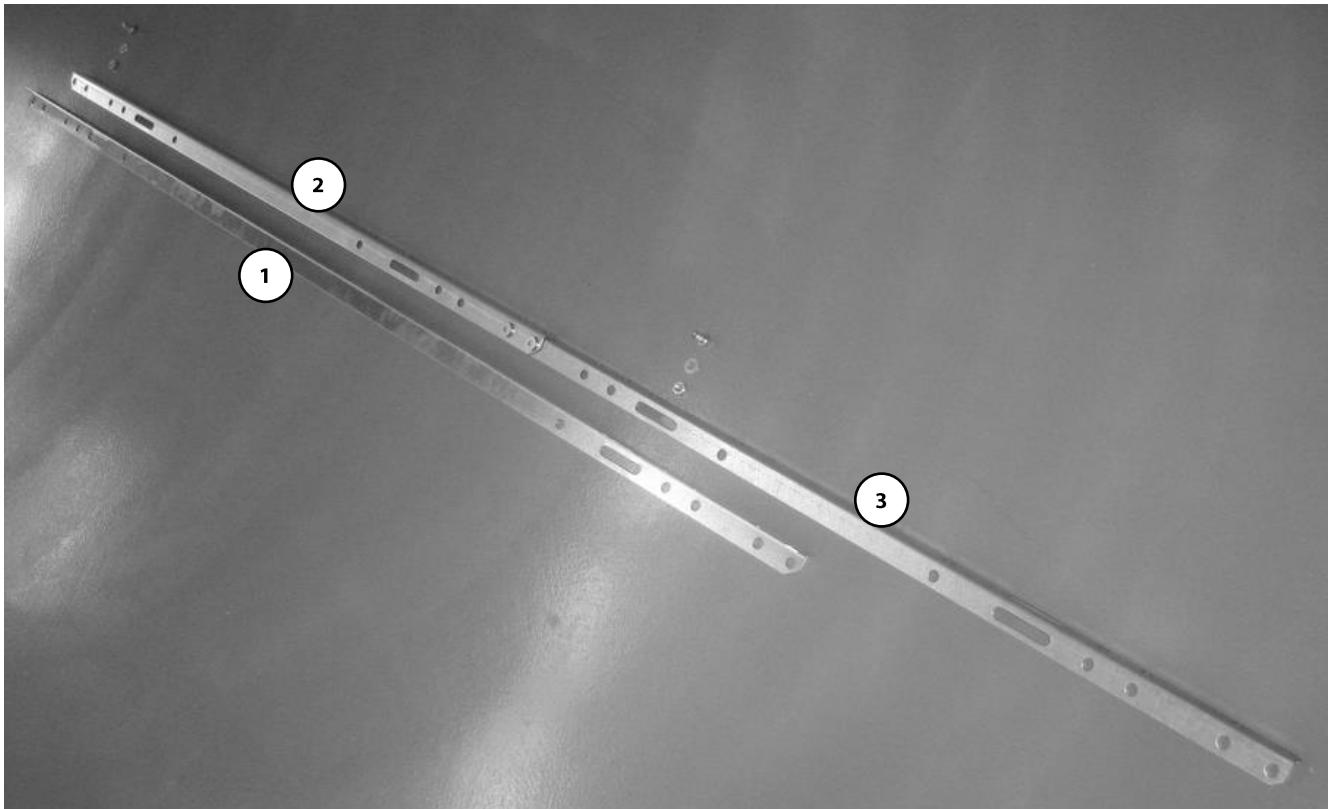
Per l'installazione della struttura di sostegno, seguire le seguenti istruzioni:

- 2.1. Unire una barra di lunghezza 1370 mm (2) con una barra di lunghezza 1120 mm (3) utilizzando 2 bulloni a testa svasata, 2 dadi e 2 rondelle.

La barra di lunghezza 1370 mm (2) dovrà sormontare la barra di lunghezza 1120 mm (3).

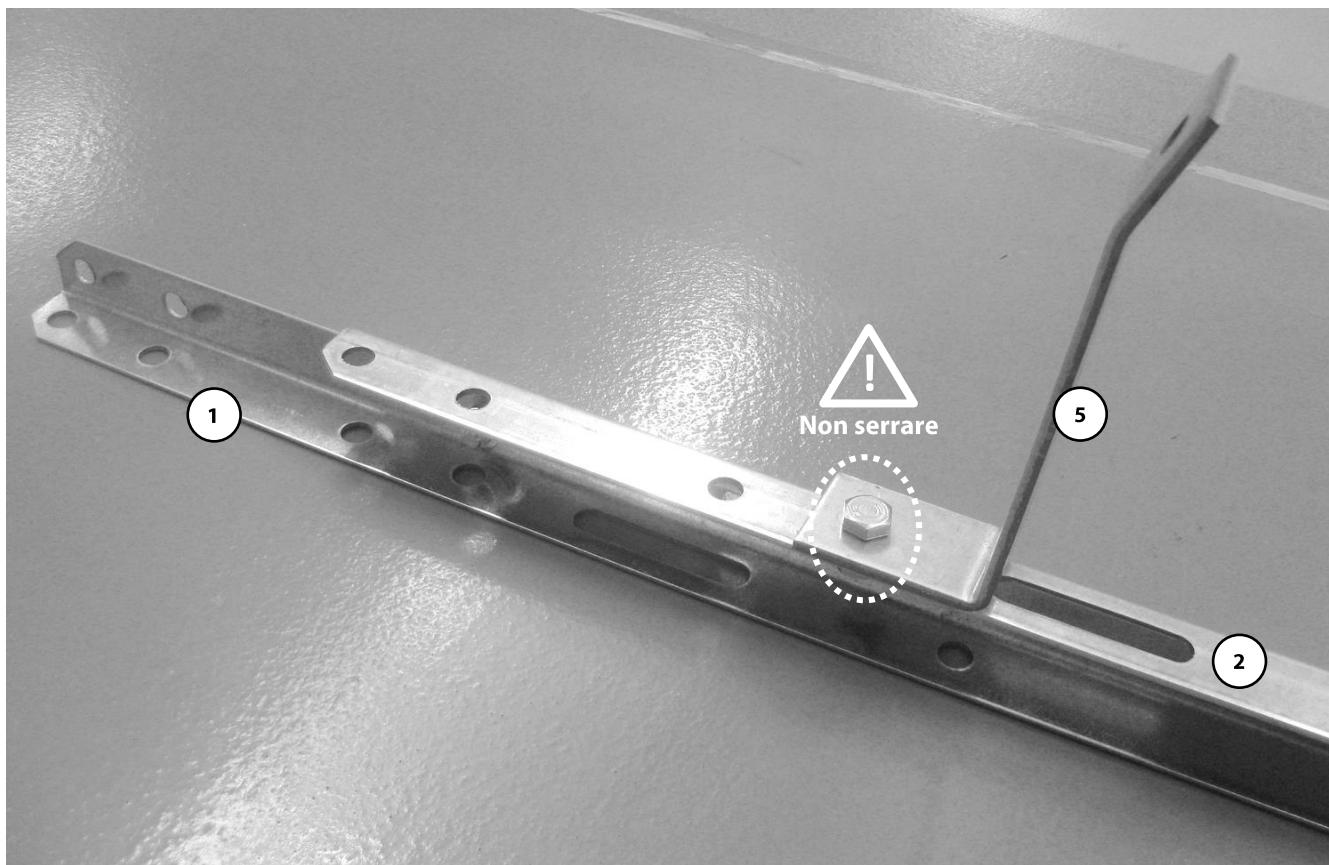
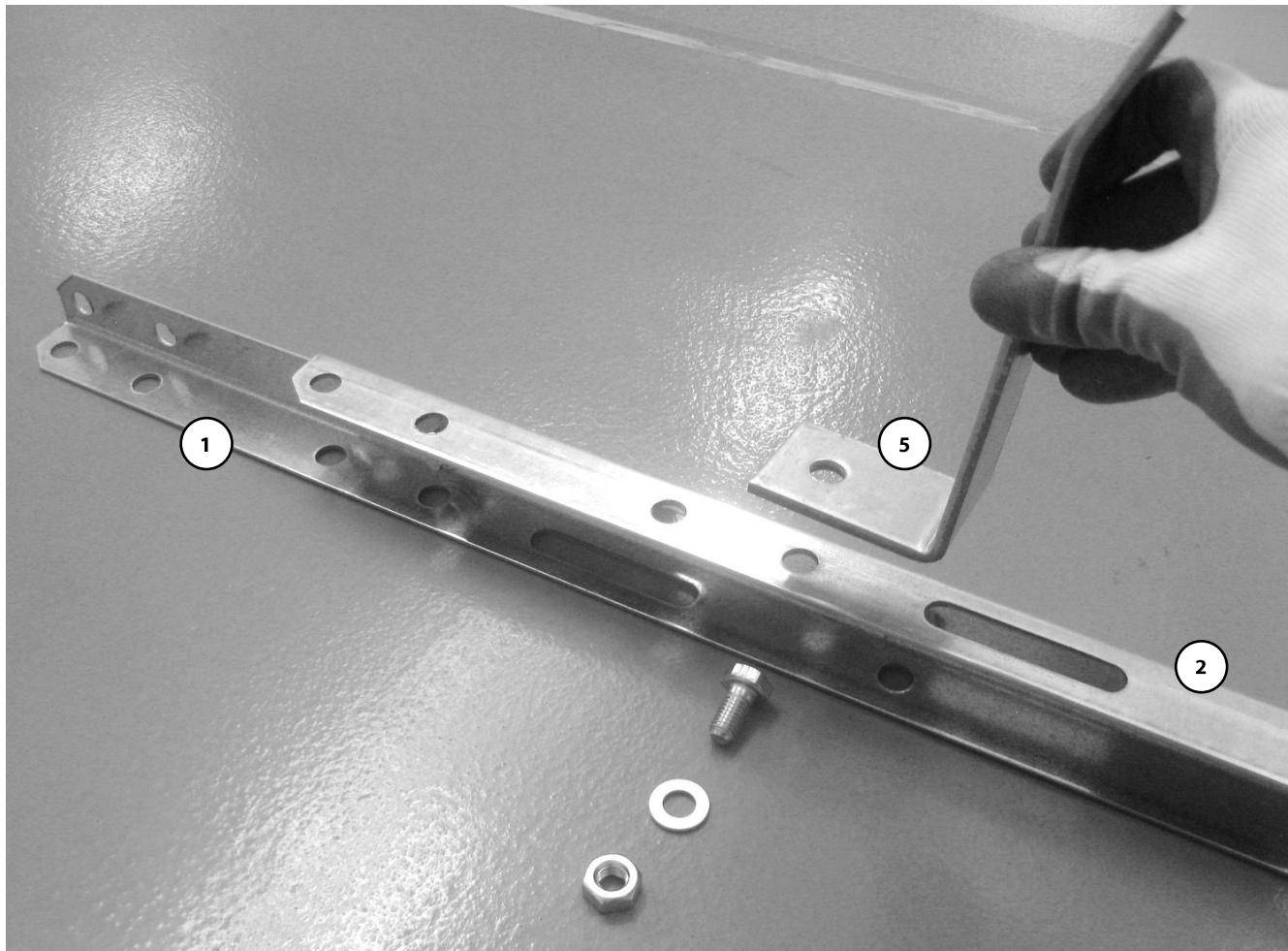


2.2. Unire la barra di lunghezza 2000 mm (1) alle barre unite precedentemente utilizzando 2 bulloni, 2 dadi e 2 rondelle.

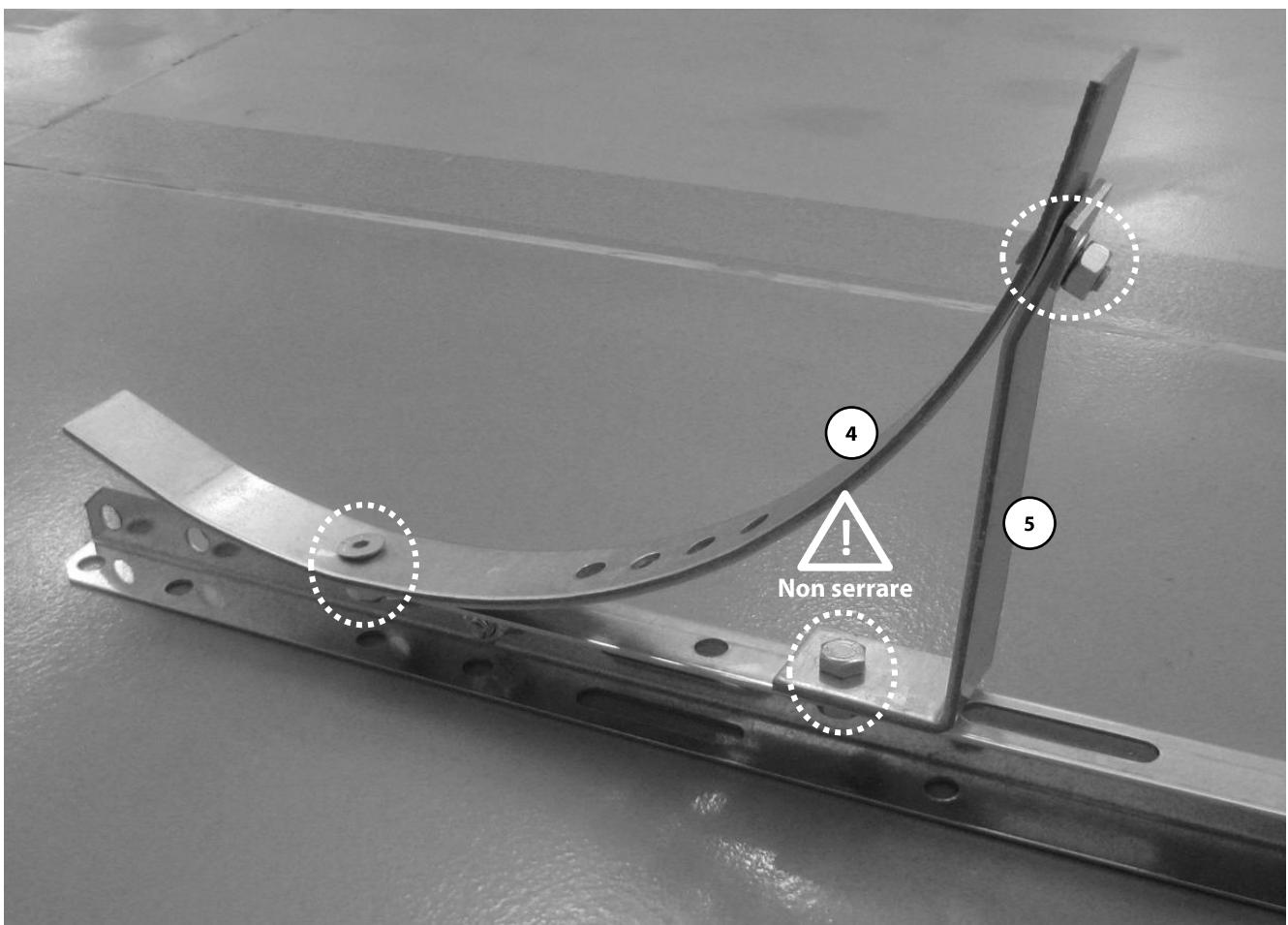
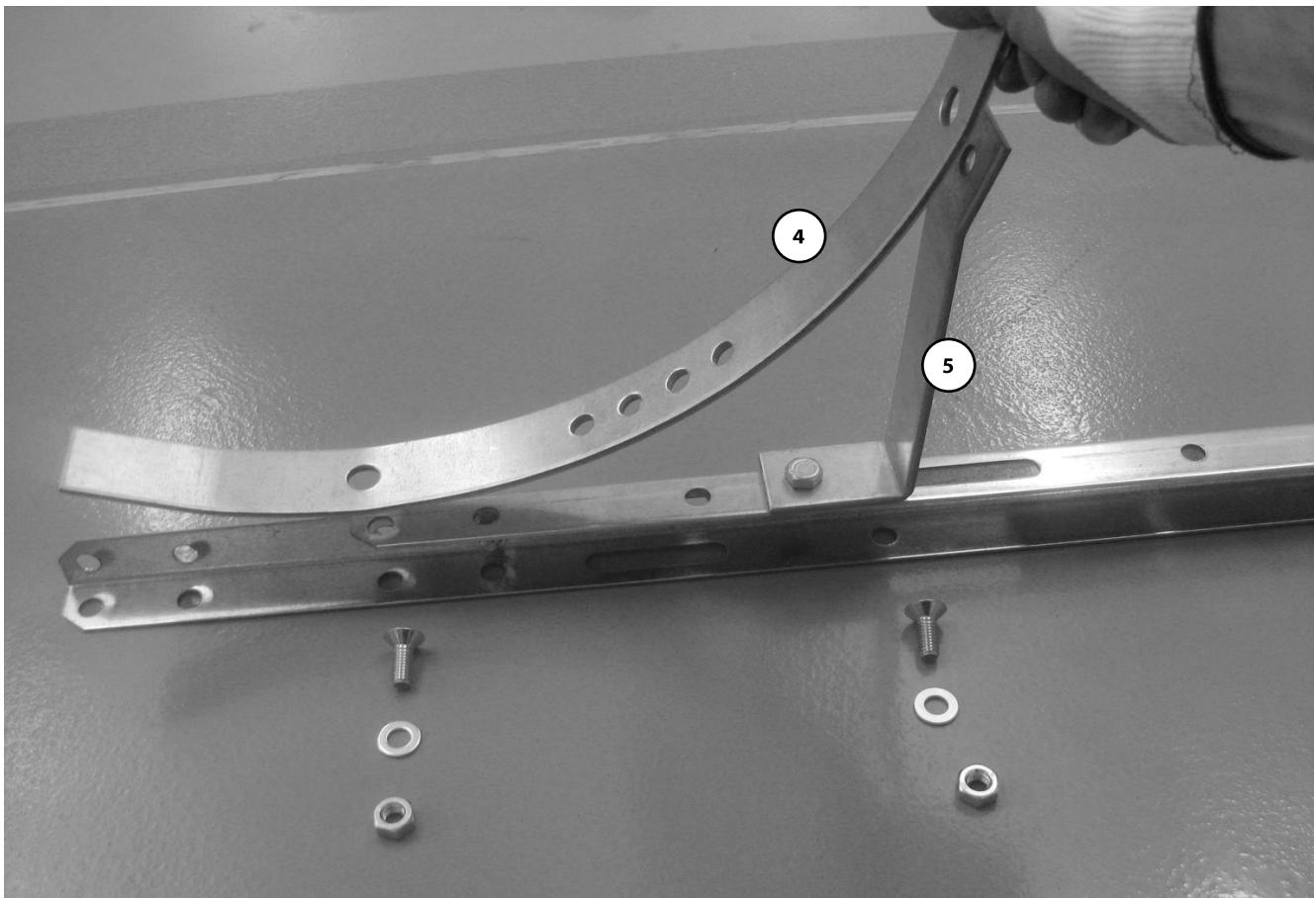


Una volta assemblata, la barra di lunghezza 2000 (1) sporgerà dalla barra di lunghezza 1370 mm (2).

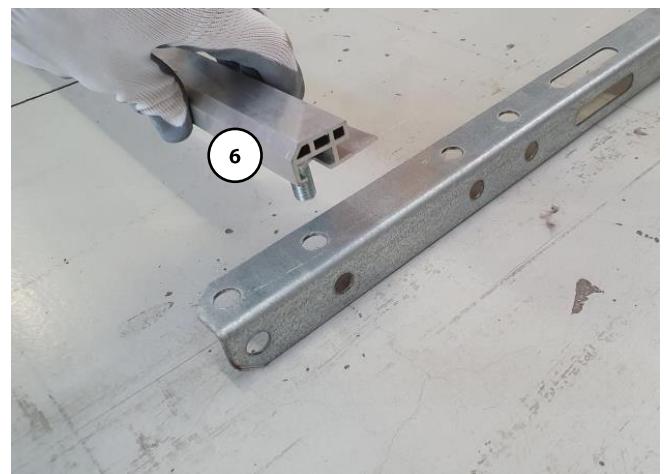
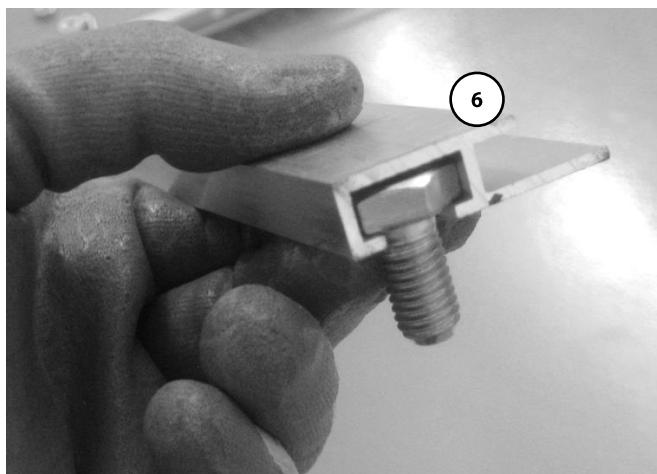
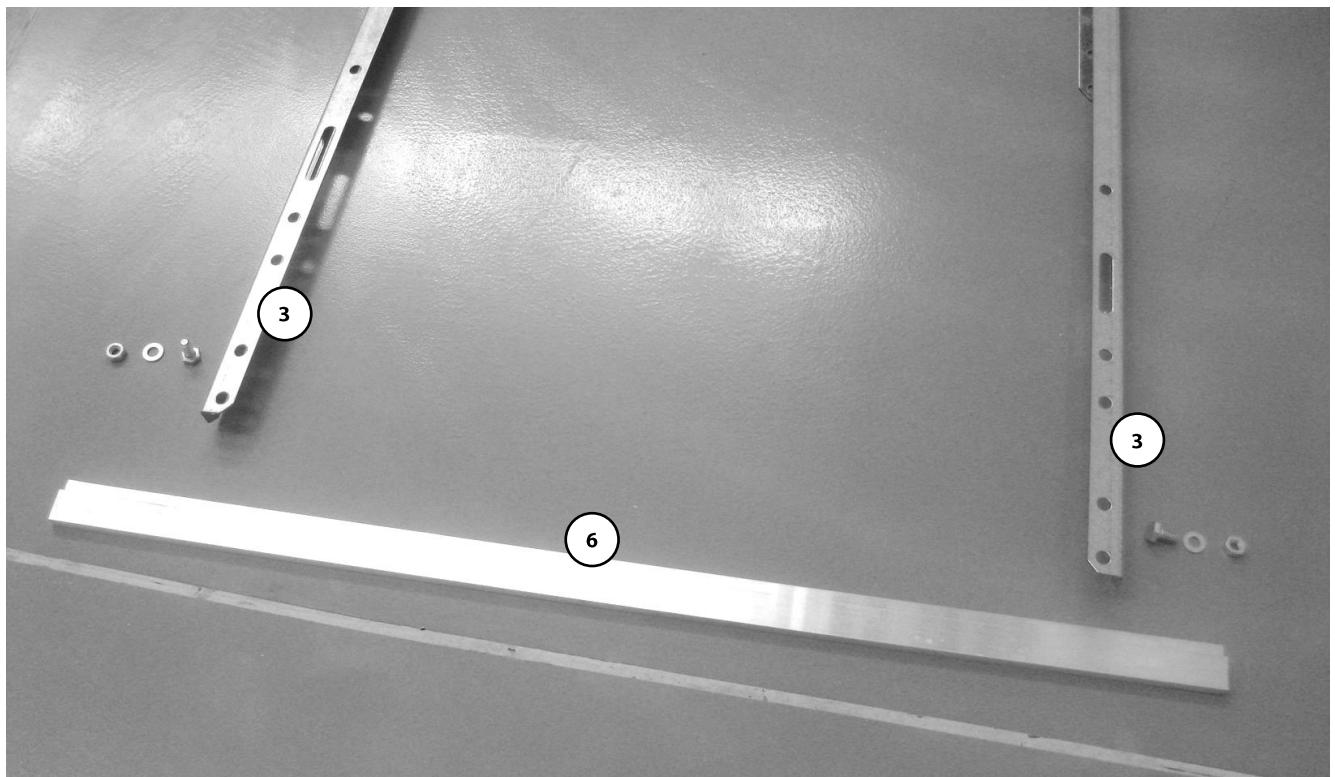
- 2.3. Alle barre appena assemblate, fissare la staffa a L (5) utilizzando 1 bullone, 1 dado e 1 rondella.  
**ATTENZIONE:** per il momento non serrare completamente dado e bullone.

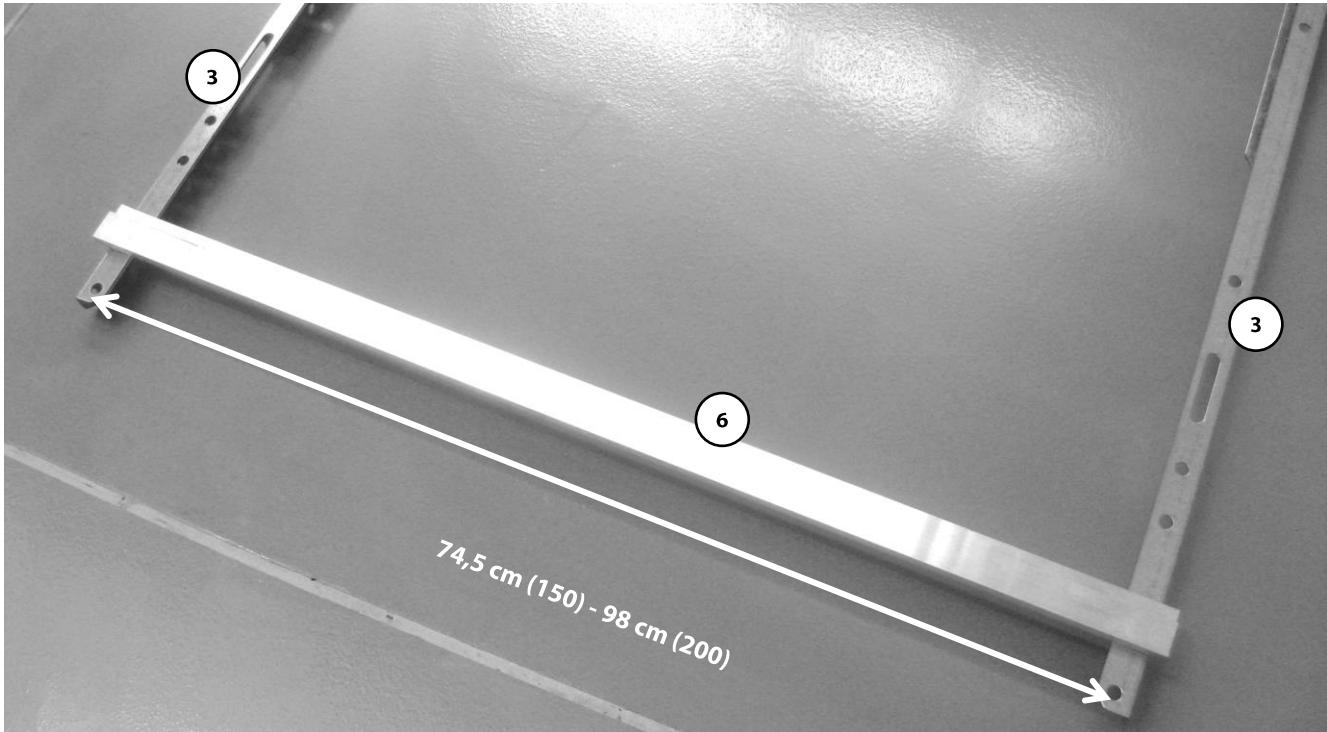


2.4. Fissare la staffa a U (4) utilizzando 2 bulloni a testa svasata, 2 dadi e 2 rondelle.



- 2.5. Ripetere i punti da 2.1 a 2.4 per preparare un'altra struttura come quella appena preparata, ma specchiata.
- 2.6. Unire, nella parte inferiore, le 2 strutture precedentemente preparate utilizzando una barra di fissaggio collettore di lunghezza 990 mm (**6**), 2 bulloni, 2 dadi e 2 rondelle.



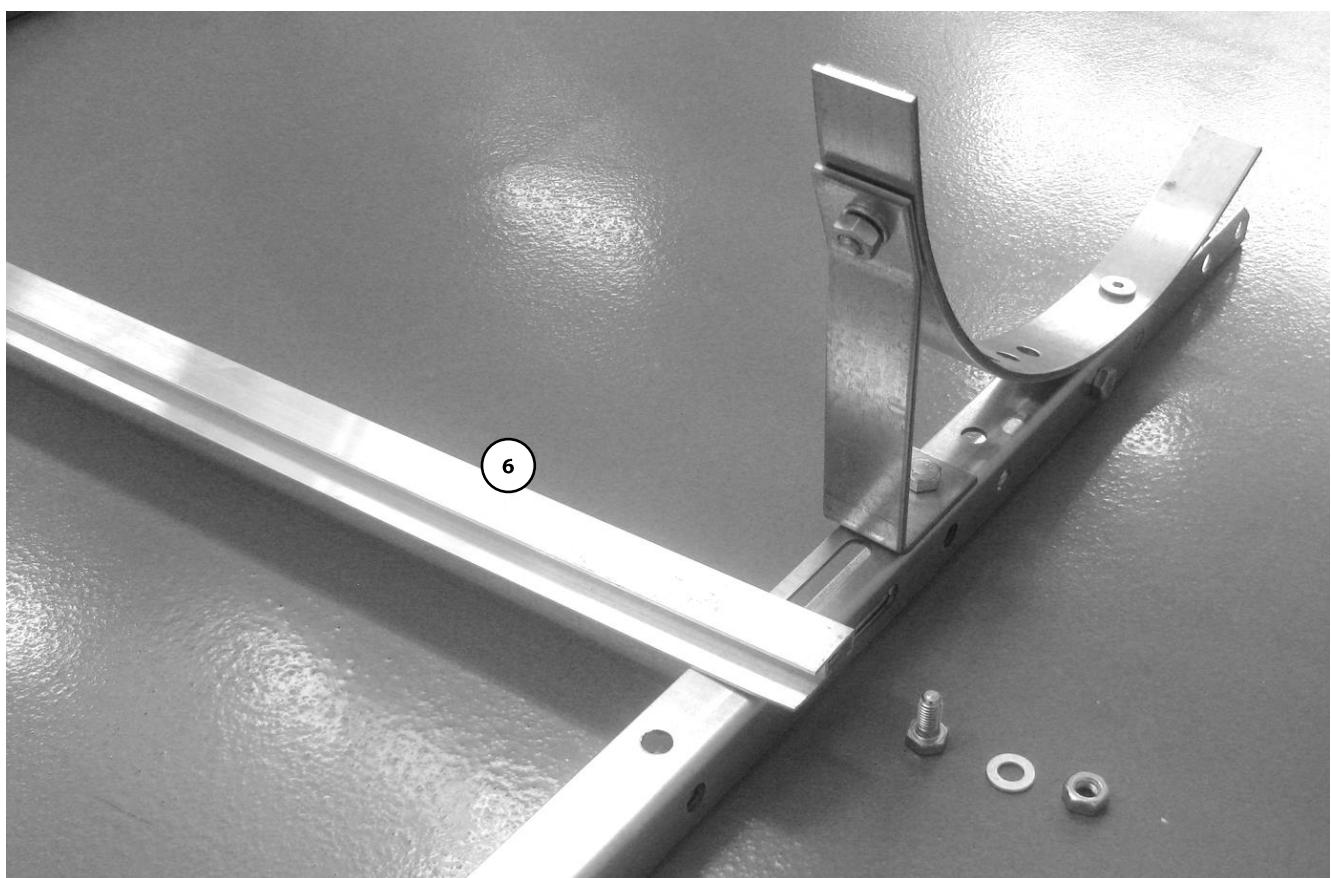


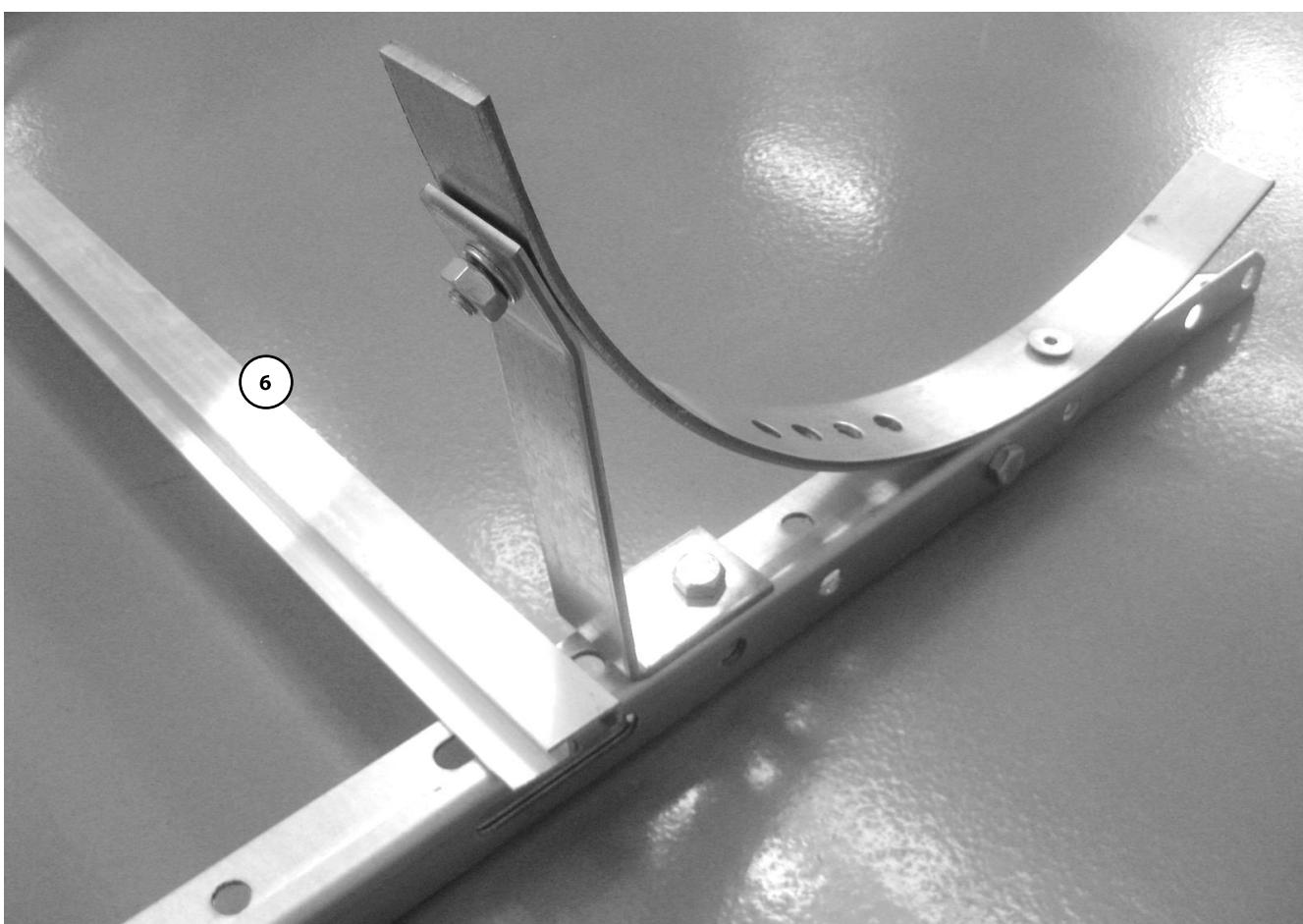
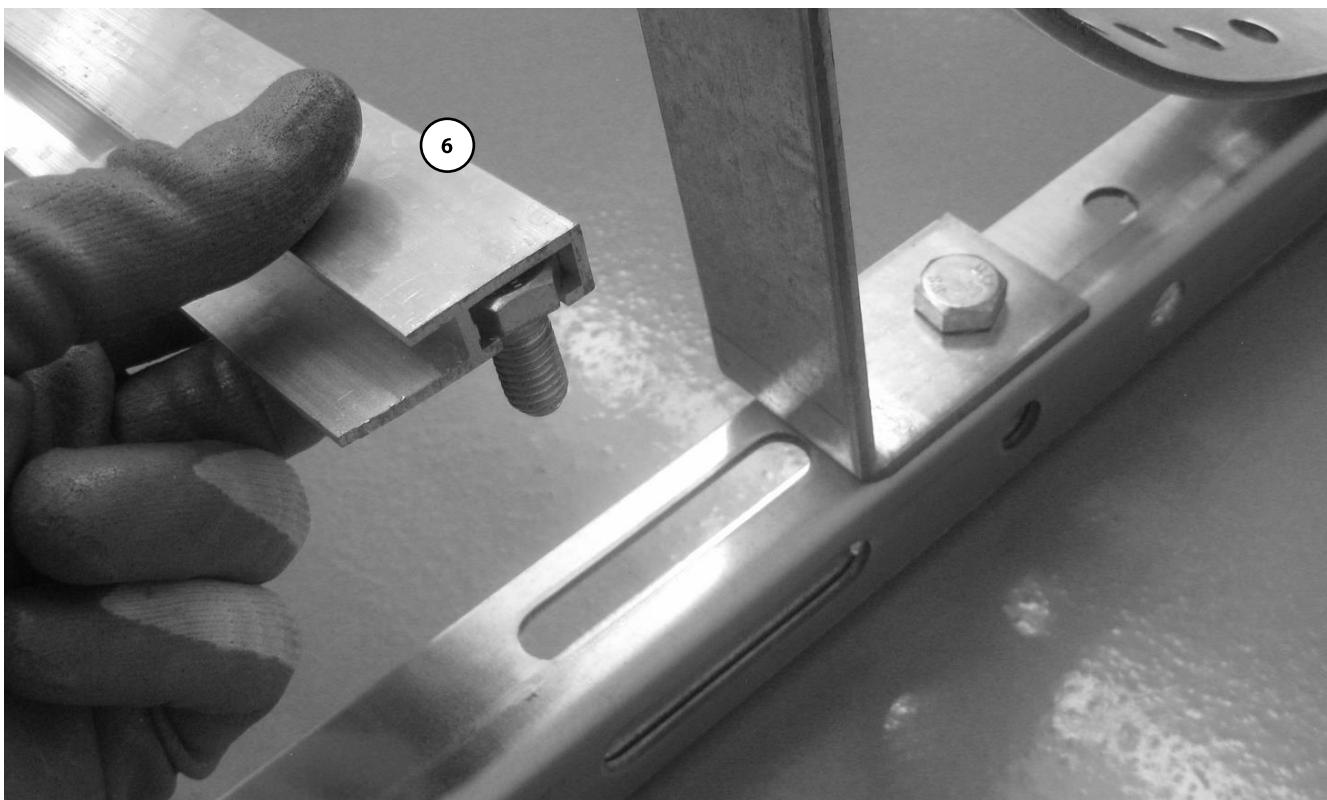
Una volta fissate, tra i fori delle 2 barre dovrà esserci una distanza pari a:

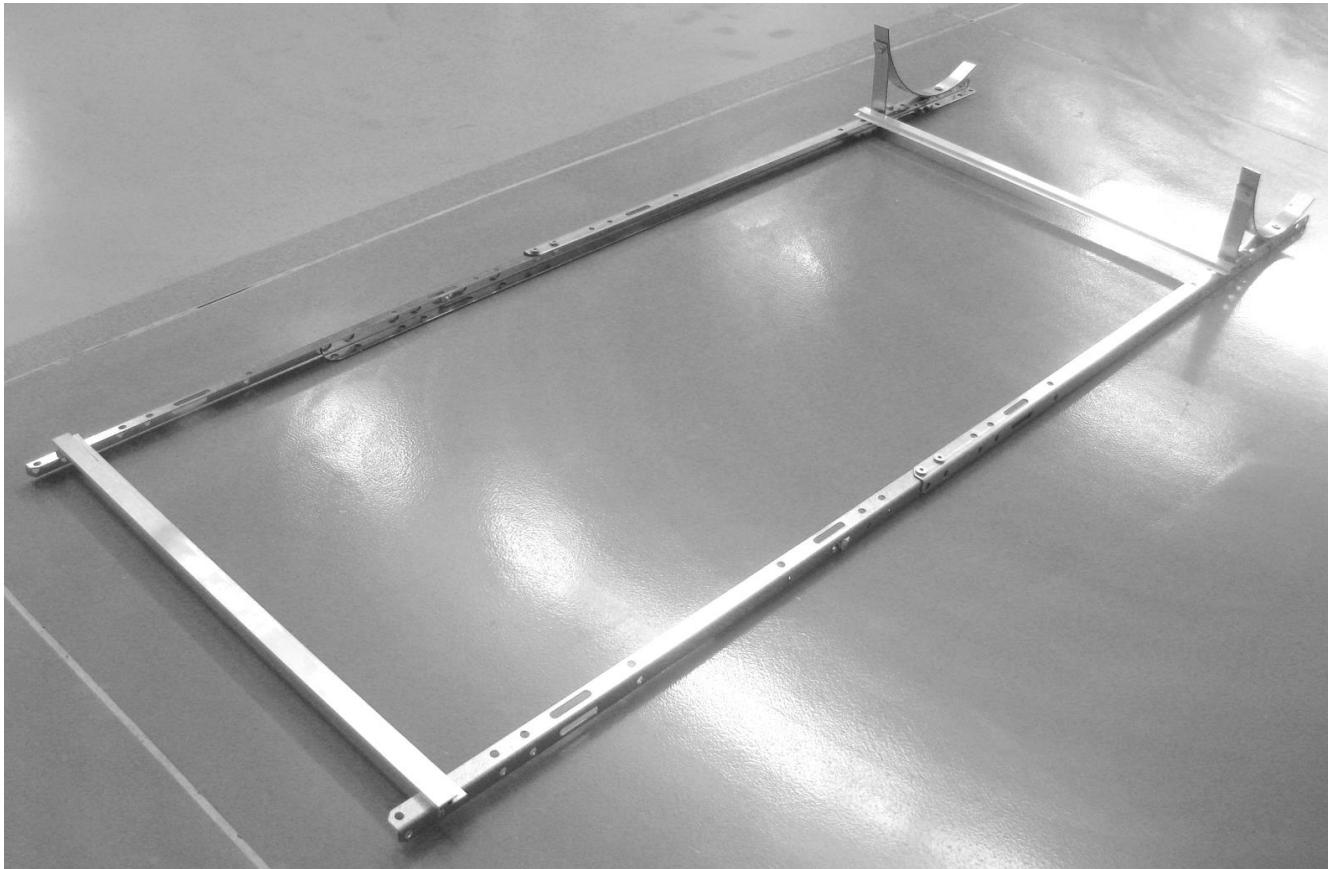
- **74,5 cm** per il modello **150**;
- **98 cm** per il modello **200**.

2.7. Fissare, nella parte alta della struttura, la seconda barra di fissaggio collettore di lunghezza 990 mm (**6**), utilizzando 2 bulloni, 2 dadi e 2 rondelle.

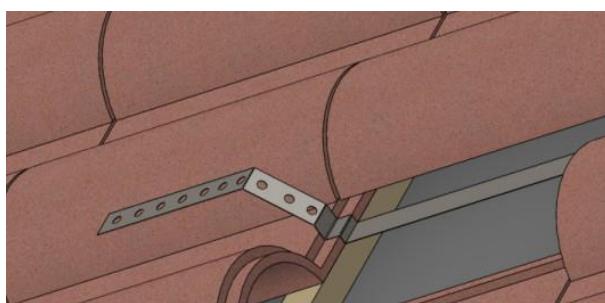
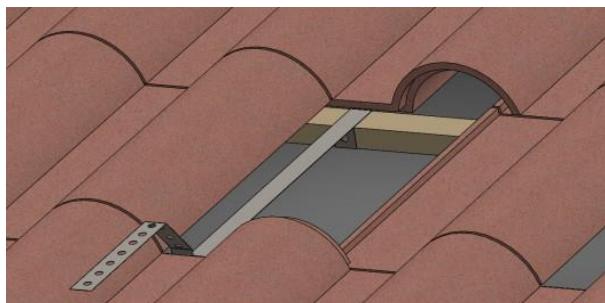
I bulloni non dovranno essere serrati finché non sarà stato inserito il pannello nella struttura.



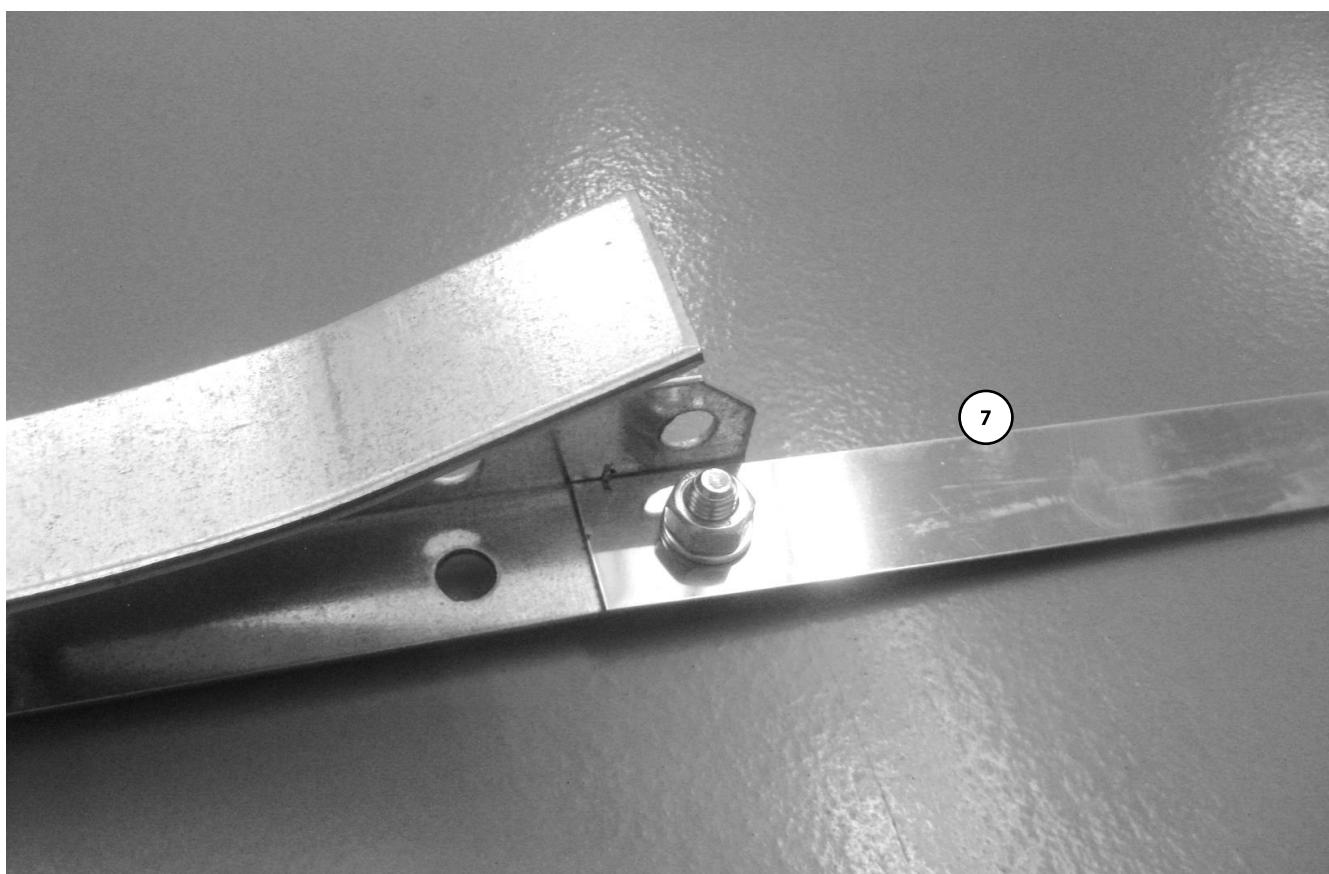
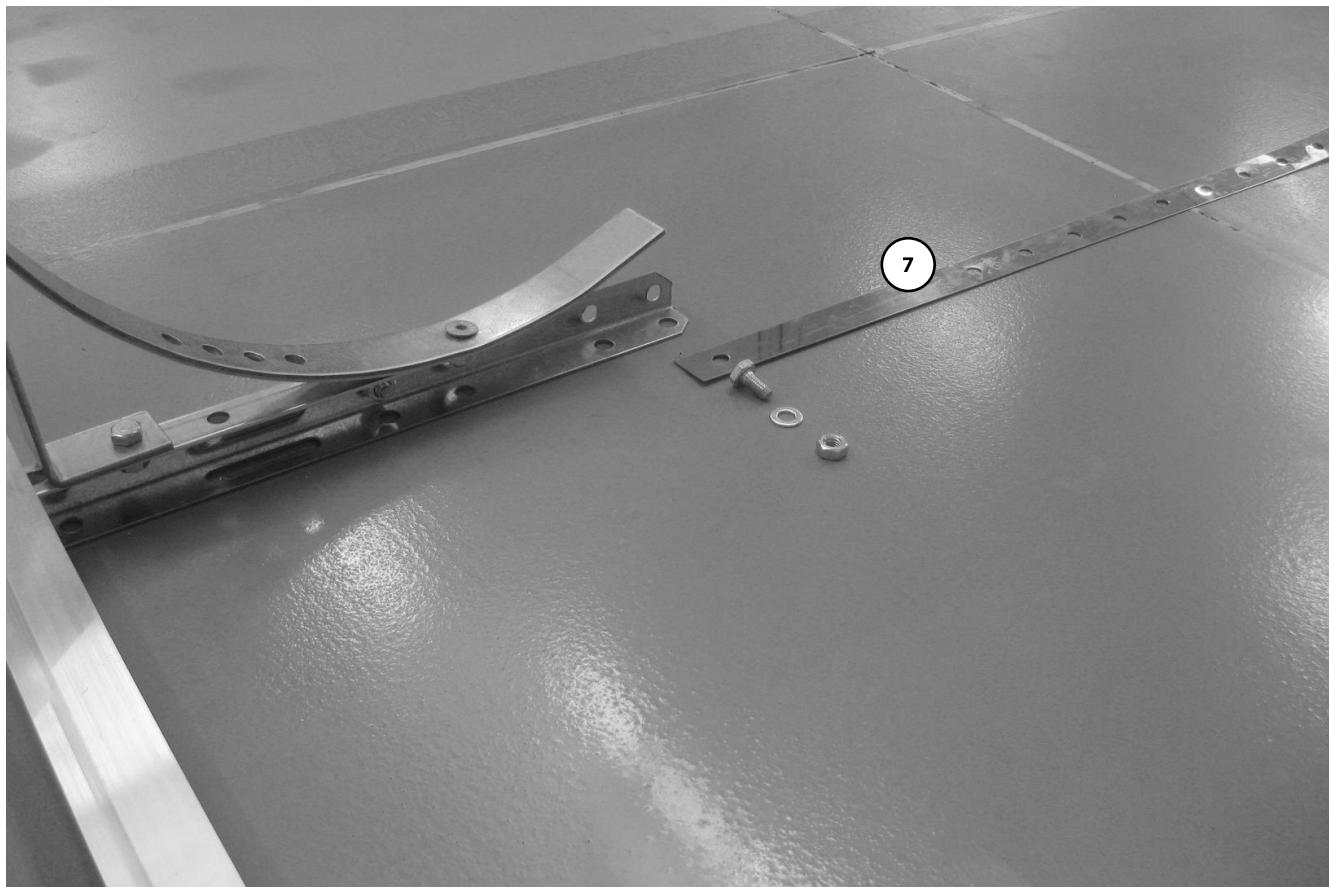


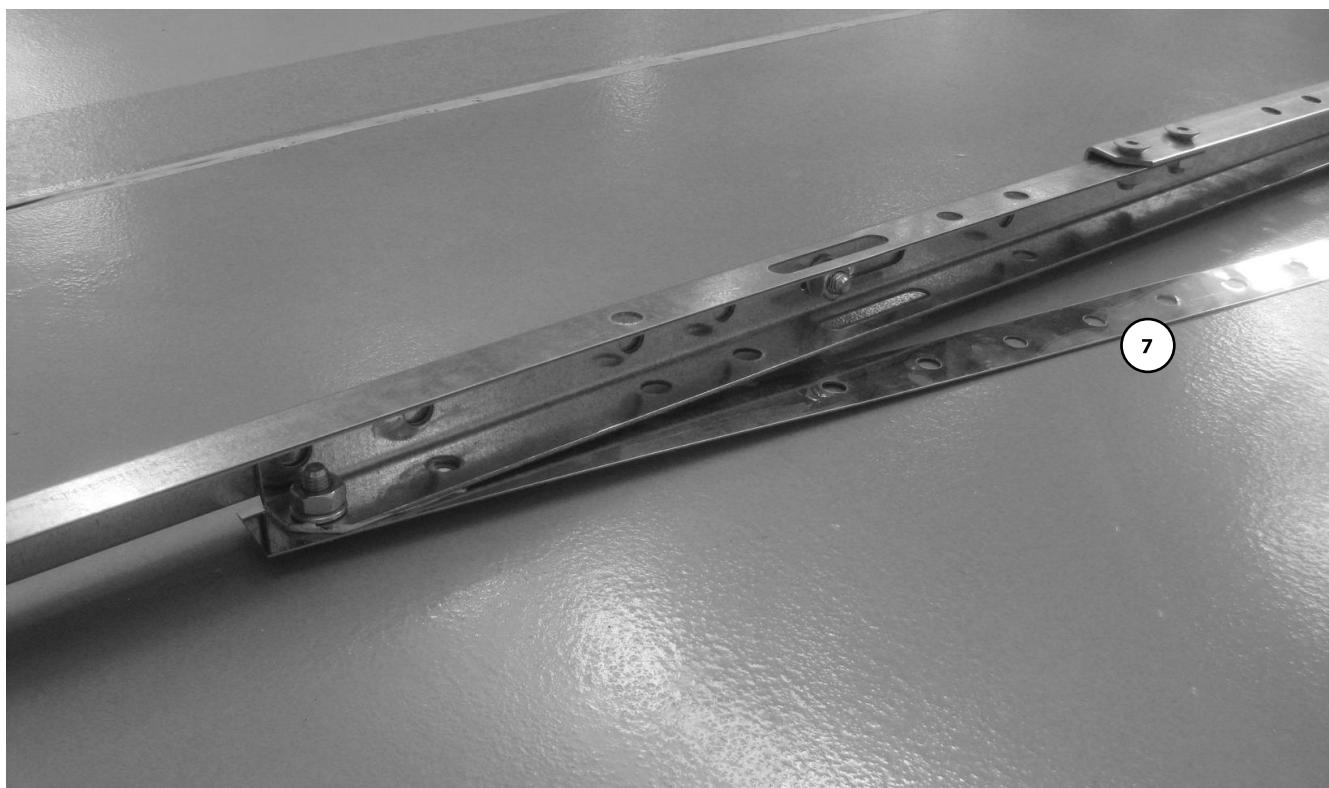
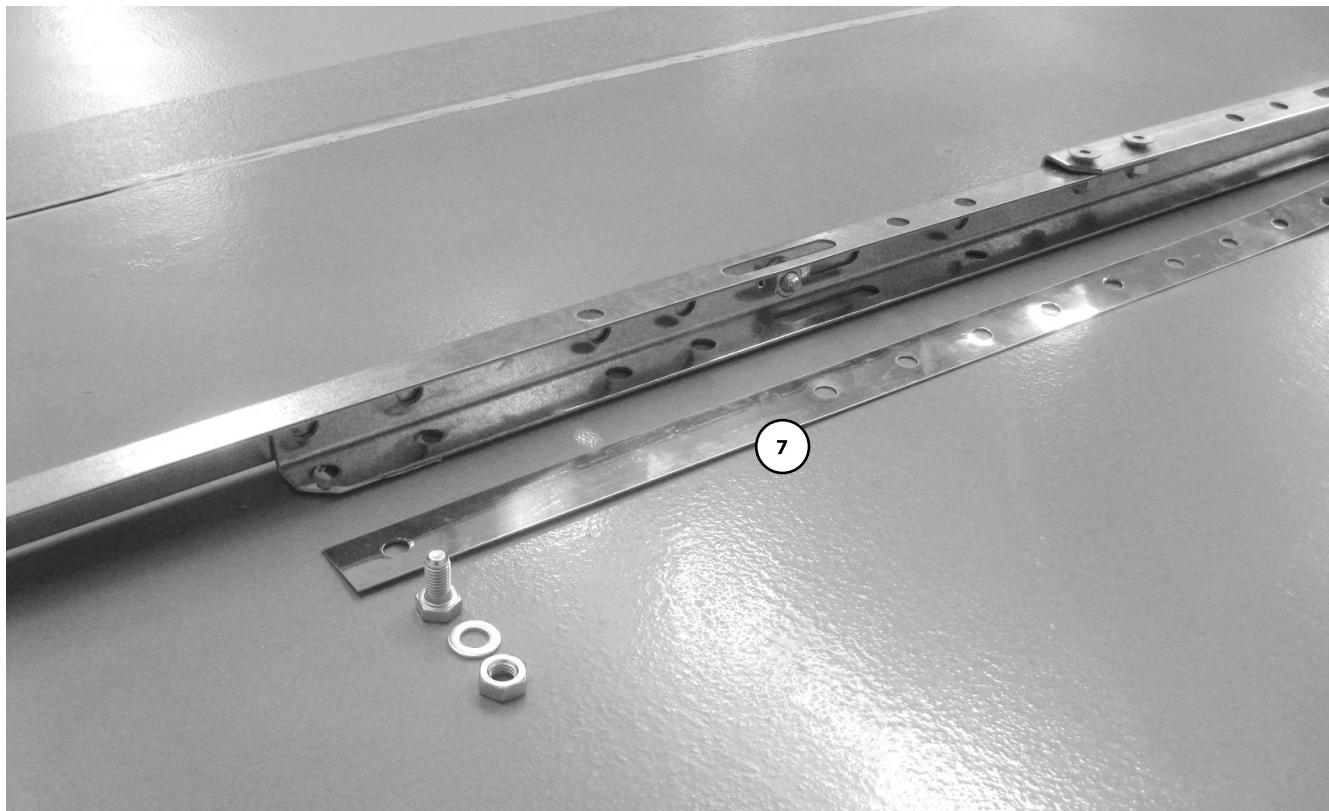


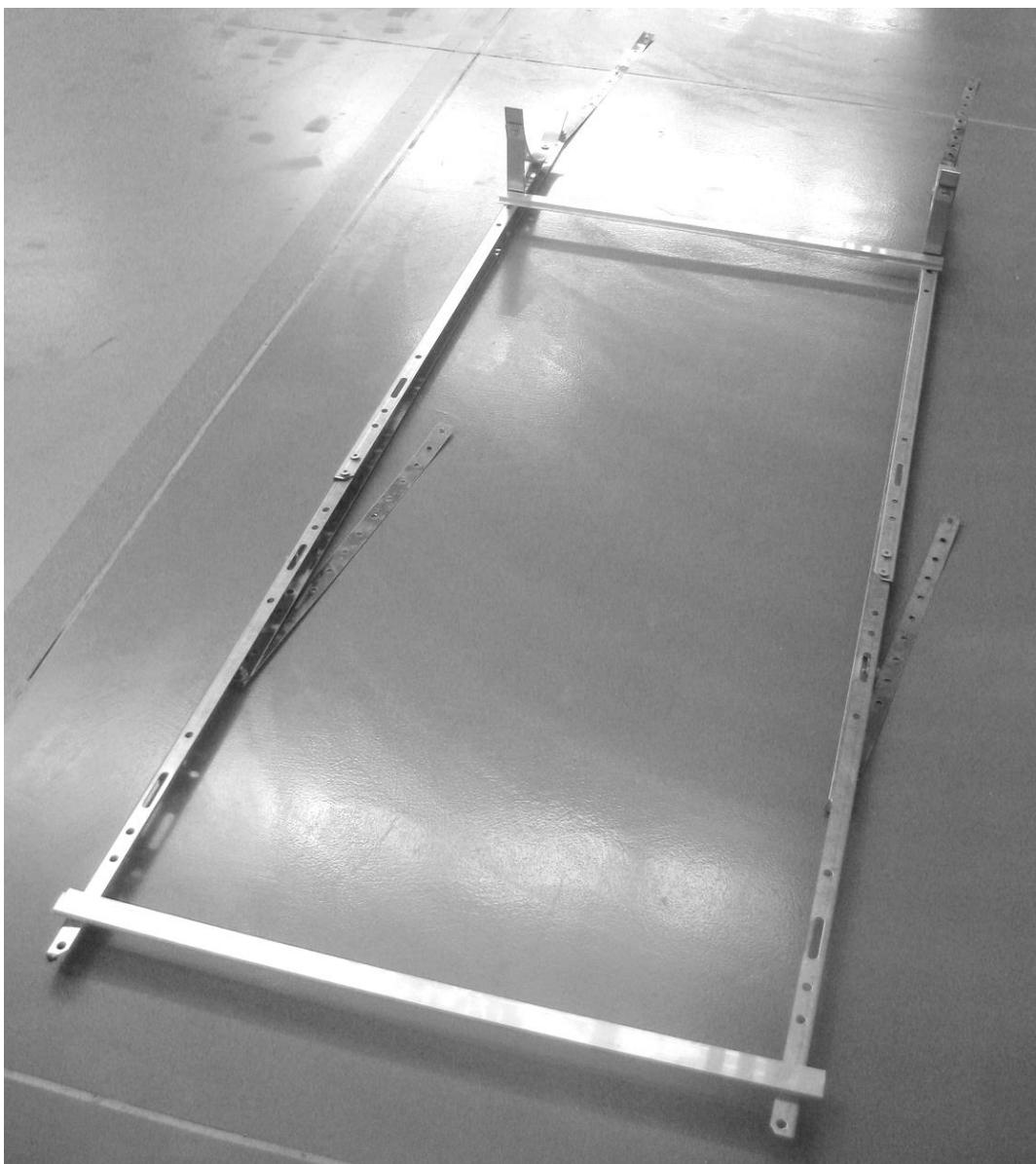
- 2.8. Fissare le 4 bandelle in acciaio forate (7) alla struttura del tetto, in corrispondenza dei fori scelti sul telaio appena montato (vedere anche le immagini dei punti successivi).



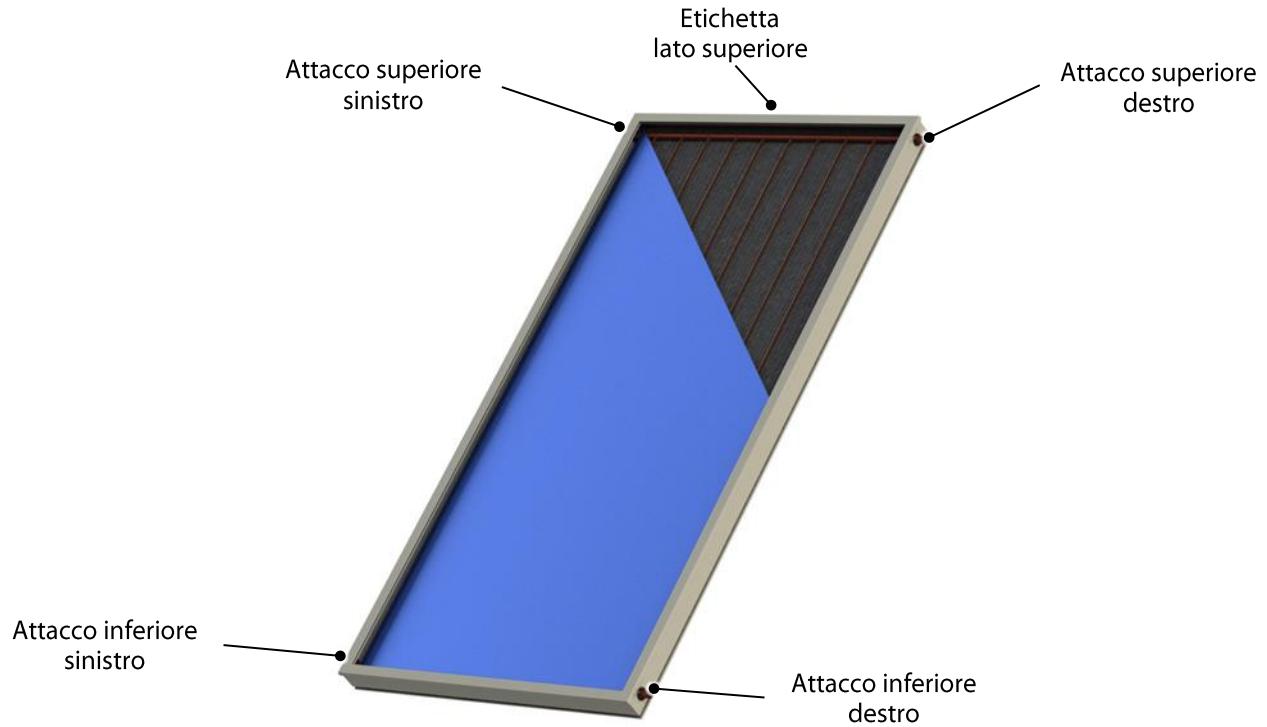
2.9. Fissare la struttura alle 4 bandelle in acciaio forate (7), utilizzando 4 bulloni, 4 dadi e 4 rondelle.







### 3. Installazione del collettore solare

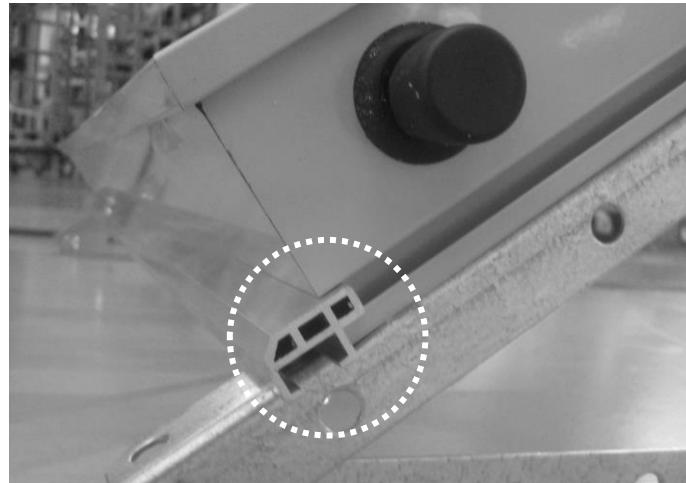


Il collettore ha un verso di installazione.  
Il lato superiore è indicato da una etichetta.

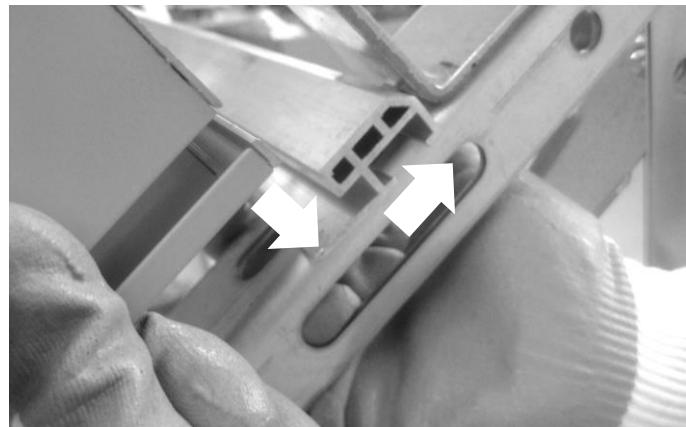


**Le immagini che seguono fanno riferimento all'installazione su struttura per tetti piani, ma l'inserimento del collettore e del bollitore avvengono nello stesso modo anche su struttura per tetti inclinati.**

- 3.1. Inserire il collettore solare nella barra di fissaggio collettore inferiore (6) assicurandosi che si incastri come in figura.  
Il collettore dovrà essere centrato rispetto alla struttura di sostegno.



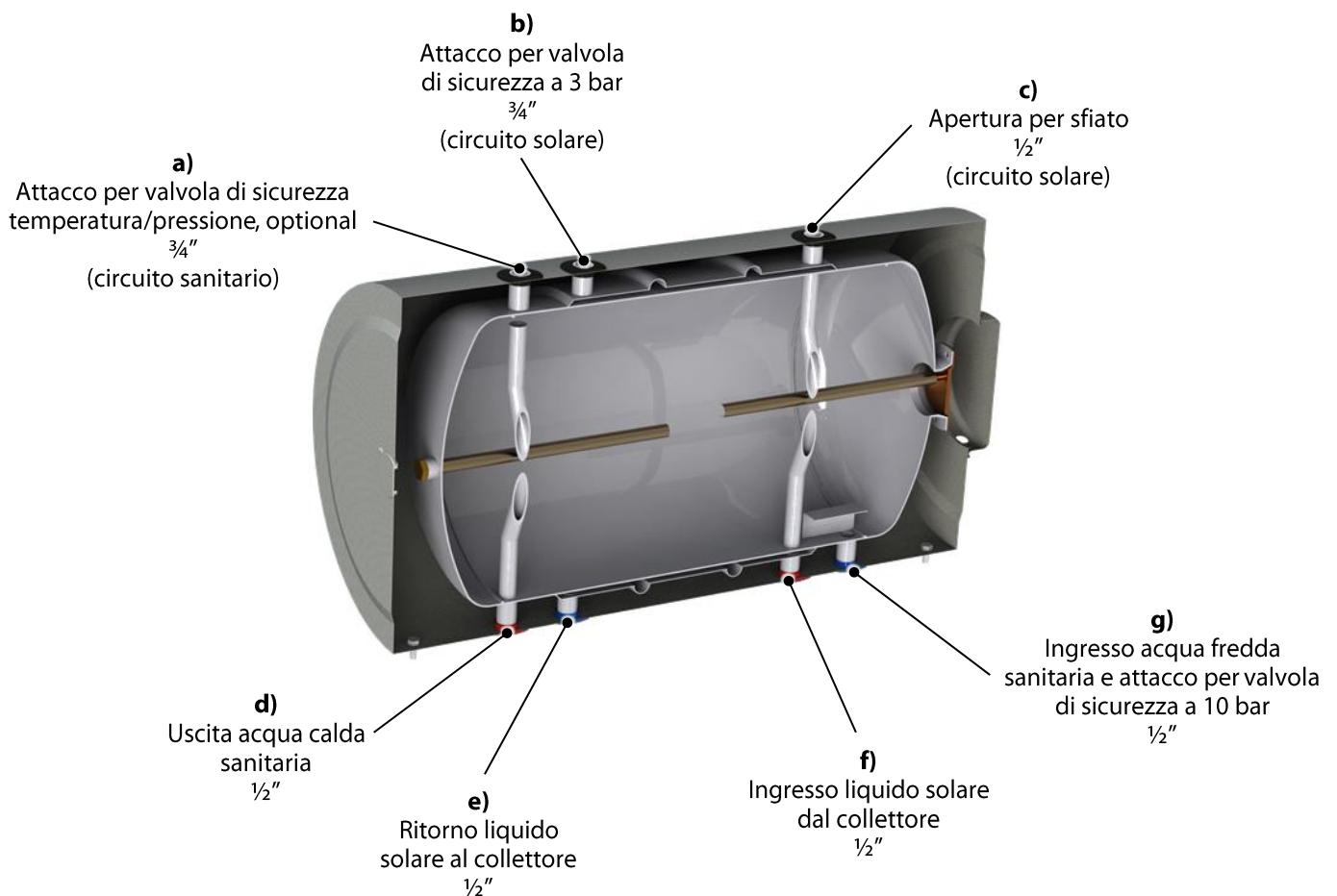
- 3.2. Inserire il collettore solare nella barra di fissaggio collettore superiore (6) facendola scorrere verso l'alto.



- 3.3. Spingere la barra fissaggio collettore superiore (6) verso il basso fino ad incastrarla nel collettore. Quindi serrare i dadi.



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



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.

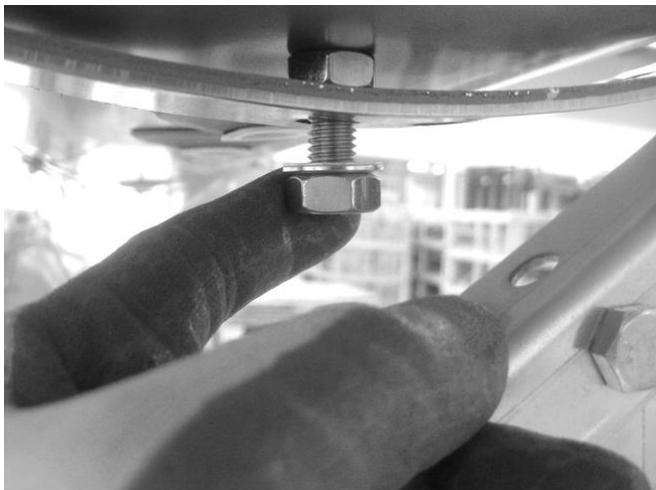
##### 4.1 Inserire il bollitore nella struttura facendolo appoggiare sulle staffe a U.

Il bollitore è dotato di due inserti filettati M10 che dovranno essere inseriti nei fori delle staffe a U che rendono gli inserti perpendicolari al terreno.

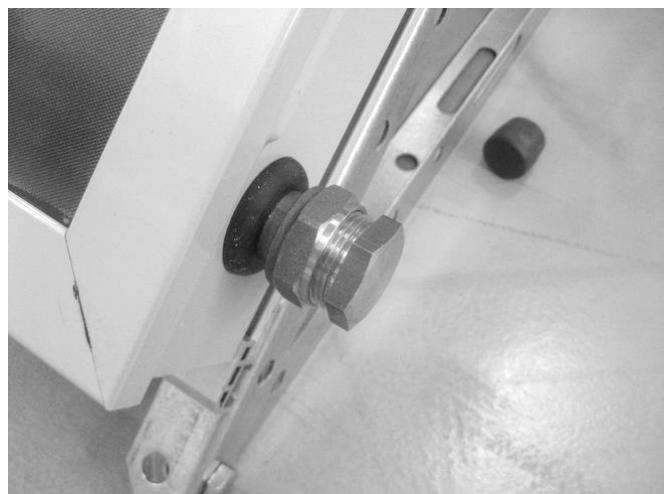




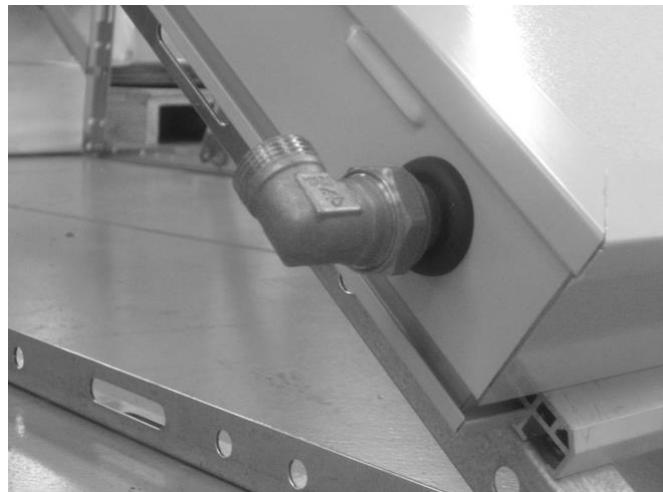
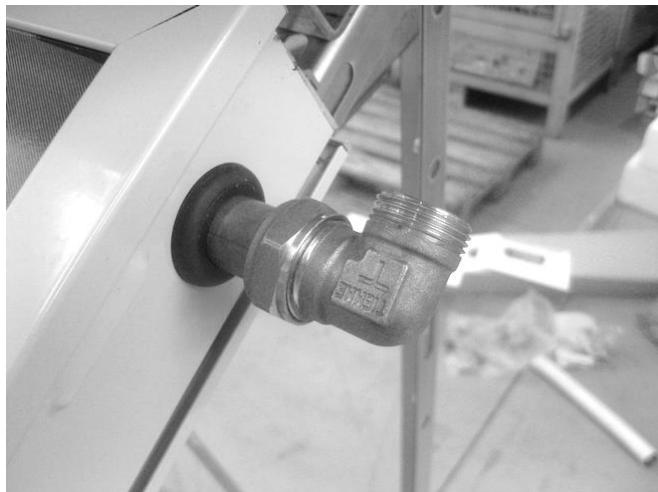
Fissare il bollitore utilizzando 2 dadi e 2 rondelle.



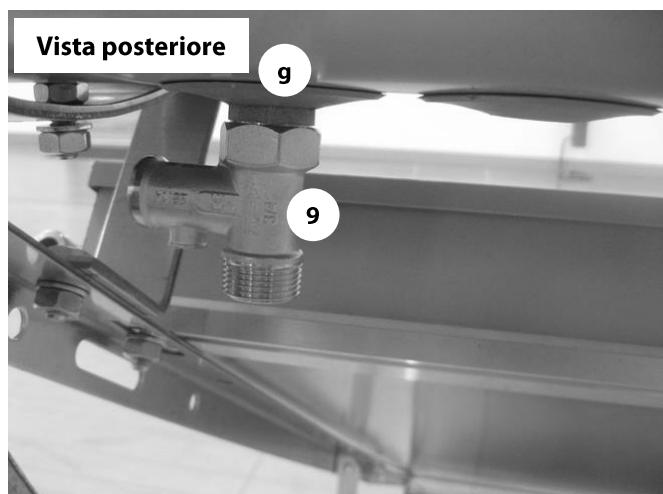
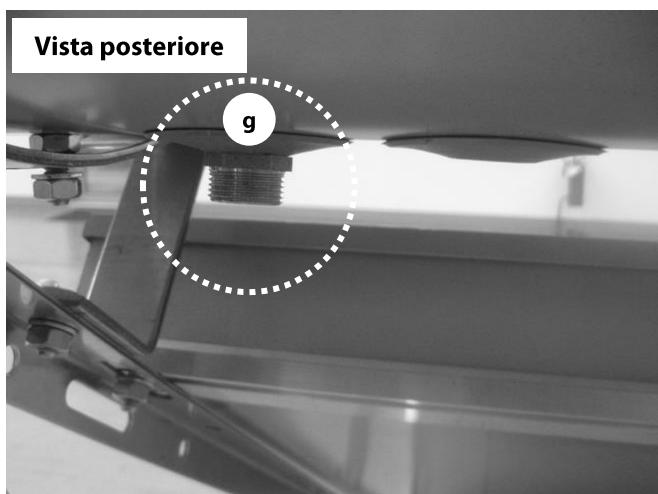
4.2 Fissare i due tappi a stringere Ø22 mm sulle connessioni in alto a sinistra e in basso a destra del collettore solare.



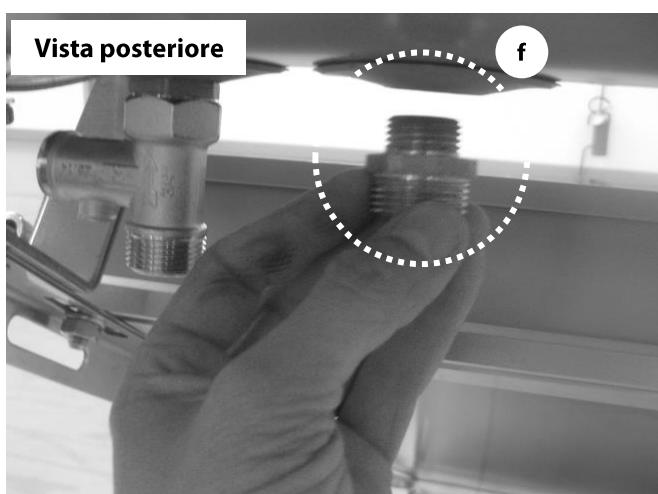
- 4.3 Fissare le due curve a stringere Ø22 mm x  $\frac{3}{4}$ " M sulle connessioni in alto a destra e in basso a sinistra del collettore solare.



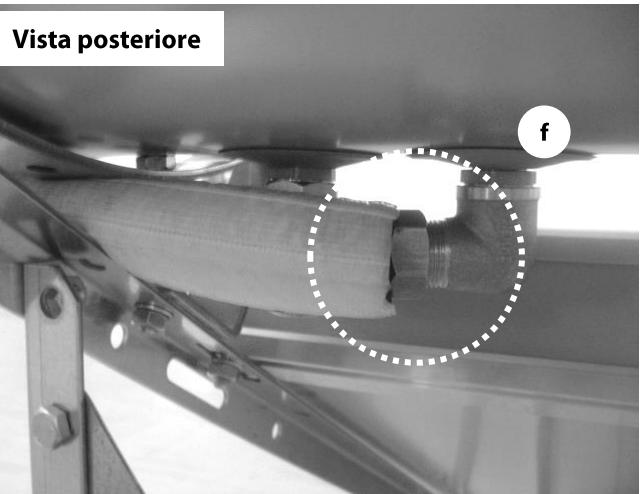
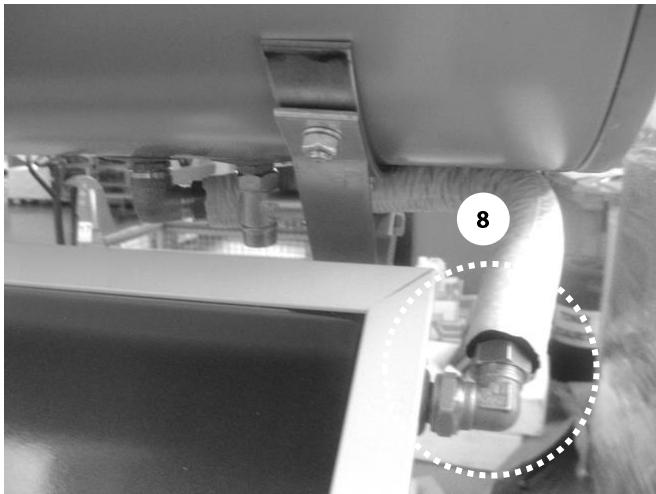
- 4.4 Utilizzando un nipple  $\frac{3}{4}$ " M x  $\frac{1}{2}$ " M collegare la valvola di sicurezza acqua sanitaria a 10 bar (g) all'ingresso acqua fredda sanitaria del bollitore (g).  
Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.



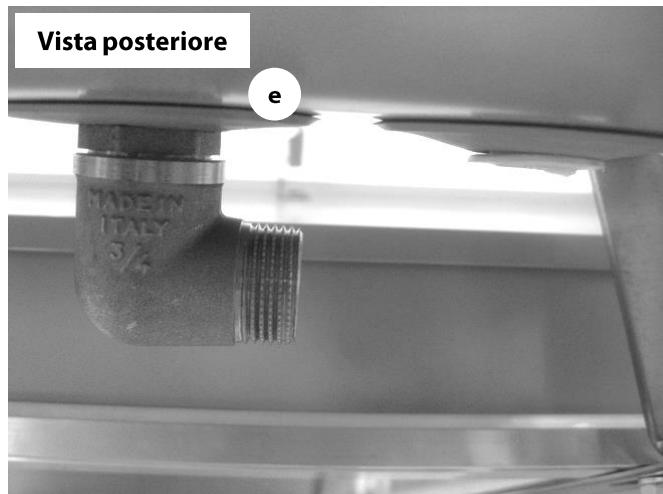
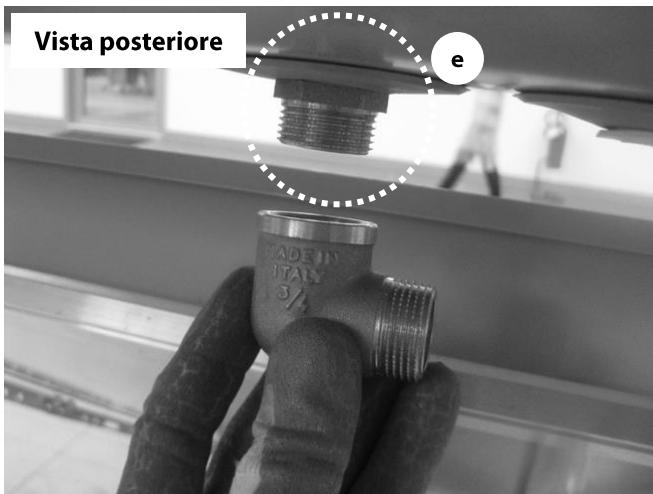
- 4.5 Utilizzando un nipple  $\frac{3}{4}$ " M x  $\frac{1}{2}$ " M collegare una curva  $\frac{3}{4}$ " M x  $\frac{3}{4}$ " F all'ingresso liquido solare del bollitore (f).  
Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.



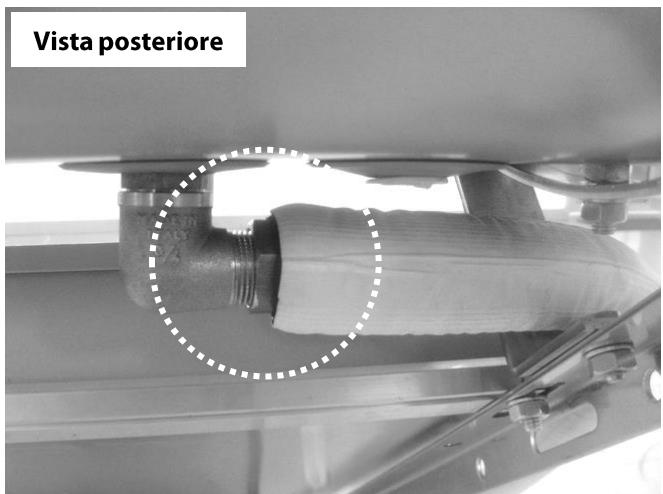
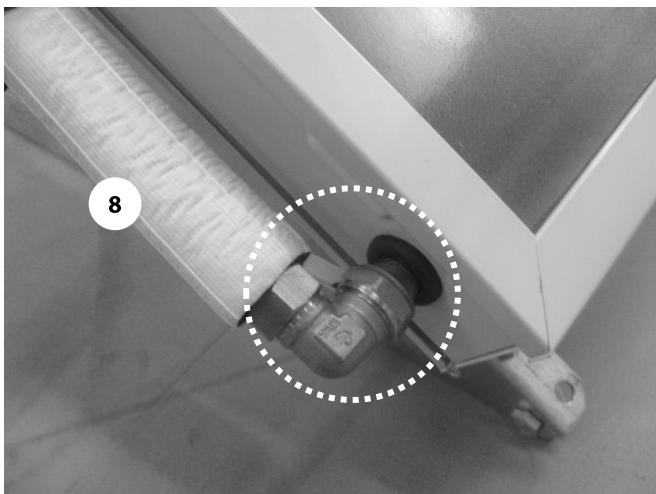
- 4.6 Utilizzando due guarnizioni  $\frac{3}{4}$ " collegare il tubo in acciaio flessibile lunghezza 440 mm (8) alla connessione in alto a destra del collettore solare e all'ingresso liquido solare del bollitore (f).  
 Il tubo in acciaio flessibile dovrà avere un andamento verso l'alto partendo dall'attacco del collettore verso l'attacco del bollitore (f).



- 4.7 Utilizzando un nipple  $\frac{3}{4}$ " M x  $\frac{1}{2}$ " M collegare una curva  $\frac{3}{4}$ " M x  $\frac{3}{4}$ " F al ritorno liquido solare del bollitore (e). Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.



- 4.8 Utilizzando due guarnizioni  $\frac{3}{4}$ " collegare il tubo in acciaio flessibile lunghezza 2200 mm (8) alla connessione in basso a sinistra del collettore solare e al ritorno liquido solare del bollitore (e).





4.9 Collegare l'ingresso acqua fredda e l'uscita acqua calda ai rispettivi attacchi sul bollitore, (g) e (d) rispettivamente.

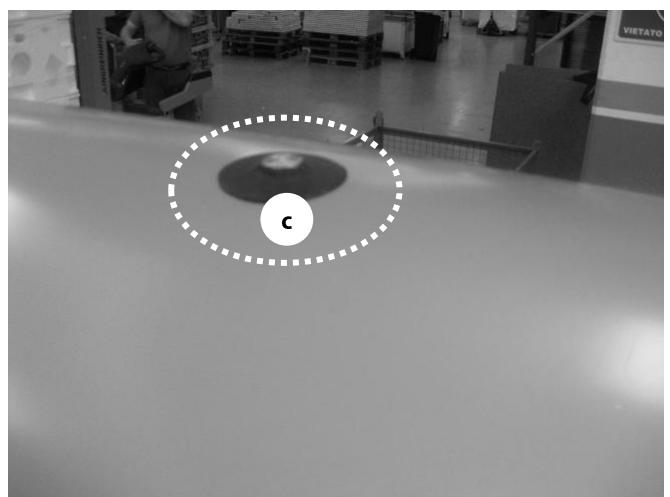
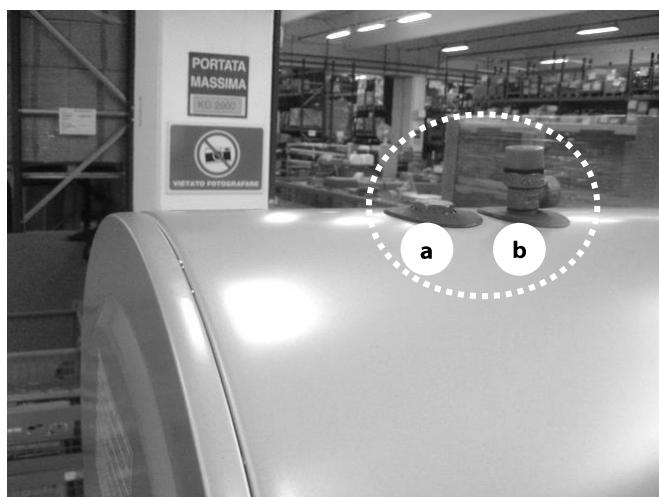
4.10 Procedere al riempimento del bollitore, lato acqua sanitaria come da capitolo **Riempimento dell'impianto del Manuale di installazione, uso e manutenzione.**

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  $\frac{3}{4}$ " M.  
Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.

4.11 Dopo aver miscelato il glicole propilenico procedere al riempimento del circuito solare come da capitolo **Riempimento dell'impianto del Manuale di installazione, uso e manutenzione.**

Una volta riempito il circuito, installare la valvola di sicurezza a 3 bar nell'attacco corrispondente sul bollitore (b)e installare il tappo  $\frac{1}{2}$ " M nell'attacco (c).

Utilizzare un nastro sigillante adatto alle alte temperature per la sigillatura dei filetti.





**ES**

# **Sulpack Natural Plus 150**

# **Sulpack Natural Plus 200**



**Instrucciones para el montaje  
en superficie inclinada**

 **fondital**

## **Índice**

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## 1. Contenido del embalaje

El embalaje contiene el siguiente material:

Ref.	Descripción	Cant.
<b>1</b>	Barra bastidor de acero galvanizado - longitud 2000 mm	2
<b>2</b>	Barra bastidor de acero galvanizado - longitud 1370 mm	2
<b>3</b>	Barra bastidor de acero galvanizado - longitud 1120 mm	2
<b>4</b>	Sostén en U apoyo hervidor	2
<b>5</b>	Sostén en L apoyo hervidor	2
<b>6</b>	Barra de fijación de aluminio - longitud 1000 mm	2
<b>7</b>	Fleje de acero perforado - longitud 750 mm	4
<b>8</b>	Tubo de acero flexible - longitud 440 mm	1
	Tubo de acero flexible - longitud 2220 mm	1
<b>9</b>	Válvula de seguridad agua sanitaria - 10 bar	1
<b>10</b>	Válvula de seguridad circuito solar - 3 bar	1
<b>11</b>	Curva ¾" M x ¾" H	2
	Curva para ajustar con ojiva Ø 22 x ¾" M	2
	Tapón para ajustar con ojiva Ø 22 mm	2
	Tapón ¾" M	1
	Tapón ½" M	1
	Niple ¾" M x ½" M	3
	Junta ¾"	4
<b>12</b>	Bulón M10x25	17
	Arandela M10	22
	Tuerca M10	22
	Bulón de cabeza avellanada M10x20 con ranura hexagonal	8
	Tornillo de fijación M8x50	4
	Arandela M8	4
<b>13</b>	Colector solar plano de vidrio	1
<b>14</b>	Hervidor de acero vitrificado	1
<b>15</b>	Bidón de líquido solar de 1 litro	<i>Sulpack Natural Plus 150</i>
		<i>Sulpack Natural Plus 200</i>
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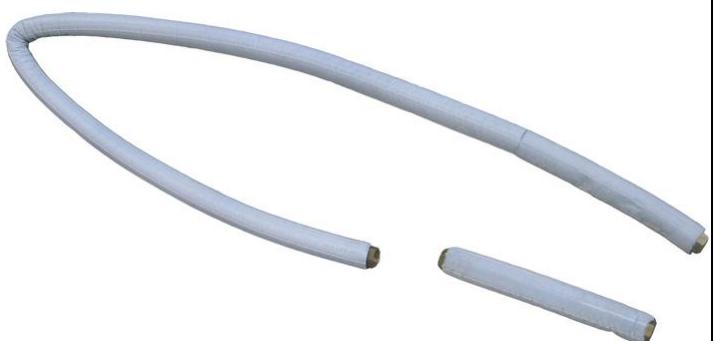
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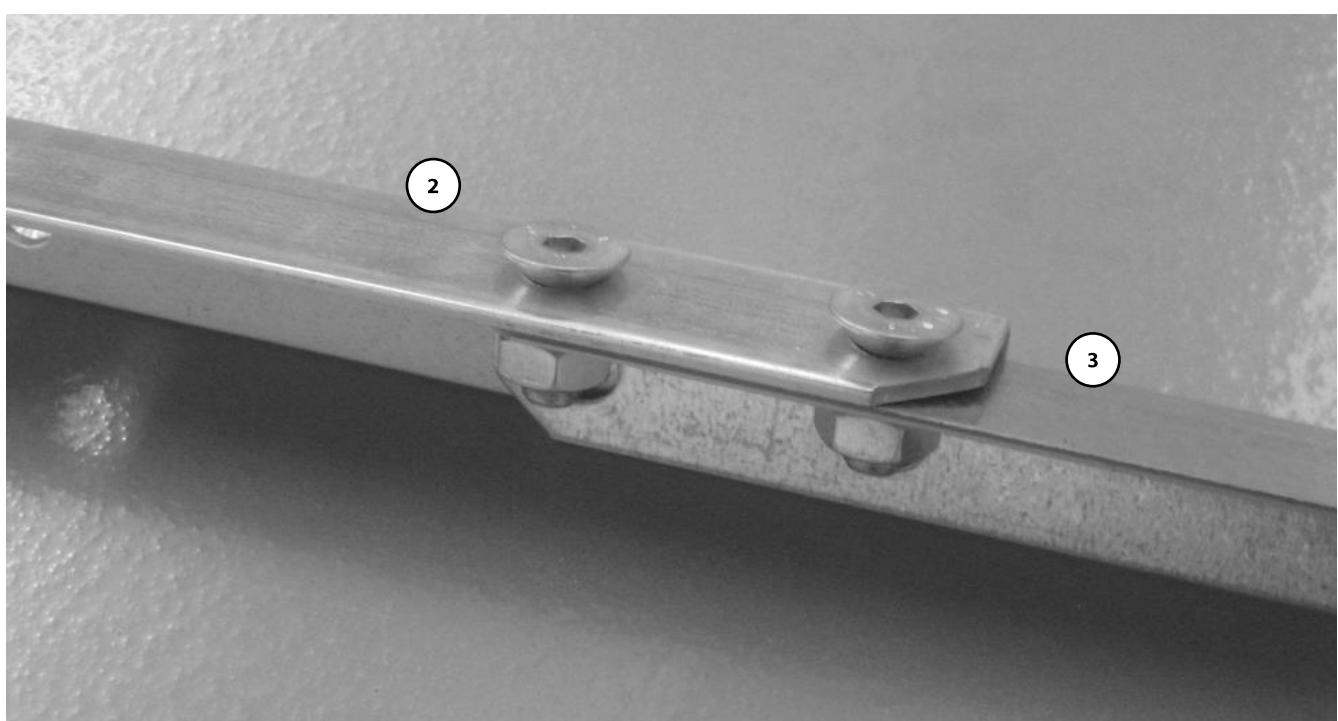
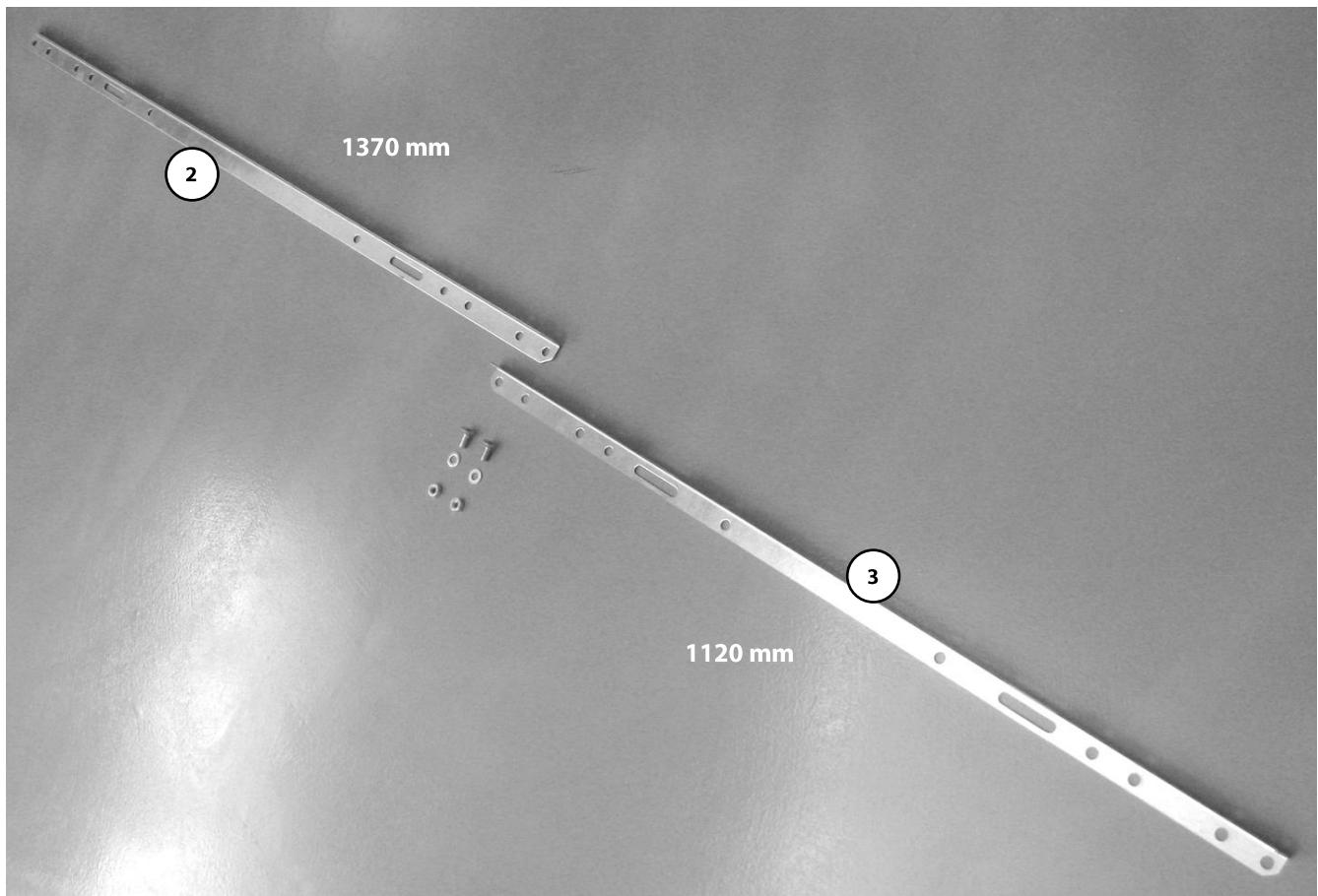
**9****10****11****12****13****14****15**

## **2. Montaje de la estructura**

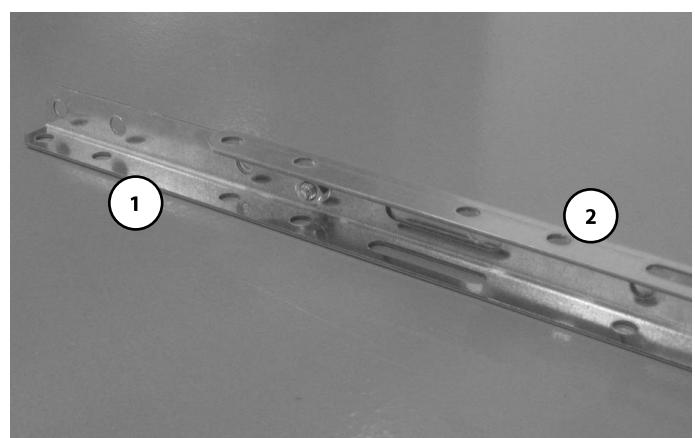
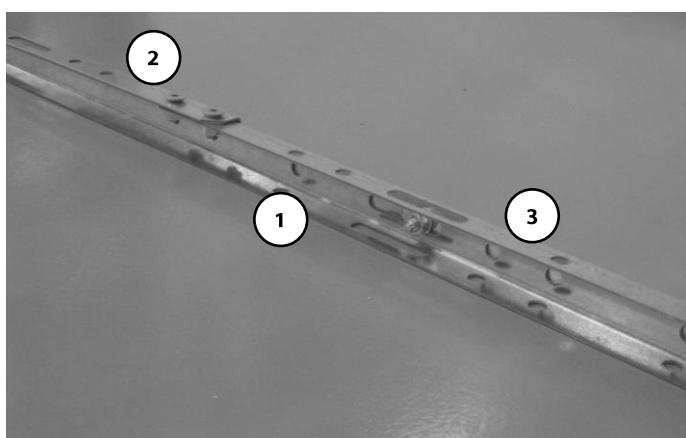
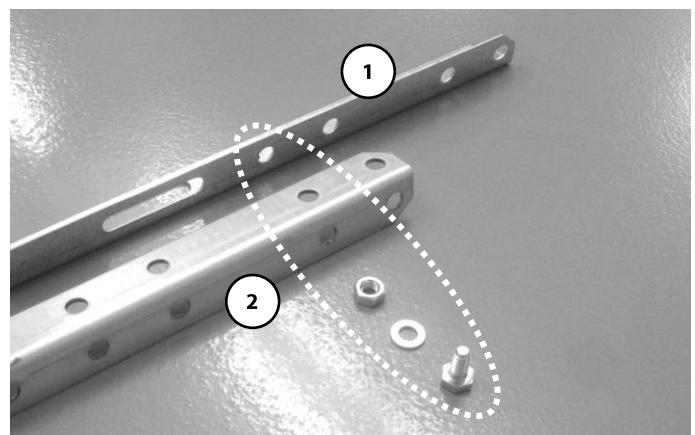
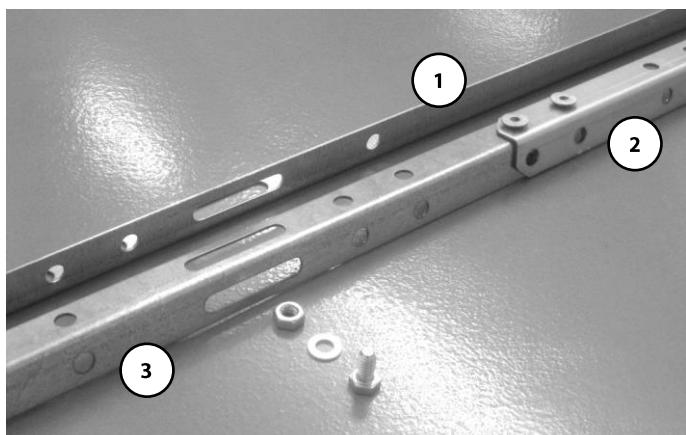
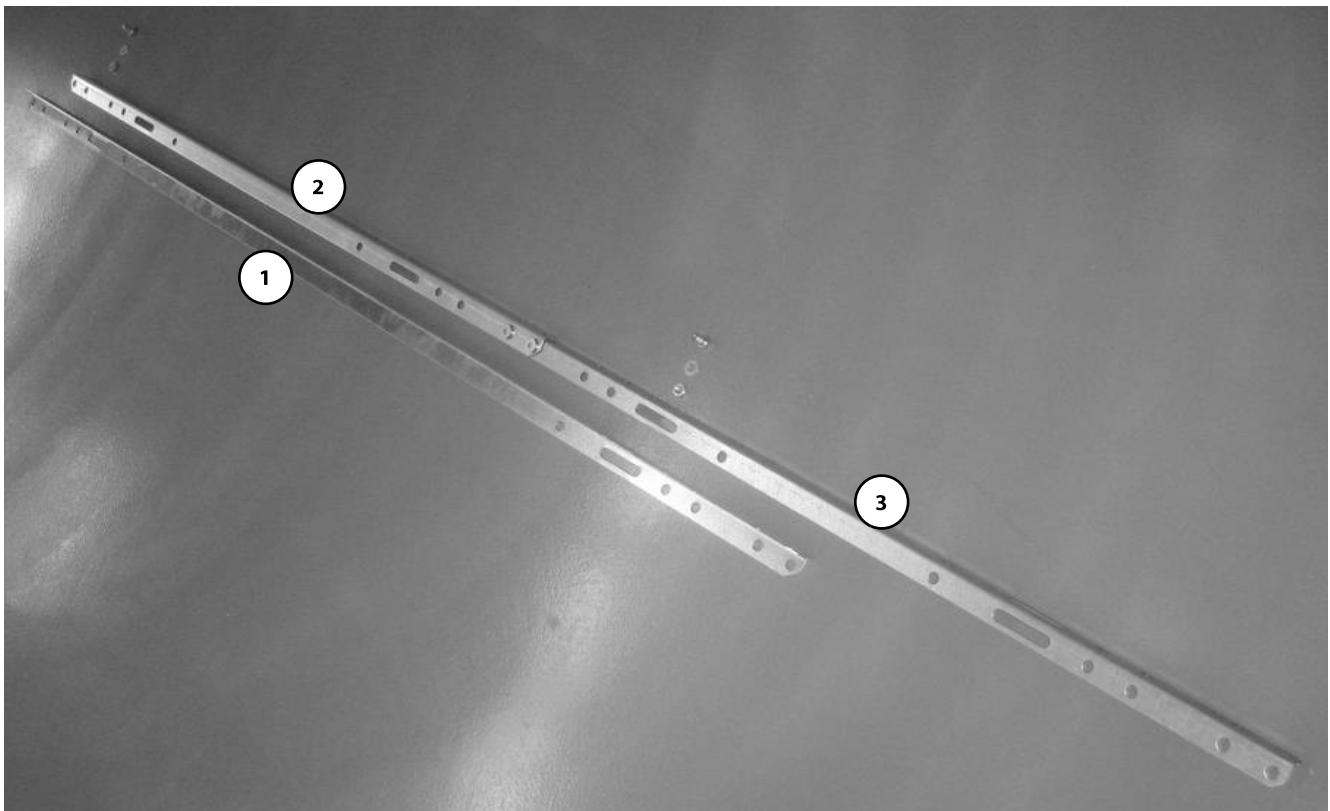
Para la instalación de la estructura de apoyo, seguir las indicaciones a continuación:

- 2.1. Unir una barra de longitud 1370 mm (2) con una barra de longitud 1120 mm (3) utilizando 2 bulones de cabeza avellanada, 2 tuercas y 2 arandelas.

La barra de longitud 1370 mm (2) deberá superar la barra de longitud 1120 mm (3).



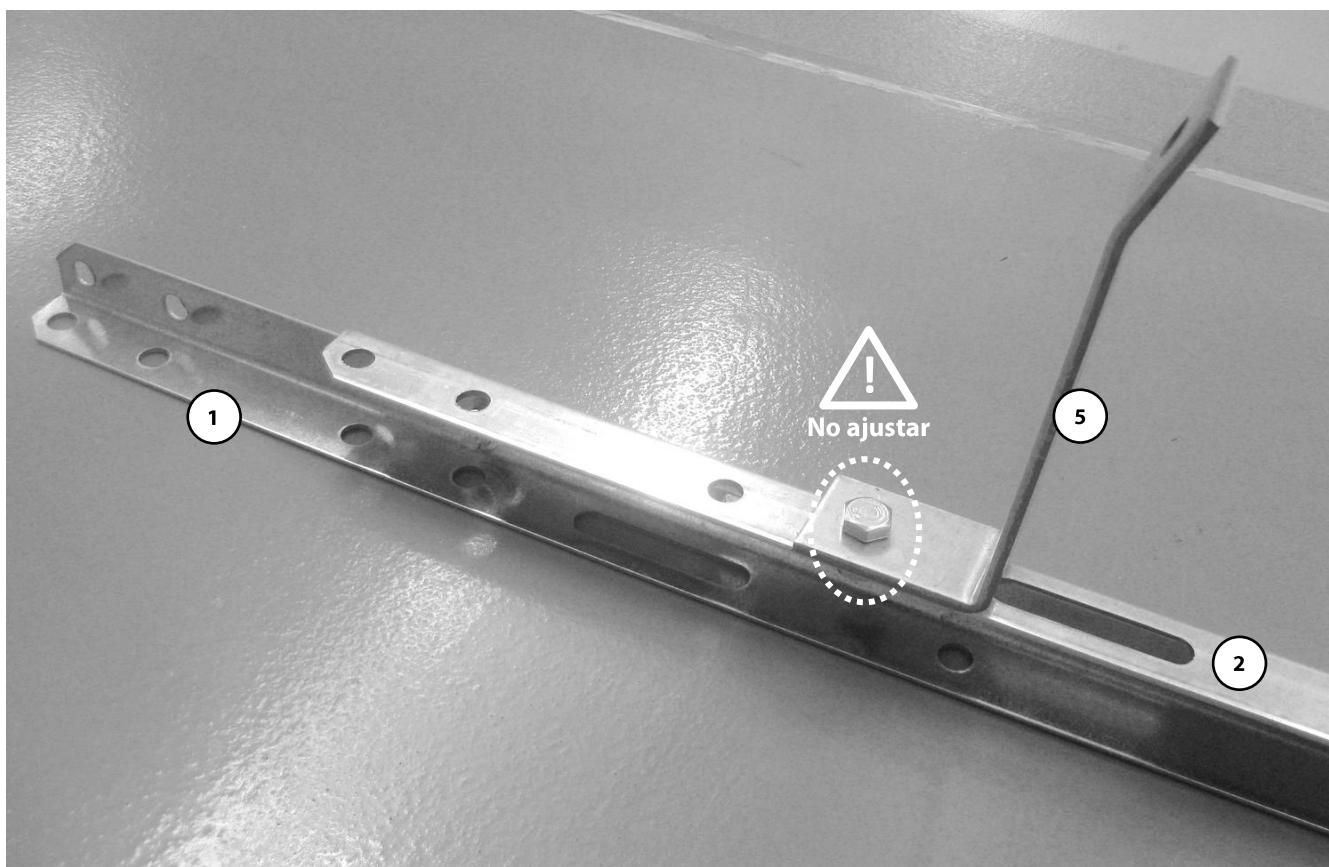
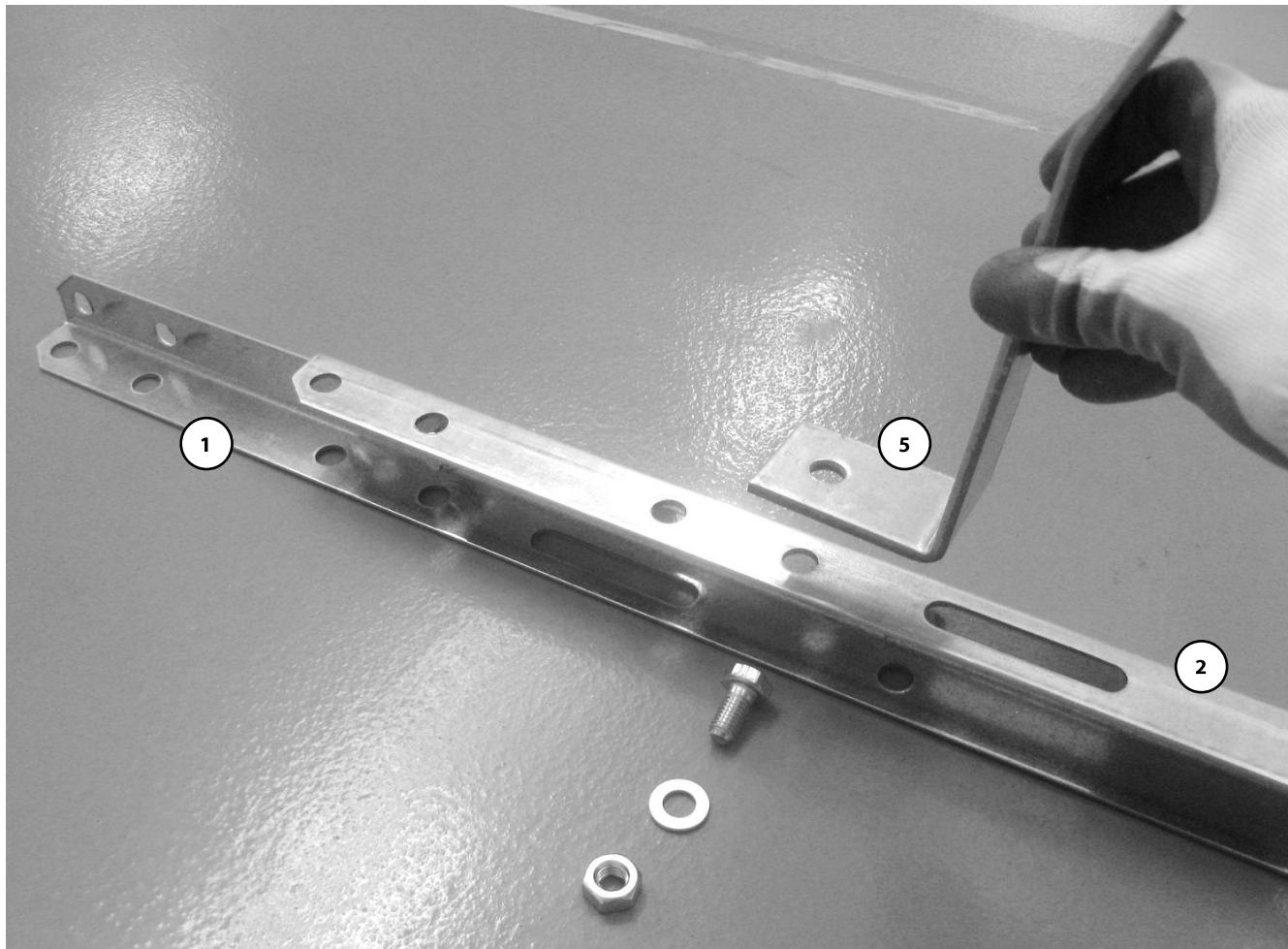
2.2. Unir la barra de longitud 2000 mm (1) con las barras previamente unidas utilizando 2 bulones, 2 tuercas y 2 arandelas.



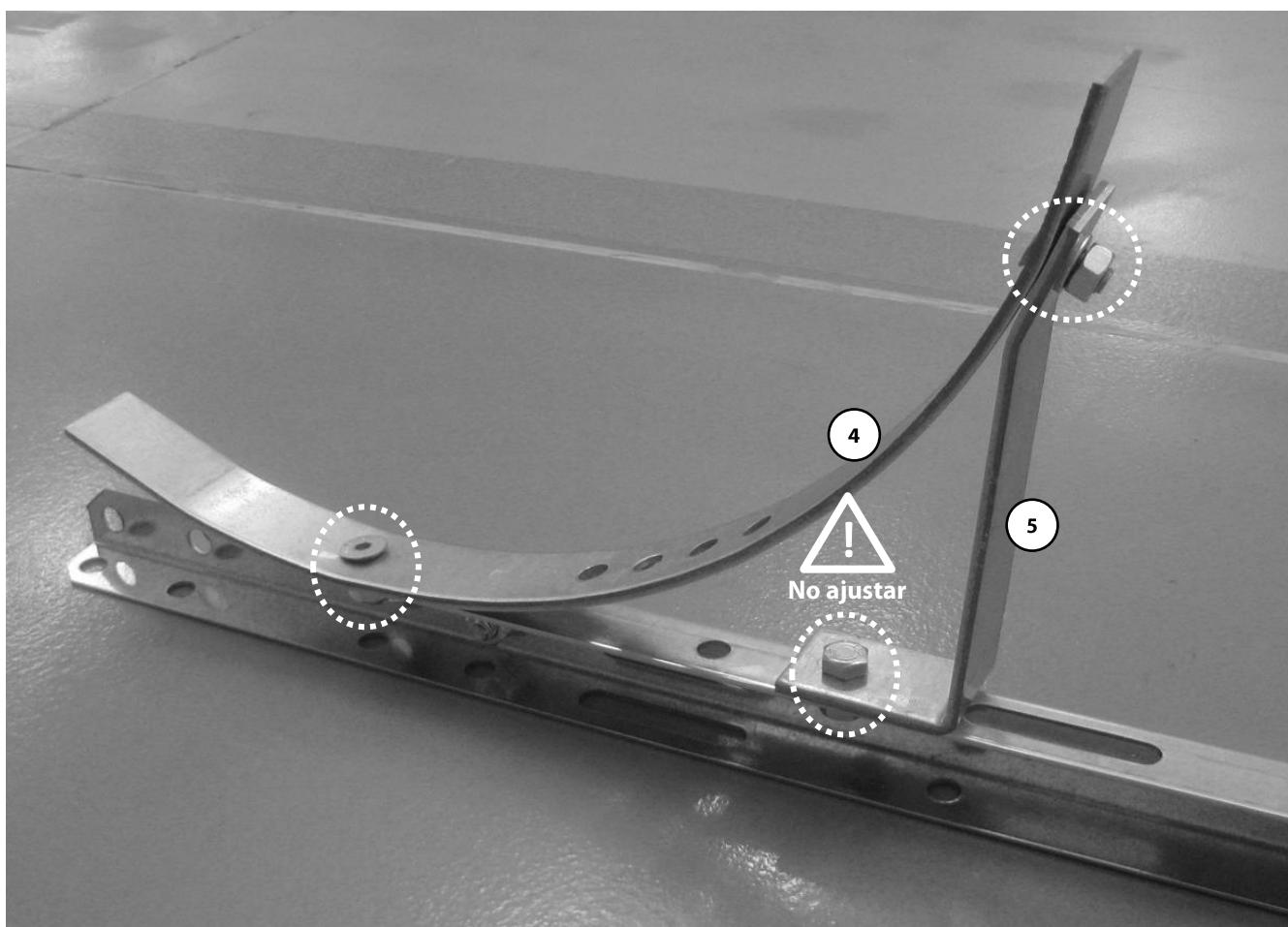
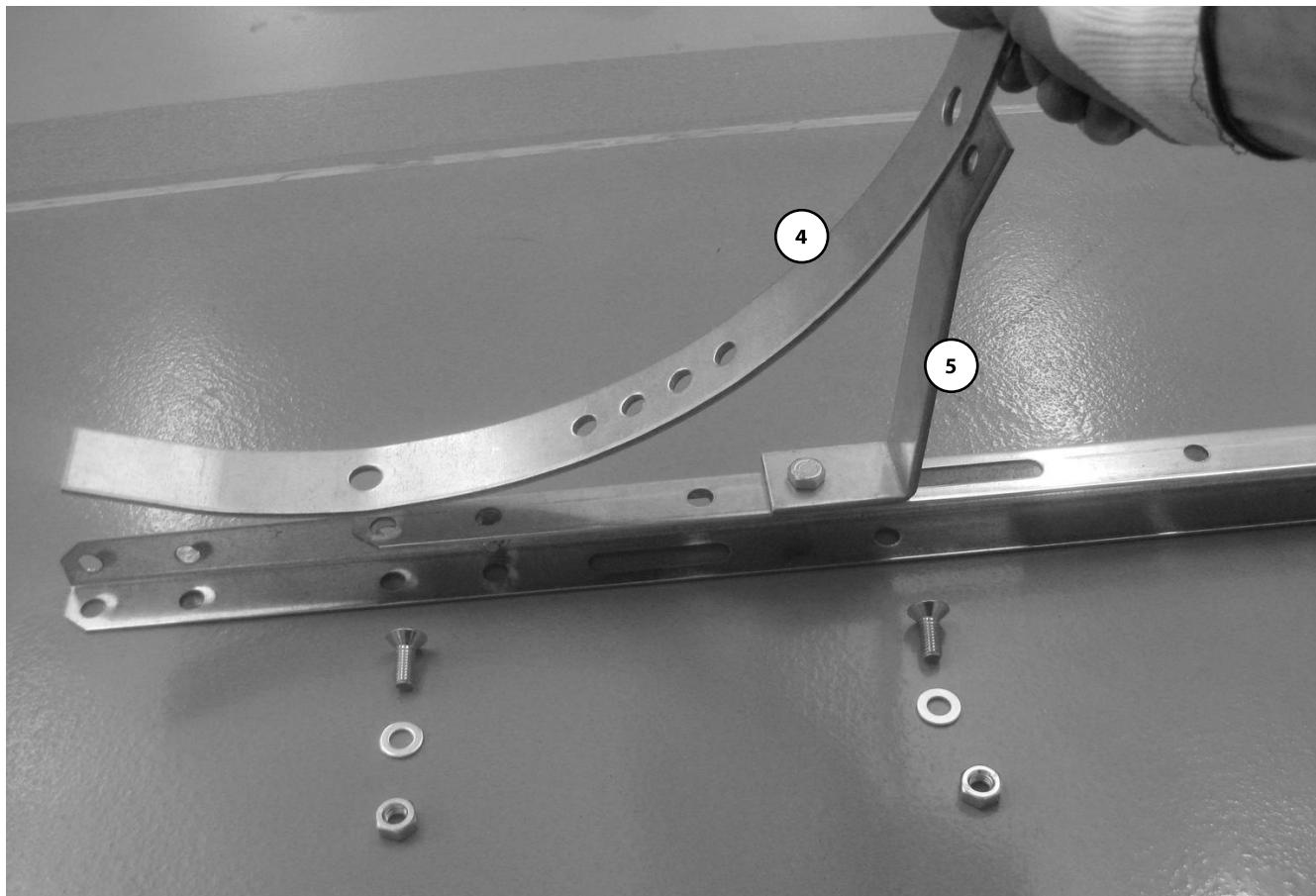
Una vez montada, la barra de longitud 2000 (1) sobresaldrá de la barra de longitud 1370 mm (2).

2.3. En las barras que se han montado fijar el sostén en L (5) utilizando 1 bulón, 1 tuerca y 1 arandela.

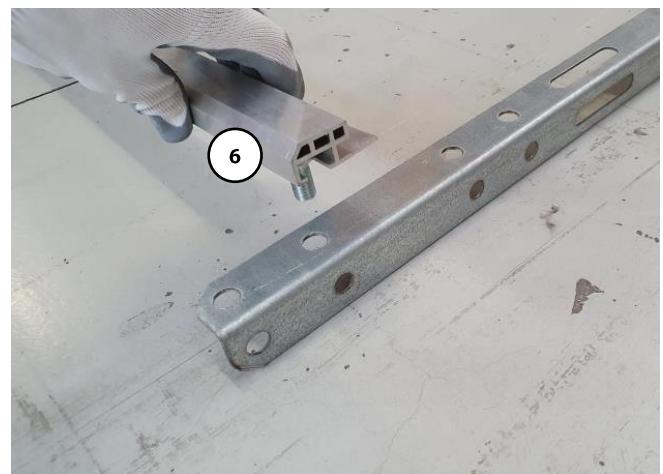
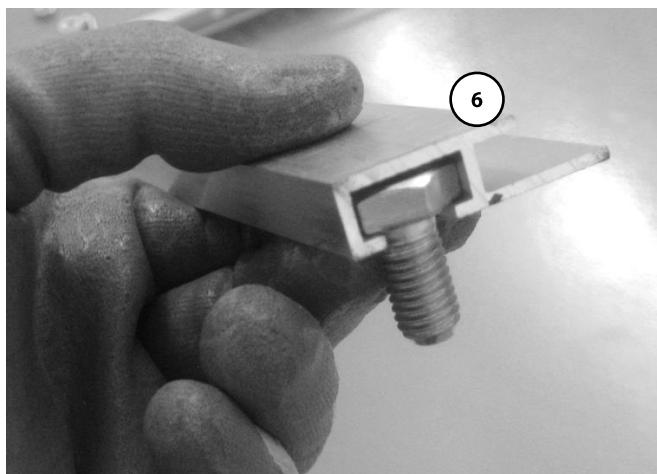
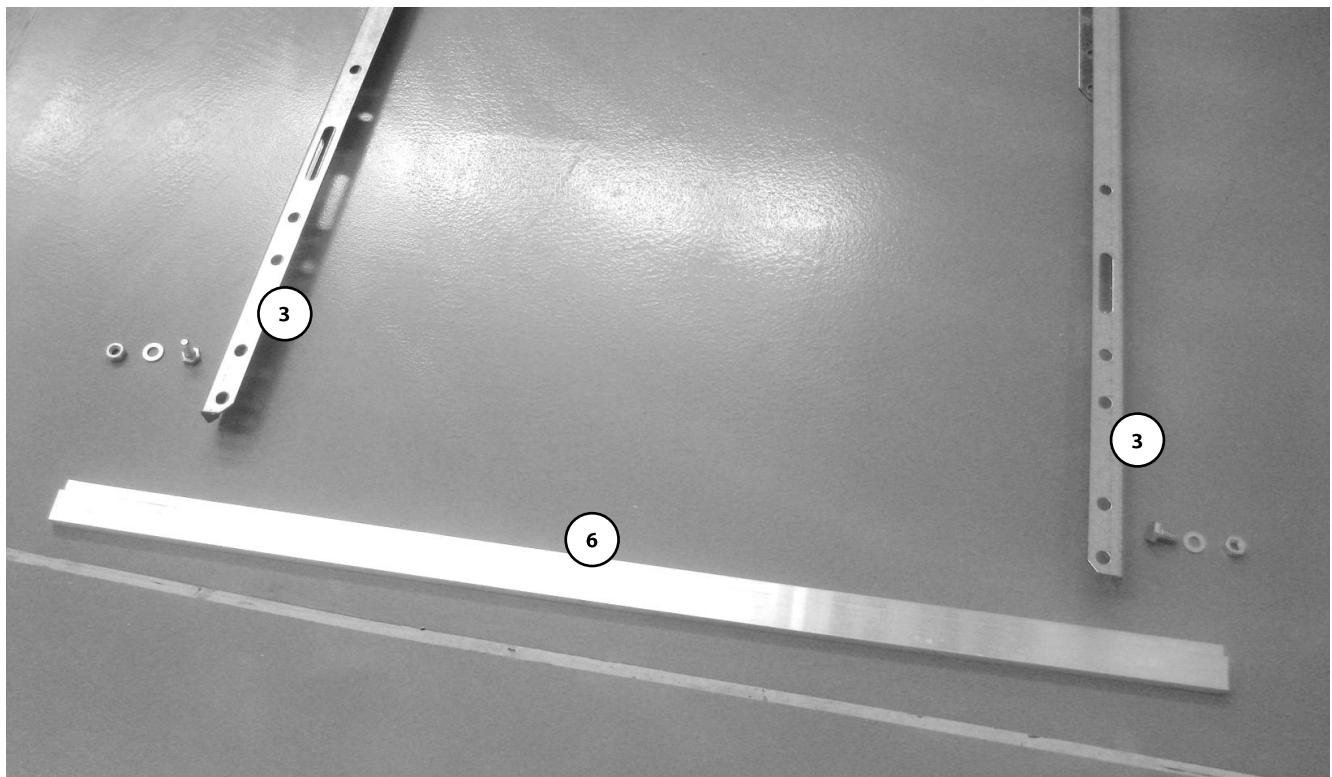
**ATENCIÓN:** por el momento no ajustar completamente la tuerca ni el bulón.

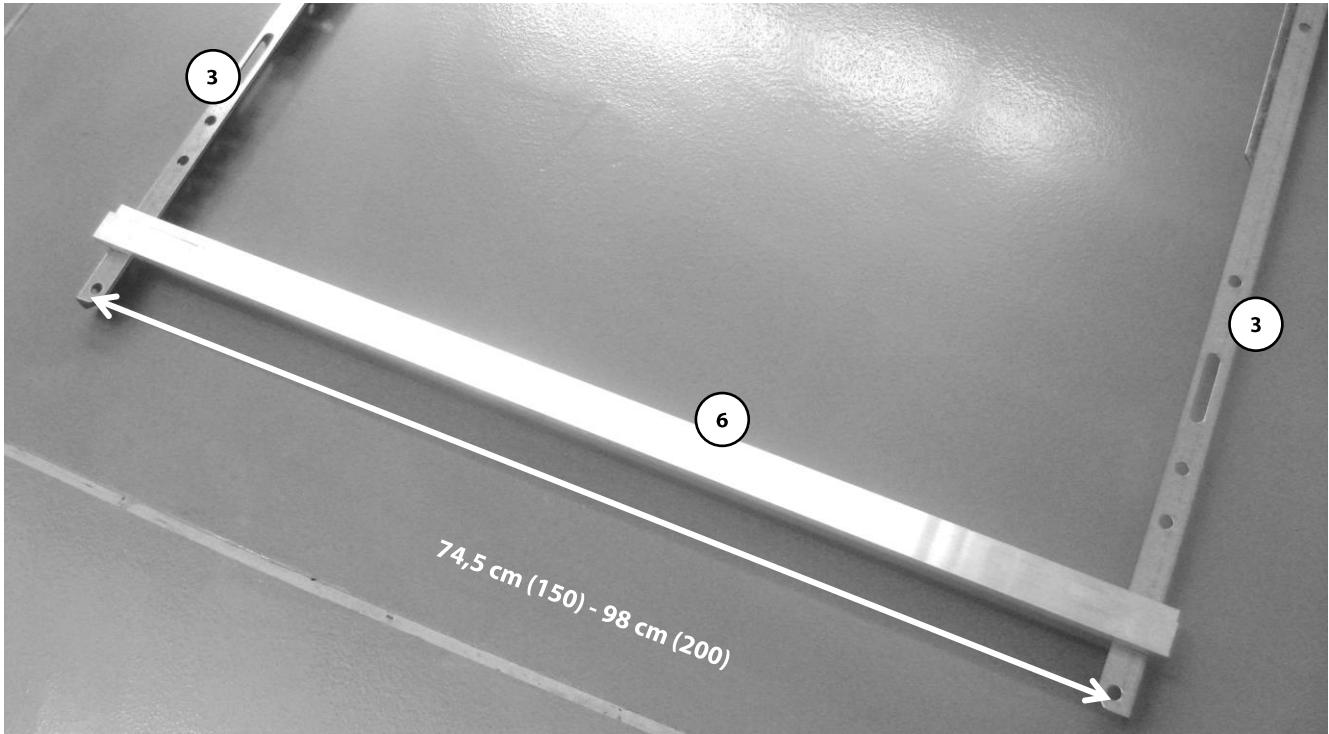


2.4. Fijar el sostén en U (4) utilizando 2 bulones de cabeza avellanada, 2 tuercas y 2 arandelas.



- 2.5. Repetir los puntos 2.1 a 2.4 para preparar otra estructura como la que se ha preparado, pero espejada.
- 2.6. Unir, en la parte inferior, las 2 estructuras previamente preparadas utilizando una barra de fijación colector de longitud 990 mm (**6**), 2 bulones, 2 tuercas y 2 arandelas.



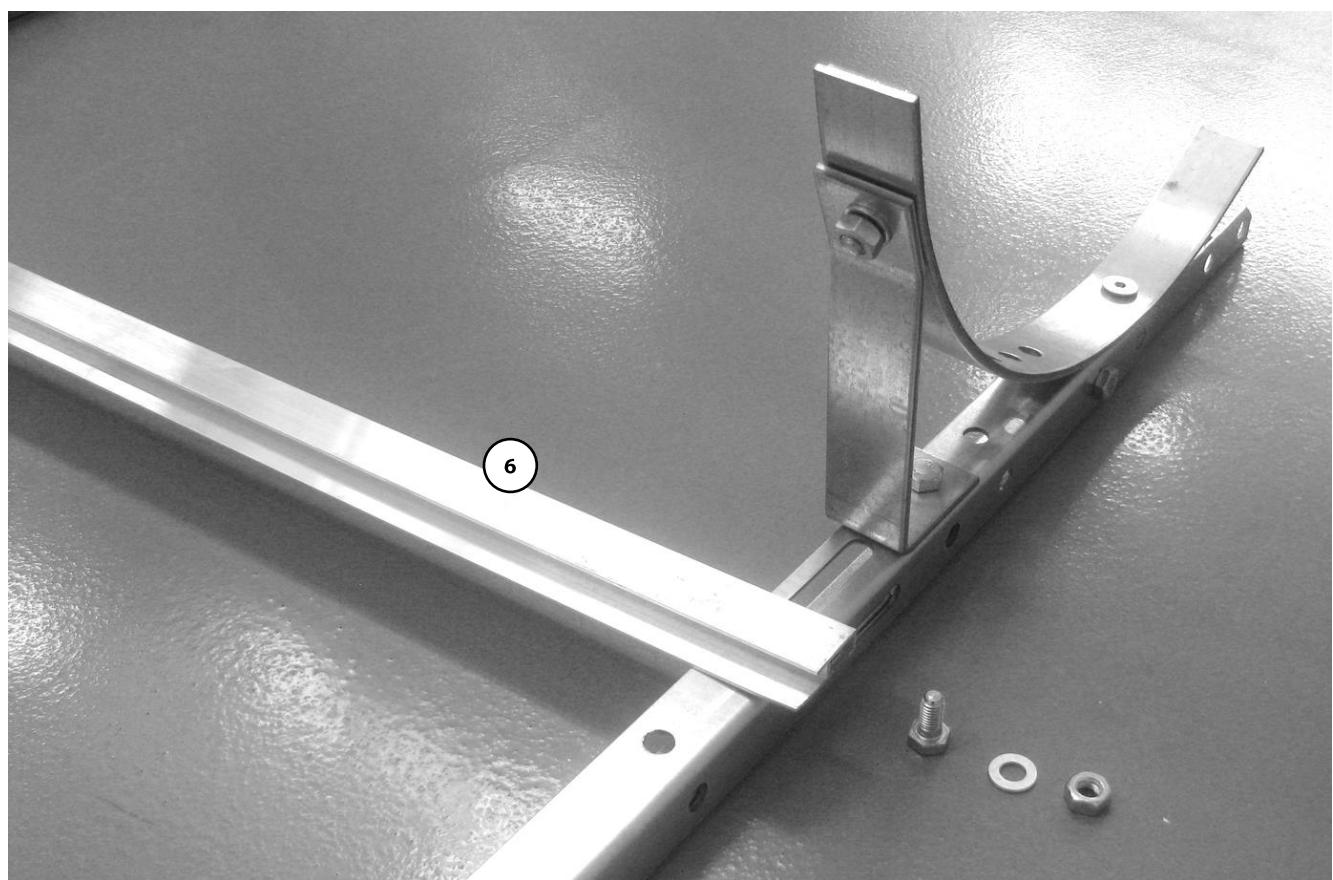


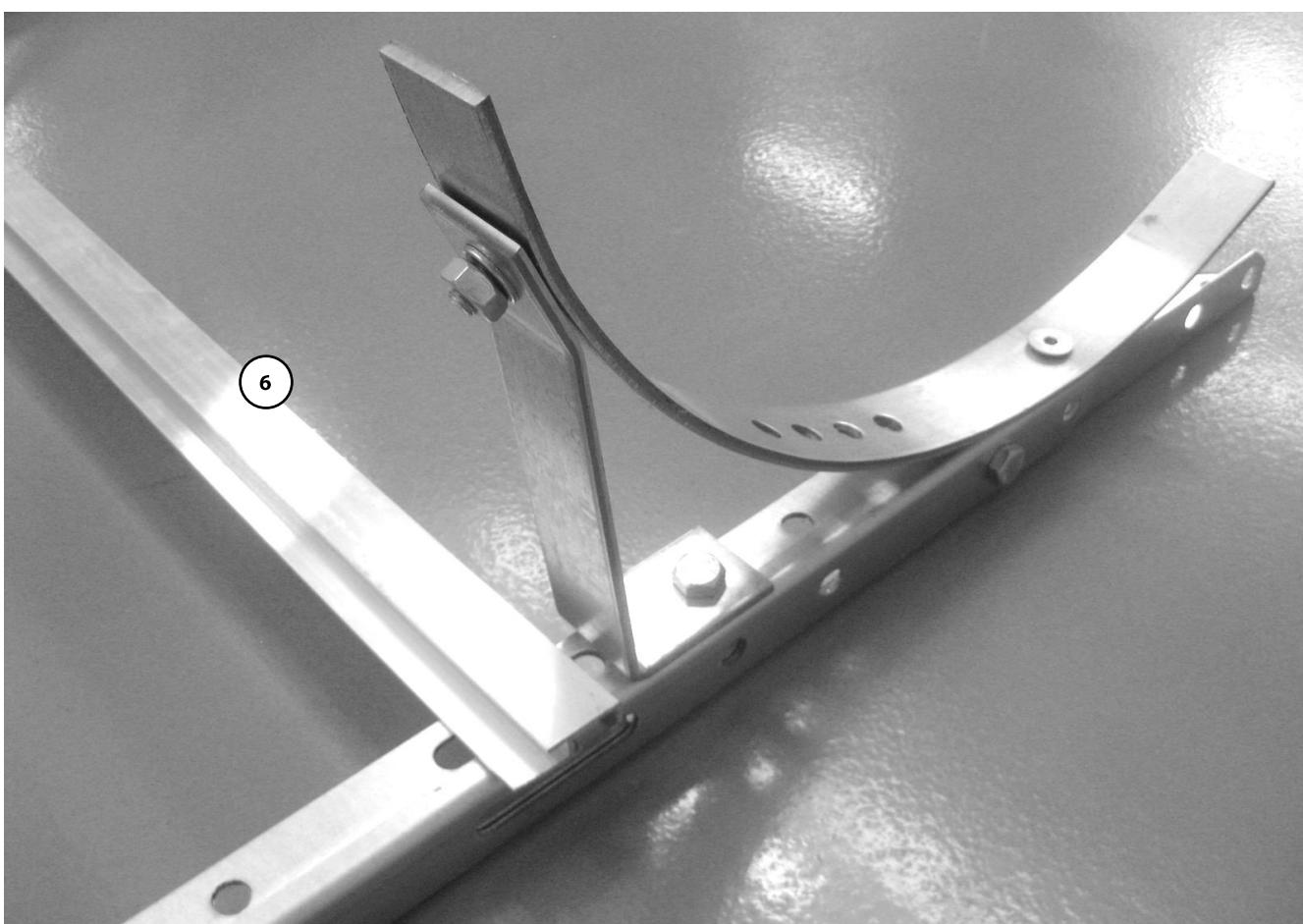
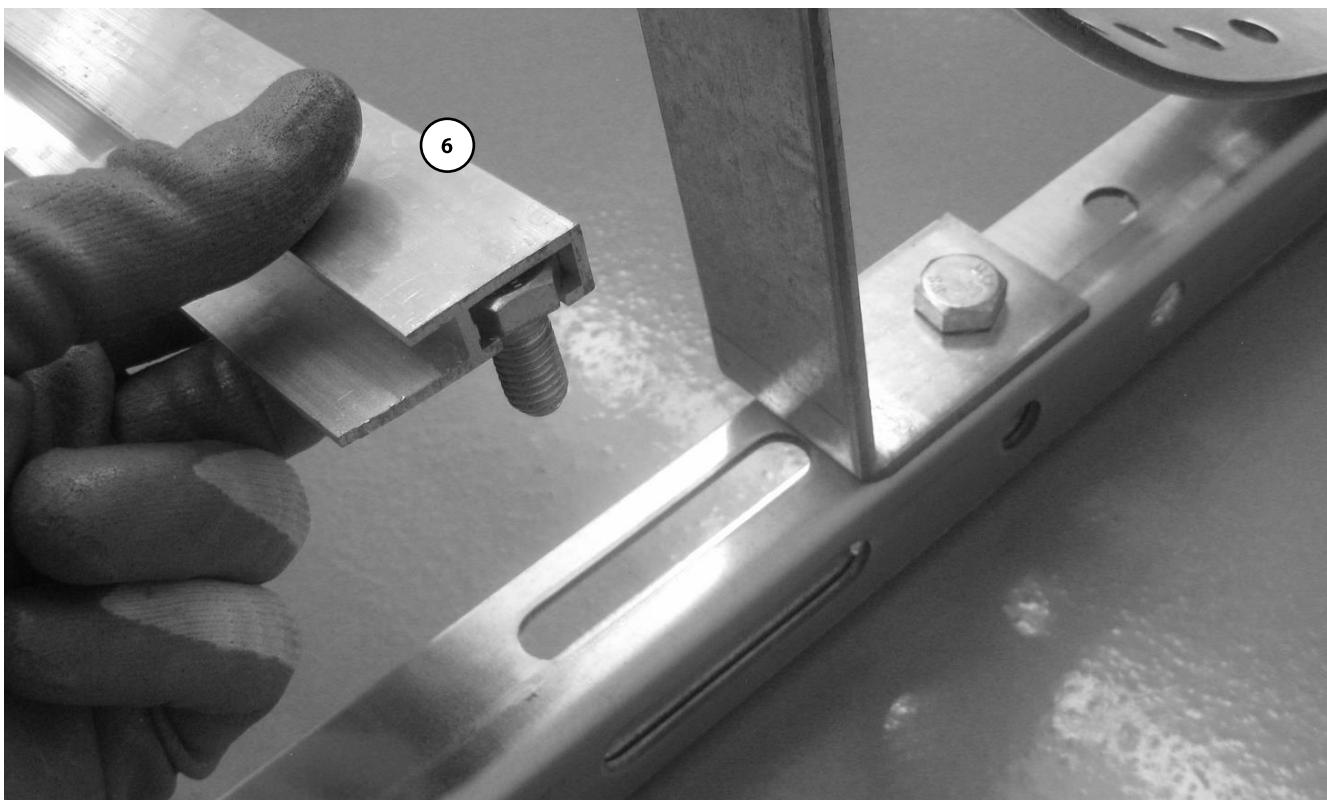
Una vez fijadas, deberá haber una distancia, entre los orificios de las 2 barras. de:

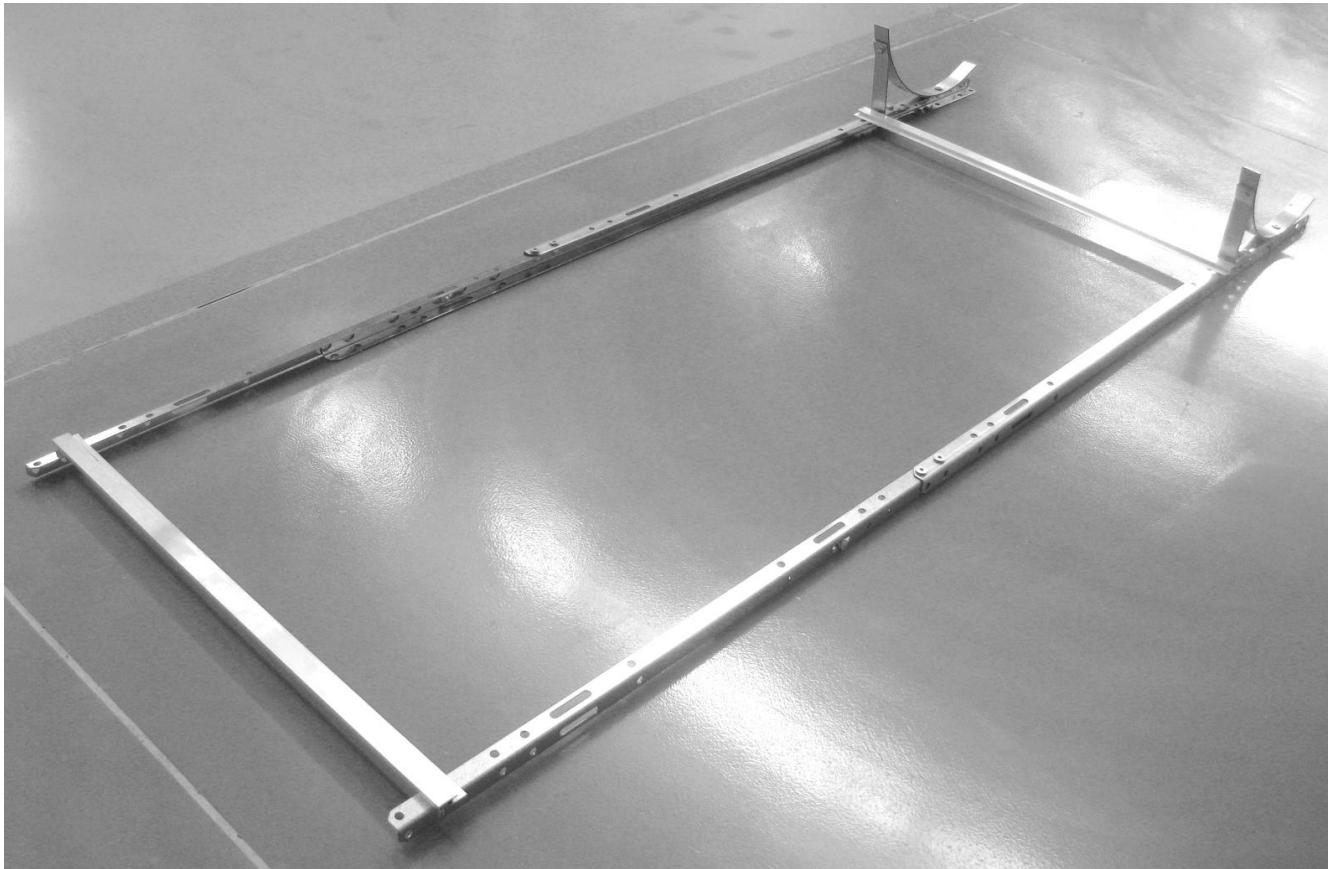
- **74,5 cm** para el modelo **150**;
- **98 cm** para el modelo **200**.

2.7. Fijar en la parte superior de la estructura la segunda barra de fijación colector de longitud 990 mm (**6**), utilizando 2 bulones, 2 tuercas y 2 arandelas.

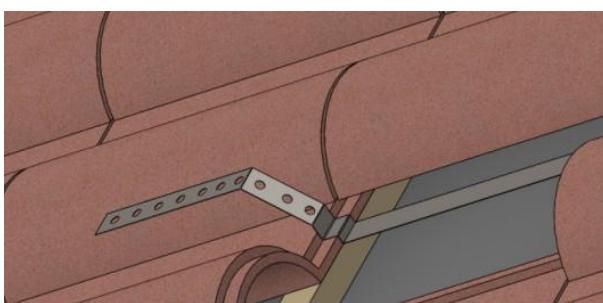
No se deberán ajustar los bulones hasta que no se haya introducido el panel en la estructura.



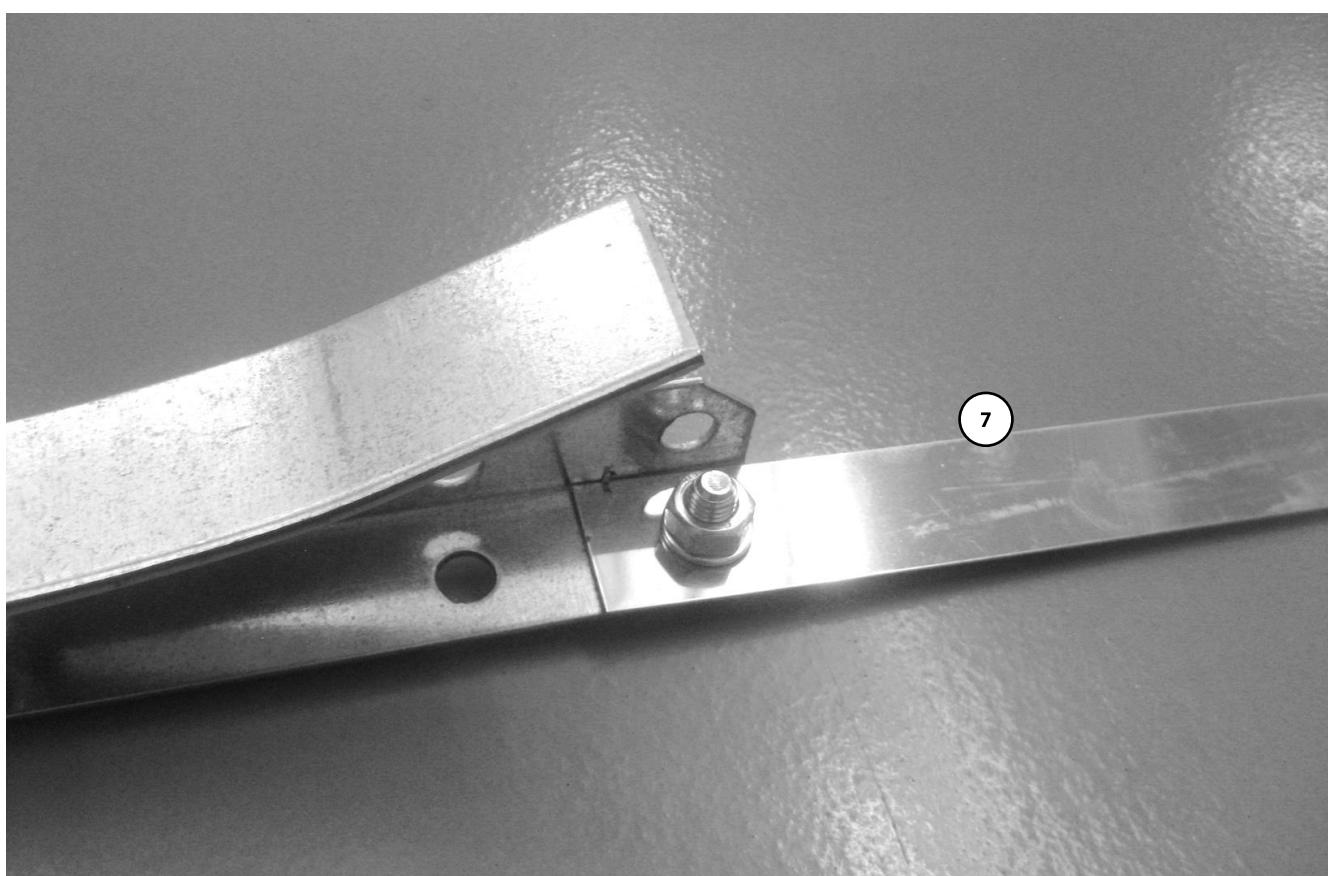
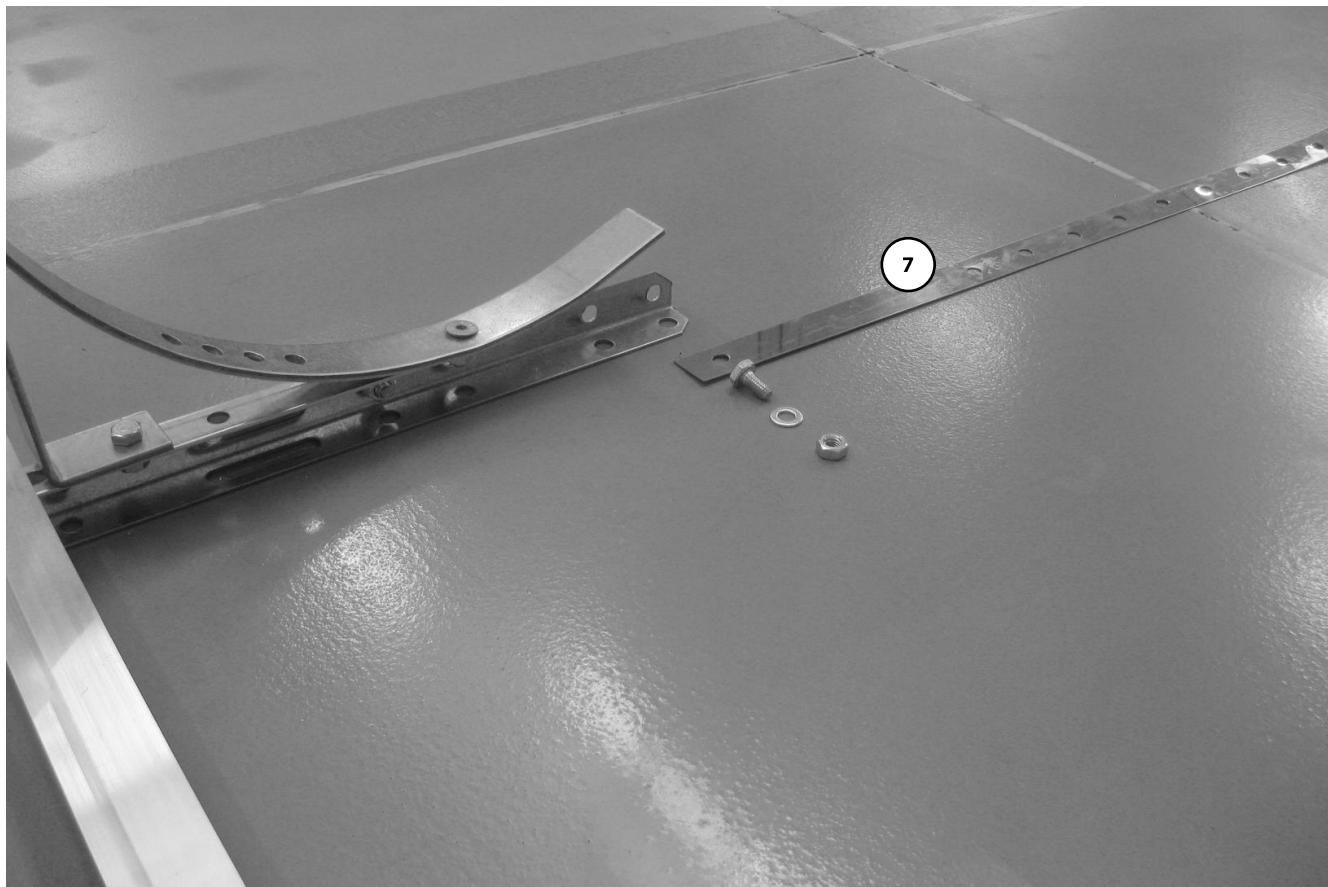


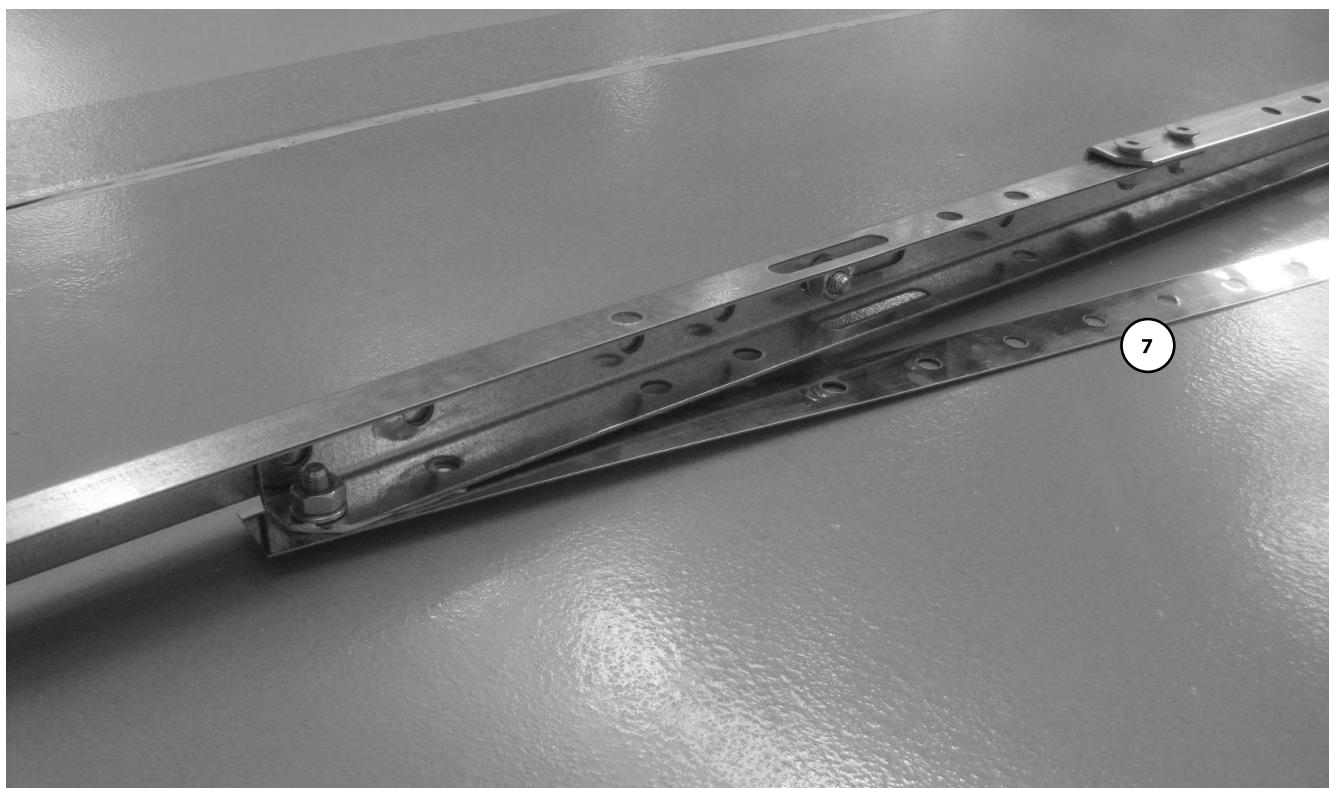
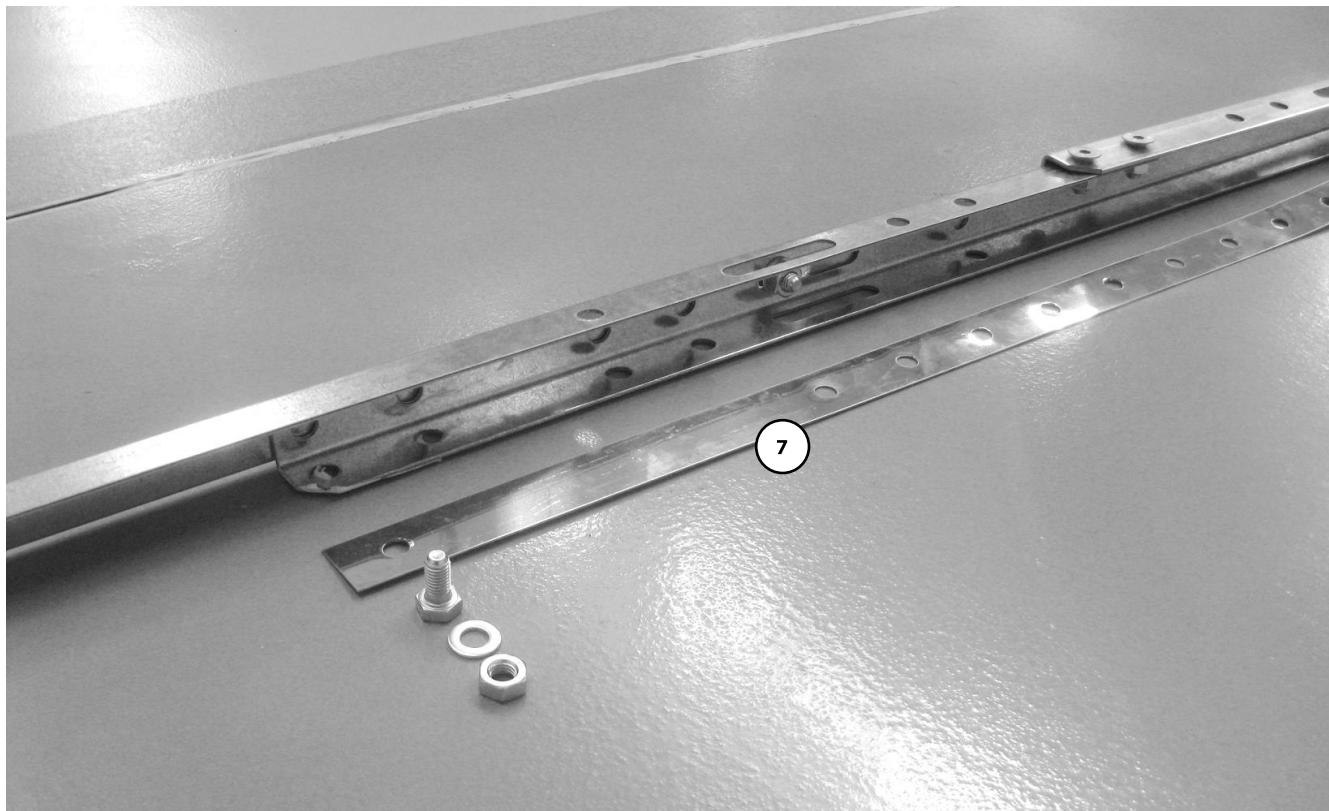


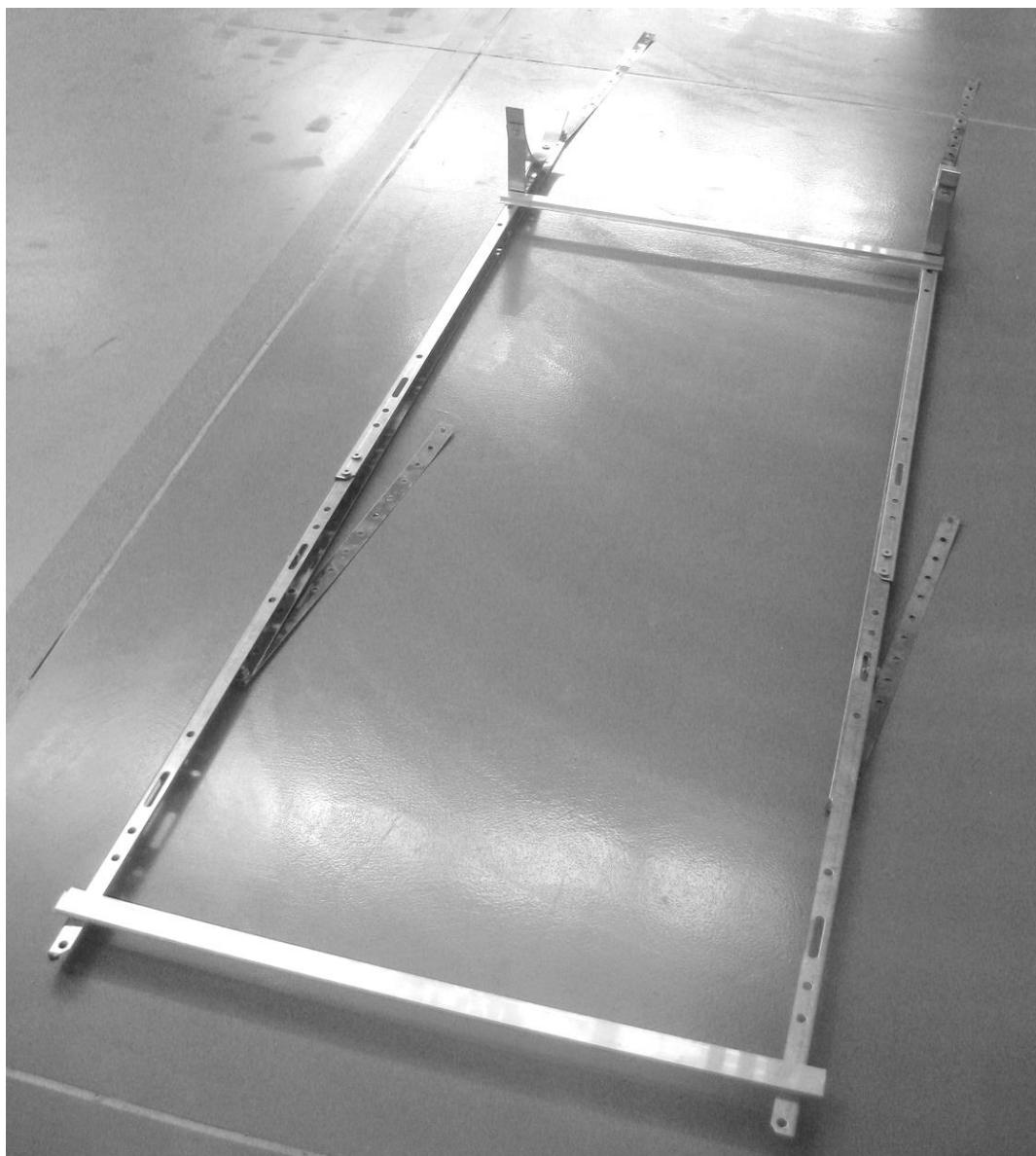
- 2.8. Fijar los 4 flejes de acero perforados (7) a la estructura del techo, en correspondencia con los orificios elegidos en el bastidor recién montado (ver también las imágenes de los puntos siguientes).



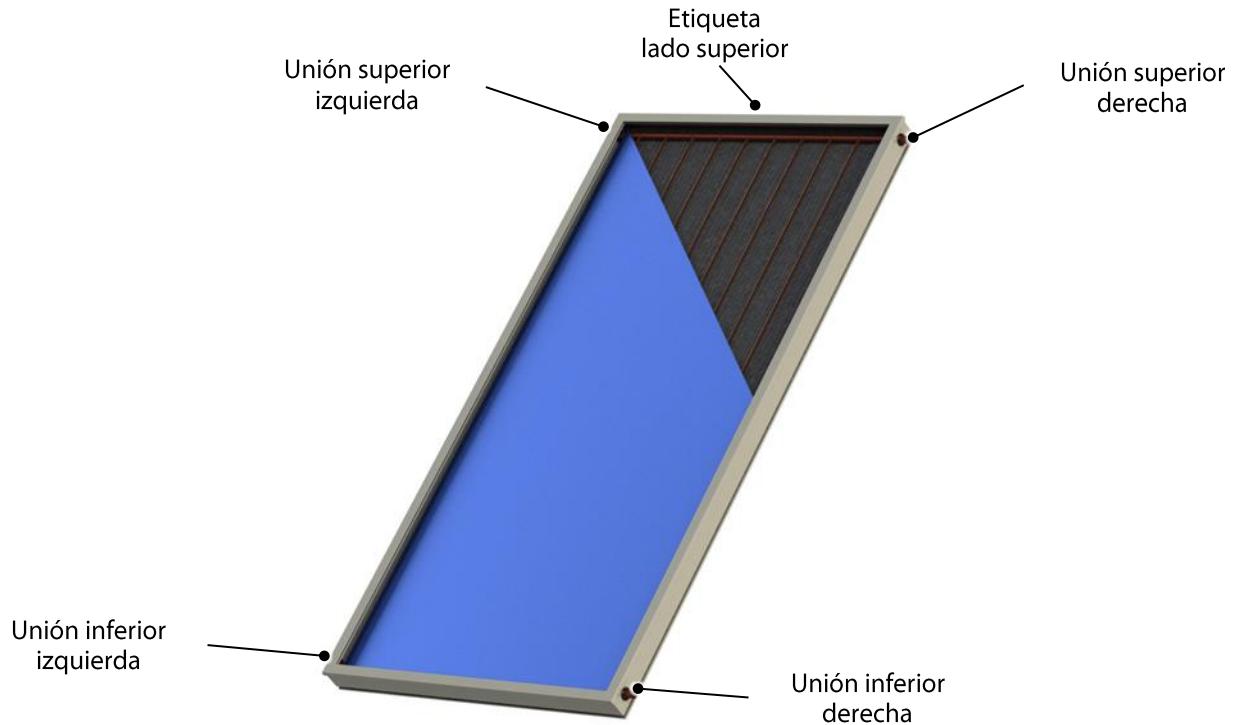
2.9. Fijar la estructura a los 4 flejes de acero perforados (7), utilizando 4 bulones, 4 tuercas y 4 arandelas.







### 3. Instalación del colector solar

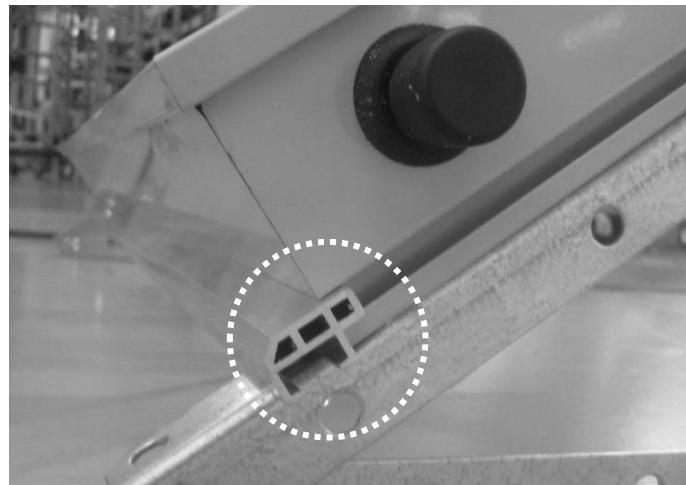


El colector tiene un sentido de instalación.  
El lado superior está indicado por una etiqueta.

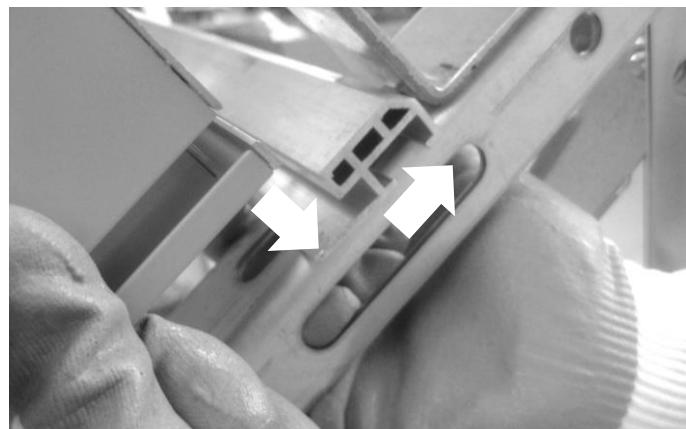


**Las imágenes siguientes se refieren a la instalación en estructura para techos planos, pero la introducción del colector y del hervidor se realiza del mismo modo también en estructura para techos inclinados.**

- 3.1. Introducir el colector solar en la barra de fijación colector inferior (6) asegurándose de que se encastre como en la figura. El colector deberá estar centrado con respecto a la estructura de apoyo.



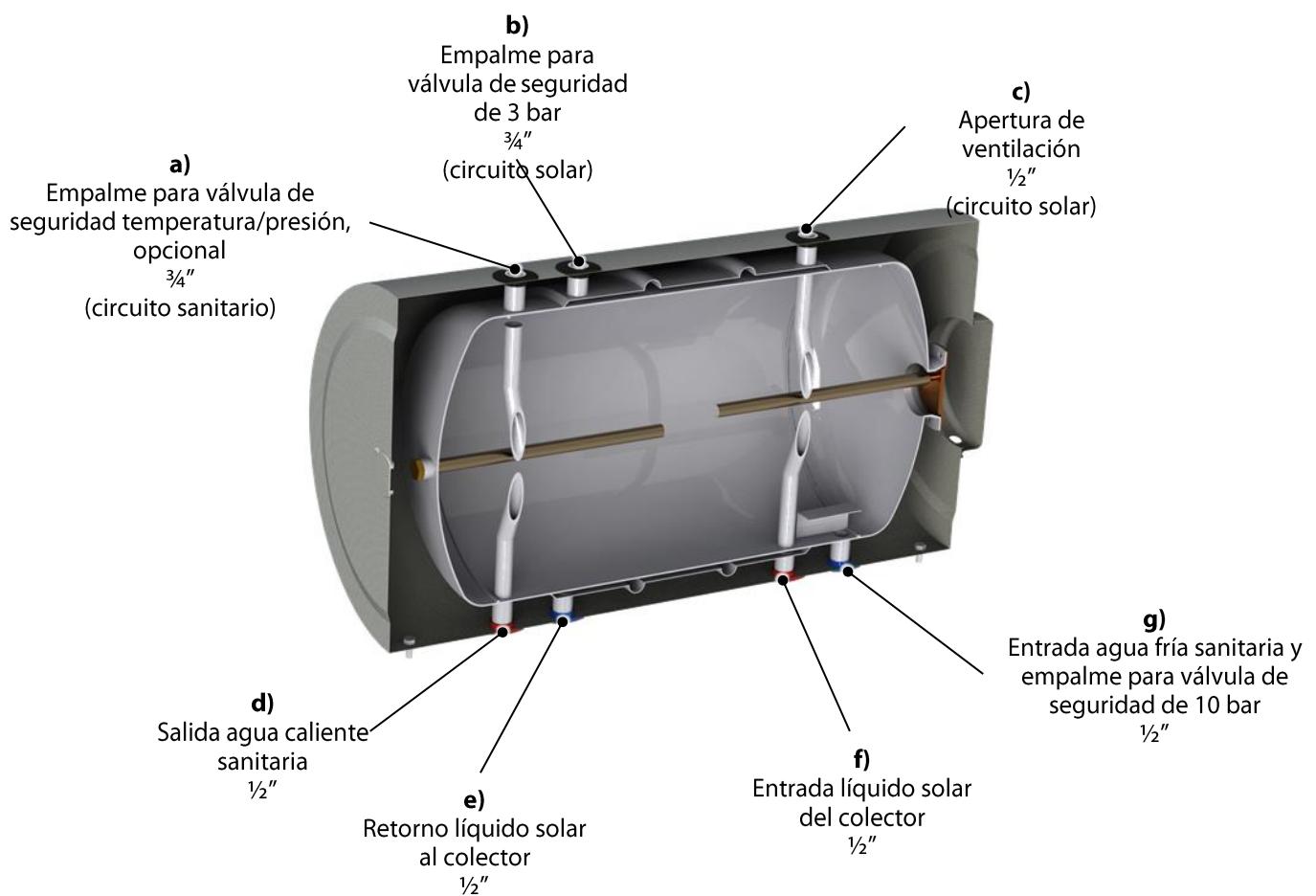
- 3.2. Introducir el colector solar en la barra de fijación colector superior (6) desplazándola hacia arriba.



- 3.3. Empujar la barra de fijación colector superior (6) hacia abajo hasta encastrarla en el colector. Luego, ajustar las tuercas.



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

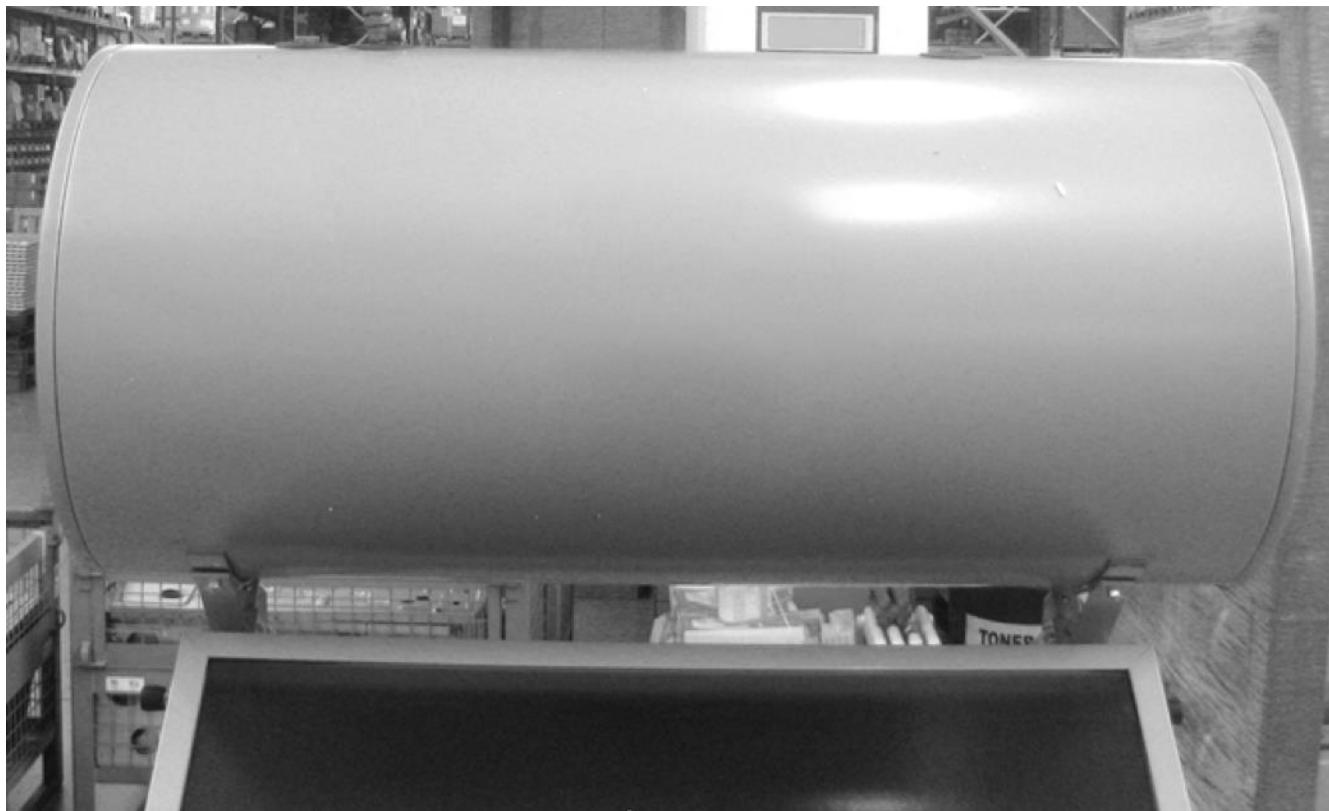


Las imágenes siguientes se refieren a la instalación en estructura para techos planos, pero la introducción del colector y del hervidor se realiza del mismo modo también en estructura para techos inclinados.

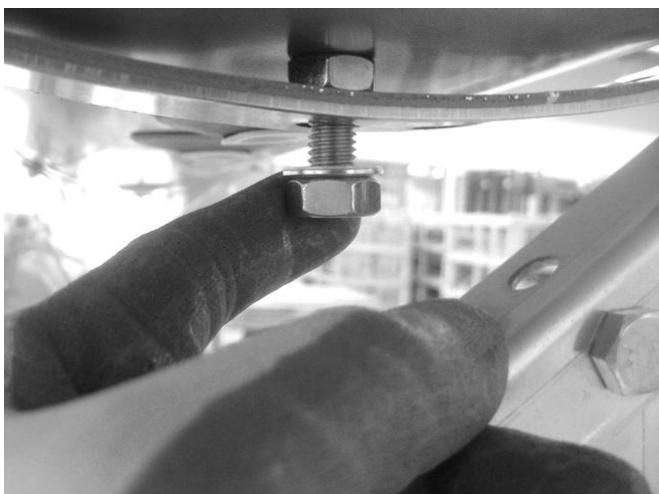
##### 4.1 Introducir el hervidor en la estructura apoyándolo en los soportes en U.

El hervidor está dotado de dos aplicaciones rosadas M10 que deberán ser introducidas en los orificios de los soportes en U para que las aplicaciones queden perpendiculares al terreno.

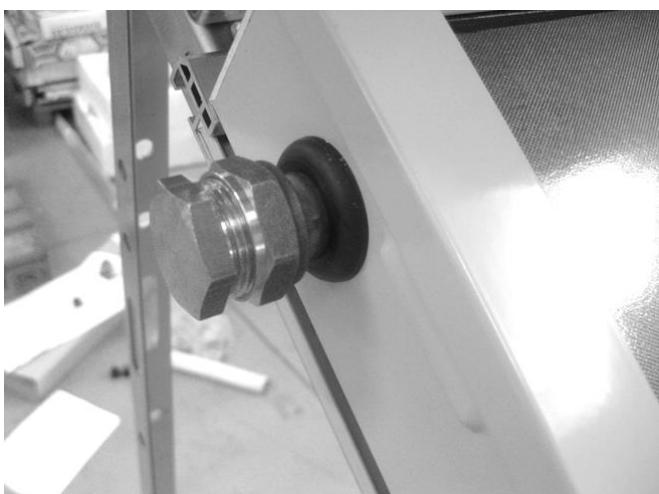




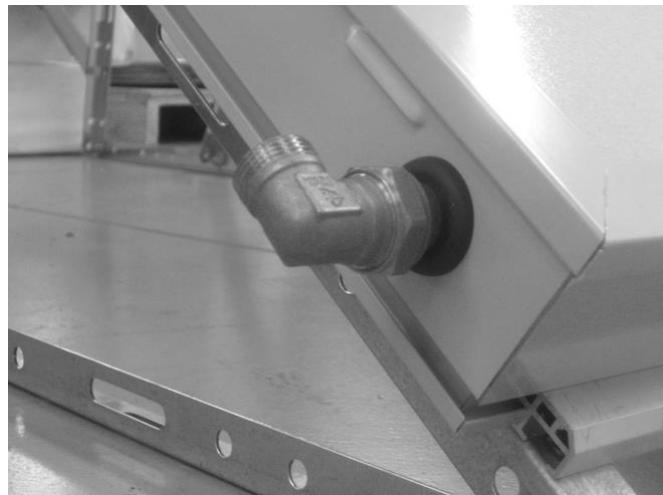
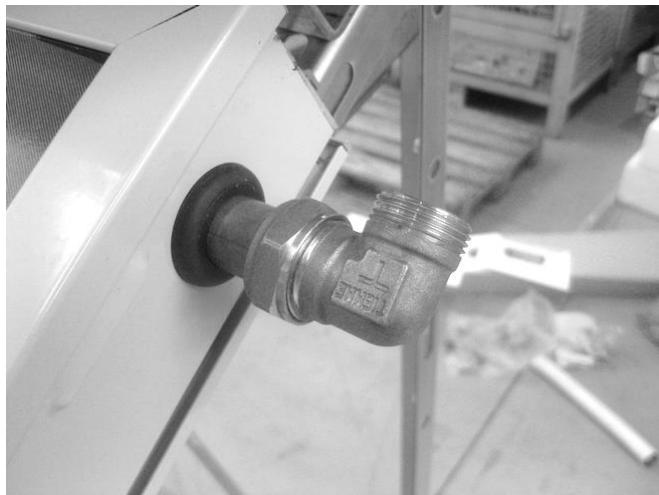
Fijar el hervidor utilizando 2 tuercas y 2 arandelas.



4.2 Fijar los dos tapones para ajustar Ø22 mm en las conexiones superior izquierda e inferior derecha del colector solar.

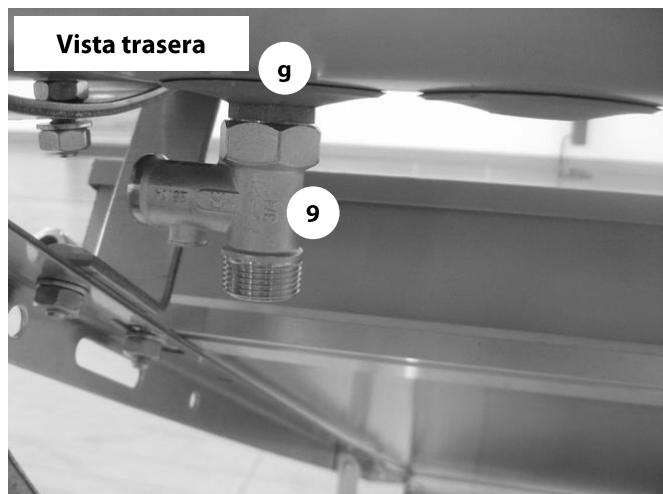
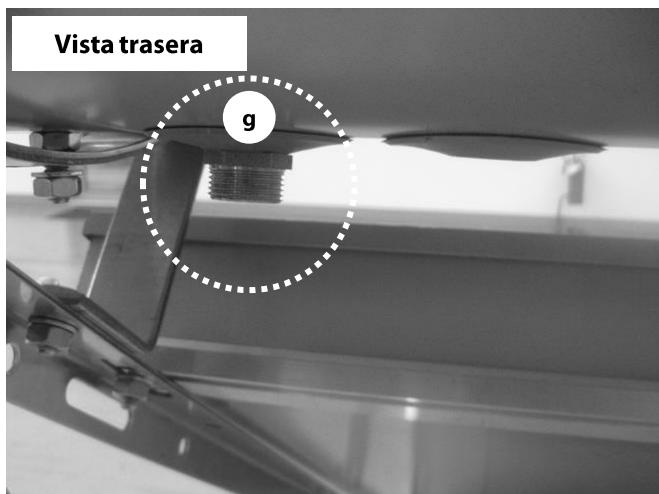


- 4.3 Fijar las dos curvas para ajustar Ø22 mm x ¾" M en las conexiones superior derecha e inferior izquierda del colector solar.

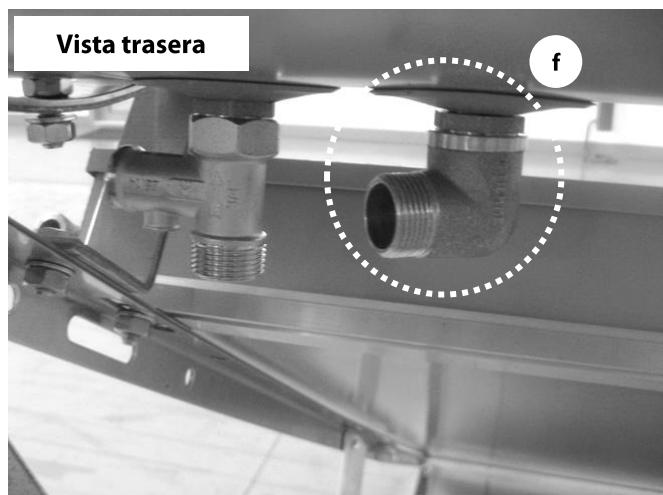
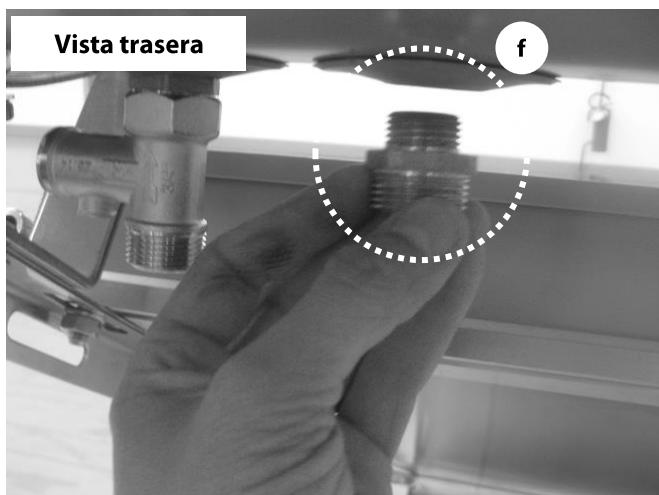


- 4.4 Utilizando un niple ¾" M ¾" M conectar la válvula de seguridad agua sanitaria de 10 bar (g) a la entrada de agua fría sanitaria del hervidor (g).

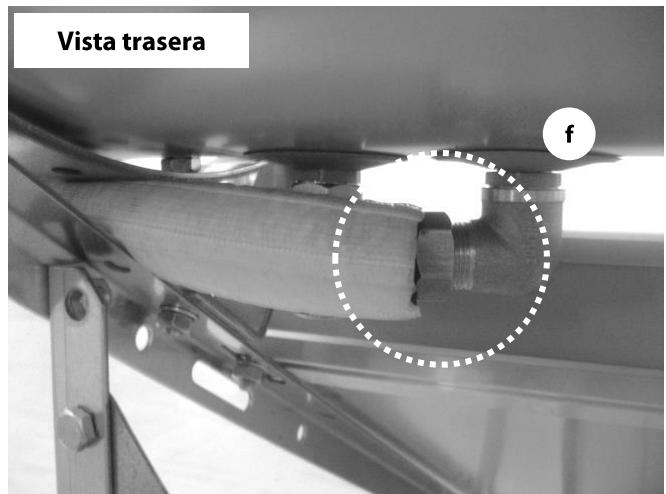
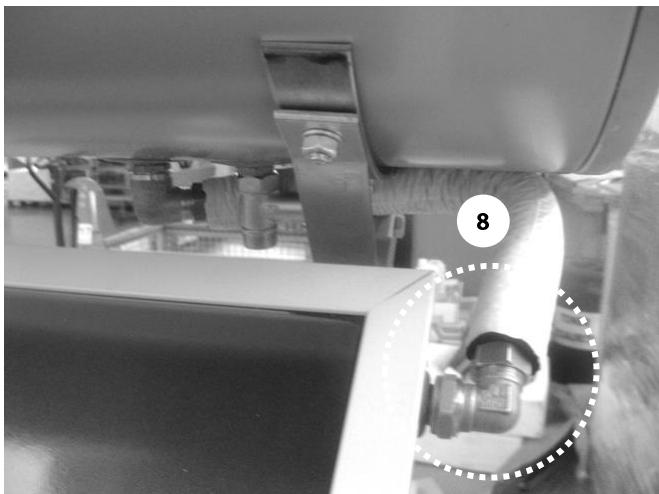
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.



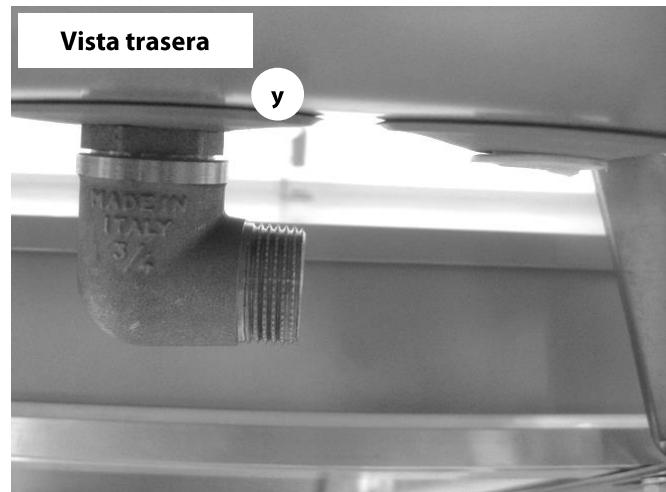
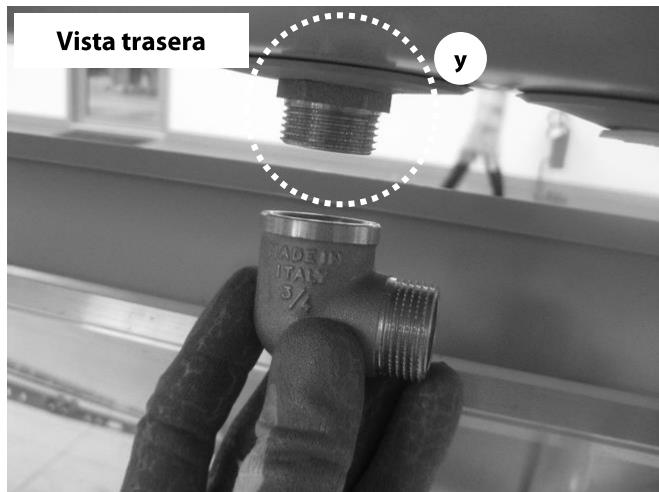
- 4.5 Utilizando un niple ¾" M x ½" M conectar una curva ¾" M x ¾" H a la entrada del líquido solar del hervidor (f).  
Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.



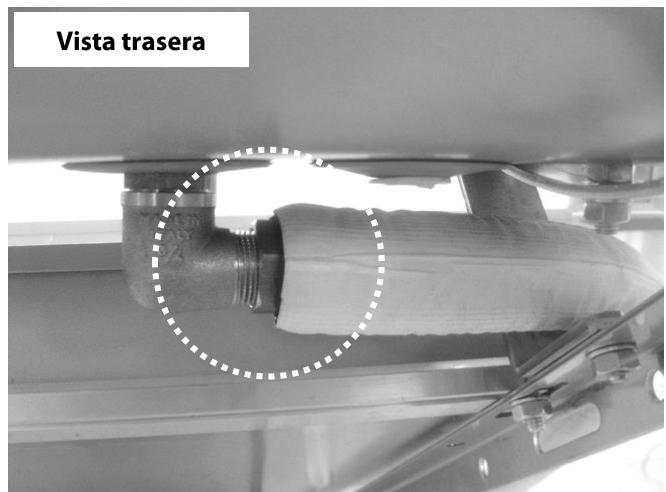
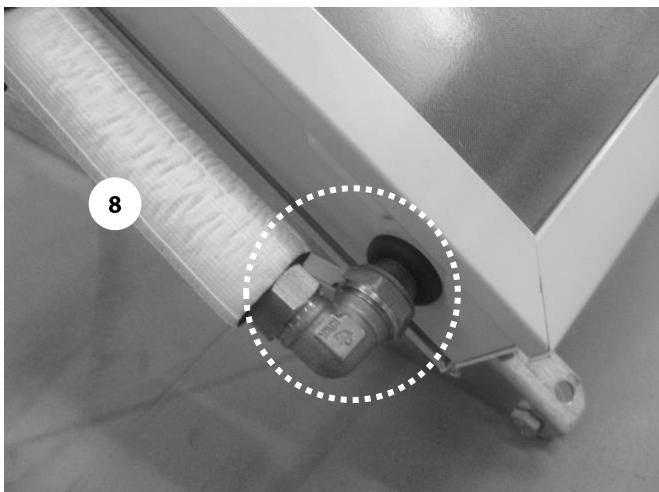
- 4.6 Utilizando dos juntas  $\frac{3}{4}$ " conectar el tubo de acero flexible de longitud 440 mm (8) a la conexión superior derecha del colector solar y a la entrada del líquido solar del hervidor (f).  
 El tubo de acero flexible deberá tener una tendencia hacia arriba comenzando por el empalme del colector hacia el empalme del hervidor (f).



- 4.7 Utilizando un niple  $\frac{3}{4}$ " M x  $\frac{1}{2}$ " M conectar una curva  $\frac{3}{4}$ " M x  $\frac{3}{4}$ " F al retorno solar del hervidor (e). Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.



- 4.8 Utilizando dos juntas  $\frac{3}{4}$ " conectar el tubo de acero flexible de longitud 2200 mm (8) a la conexión inferior izquierda del colector solar y al retorno del líquido solar del hervidor (e).





4.9 Conectar la entrada de agua fría y la salida de agua caliente a las respectivas conexiones del hervidor, (g) y (d) respectivamente.

4.10 Llenar el hervidor, del lado del agua sanitaria como se indica en el capítulo **Llenado del sistema** del **Manual de instalación, uso y mantenimiento**.

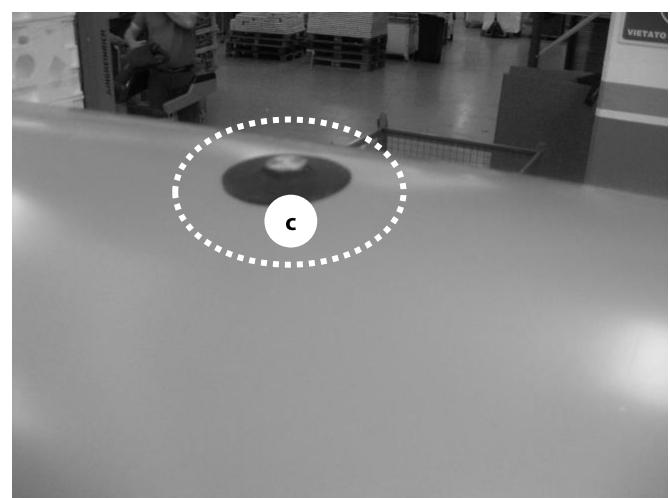
Después de llenar el hervidor, instalar una válvula de seguridad temperatura/presión (opcional, si está prevista) en la conexión correspondiente del hervidor (a). De lo contrario, cerrar este orificio con el tapón  $\frac{3}{4}$ " M.

Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.

4.11 Despues de haber mezclado el glicol de propileno llenar el circuito solar como se indica en el capítulo **Llenado del sistema** del **Manual de instalación, uso y mantenimiento**.

Una vez llenado el circuito, instalar la válvula de seguridad de 3 bar en la conexión correspondiente del hervidor (b) e instalar el tapón  $\frac{1}{2}$ " M en la conexión (c).

Utilizar una cinta selladora adecuada para las altas temperaturas para el sellado de las roscas.





**EN**

# **Sulpack Natural Plus 150**

# **Sulpack Natural Plus 200**



**Instructions for installation  
on an inclined surface**

 **fondital**

## **Contents**

1.	Package contents .....	51
2.	Structure assembly .....	54
3.	Installation of the solar collector .....	65
4.	Boiler installation and water connections.....	67

## 1. Package contents

The packaging contains the following material:

Ref.	Description	Q.ty
<b>1</b>	Galvanised steel frame bar - length 2000 mm	2
<b>2</b>	Galvanised steel frame bar - length 1370 mm	2
<b>3</b>	Galvanised steel frame bar - length 1120 mm	2
<b>4</b>	Boiler support U-bracket	2
<b>5</b>	Boiler support L-bracket	2
<b>6</b>	Aluminium collector fastening bar - length 1000 mm	2
<b>7</b>	Perforated steel strip - length 750 mm	4
<b>8</b>	Flexible steel pipe - length 440 mm	1
	Flexible steel pipe - length 2220 mm	1
<b>9</b>	DHW safety valve - 10 bar	1
<b>10</b>	Solar circuit safety valve - 3 bar	1
<b>11</b>	Elbow $\frac{3}{4}$ " M x $\frac{3}{4}$ " F	2
	Compression elbow coupling with ogive Ø 22 x $\frac{3}{4}$ " M	2
	Compression cap with ogive Ø 22 mm	2
	Cap $\frac{3}{4}$ " M	1
	Cap $\frac{1}{2}$ " M	1
	Nipple $\frac{3}{4}$ " M x $\frac{1}{2}$ " M	3
	Gasket $\frac{3}{4}$ "	4
<b>12</b>	Bolt M10x25	17
	M10 washer	22
	Nut M10	22
	Hex socket countersunk bolt M10x20	8
	Fastening screw M8x50	4
	M8 washer	4
<b>13</b>	Flat glazed solar collector	1
<b>14</b>	Vitrified steel boiler	1
<b>15</b>	1-litre jug of solar liquid	<i>Sulpack Natural Plus 150</i> <i>Sulpack Natural Plus 200</i>
		2
		3

**1**



**2**



**3**



**4**



**5**



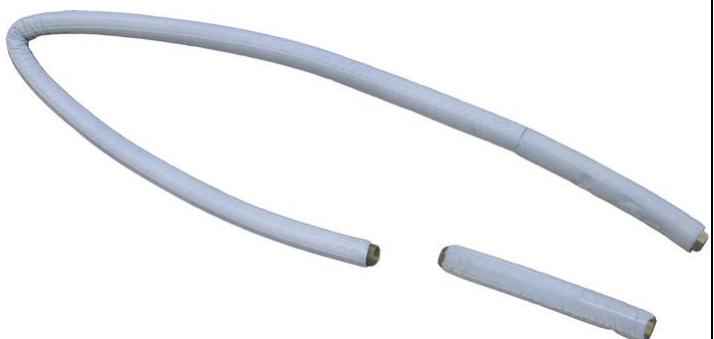
**6**



**7**



**8**

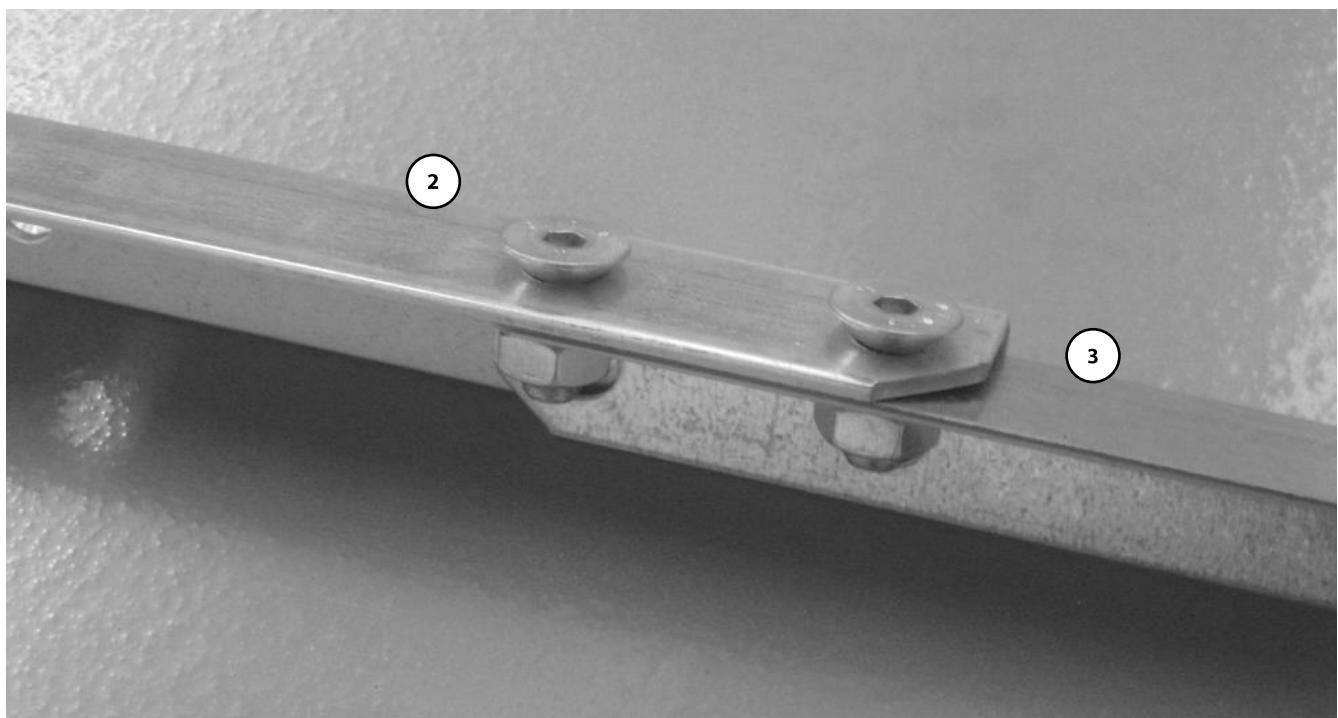
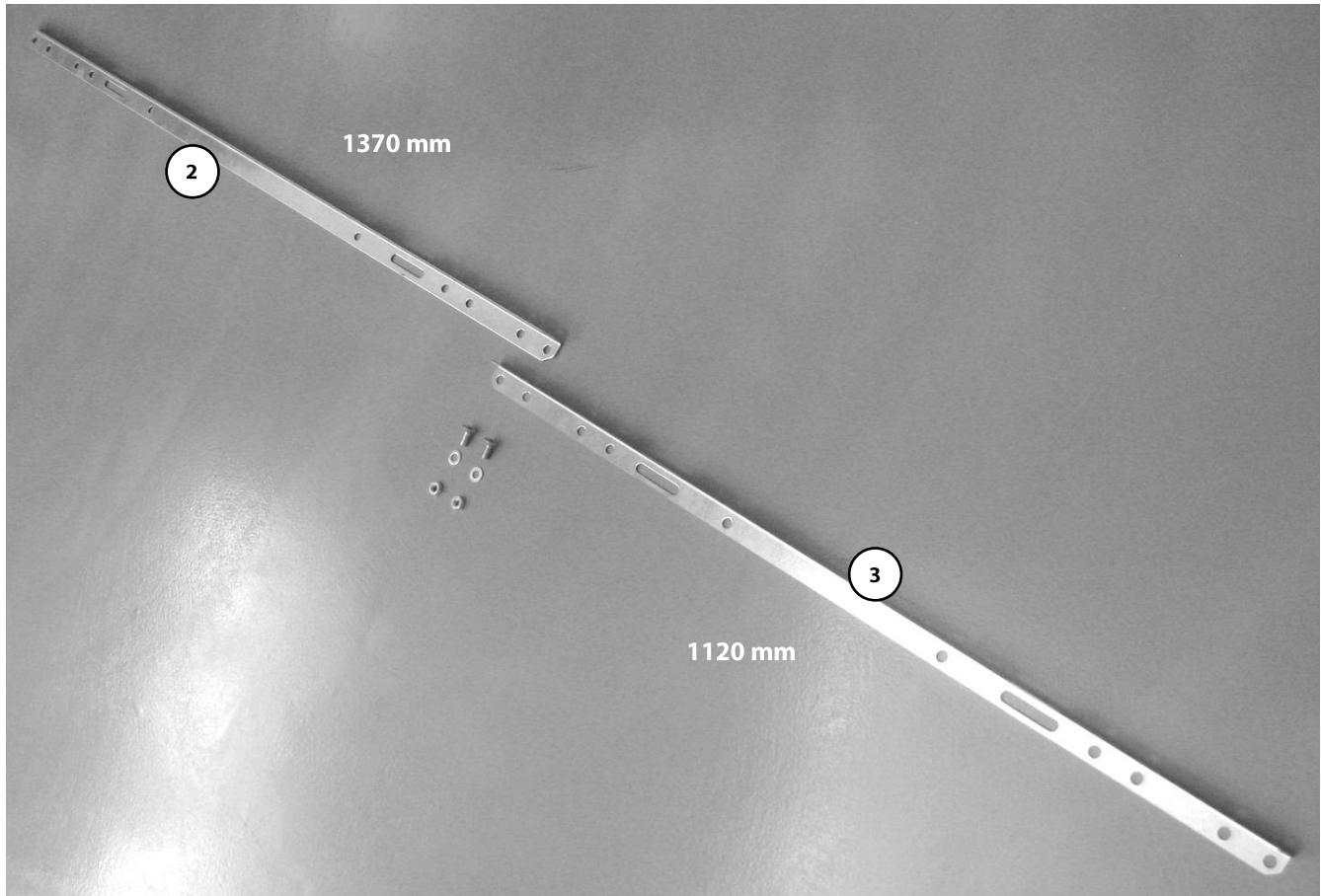


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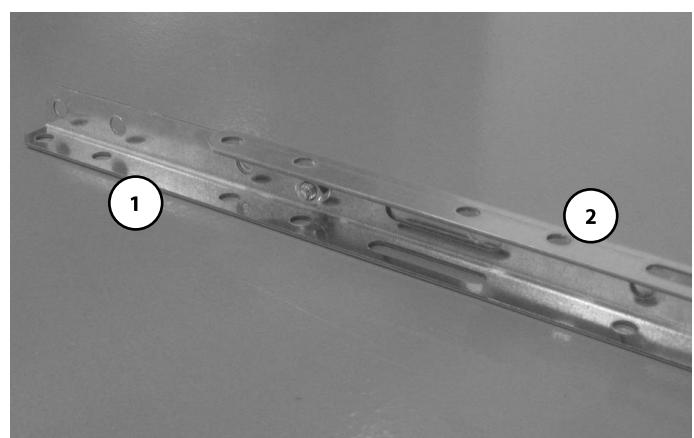
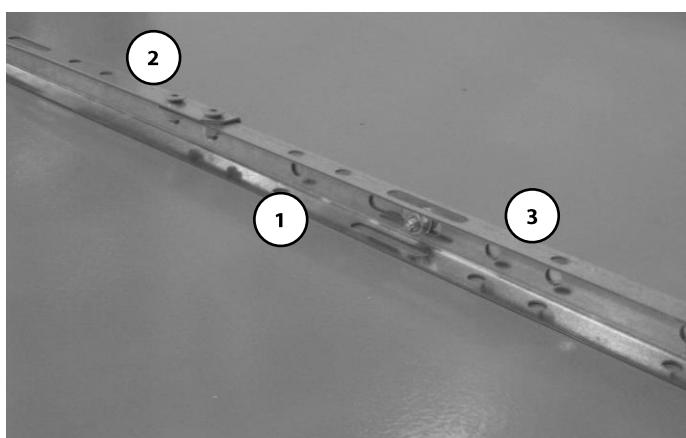
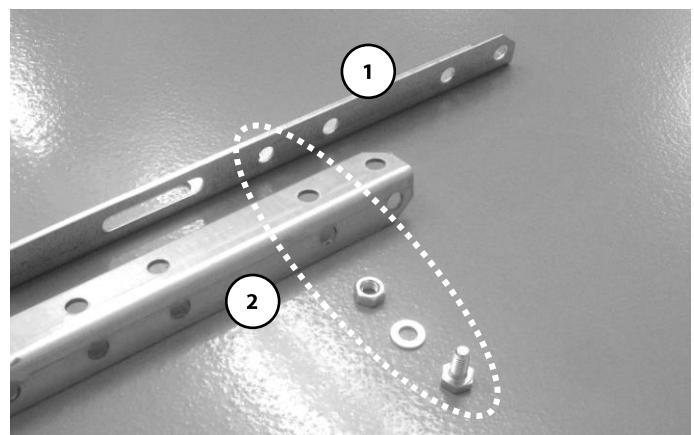
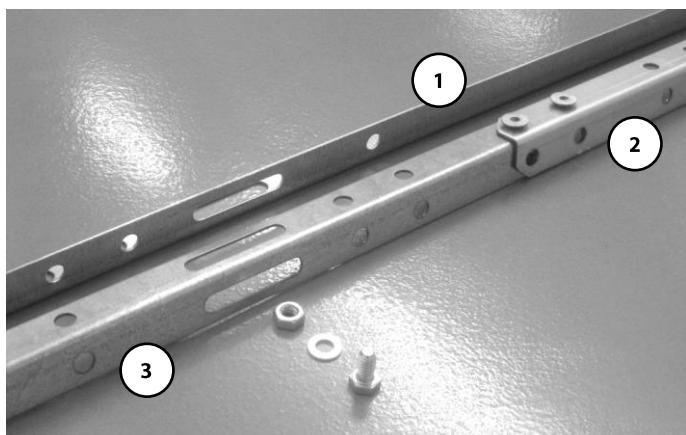
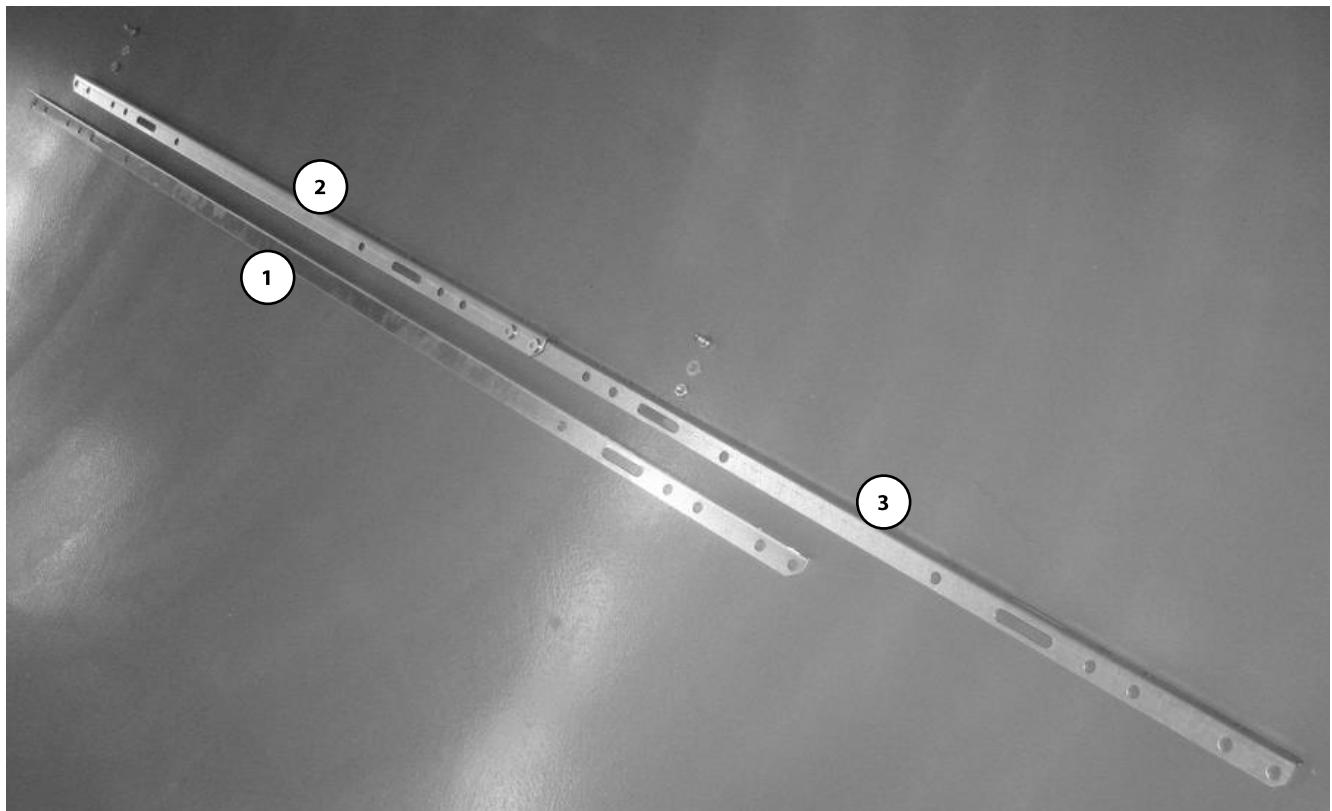
## **2. Structure assembly**

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

- 2.1. Couple a 1370 mm long bar (2) with a 1120 mm long bar (3) using 2 countersunk bolts, 2 nuts and 2 washers. The 1370 mm long bar (2) should overlap the 1120 mm long bar (3).



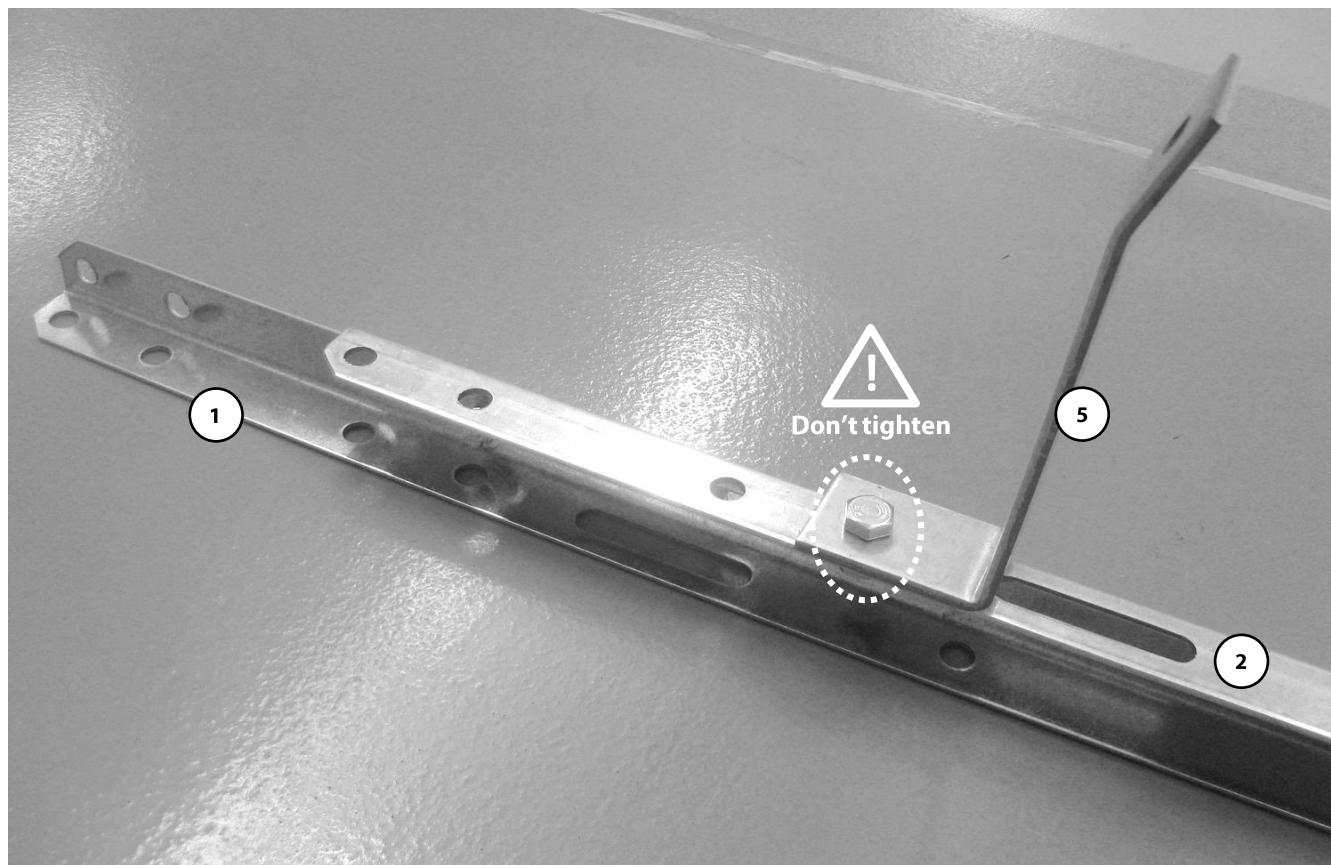
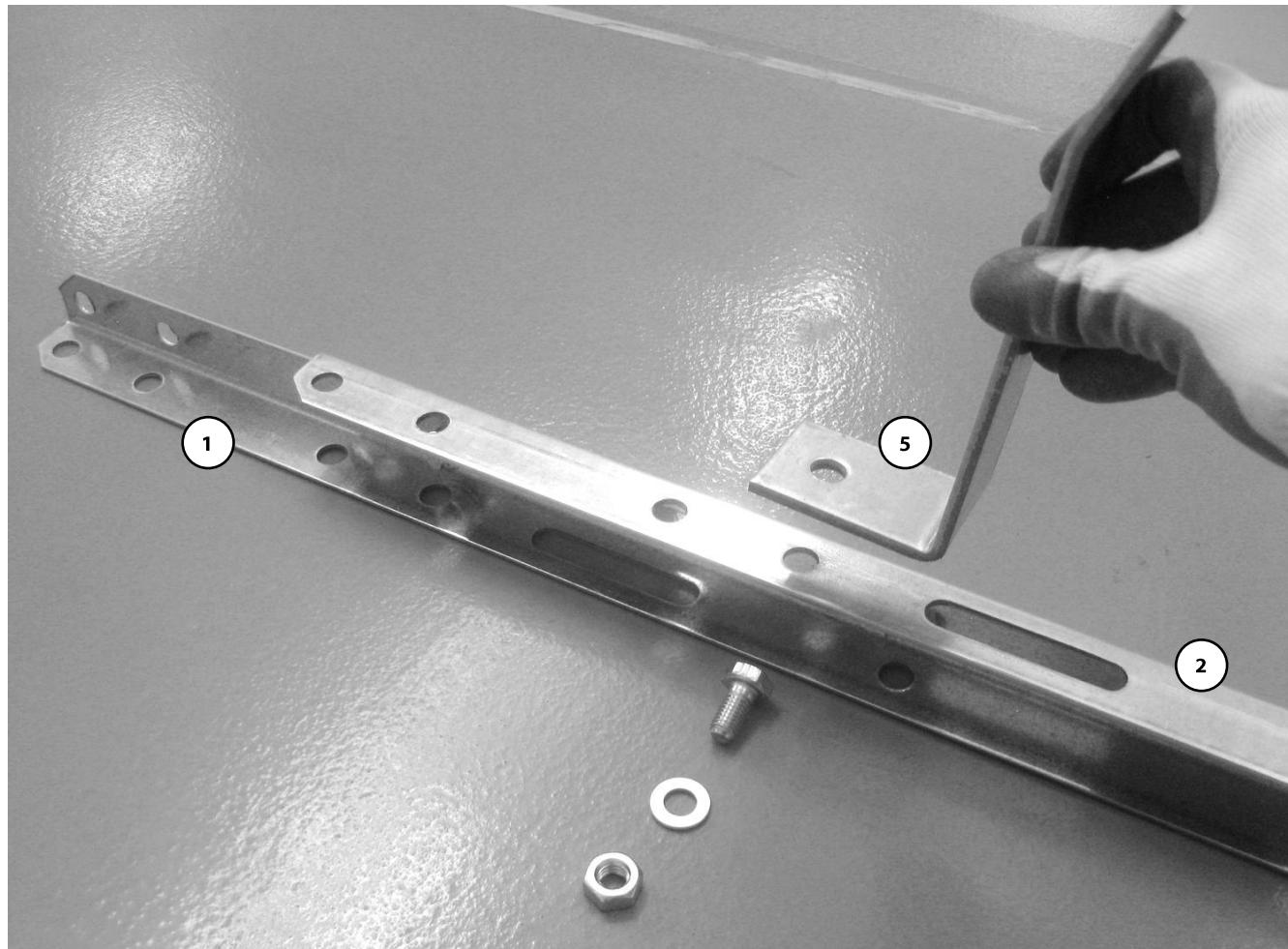
2.2. Couple the 2000 mm long bar (**1**) to the bars previously coupled using 2 bolts, 2 nuts and 2 washers.



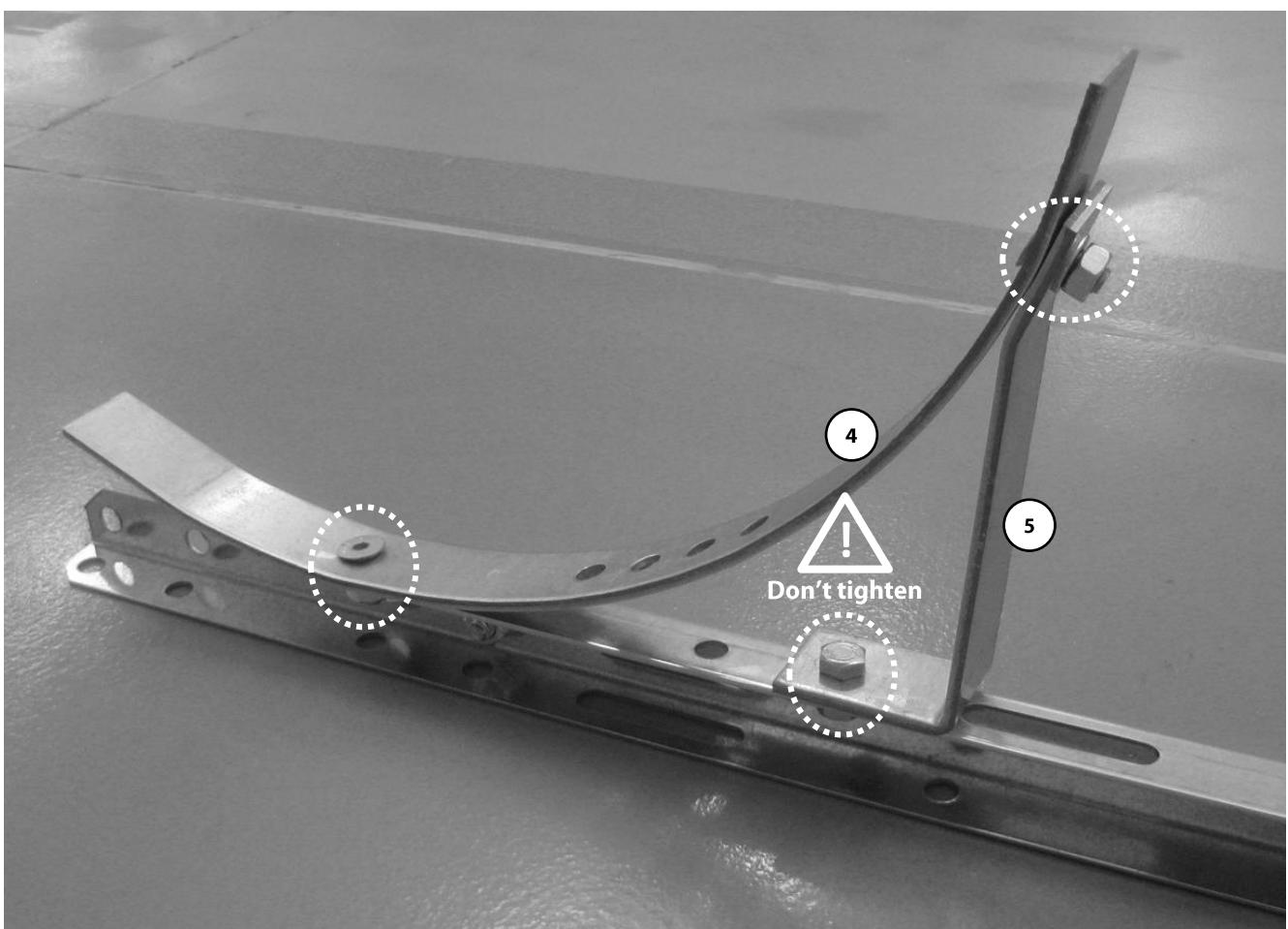
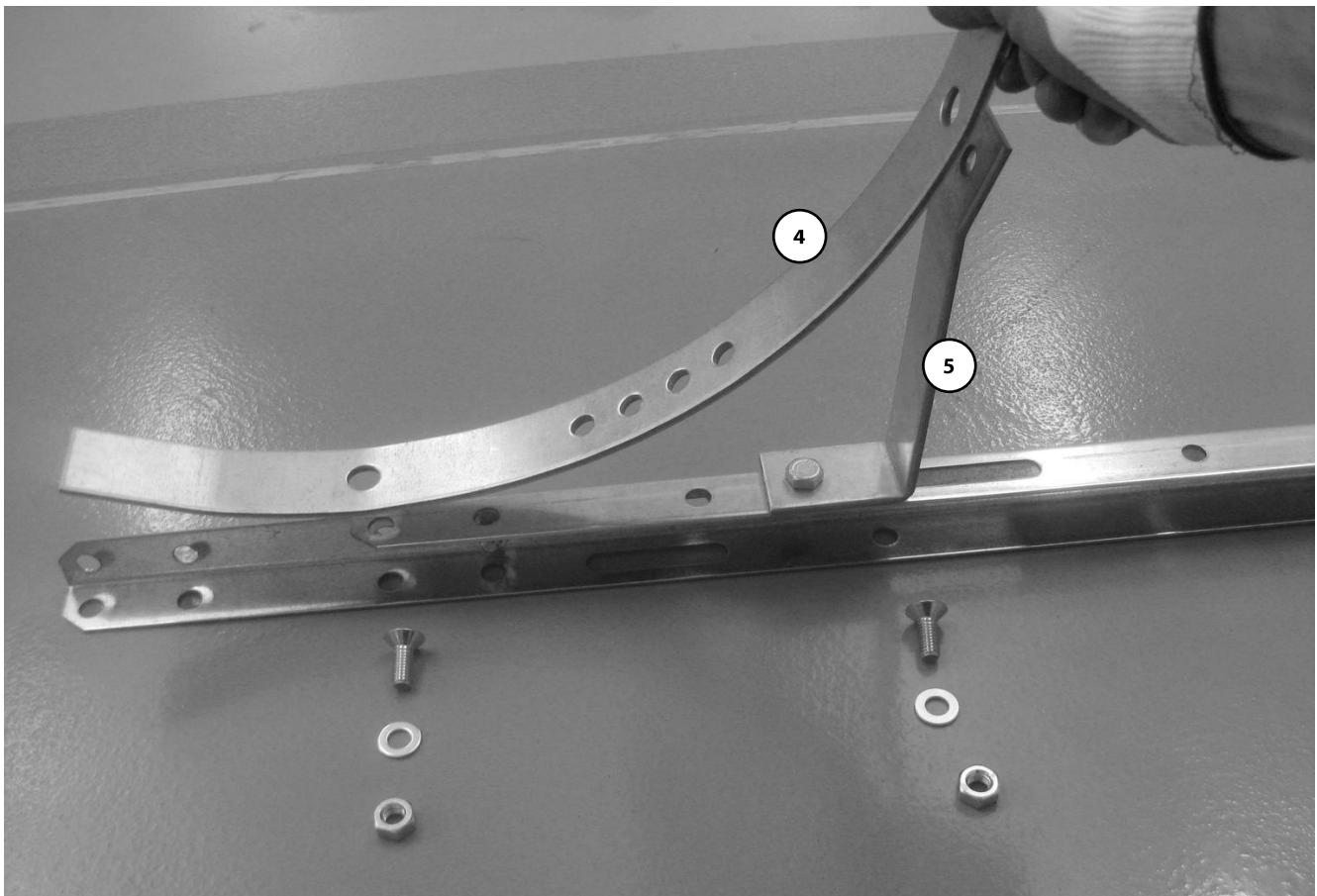
Once assembled, the 2000 mm long bar (**1**) will protrude from the 1370 mm long bar (**2**).

2.3. Fasten the L-bracket (5) to the bar just assembled using 1 bolt, 1 nut and 1 washer.

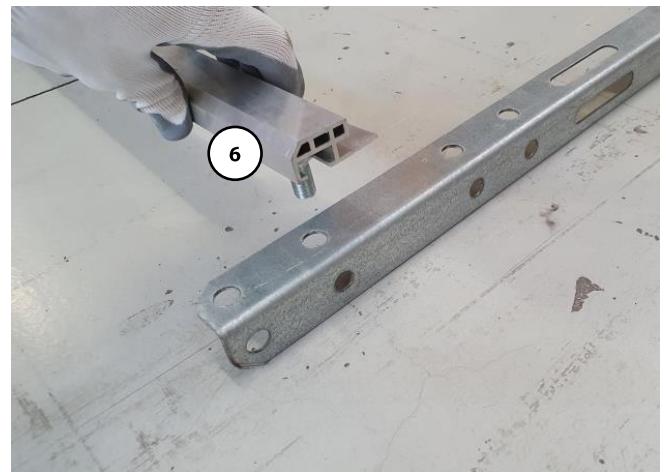
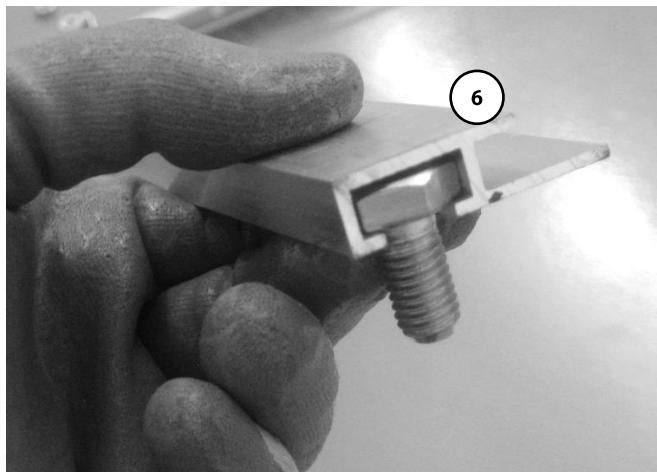
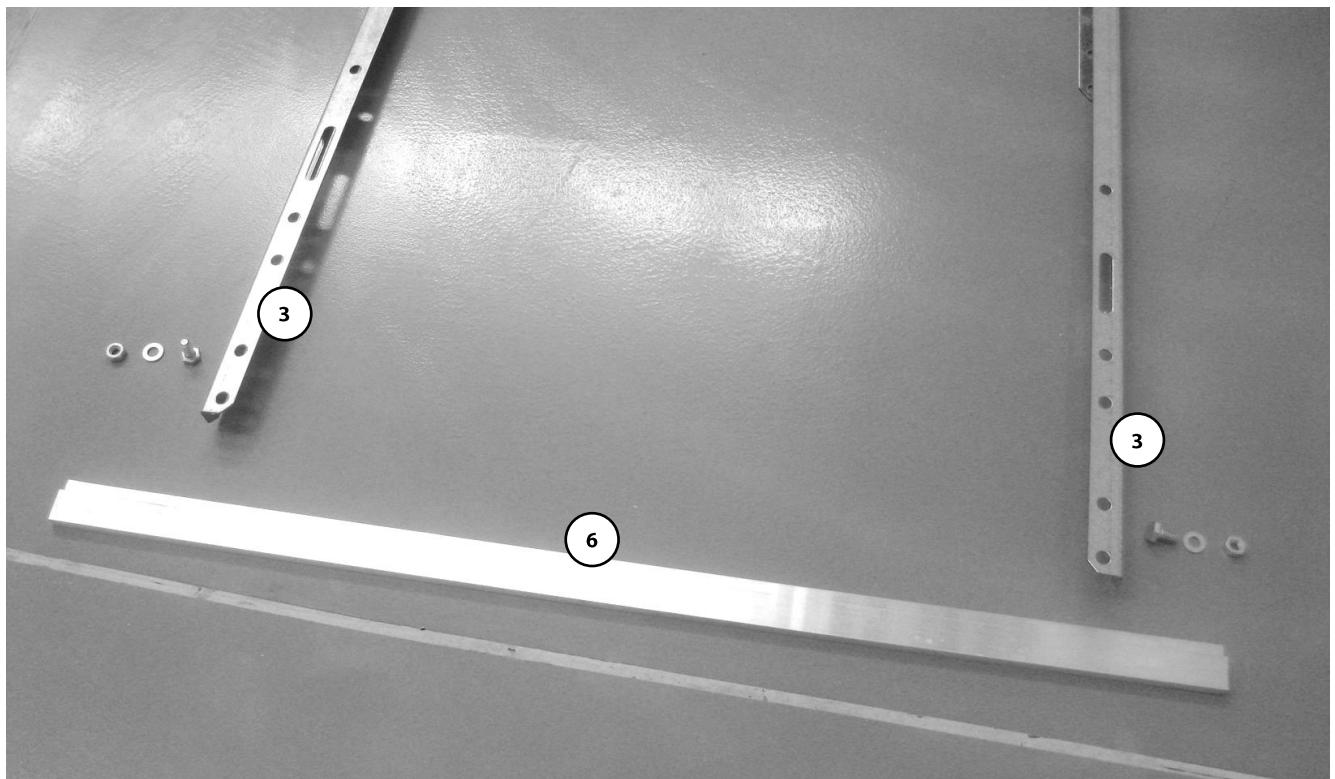
**WARNING: don't tighten the nut and bolt completely for the time being.**

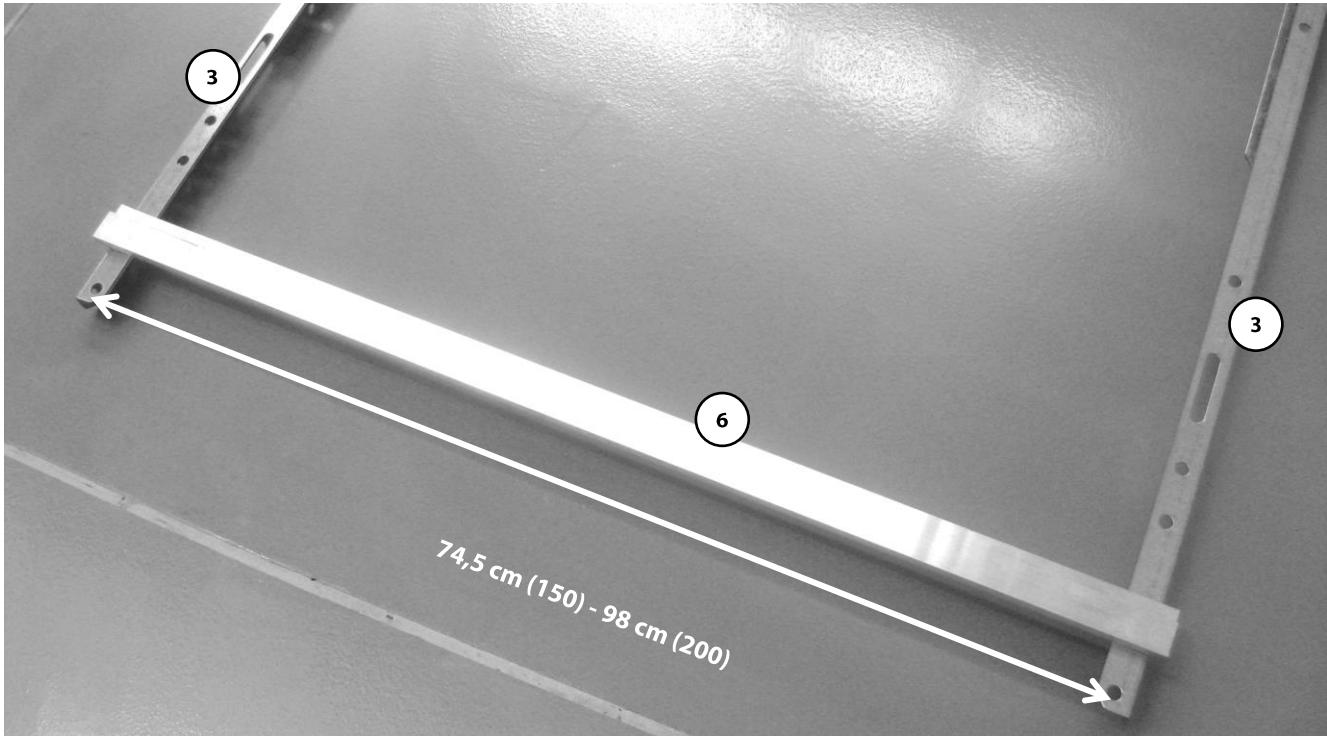


2.4. Fasten the U-bracket (4) using 2 countersunk bolts, 2 nuts and 2 washers.



- 2.5. Repeat points 2.1 through 2.4 to prepare another structure like that just prepared, but in the reverse manner.
- 2.6. Couple a 990 mm long collector fastening bar (6) to the lower part of the previously prepared structure using 2 bolts, 2 nuts and 2 washers.



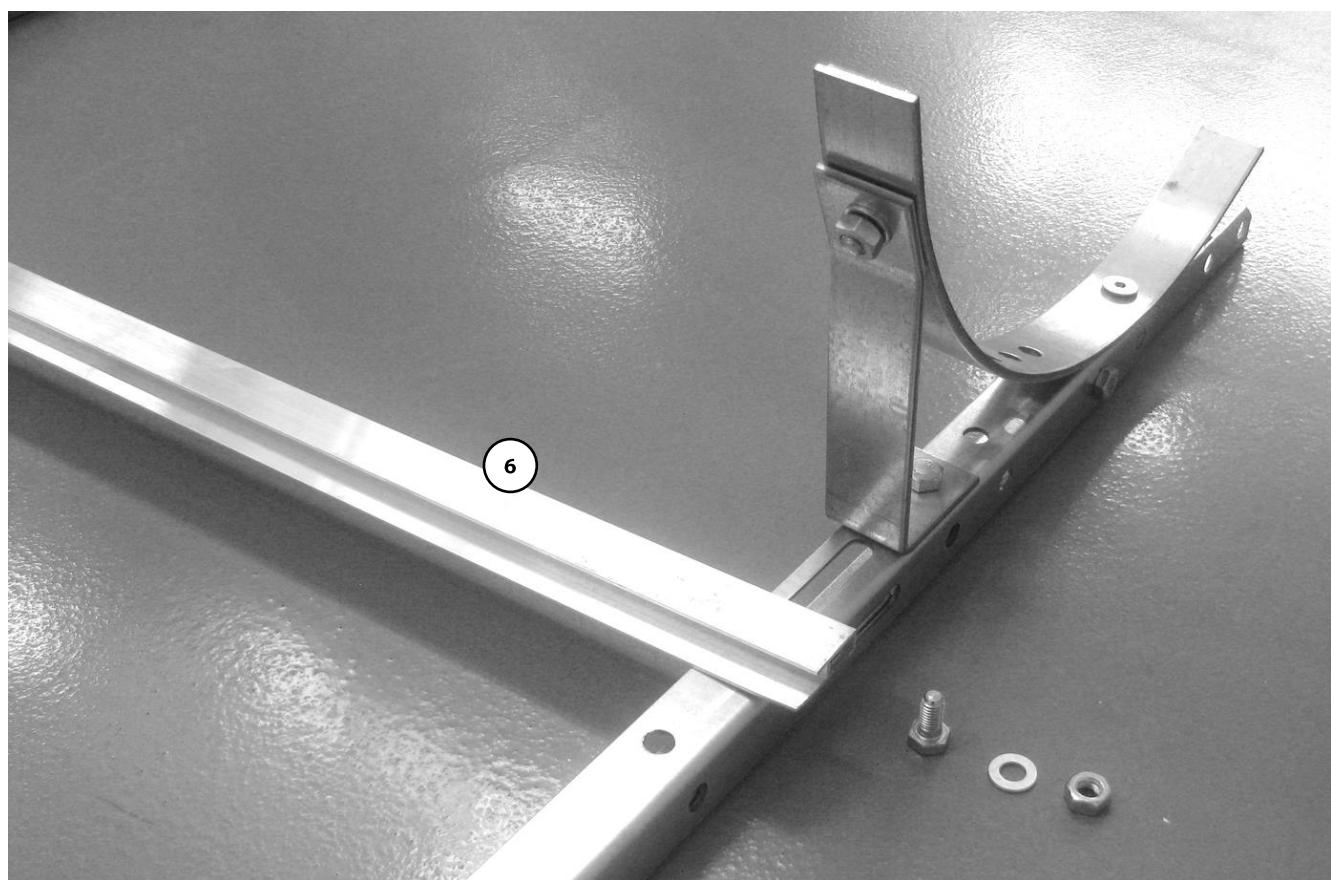


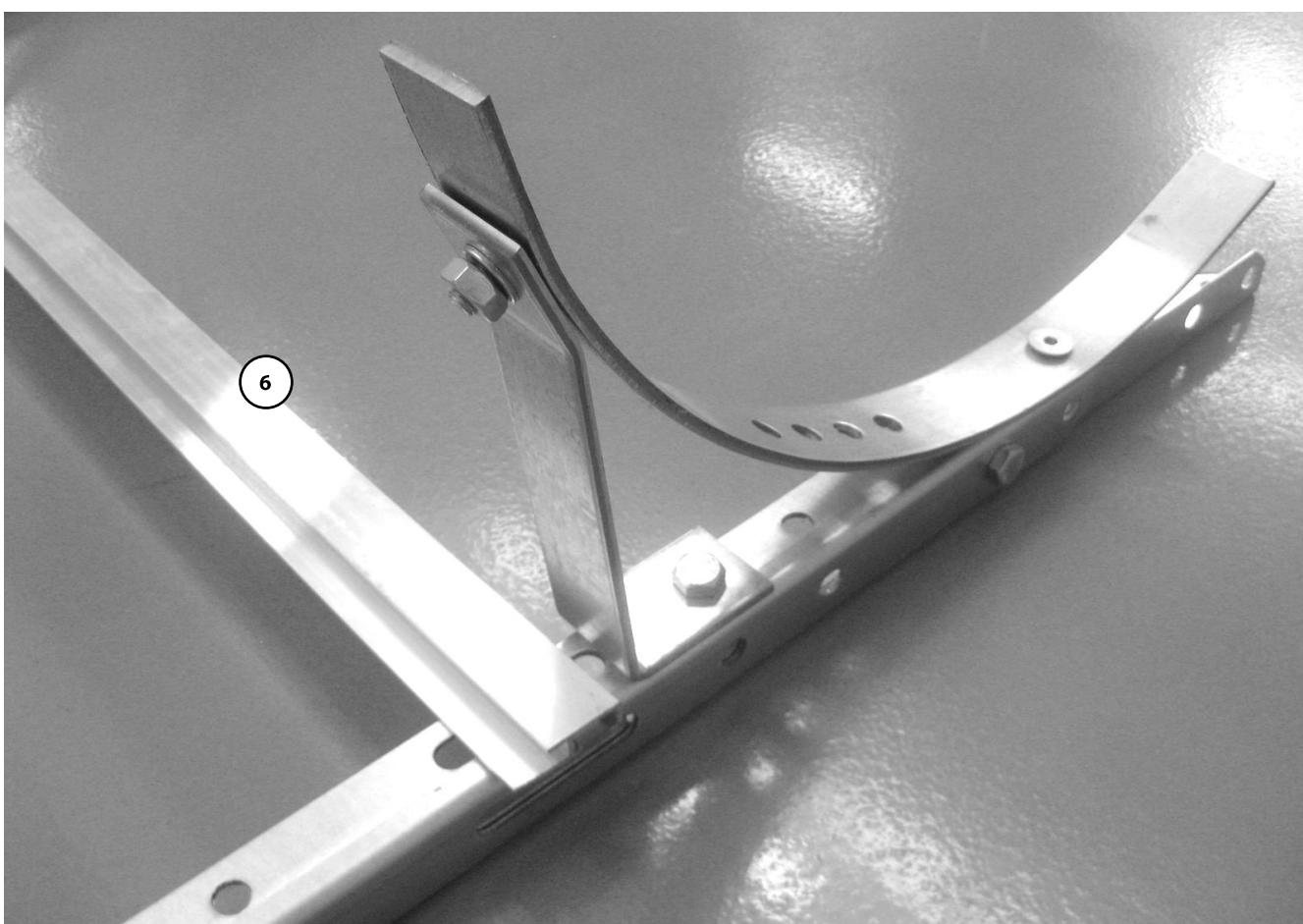
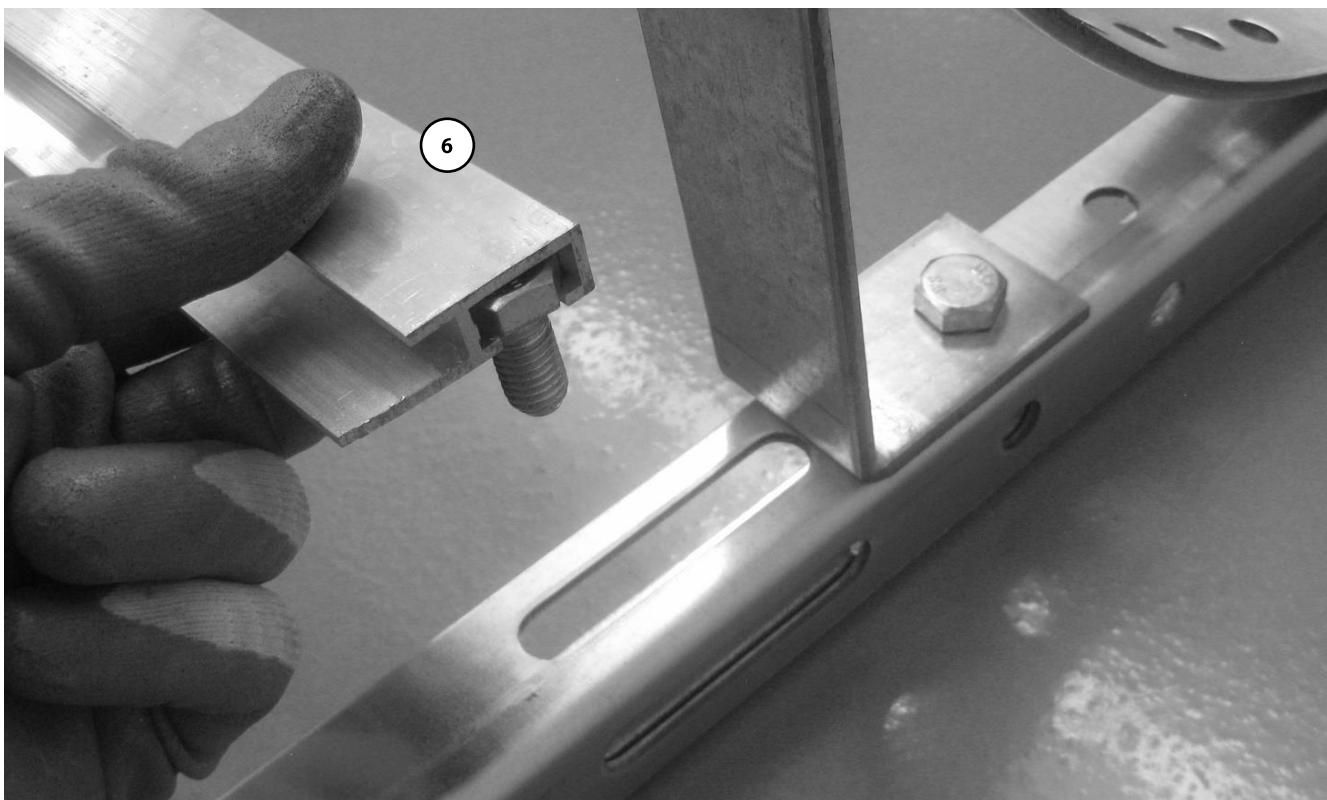
Once fastened, there should be a distance, between the holes on the 2 bars, of:

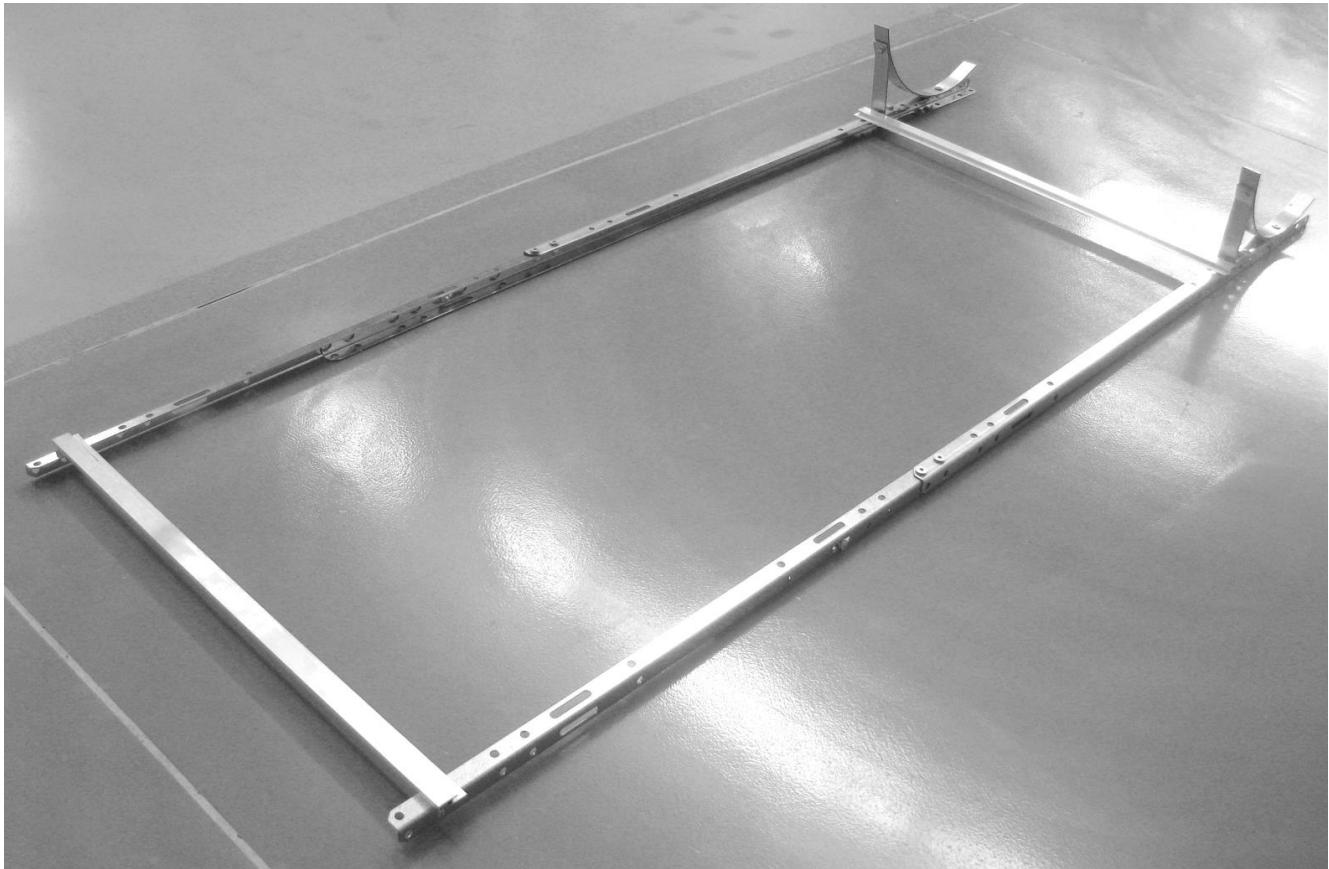
- **74,5 cm** for model **150**;
- **98 cm** for model **200**.

2.7. Fasten the other 990 mm long collector fastening bar (**6**) to the upper part of the structure using 2 bolts, 2 nuts and 2 washers.

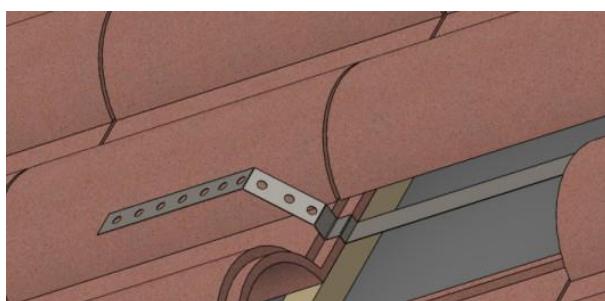
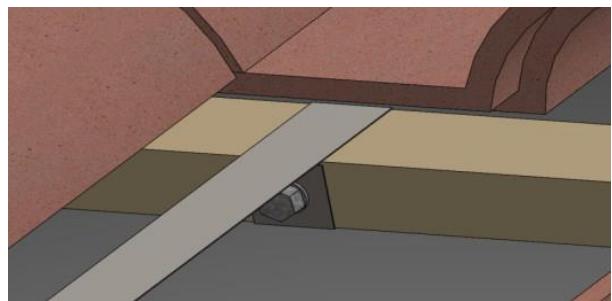
The bolts mustn't be tightened until the panel has been inserted into the structure.



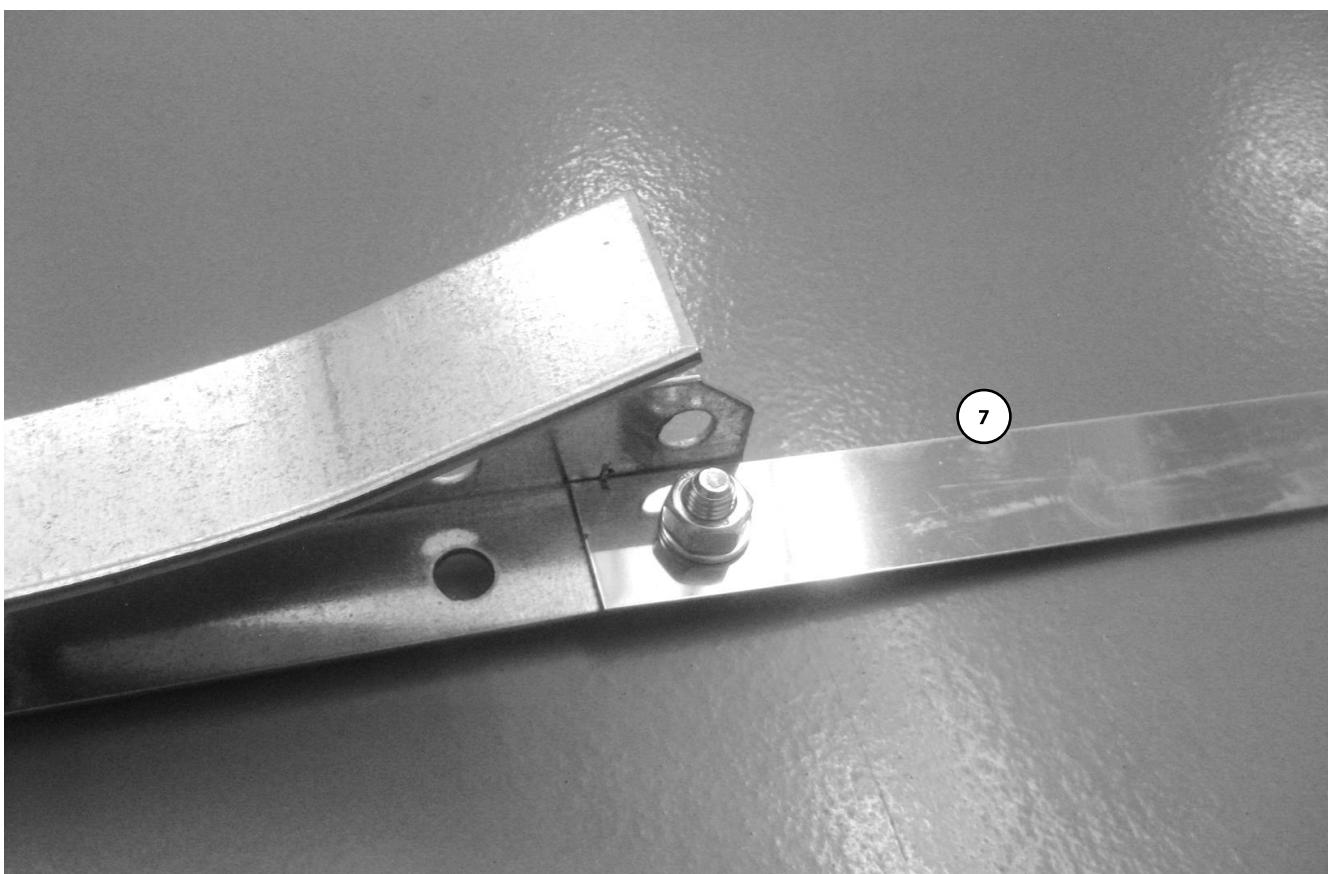
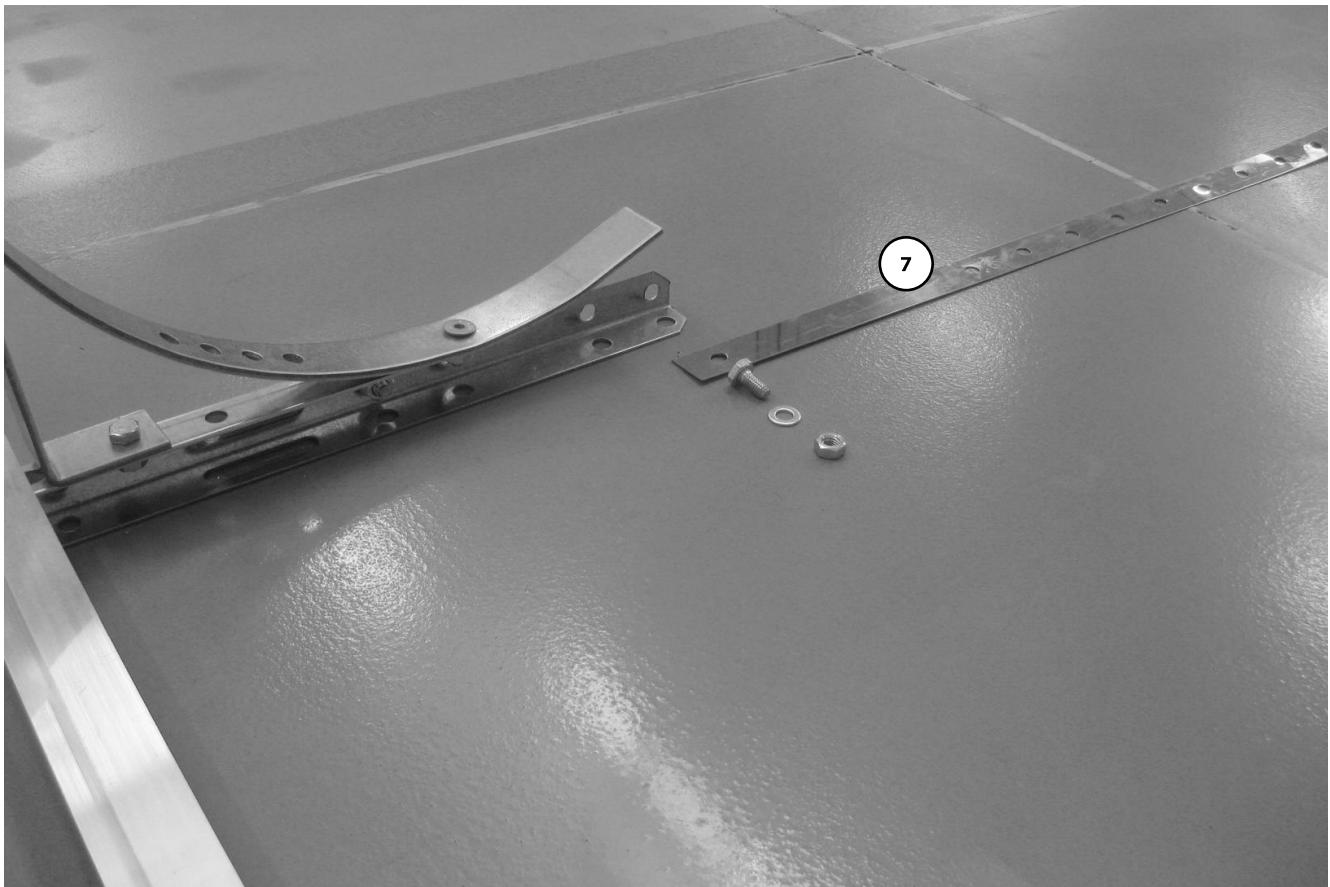


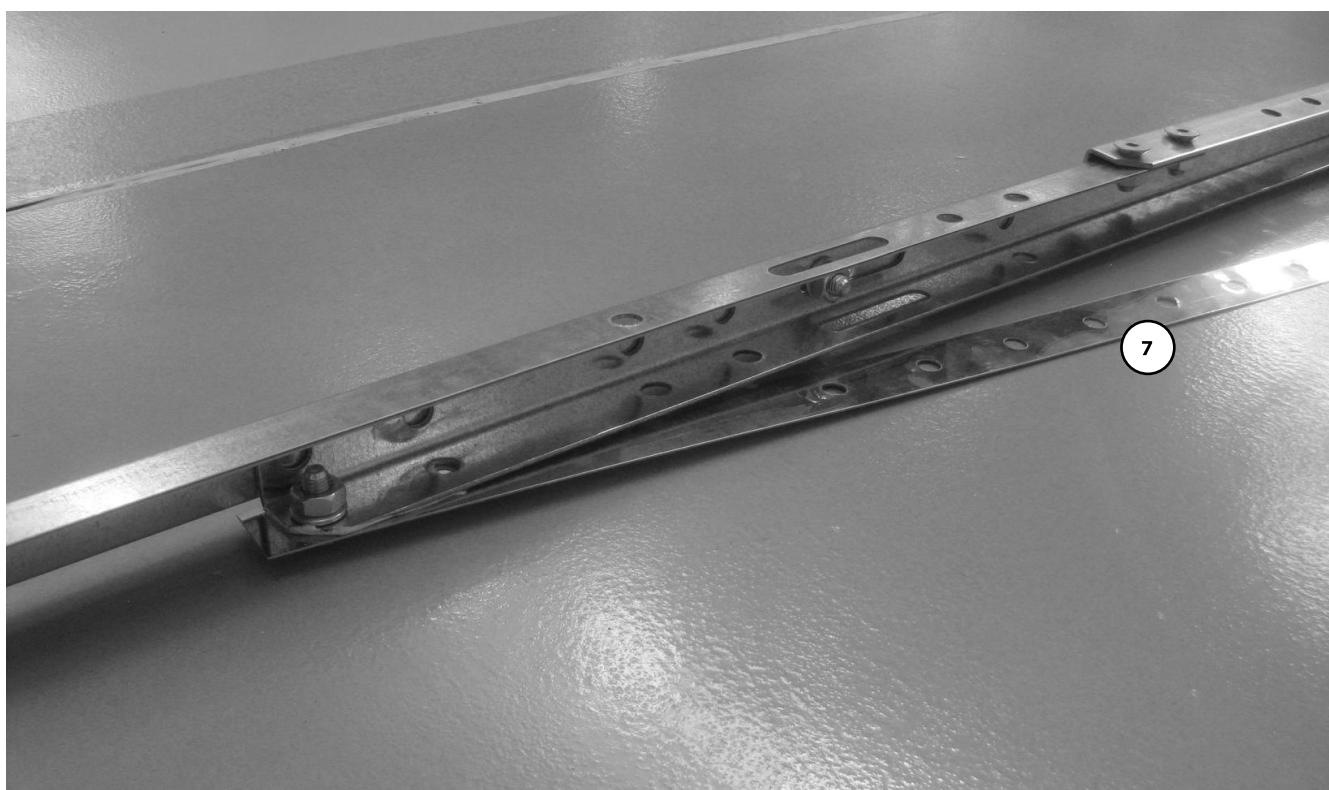
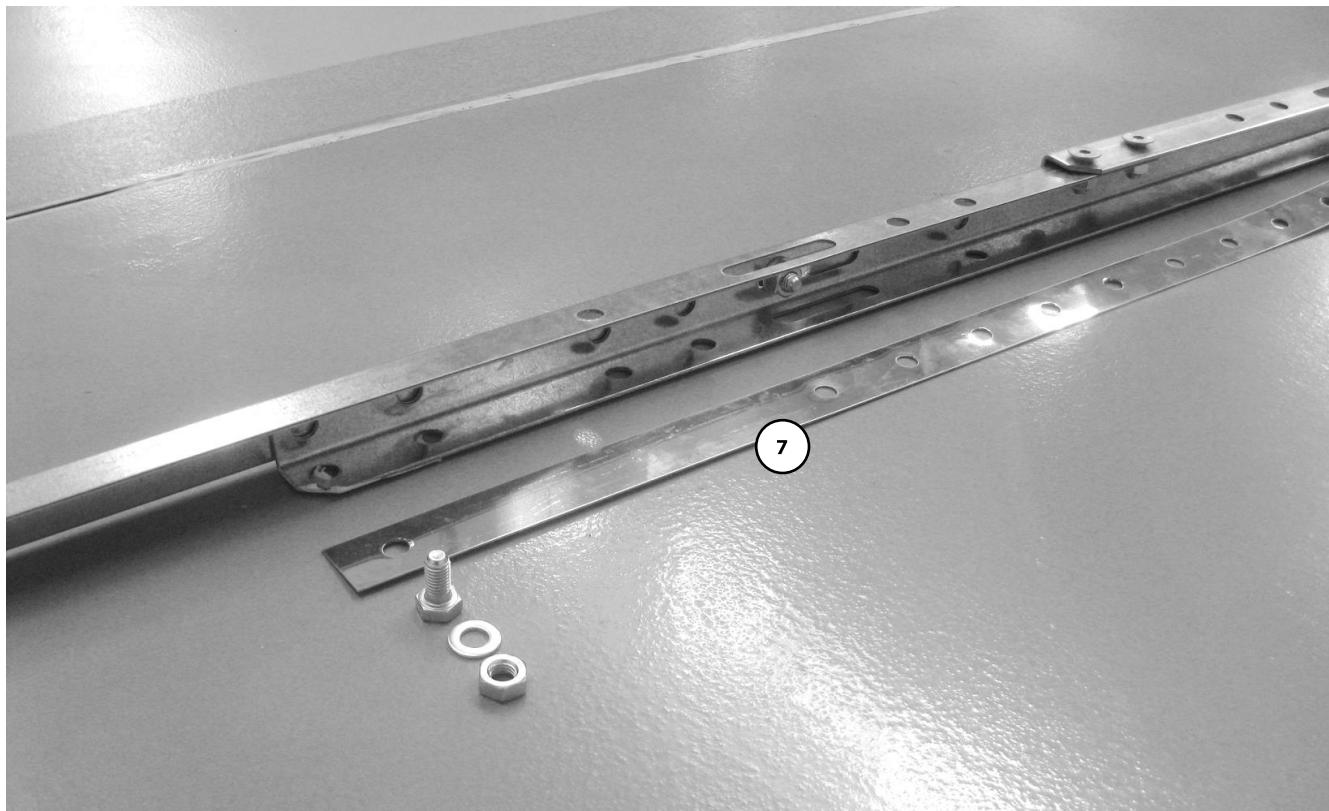


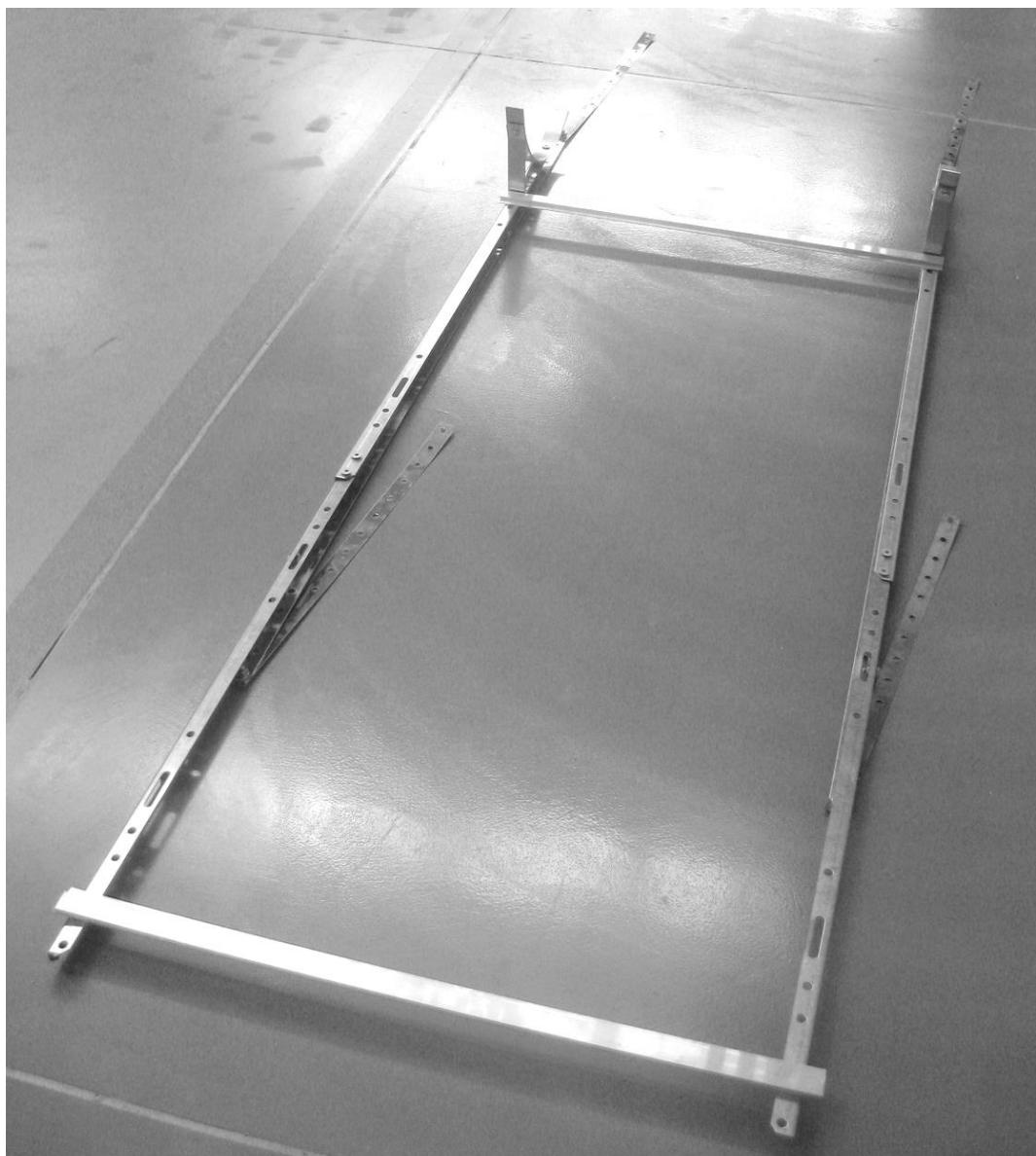
- 2.8. Fasten the 4 perforated steel strips (7) to the structure of the roof using the selected holes on the frame that was just mounted (see the images in the following points as well).



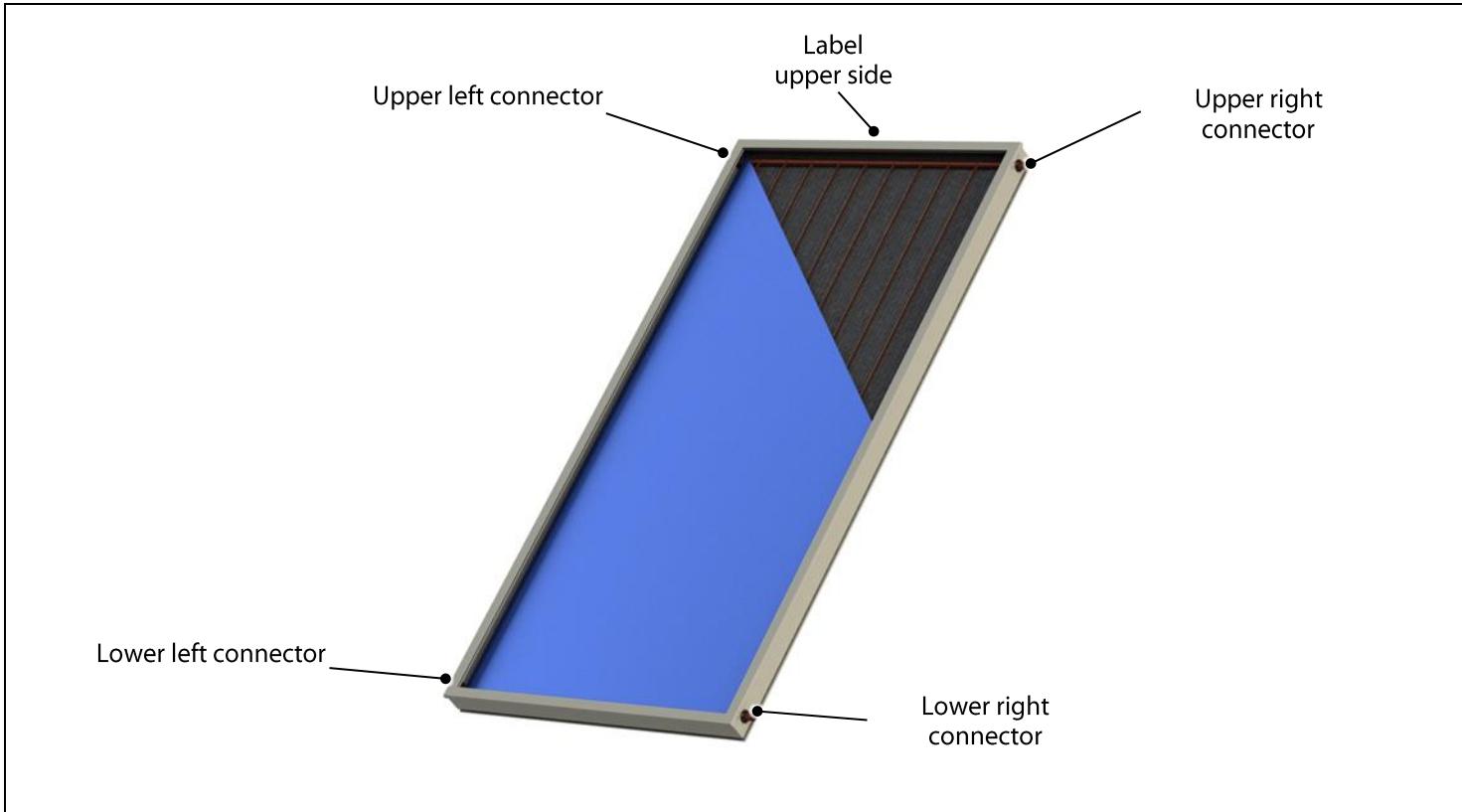
2.9. Fasten the structure to the 4 perforated steel strips (7) using 4 bolts, 4 nuts, and 4 washers.







### 3. Installation of the solar collector

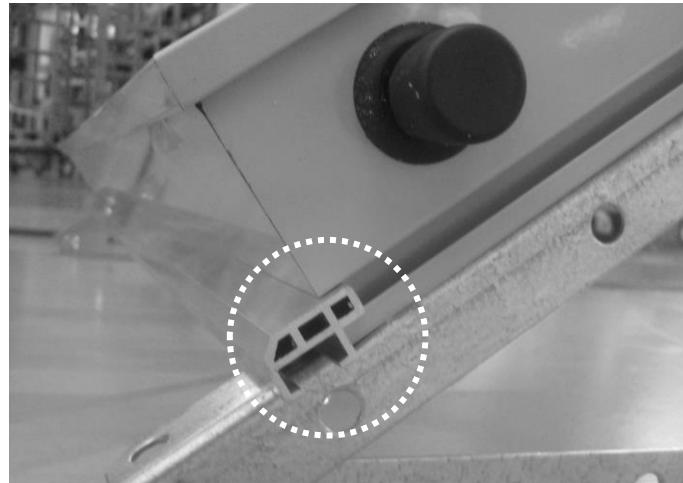


The collector has a designated direction of installation.  
The top is indicated by a label.

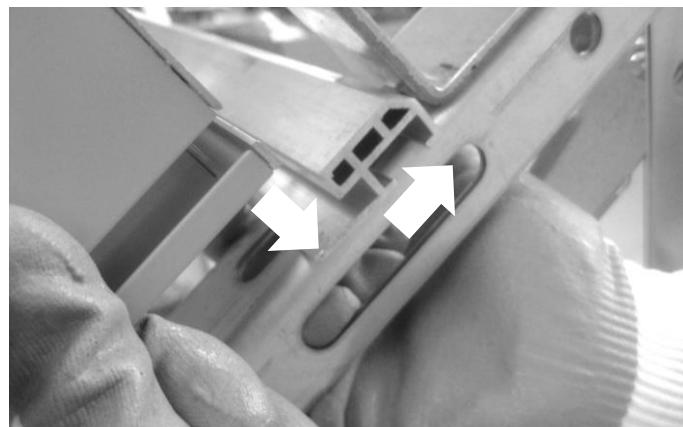


**Although the following images refer to installation on the structure for flat roofs, the insertion of the collector and the boiler is also carried out in the same manner on the structure for inclined roofs.**

- 3.1. Insert the solar collector into the lower collector fastening bar (6), and make sure that it fits as shown in the figure. The collector must be centred with respect to the support structure.



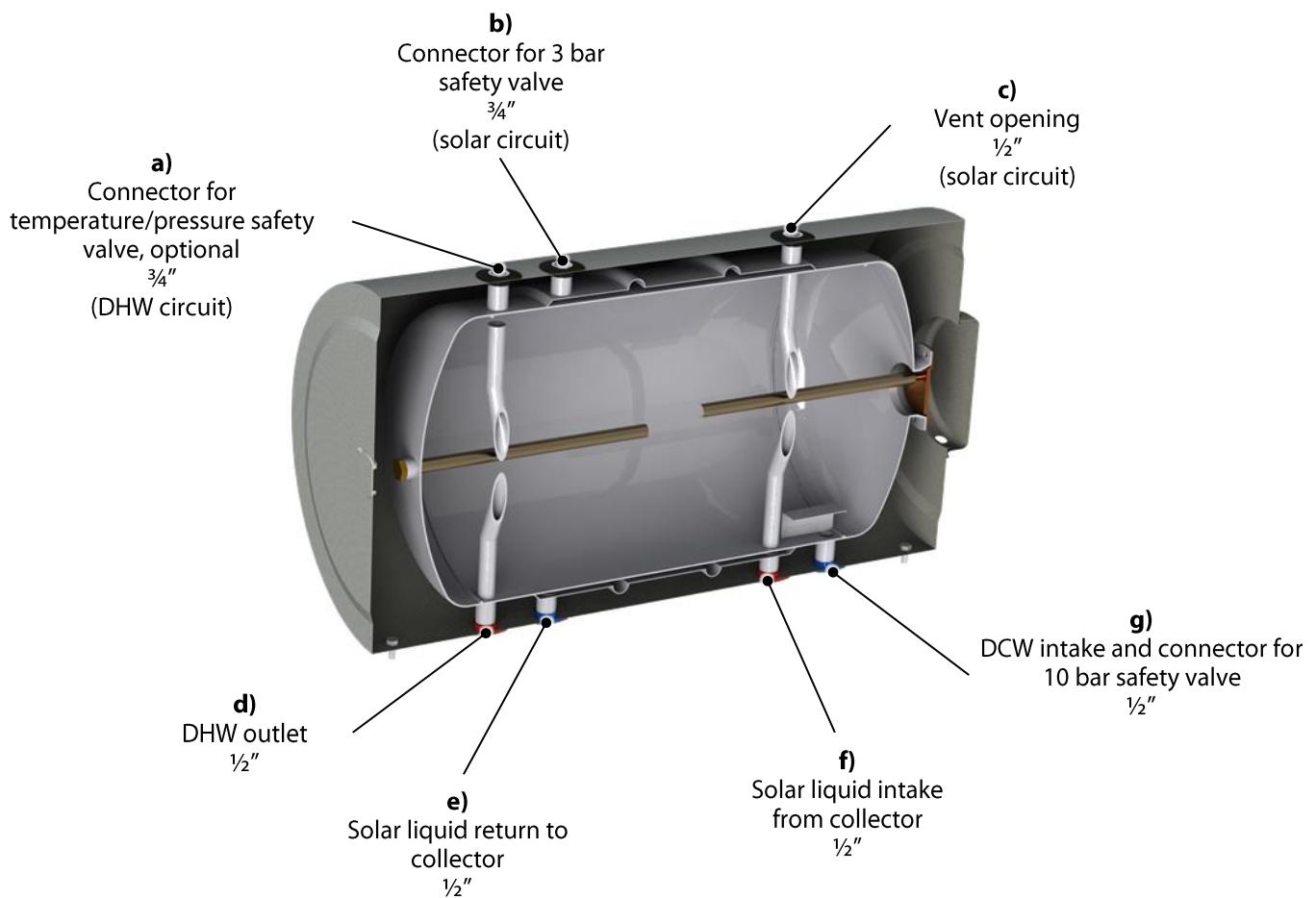
- 3.2. Insert the solar collector into the upper collector fastening bar (6) by sliding it upwards.



- 3.3. Push the upper collector fastening bar (6) downward until it fits into the collector. Afterwards tighten the nuts.



#### 4. Boiler installation and water connections

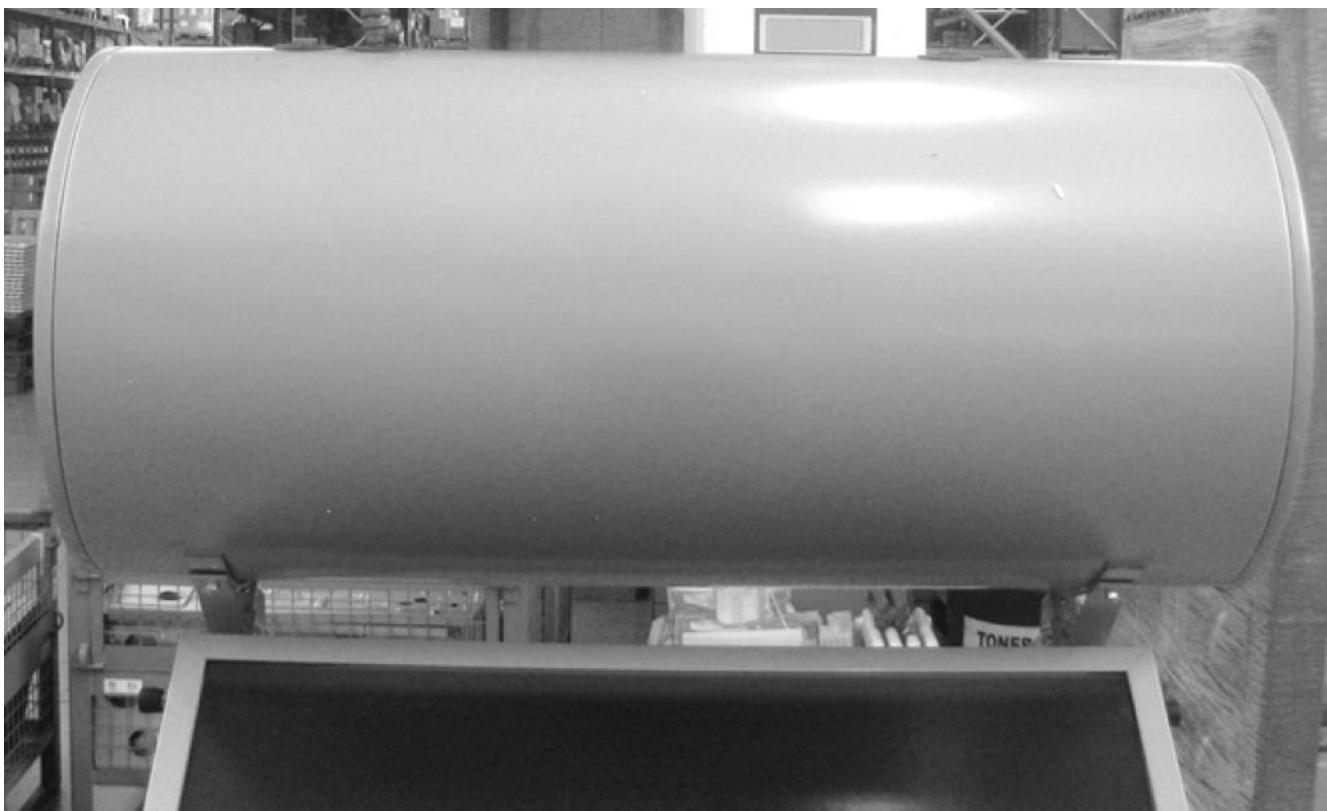


**Although the following images refer to installation on the structure for flat roofs, the insertion of the collector and the boiler is also carried out in the same manner on the structure for inclined roofs.**

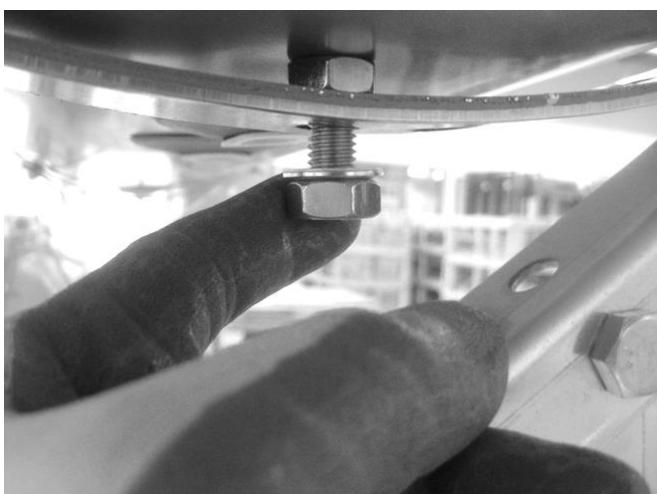
##### 4.1 Insert the boiler into the structure and rest it on the U-brackets.

The boiler has two threaded M10 inserts, which must be inserted into the holes of the U-brackets that render the inserts perpendicular to the ground.





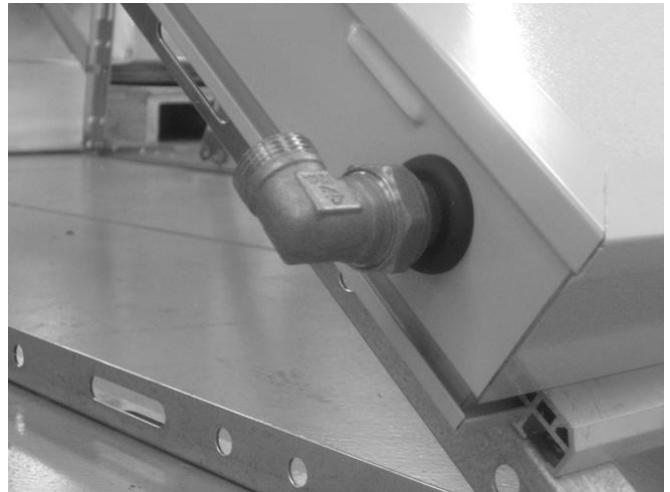
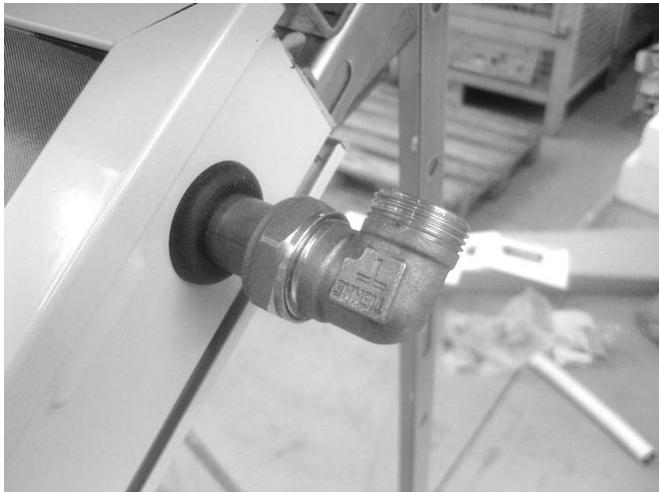
Fasten the boiler using 2 nuts and 2 washers.



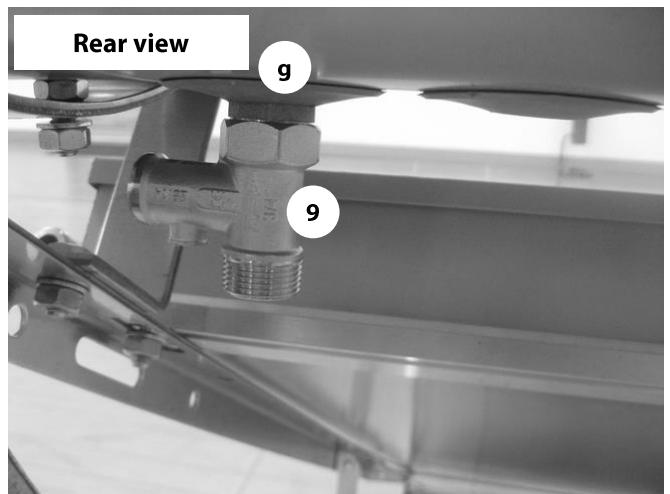
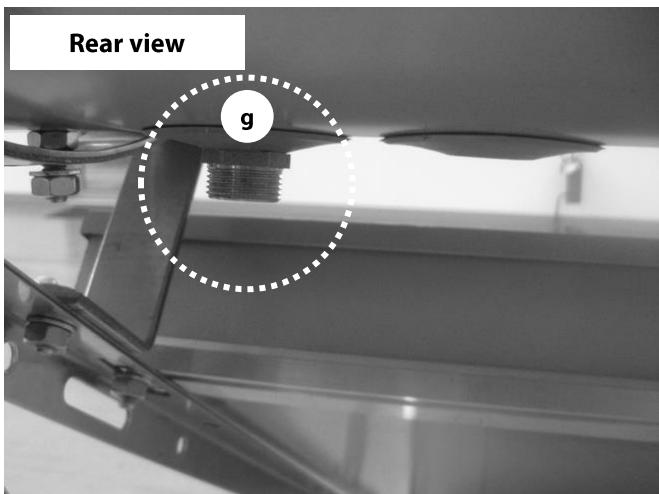
4.2 Fasten the two Ø22 mm compression caps onto the solar collector's upper left and lower right connections.



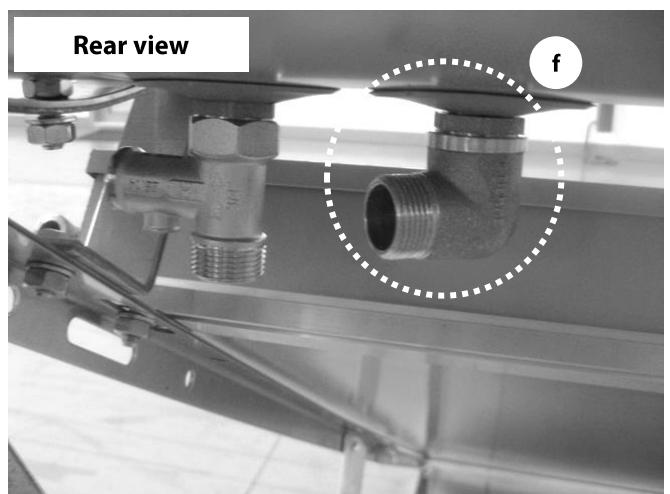
- 4.3 Fasten the two Ø22 mm x ¾" M compression elbow couplings onto the solar collector's upper right and lower left connections.



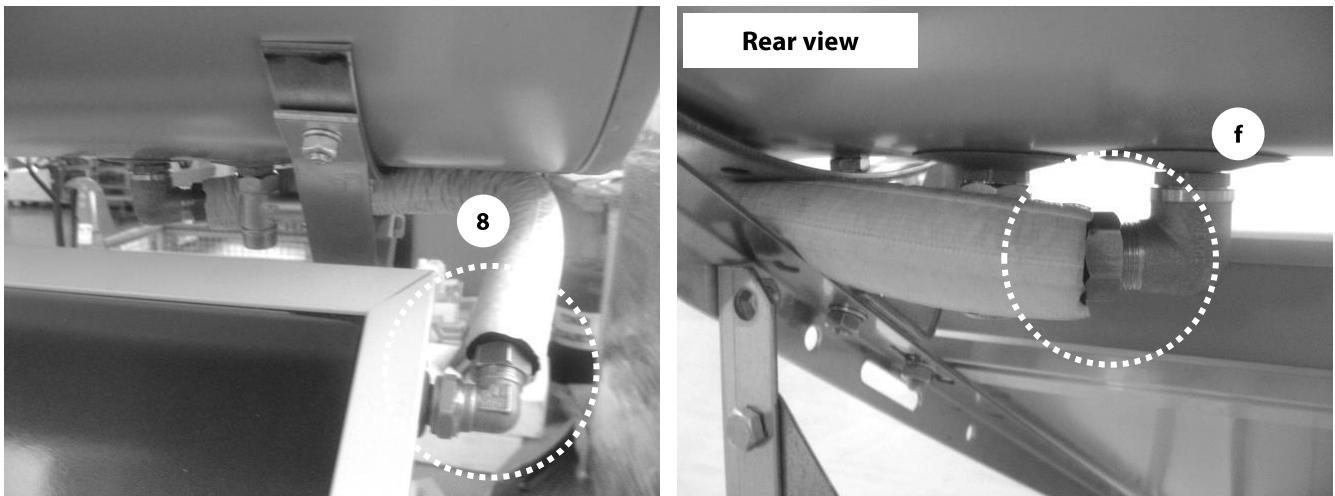
- 4.4 Using a ¾" M x ½" M nipple, connect the 10 bar domestic water safety valve (9) to the boiler's DCW intake (g). Seal the threads using a thread seal tape suitable for high temperatures.



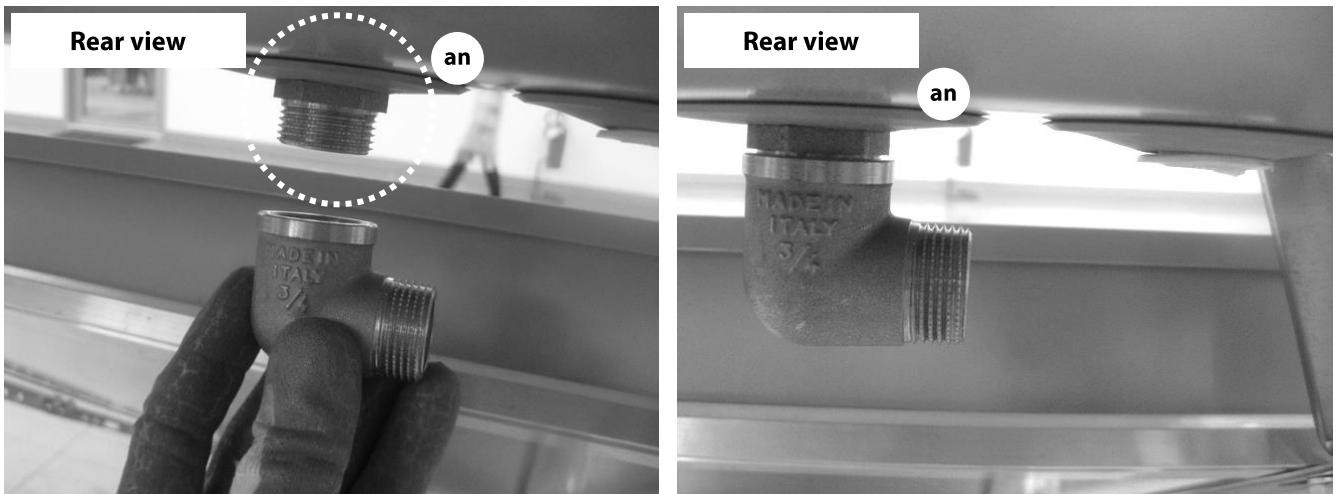
- 4.5 Using a ¾" M x ½" M nipple, connect a ¾" M x ¾" F elbow coupling to the boiler's solar liquid intake (f). Seal the threads using a thread seal tape suitable for high temperatures.



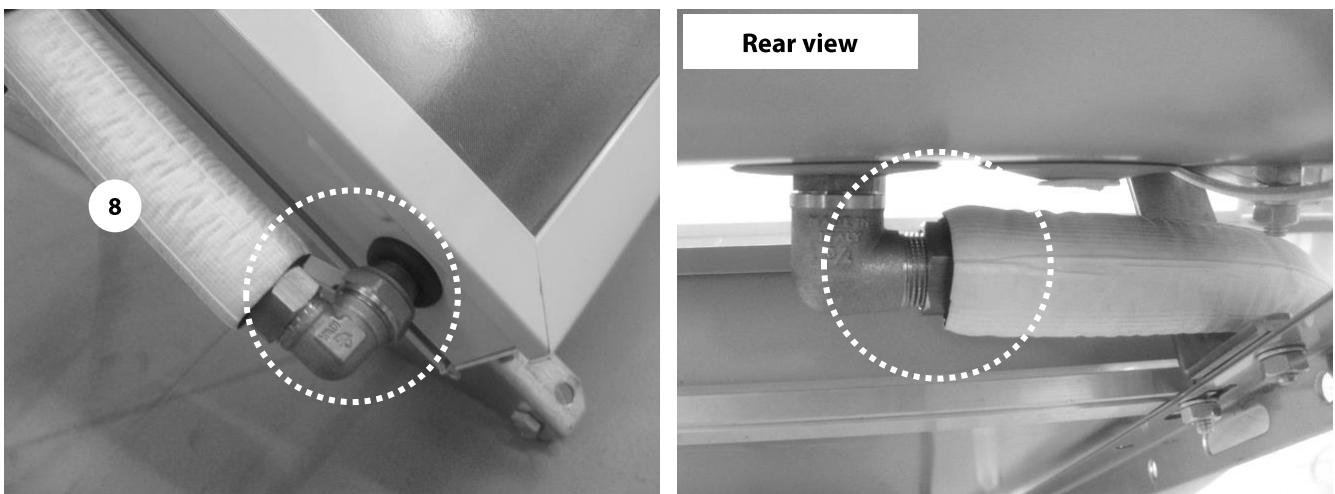
- 4.6 Using two  $\frac{3}{4}$ " gaskets, connect the 440 mm long flexible steel pipe (8) to the solar collector's upper right connection and to the boiler's solar liquid intake (f).  
 The flexible steel pipe must proceed in an upward direction from the connector on the collector to the connector on the boiler (f).



- 4.7 Using a  $\frac{3}{4}$ " M x  $\frac{1}{2}$ " M nipple, connect a  $\frac{3}{4}$ " M x  $\frac{3}{4}$ " F elbow coupling to the boiler's solar liquid return (e). Seal the threads using a thread seal tape suitable for high temperatures.

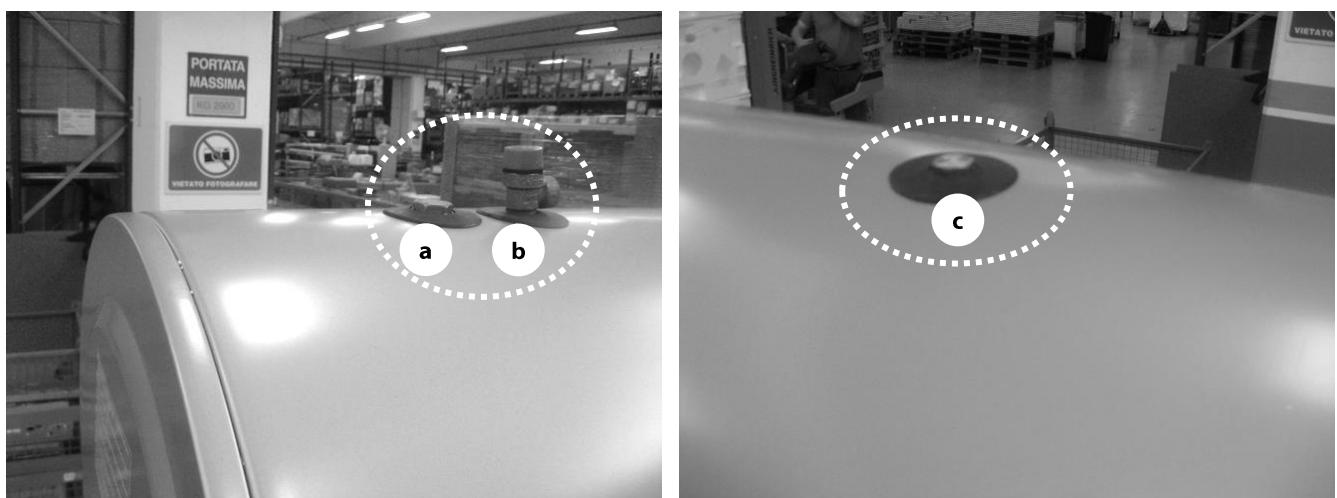


- 4.8 Using two  $\frac{3}{4}$ " gaskets, connect the 2200 mm long flexible steel pipe (8) to the solar collector's lower left connection and to the boiler's solar liquid return (e).





- 4.9 Connect the cold water intake and the hot water outlet to the respective connectors on the boiler (**g**) and (**d**).
- 4.10 Fill the boiler on the domestic water side, as described in the **Filling the system** section of the **Installation, use, and maintenance manual**.  
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  $\frac{3}{4}$ " M cap.  
Seal the threads using a thread seal tape suitable for high temperatures.
- 4.11 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**.  
Once the circuit has been filled, install the 3 bar safety valve on the boiler's corresponding connector (**b**) and install the  $\frac{1}{2}$ " M cap on the connector (**c**).  
Seal the threads using a thread seal tape suitable for high temperatures.





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