

# ***Ombrière G-box***

## ***Notice de montage***

**genelios**  
Energy & Carpark

# Outils

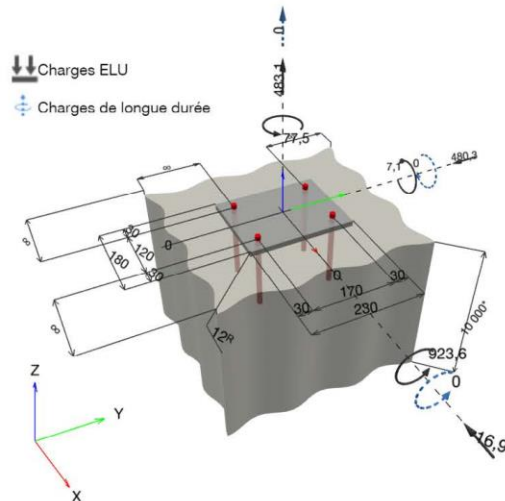
		
		 51 mm 41 mm
		

## 1 Données d'entrée

Type et diamètre de la cheville:	HIT-HY 200-A V3 + HAS-U HCR M12	
Période de retour (durée de vie en années):	50	
Code d'article:	indisponible (accessoire de pose) / 2378171 HIT-HY 200-A V3 (mortier)	
Profondeur d'implantation effective:	$h_{ef, opt} = 159,0 \text{ mm}$ ( $h_{ef, limit} = 240,0 \text{ mm}$ )	
Matériau:	HCR	
Homologation:	ETA 19/0601	
Délivré l Validité:	02/06/2023   -	
Méthode de calcul:	Méthode de calcul EN 1992-4, Produits chimiques	
Montage avec écartement:	$e_b = 0,0 \text{ mm}$ (sans écartement); $t = 12,0 \text{ mm}$	
Platine <sup>R</sup> :	$l_x \times l_y \times t = 180,0 \text{ mm} \times 230,0 \text{ mm} \times 12,0 \text{ mm}$ ; (Epaisseur de platine recommandée: non calculé)	
Profil:	pas de profil	
Matériau de base:	Béton fissuré béton, C20/25, $f_{c, cyl} = 20,00 \text{ N/mm}^2$ ; $h = 10\,000,0 \text{ mm}$ , Temp. court/long: 40/24 °C, Coefficient de sécurité matériel partiel personnalisé $\gamma_c = 1,500$	
Installation:	<b>trou foré avec perforateur, condition d'installation: sec</b>	
Renforcement:	Pas de renforcement ou distance entre armatures $\geq 150 \text{ mm}$ (tous $\varnothing$ ) ou $\geq 100 \text{ mm}$ ( $\varnothing \leq 10 \text{ mm}$ ) Pas de renforcement de bord longitudinal	

<sup>R</sup> - Le calcul de la cheville est réalisé avec l'hypothèse d'une platine rigide.

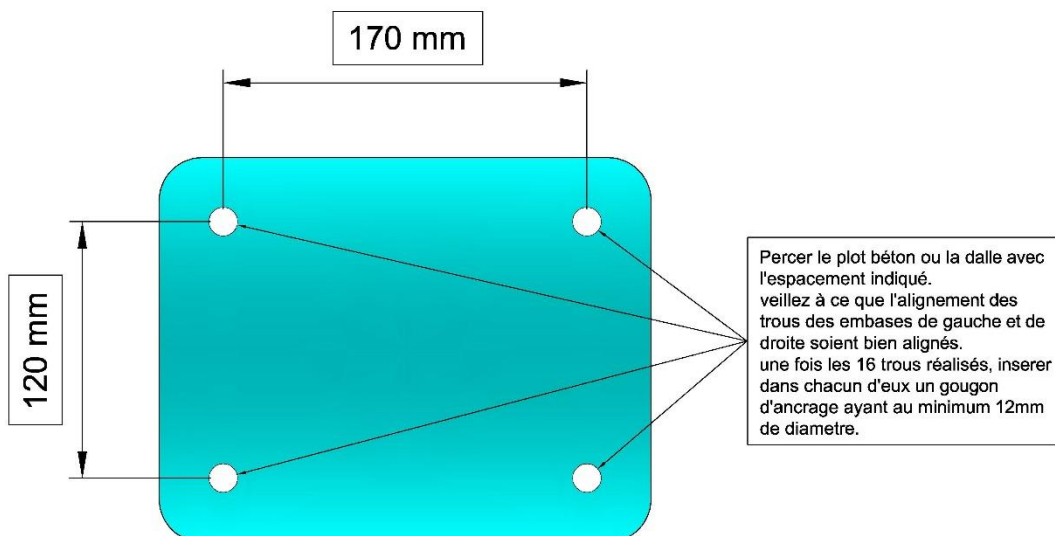
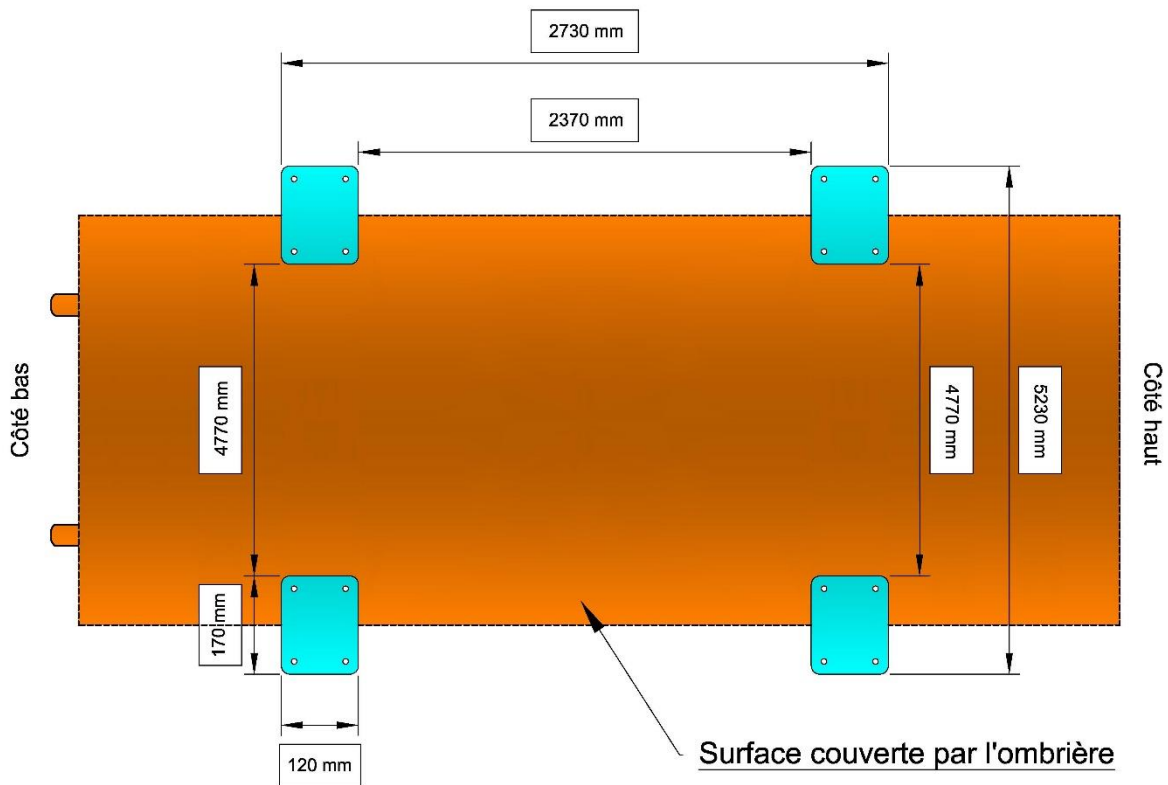
### Géométrie [mm] & Charges [daN, daNm]



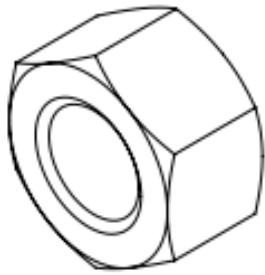
Les données d'entrée et les résultats doivent être vérifiés quant aux conditions existantes et leur plausibilité!  
PROFIS Engineering (c) 2003-2024, Hilti AG, FL-9494 Schaan. Hilti est une marque déposée de Hilti AG, Schaan

## Contraintes montage

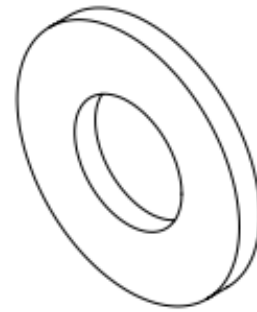
- Sol de niveau ou fondation de niveau
- Tréteaux + lève-plaques réglables
- Plots de béton ou pieux



# Liste des pièces



**Ecrous M12 x 64 M8 x 60**



**Rondelles N12 x 128 S8 x 20 N8 x 88**

**ST6,3 x 25 mm x 20**

**M8 x 20 mm x 84**

**M10 x 70 mm x 8**

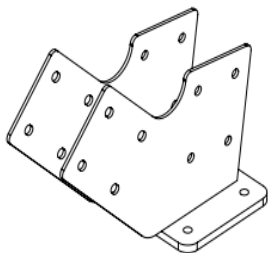
**M12 x 35 mm x 16**

**M12 x 140 mm x 48**

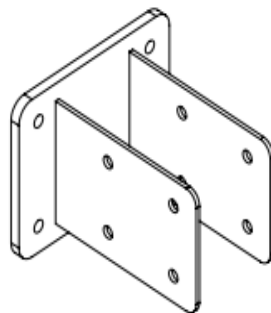


**ST 6.3 x 19 mm x 3**

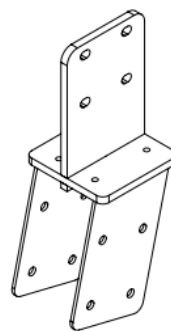
**ST 3.5 x 16 mm x 96**



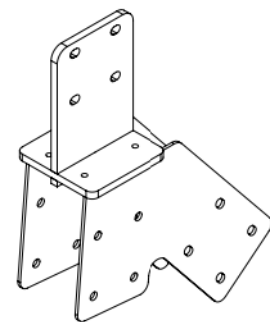
**Tôle encastrement long x 2**



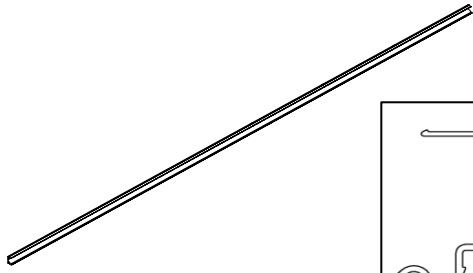
**Tôle encastrement court x 2**



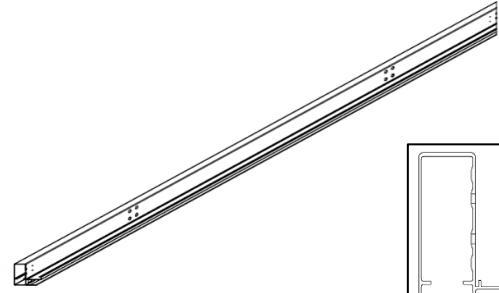
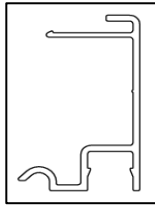
**Encastrement haut poteau long x 2**



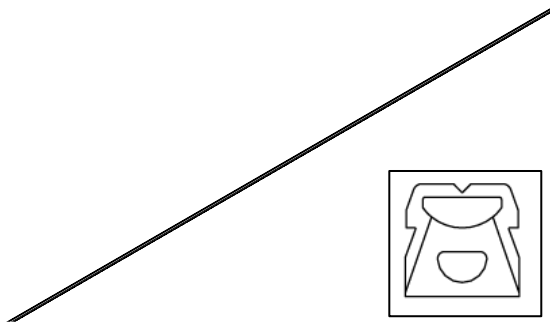
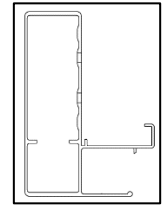
**Encastrement haut poteau court x 2**



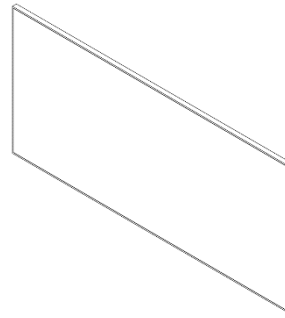
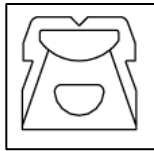
Capot technique 5,4 m x 2 4,7 m x 2



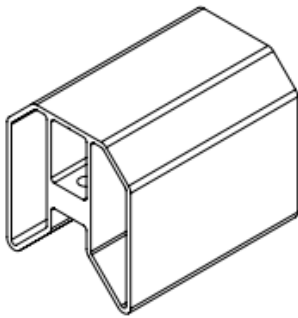
Profilé 5 m x 2 5,5 m x 2



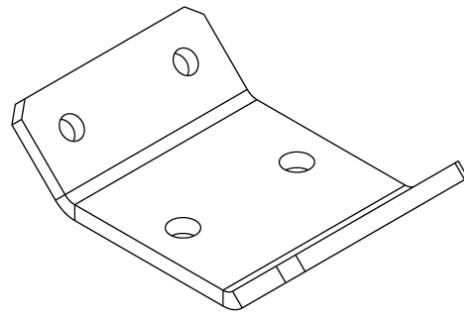
Bandeau LED 5 m x 2 4,3 m x 2



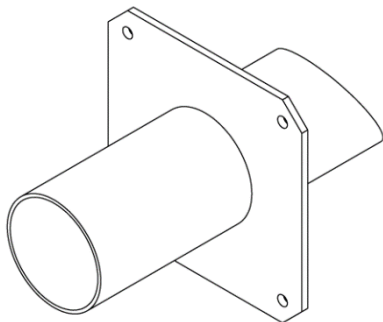
Panneaux x 12



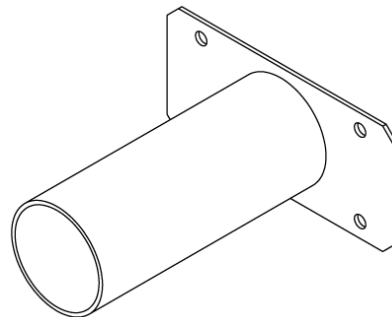
Profilé reprise angle x 4



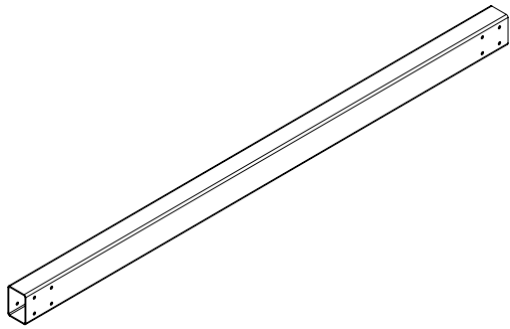
Tôle tendeuse x 4



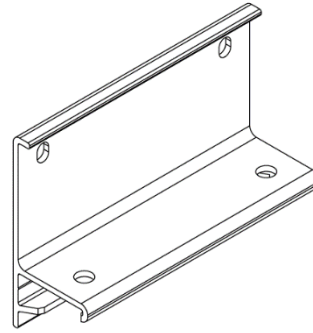
Sortie d'eau horizontale x 2



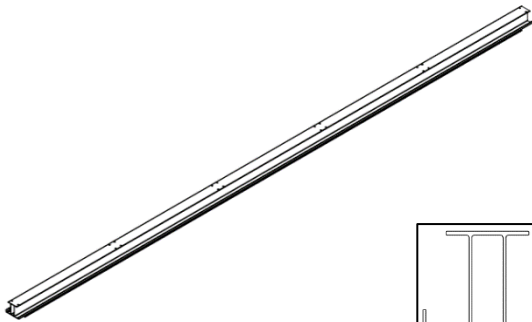
Sortie d'eau verticale x 2



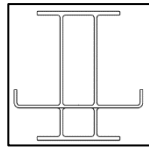
**Poteaux 2,5 m x 2    2,8 m x 2    3,3 m x 2**



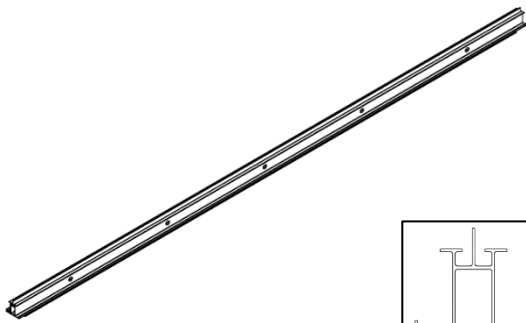
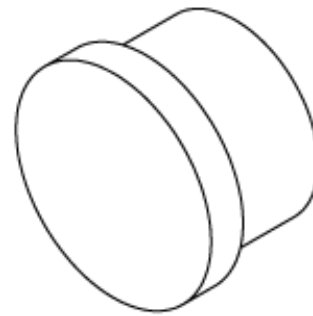
**Equerre support profilé x 10**



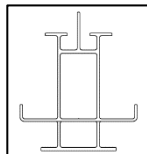
**Profilé renfort mi-panneau x 4**



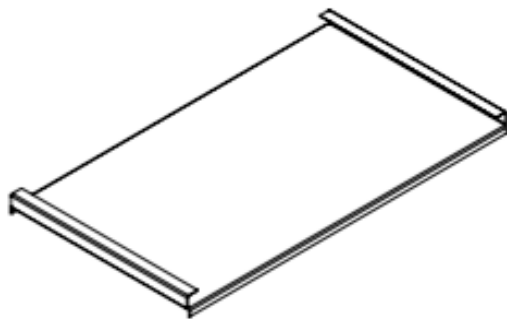
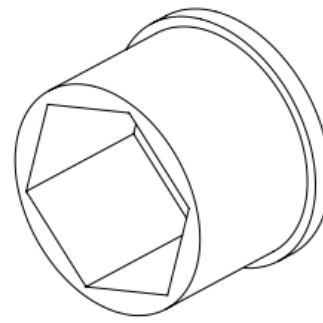
**Embout à ailettes x 16**



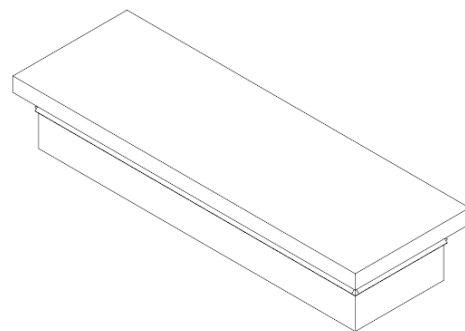
**Profilé support panneau x 1**



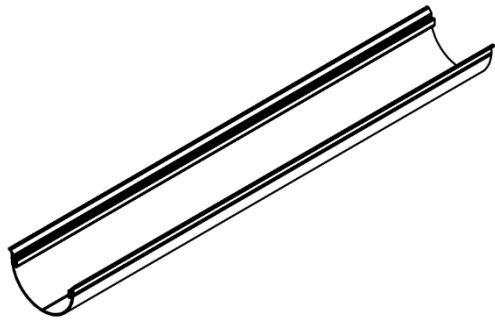
**Bouchon x 128**



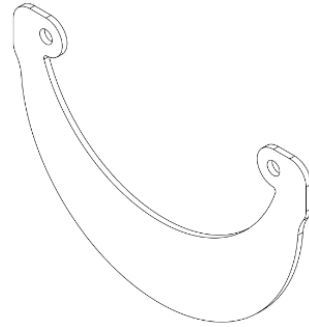
**Plaque onduleur x 1**



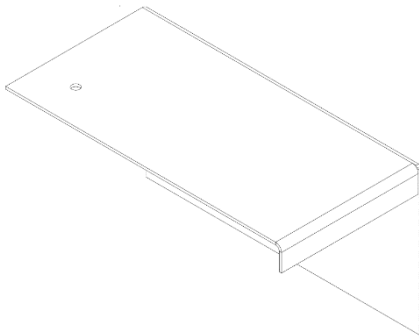
**Embout rectangulaire x 2**



**Goulotte 0,5 m x 16    1 m x 8**



**Tôle évacuation goulotte x 48**

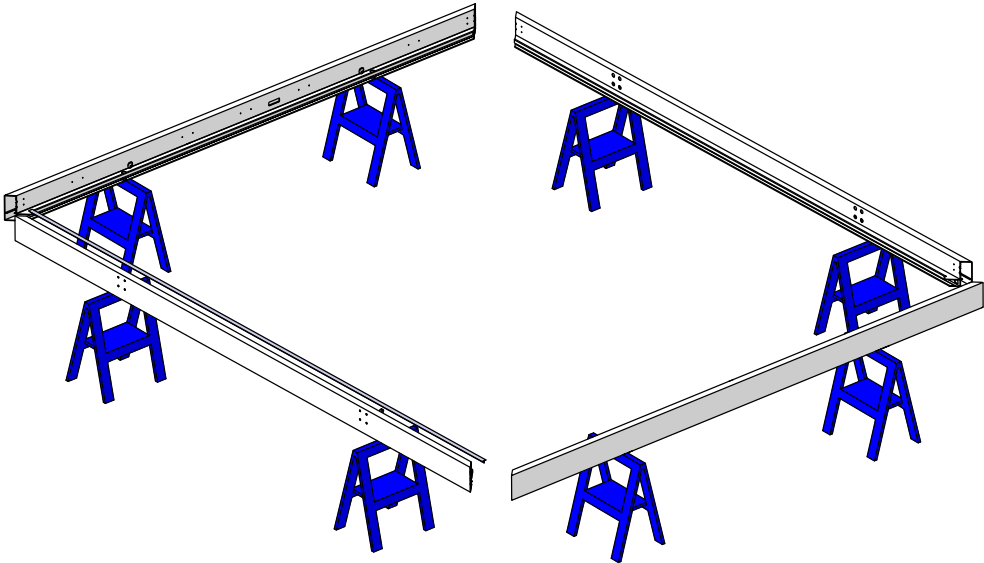


**Gabarie évacuation d'eau x 2**



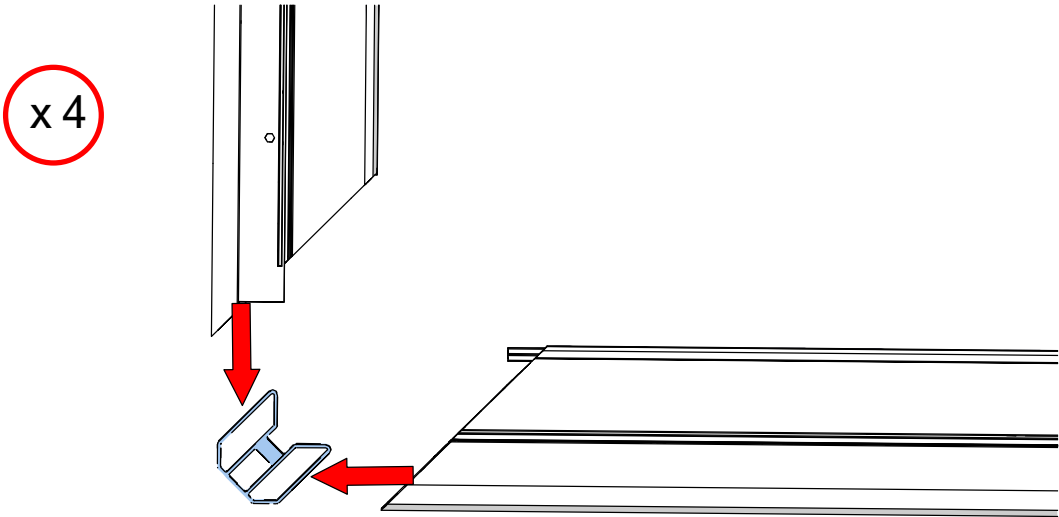
# Montage cadre

## 1 Positionnement profilés



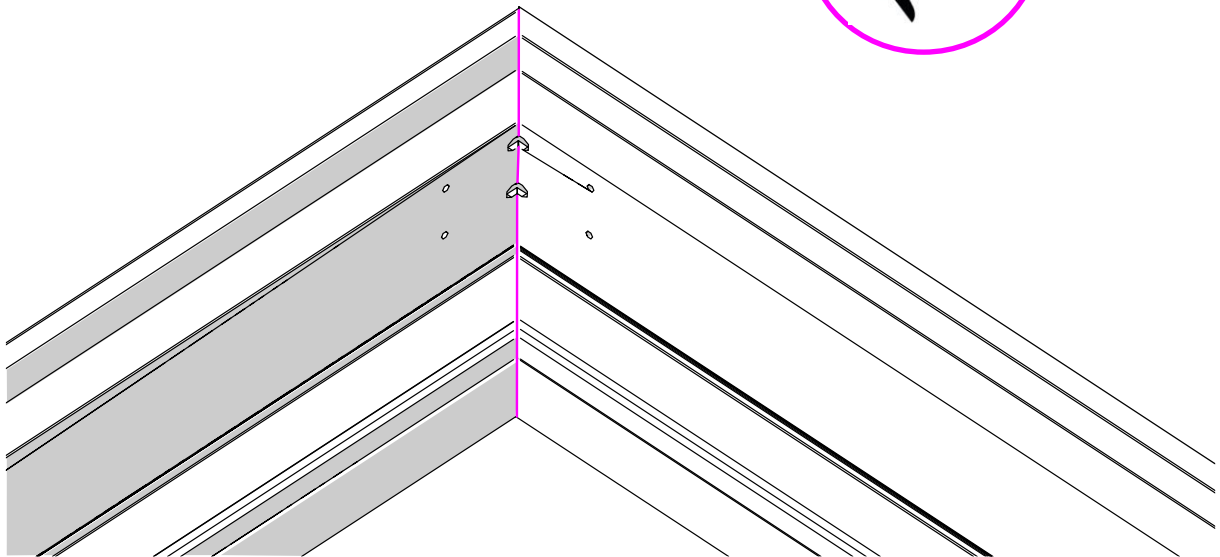
## 2 Insertion profilé reprise angle

2-1



2-2

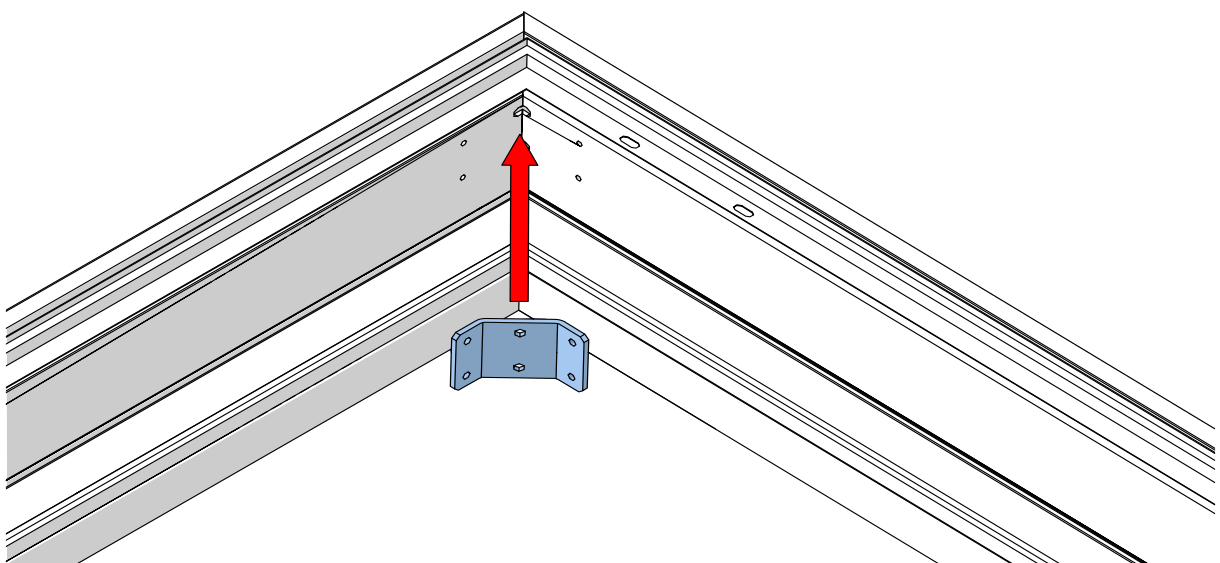
x 4



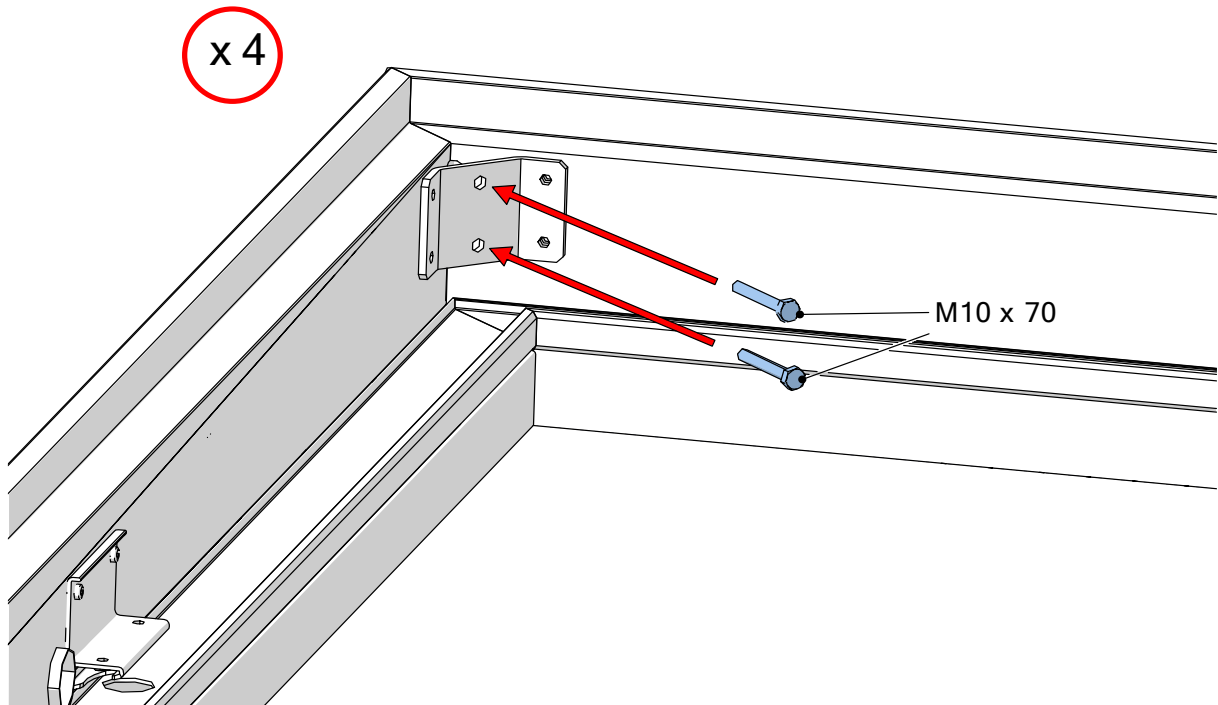
### 3 Montage tôle tendeuse

3-1

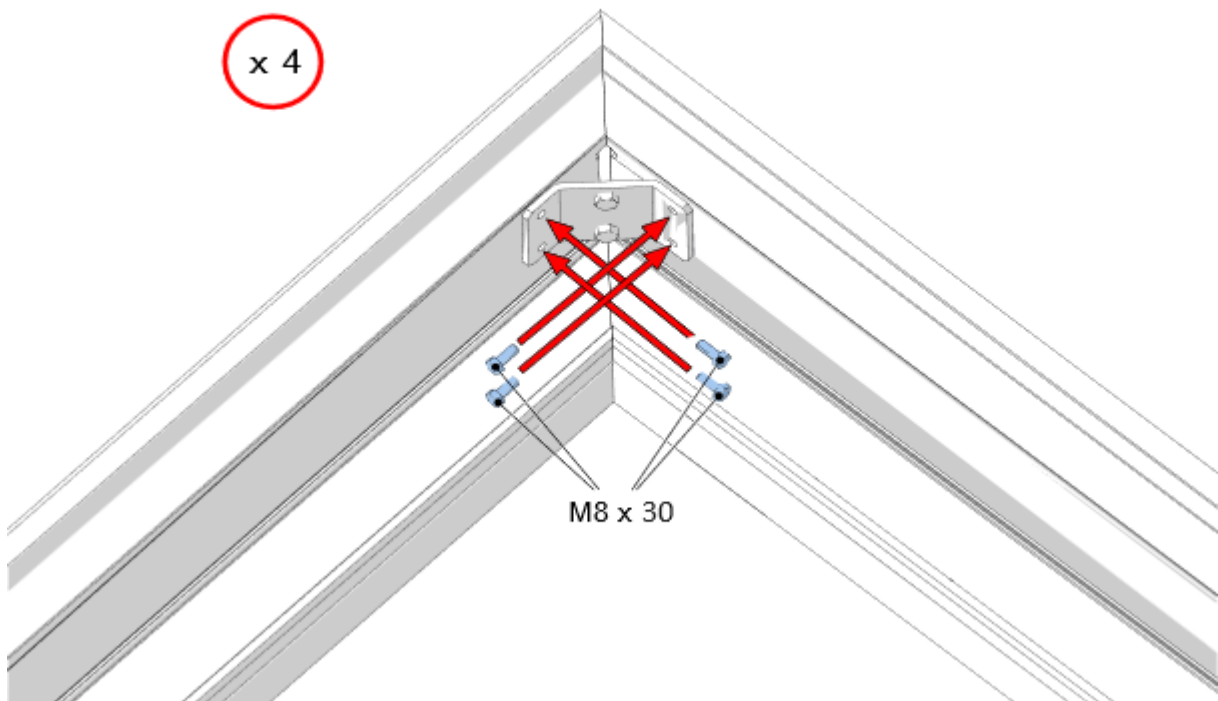
x 4



### 3-2

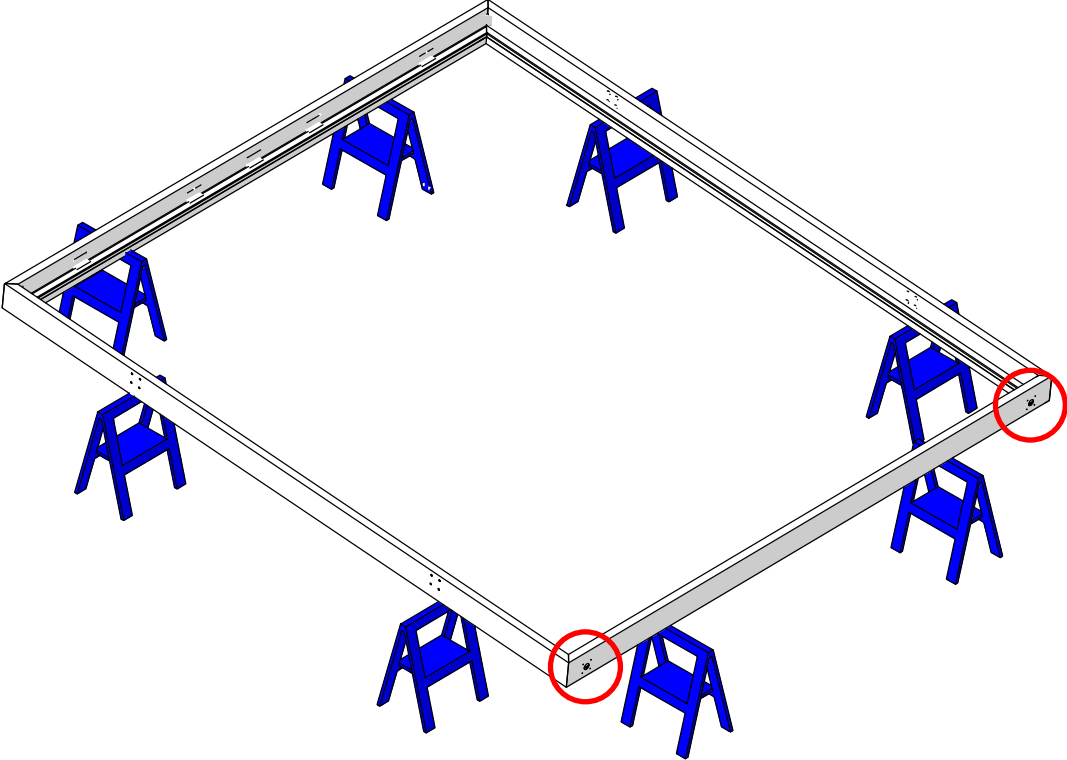


### 3-3

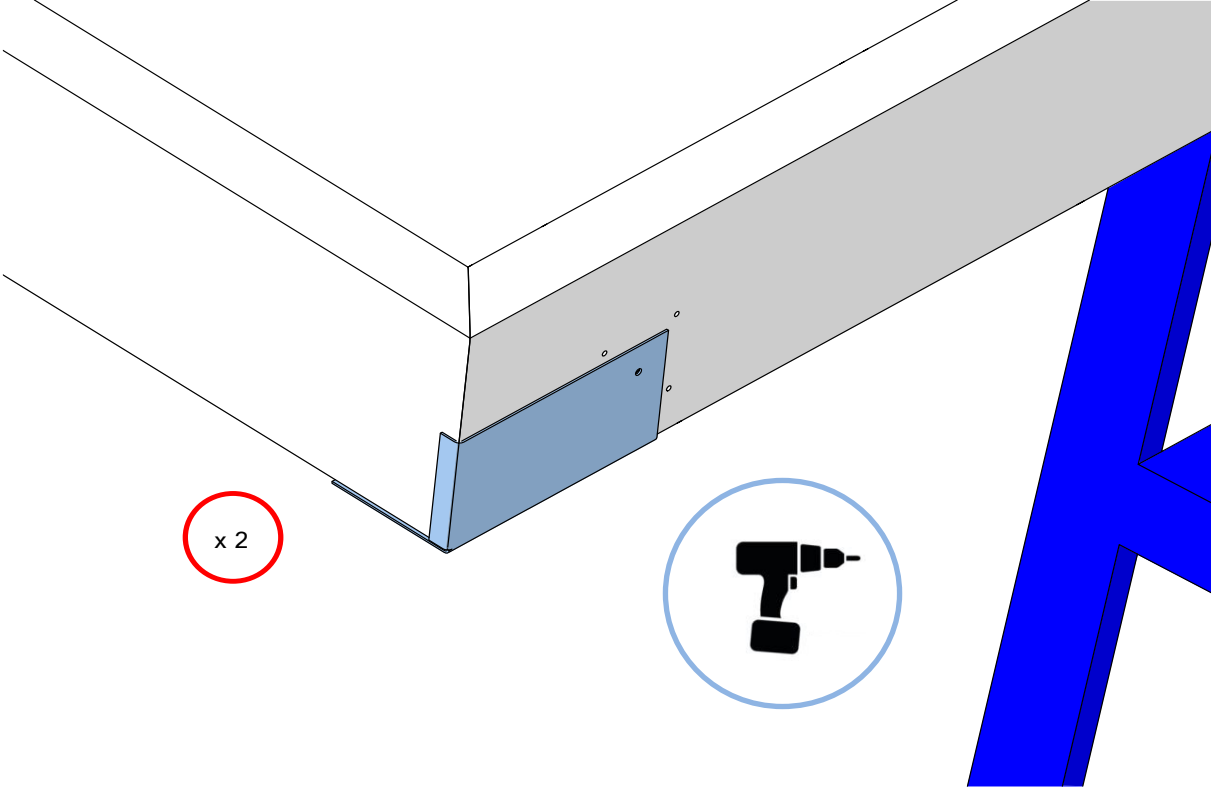


# 4 Sorties d'eau horizontale (Option 1)

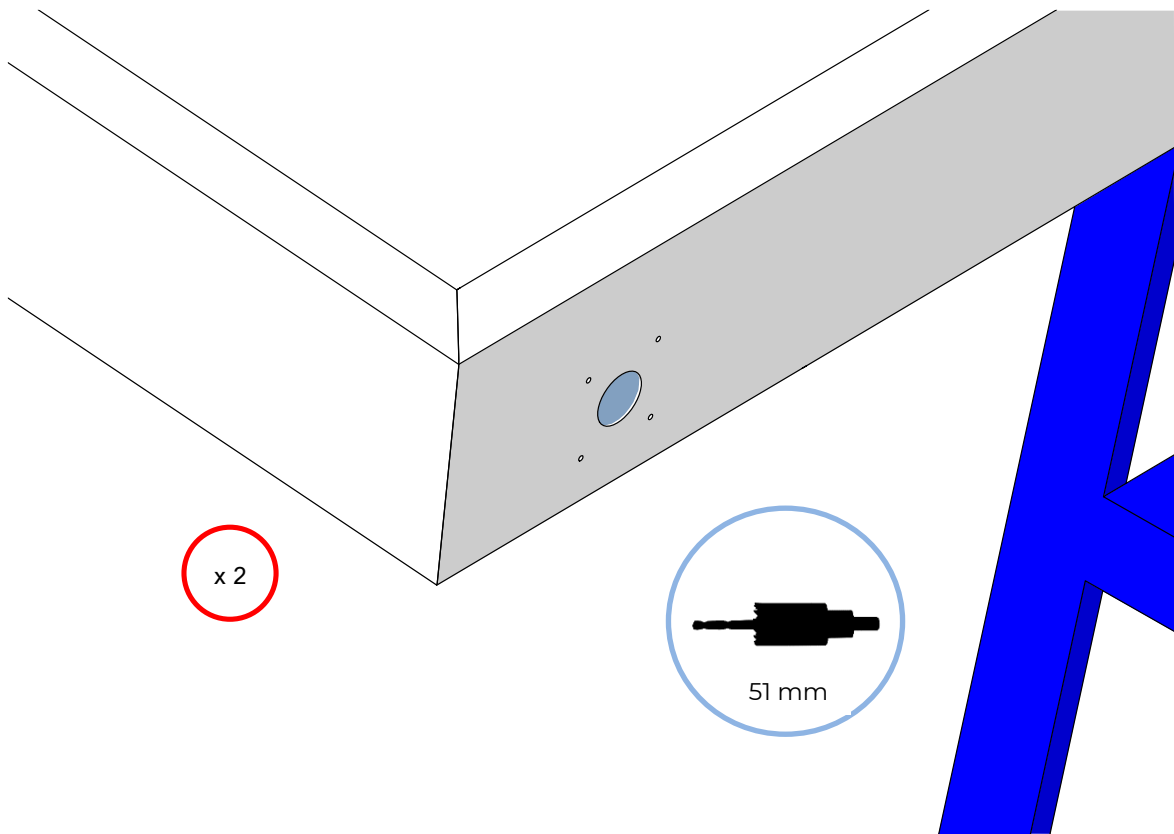
4-1



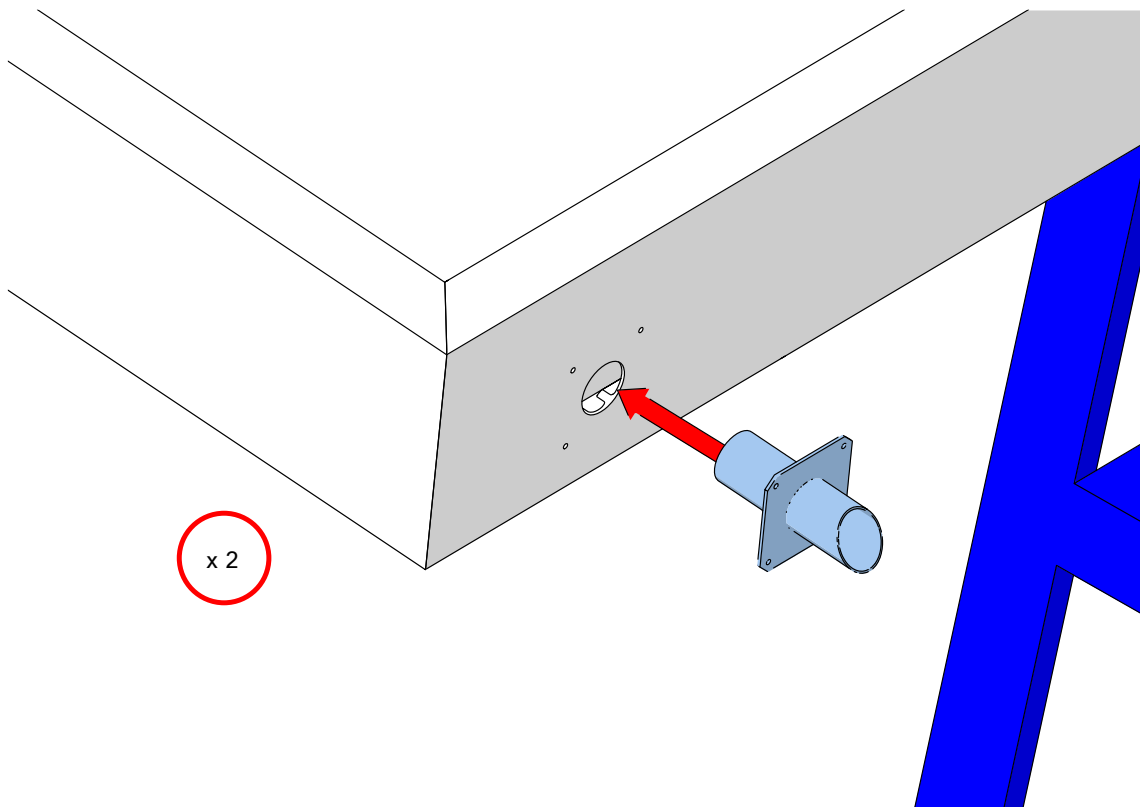
4-2



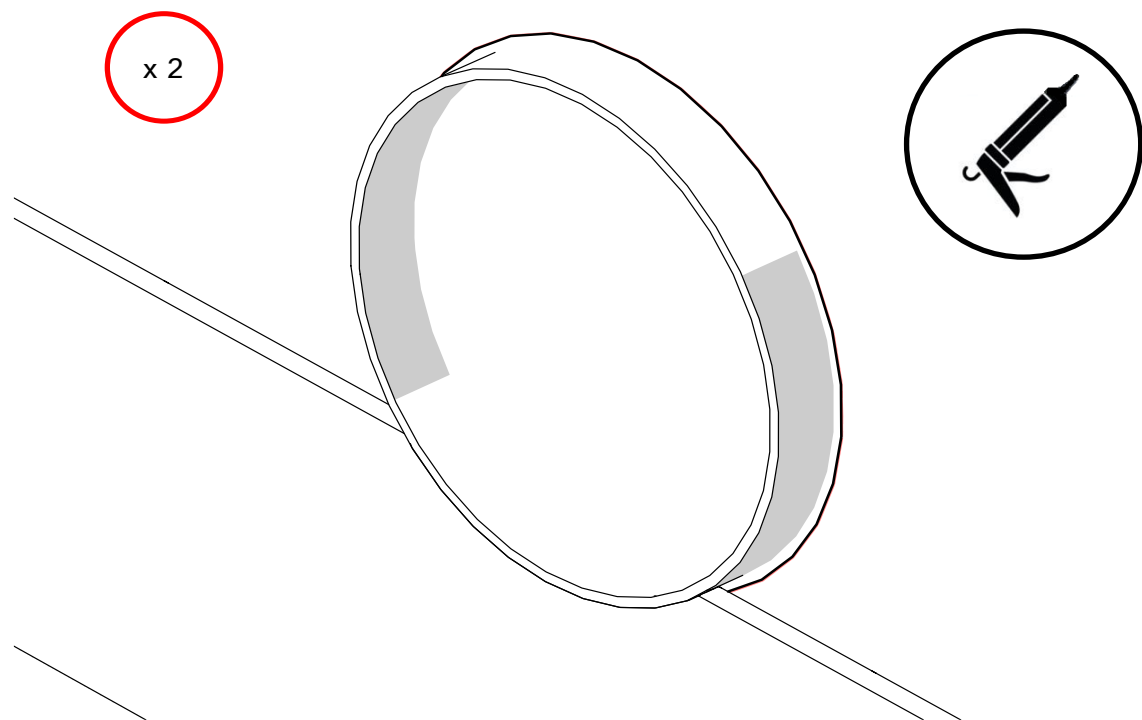
**4-3**



**4-4**

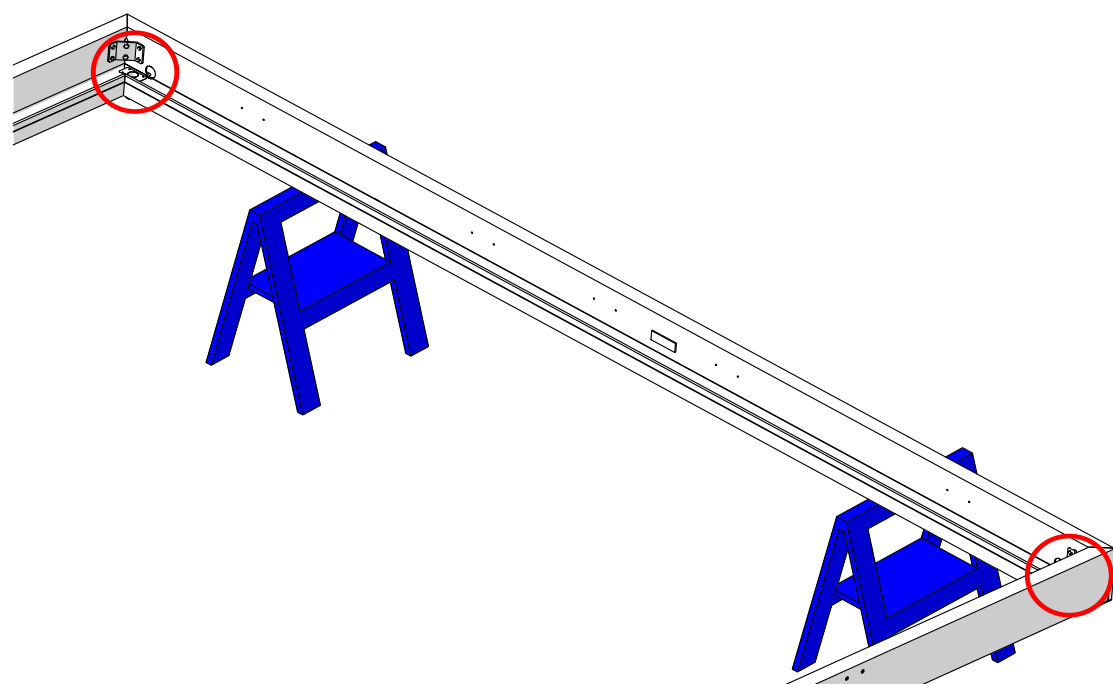


4-5

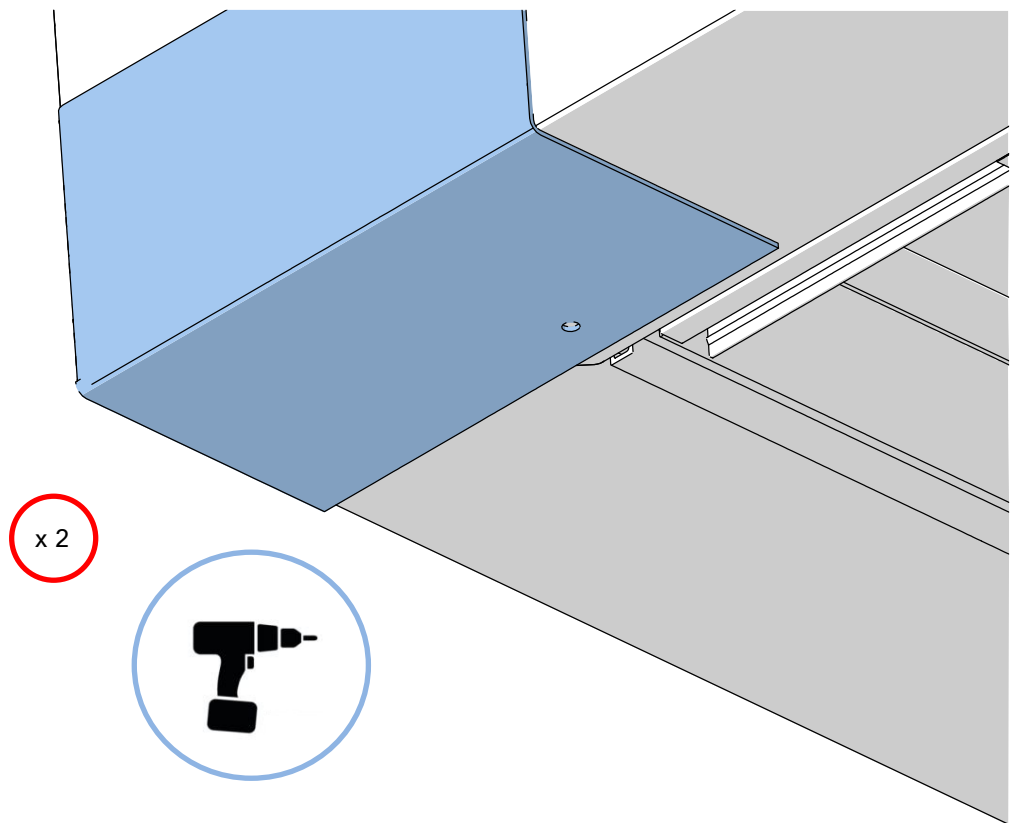


## 5 Sortie d'eau verticale (Option 2)

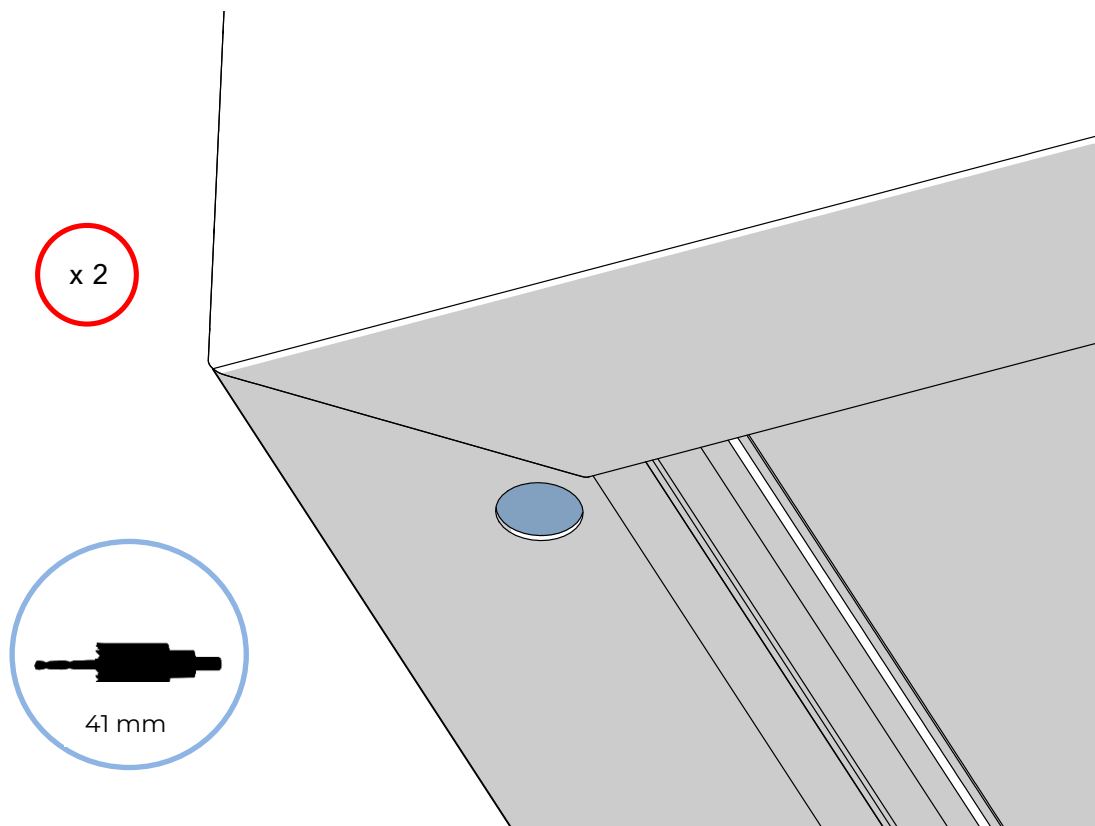
5-1



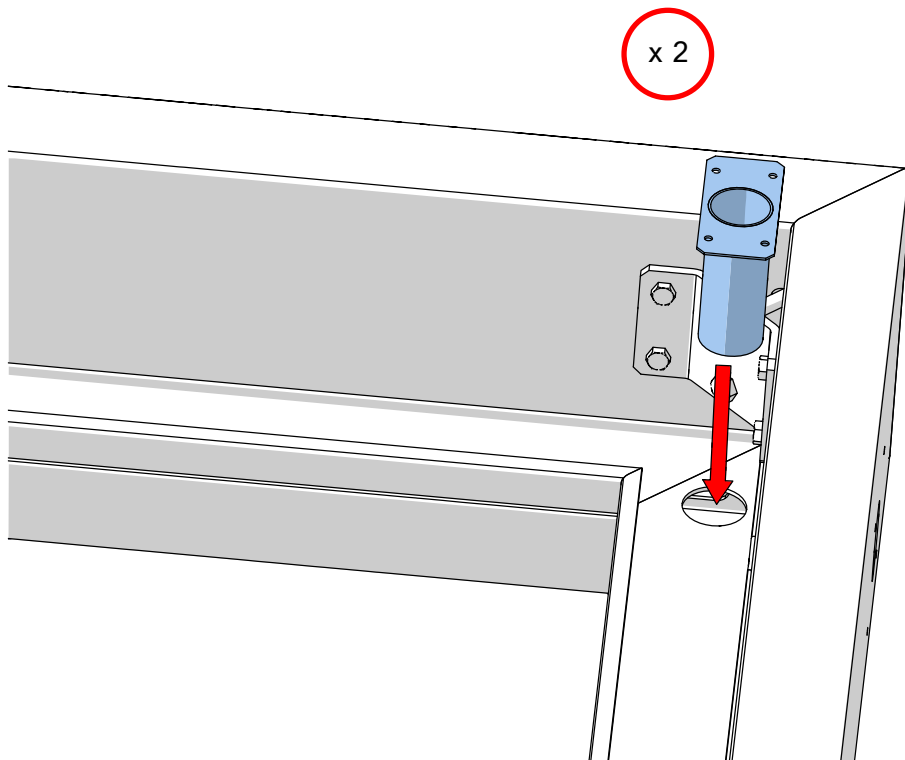
5-2



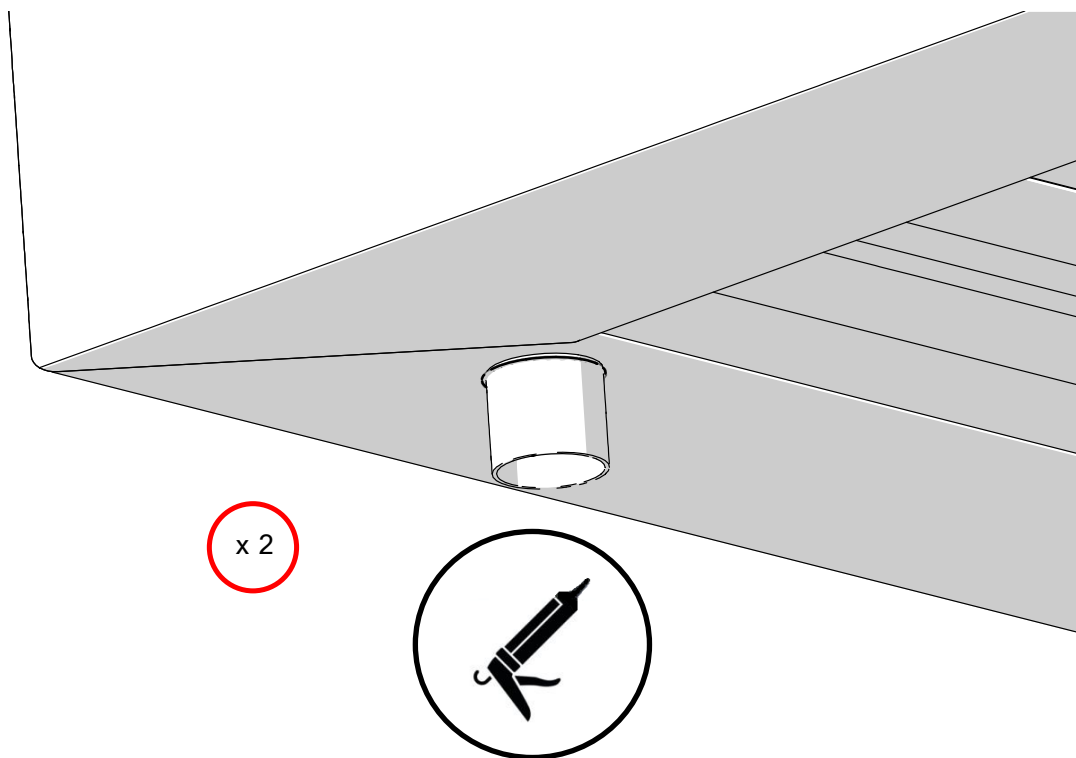
5-3



**5-4**

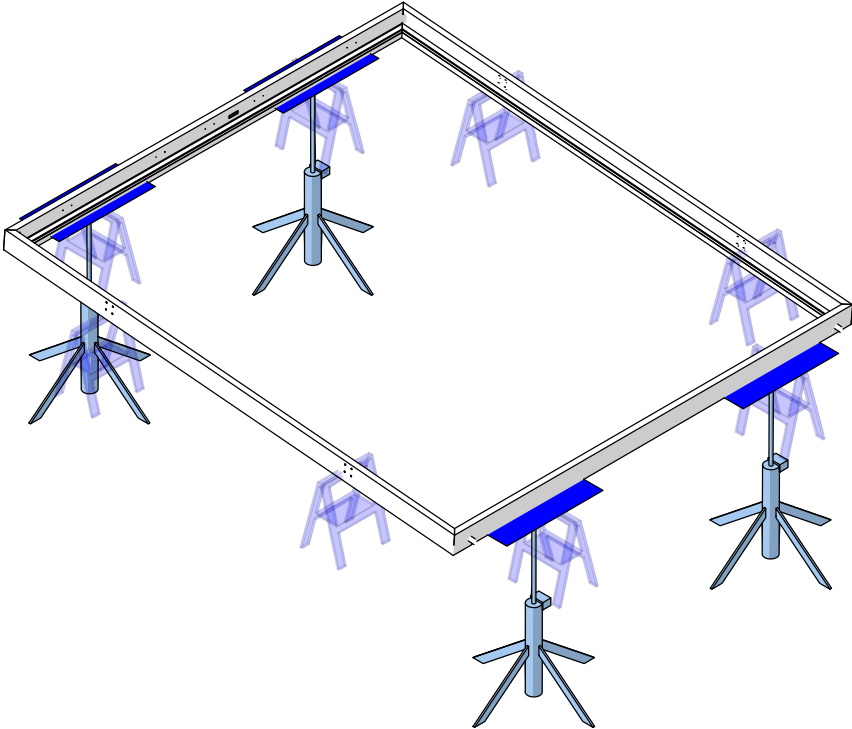


**5-5**



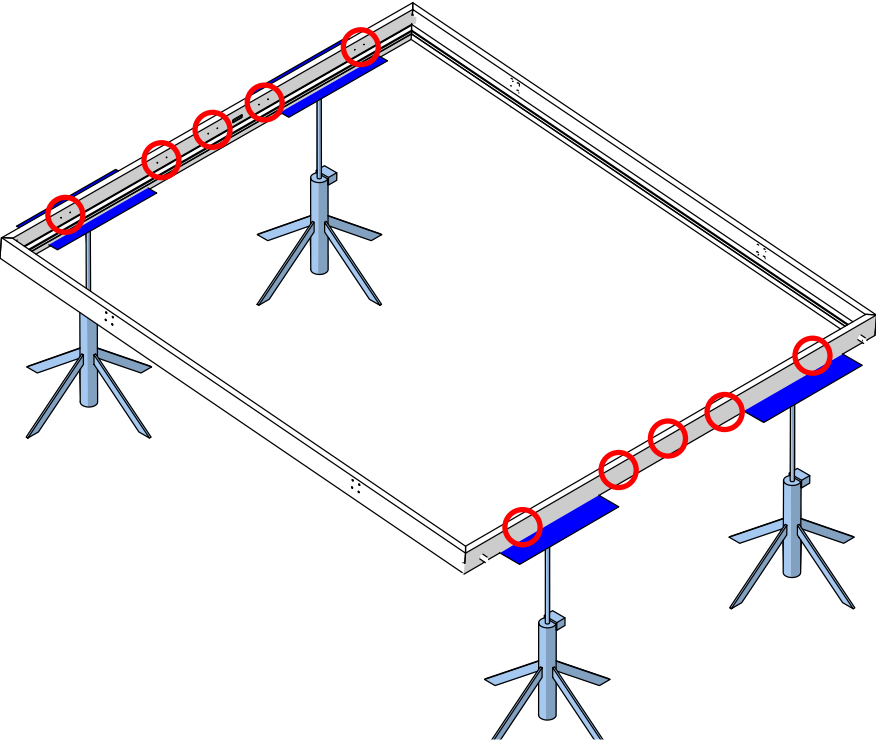


# 6 Mise en place des lève-plaques

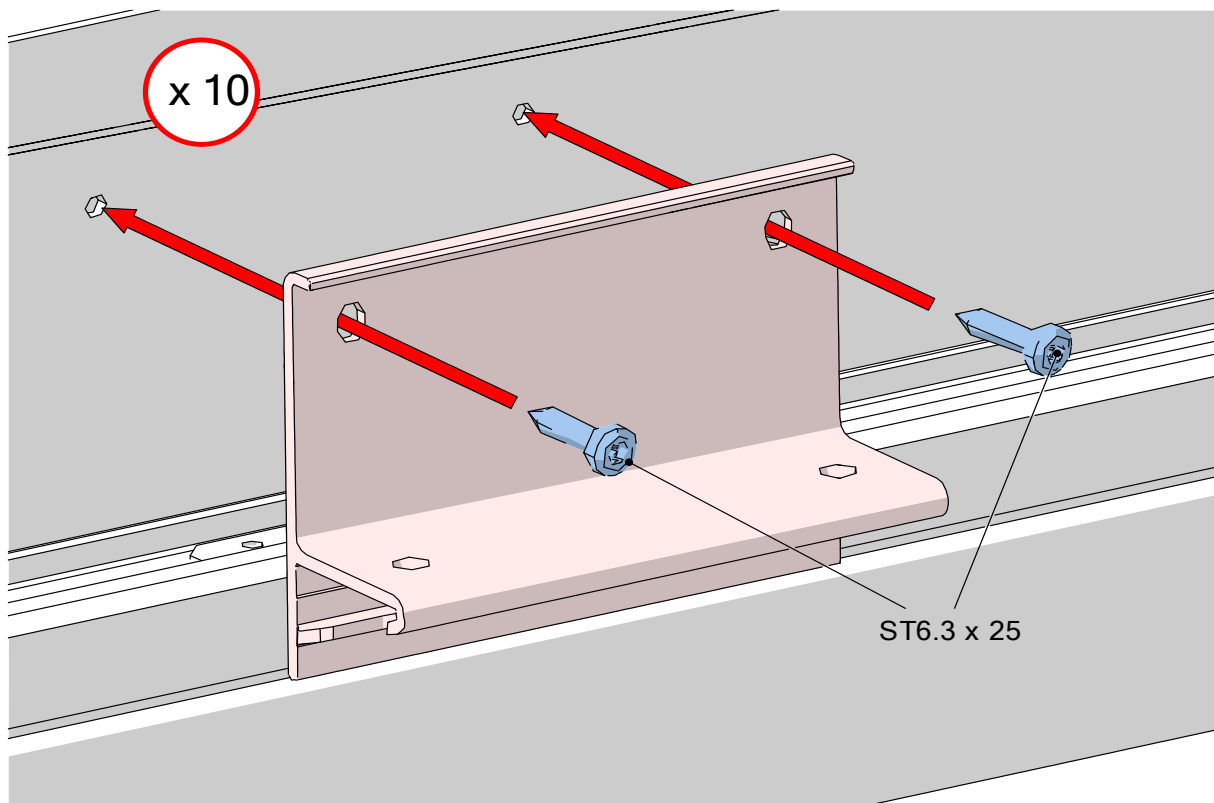


# 7 Montage des équerres

7-1

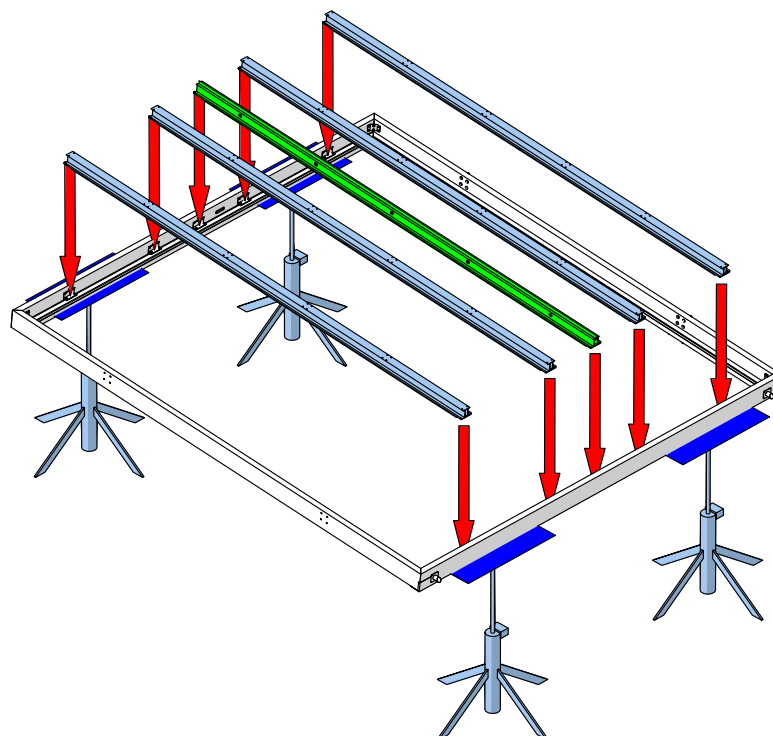


## 7-2

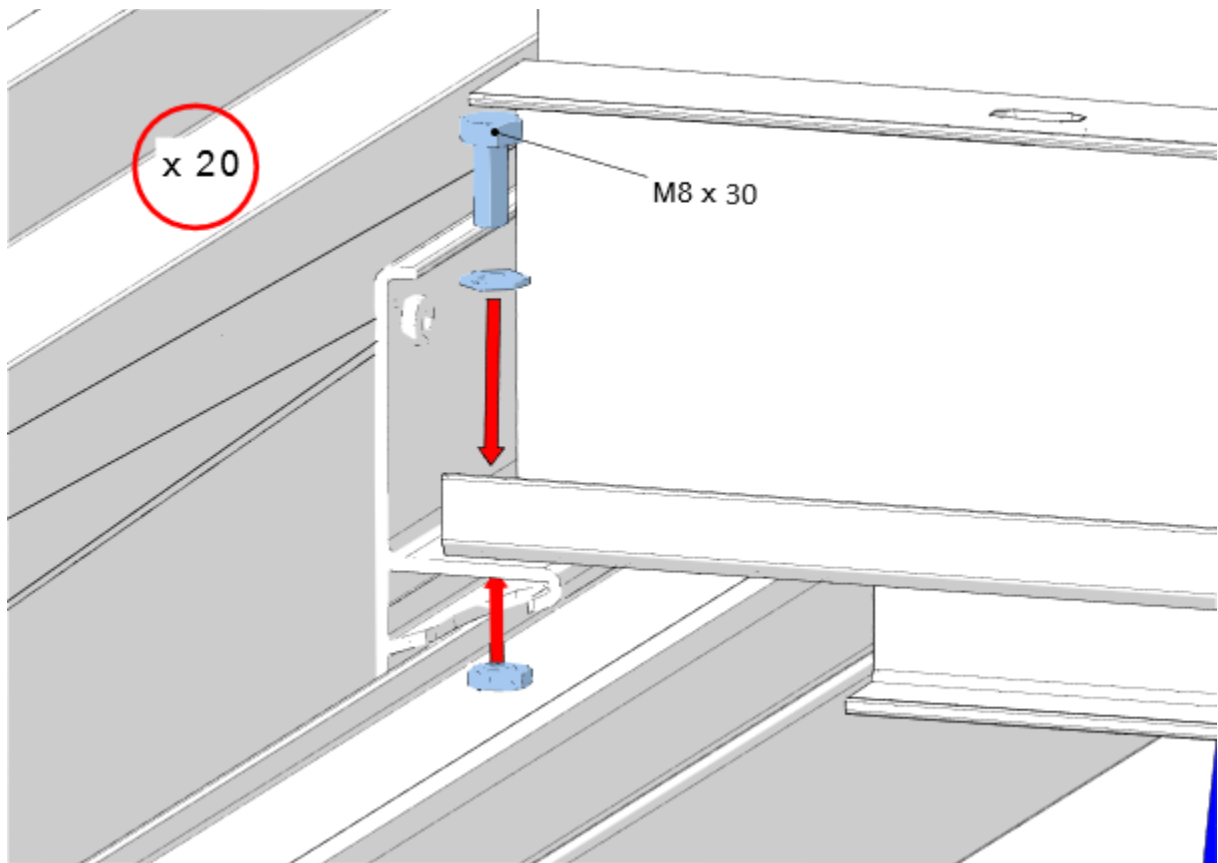


## 8 Montage des profilés

### 8-1

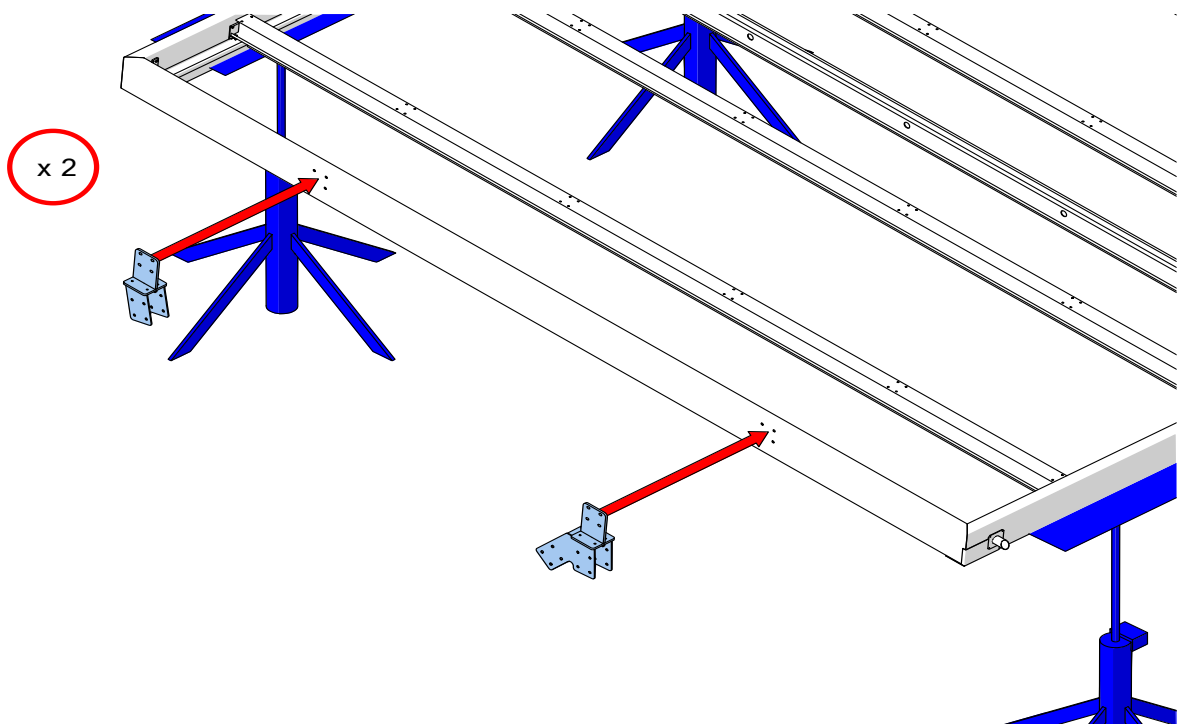


## 8-2

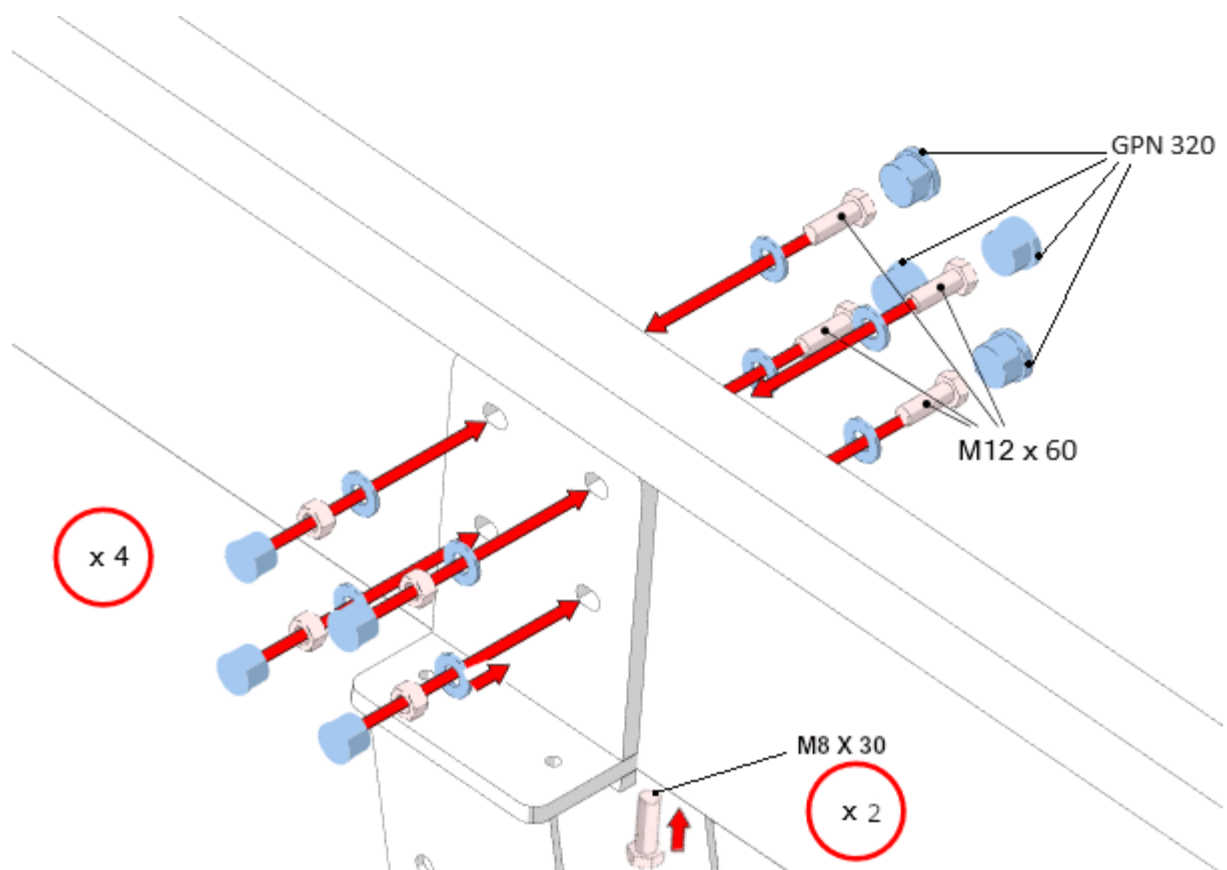


## 9 Montage des encastements

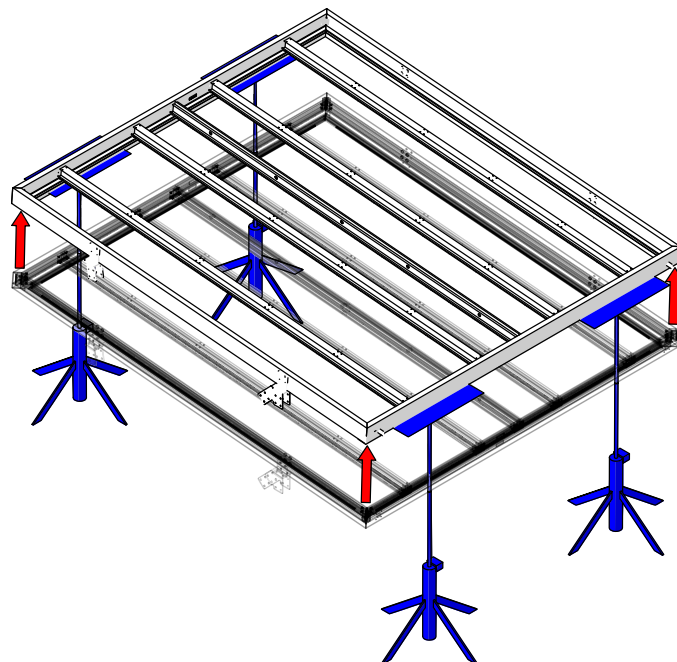
### 9-1



9-2



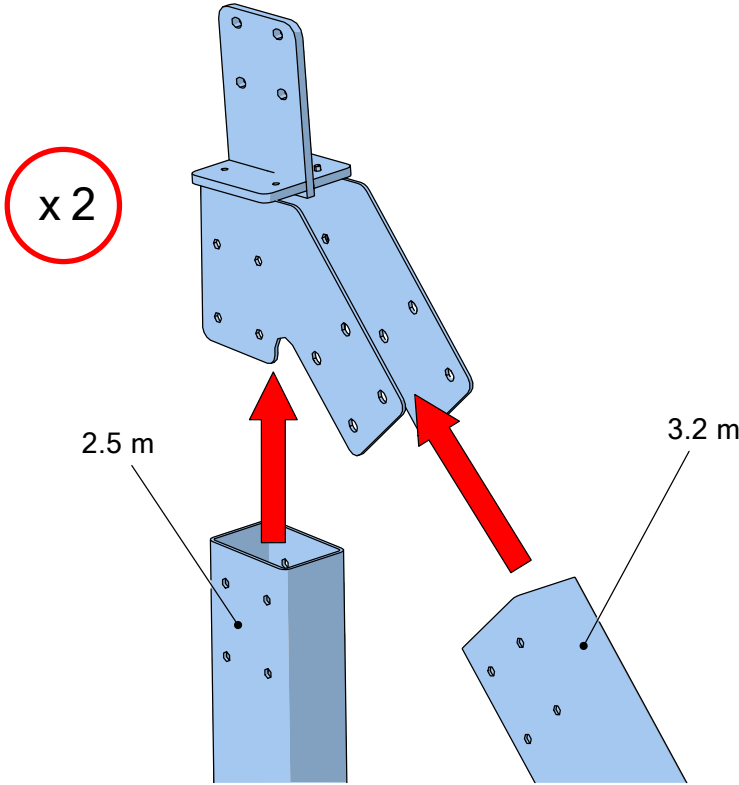
## 10 Soulèvement avec lève-plaques



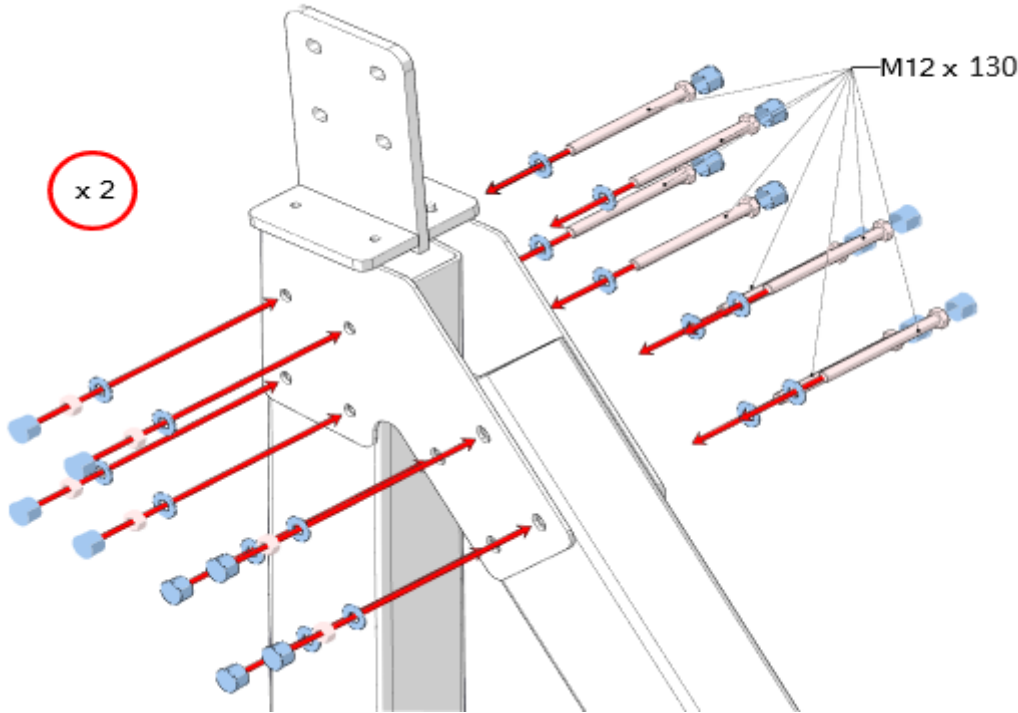
# Montage supports

## 1 Encastrement haut poteau court

1-1

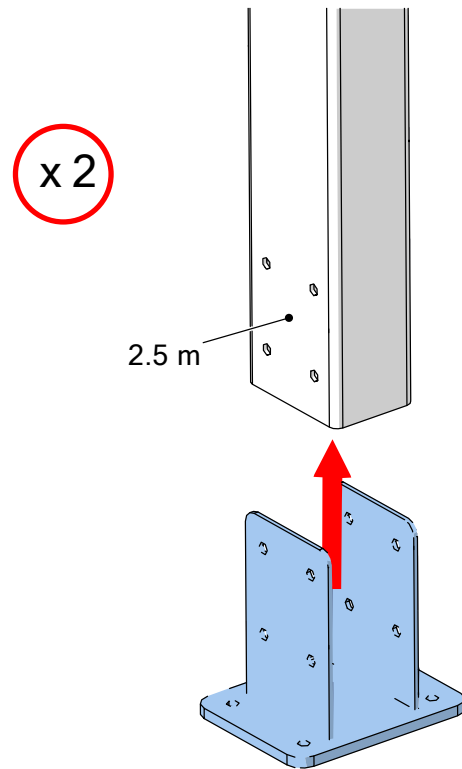


1-2

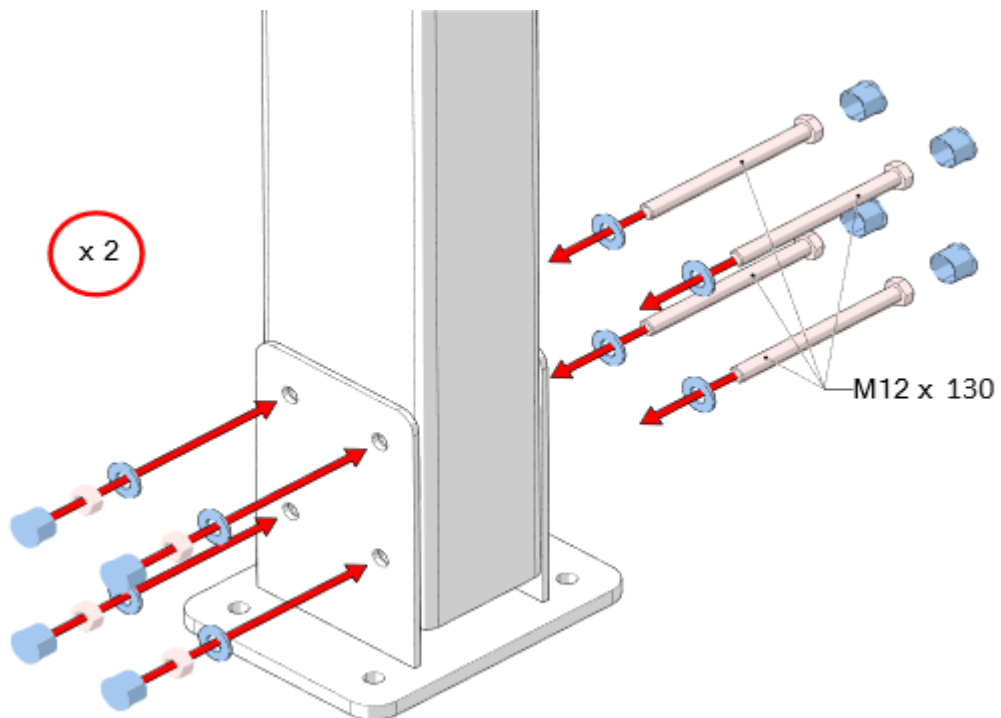


## 2 Tôle encastrement court

2-1

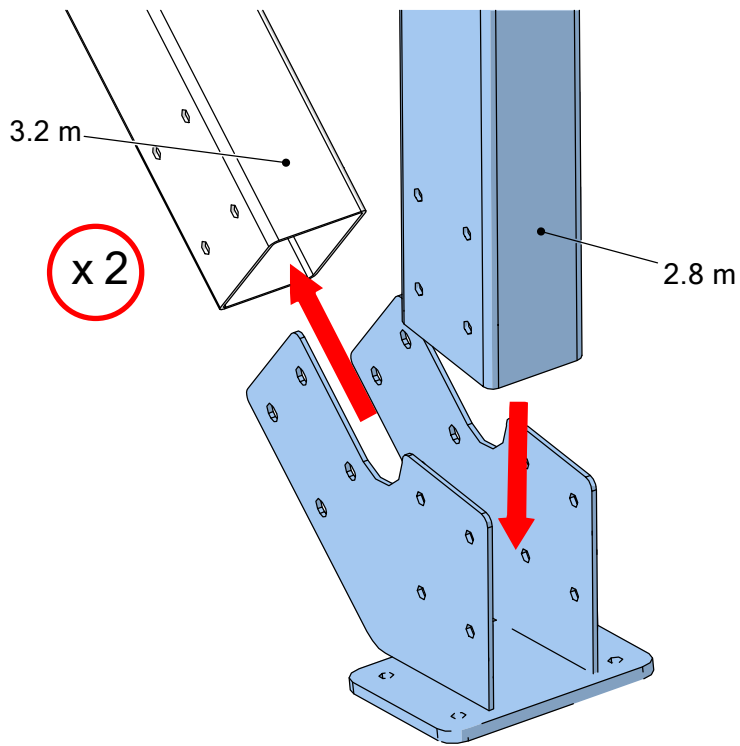


2-2

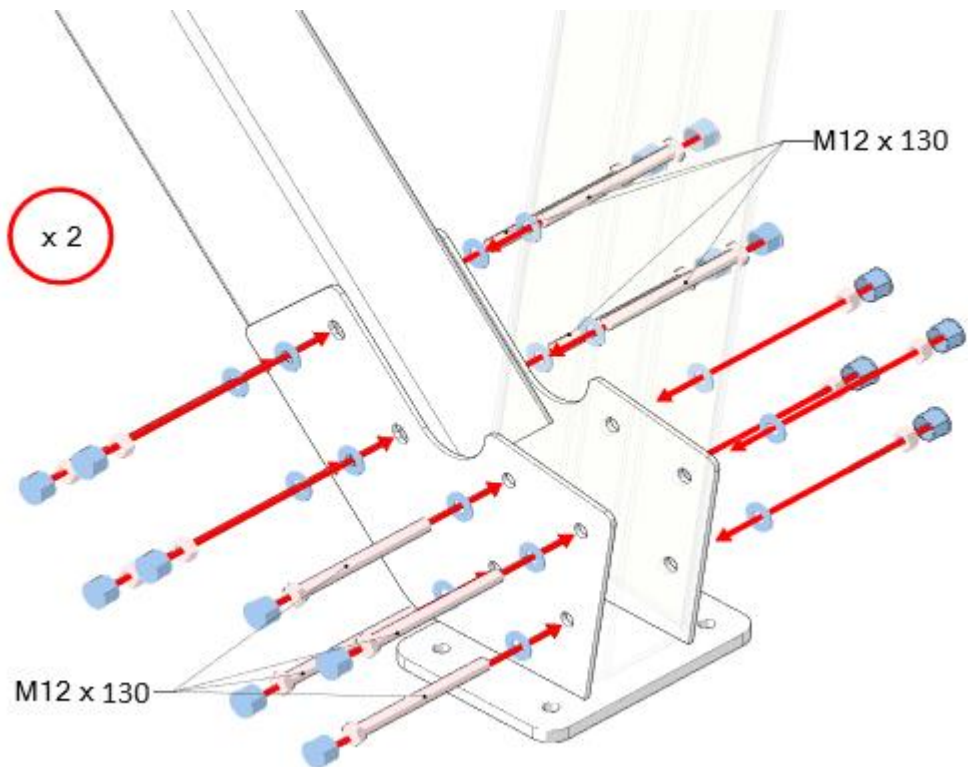


### 3 Tôle encastrement long

3-1

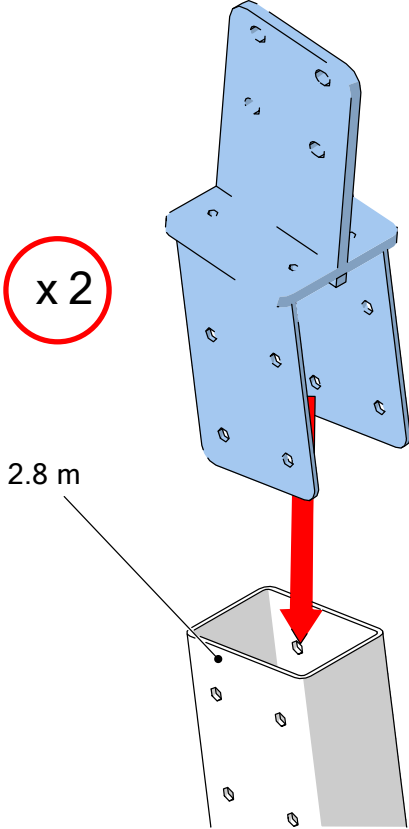


3-2

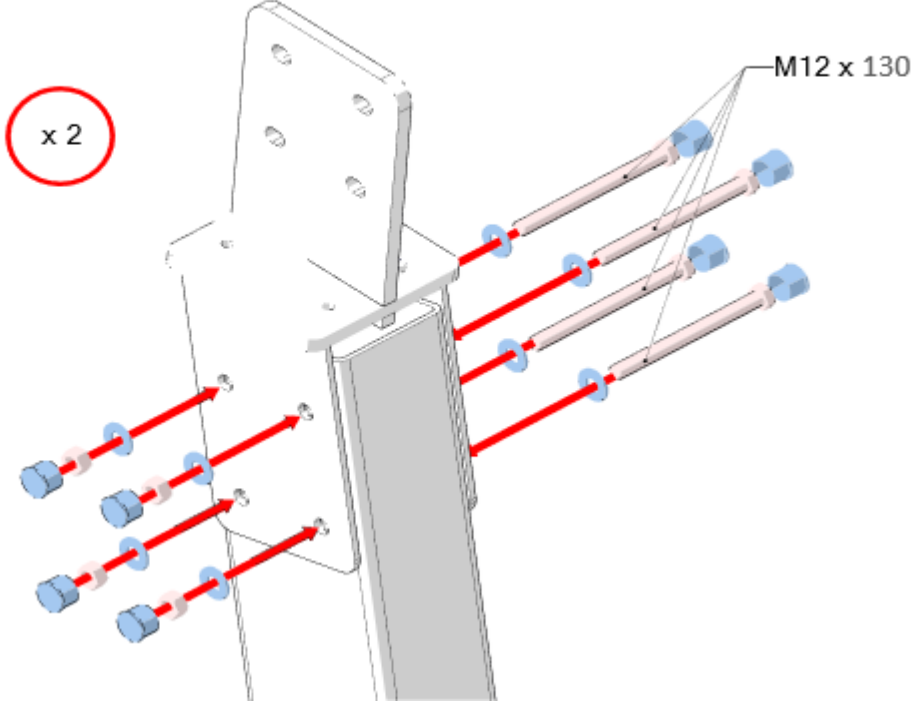


# 4 Encastrement haut poteau long

## 4-1



## 4-2

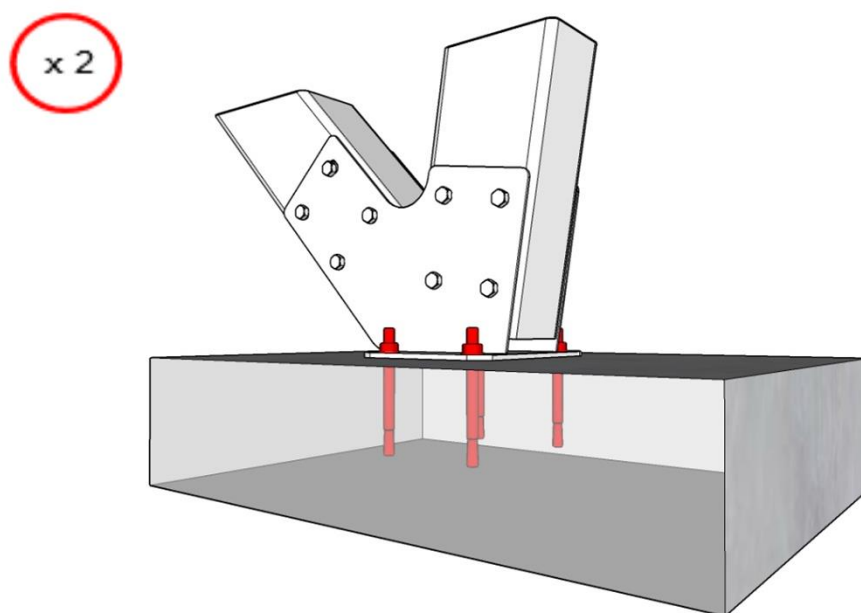
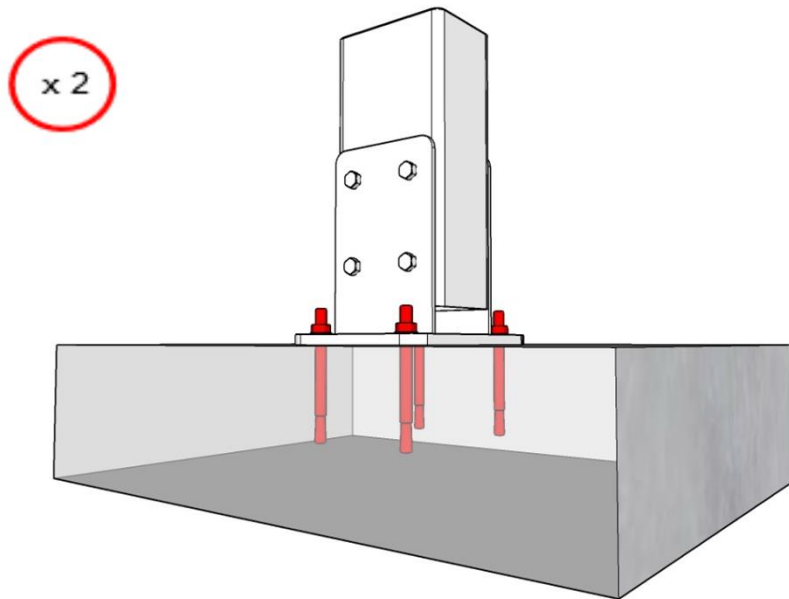




## 5 Fixation au sol

Voir préconisation page 3

5-1

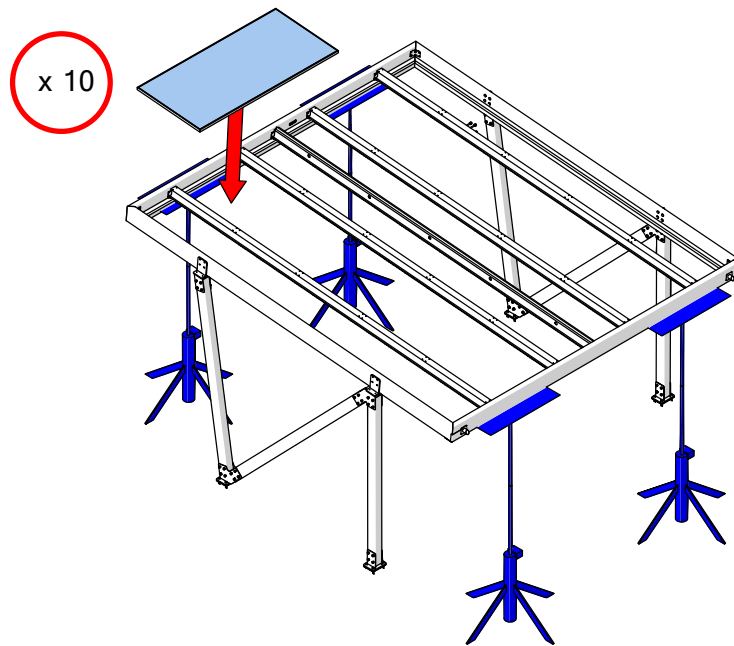


# Montage des panneaux et gouttières

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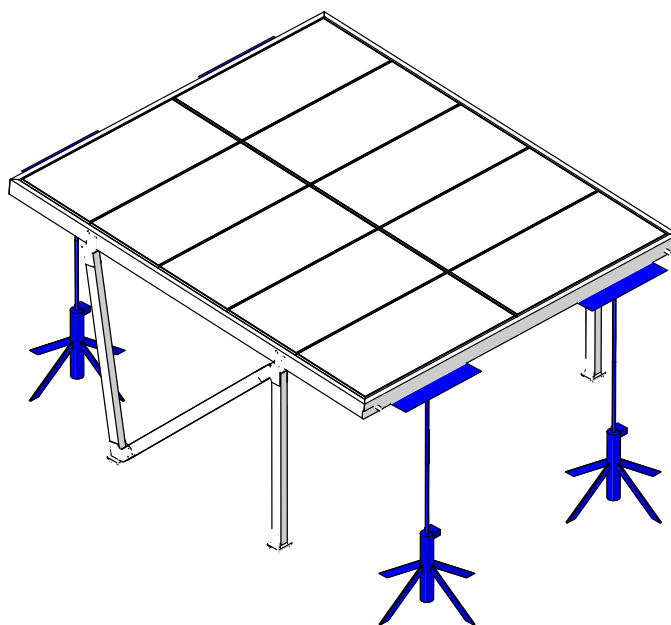
## 1 Montage panneaux

1-1

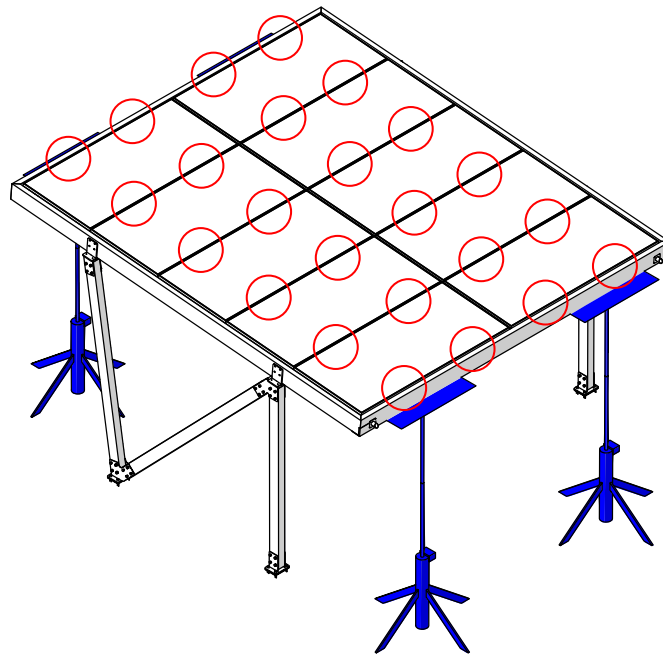


**Nota : câble court au centre, câble long sur les côtés**

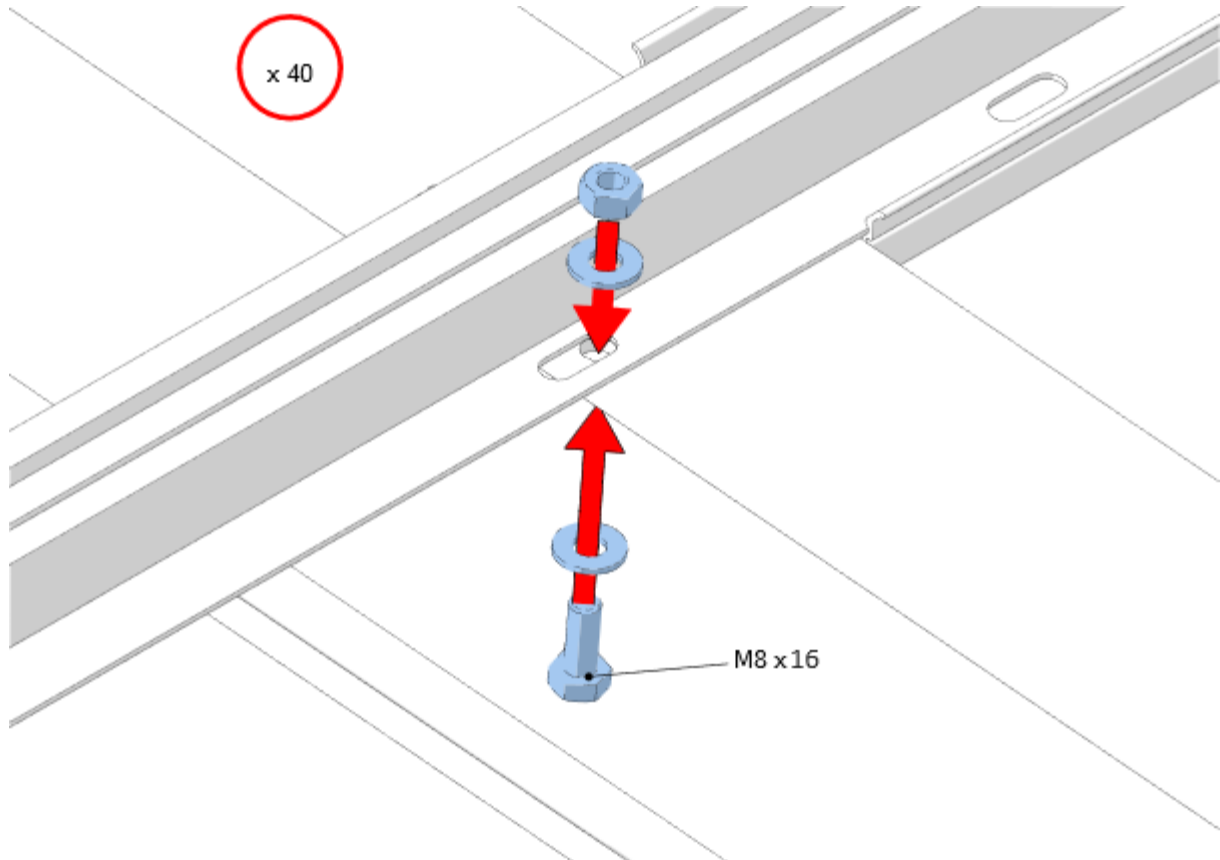
2



1-3

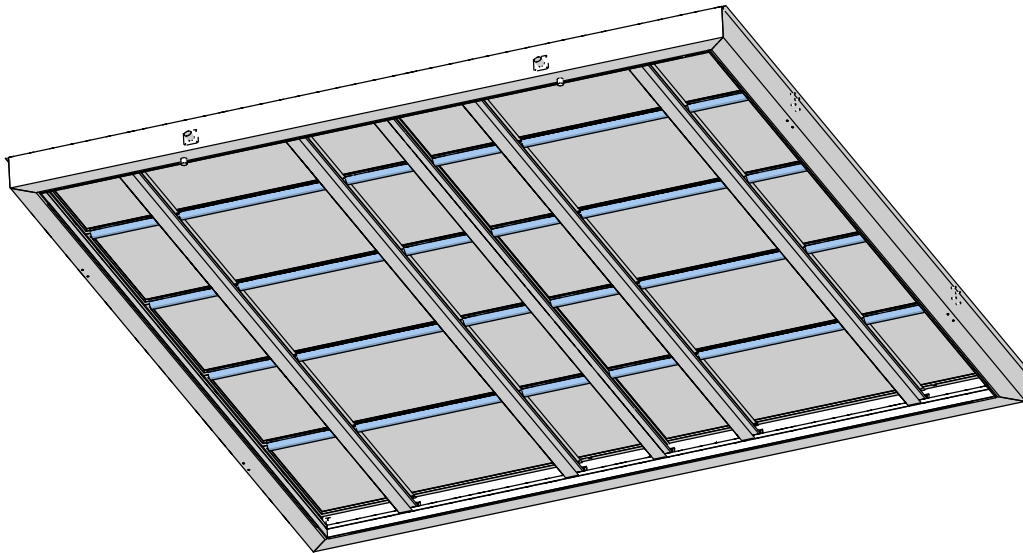


1-4

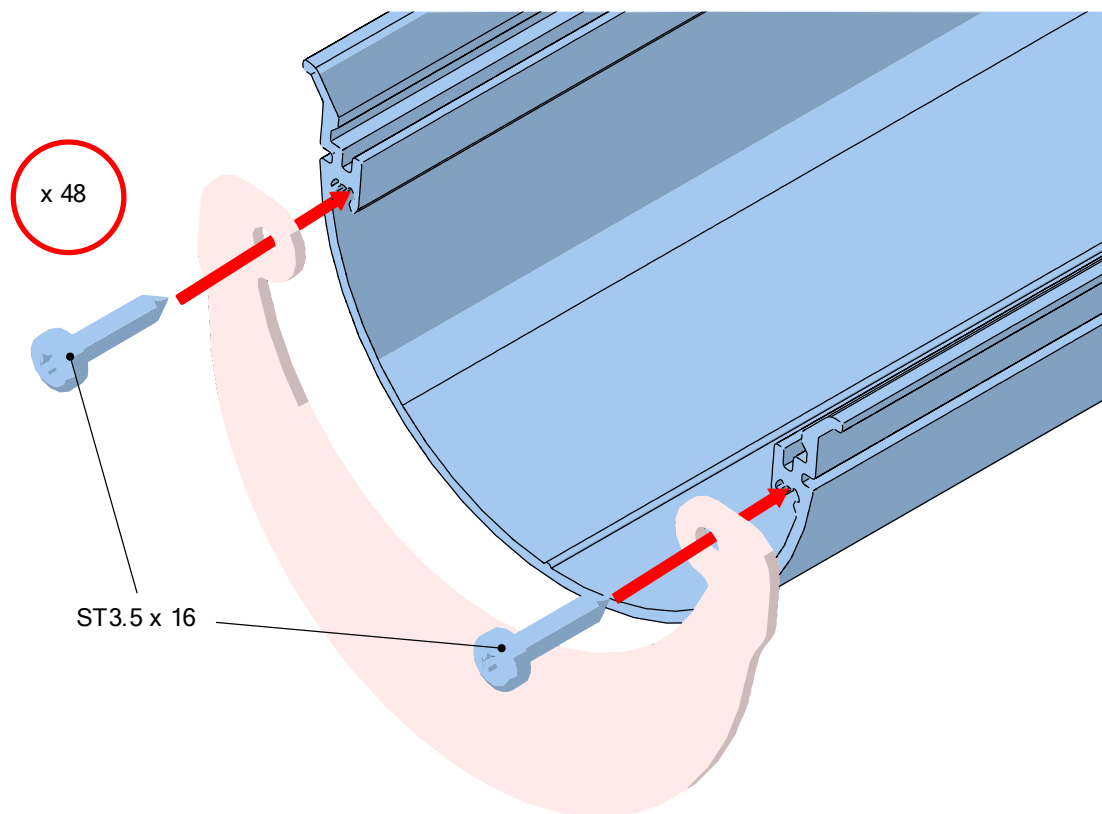


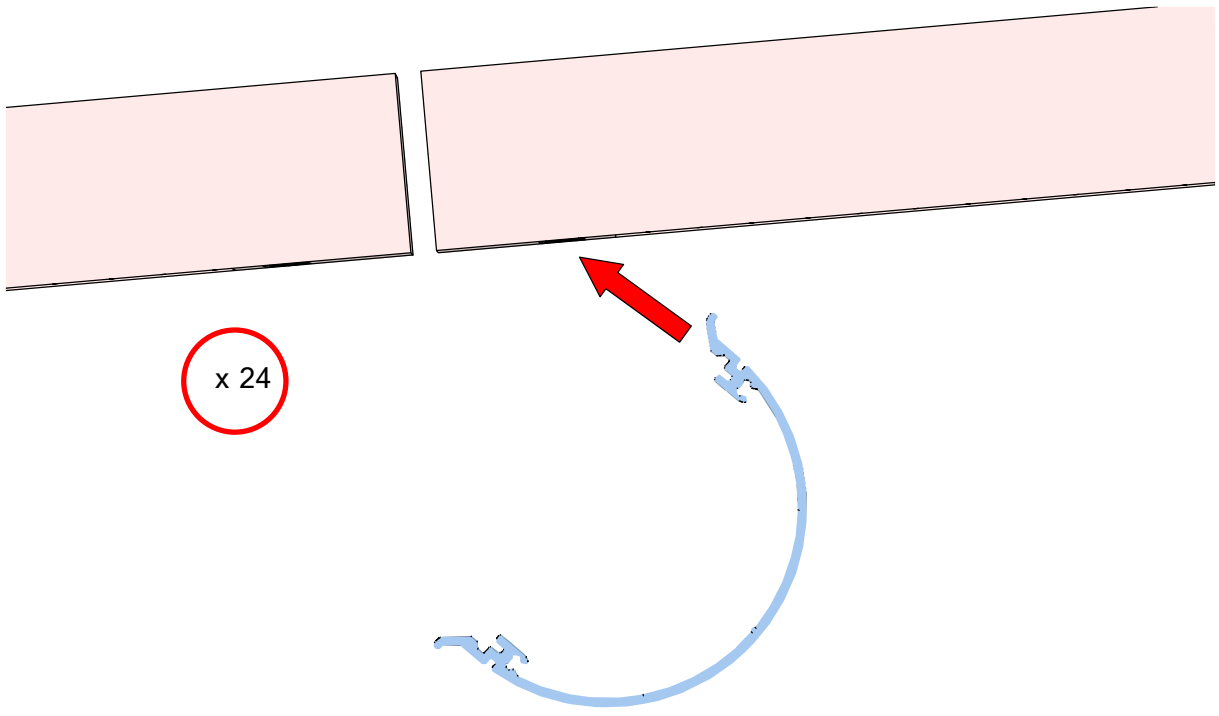
## 2 Montage gouttière

### 2-1

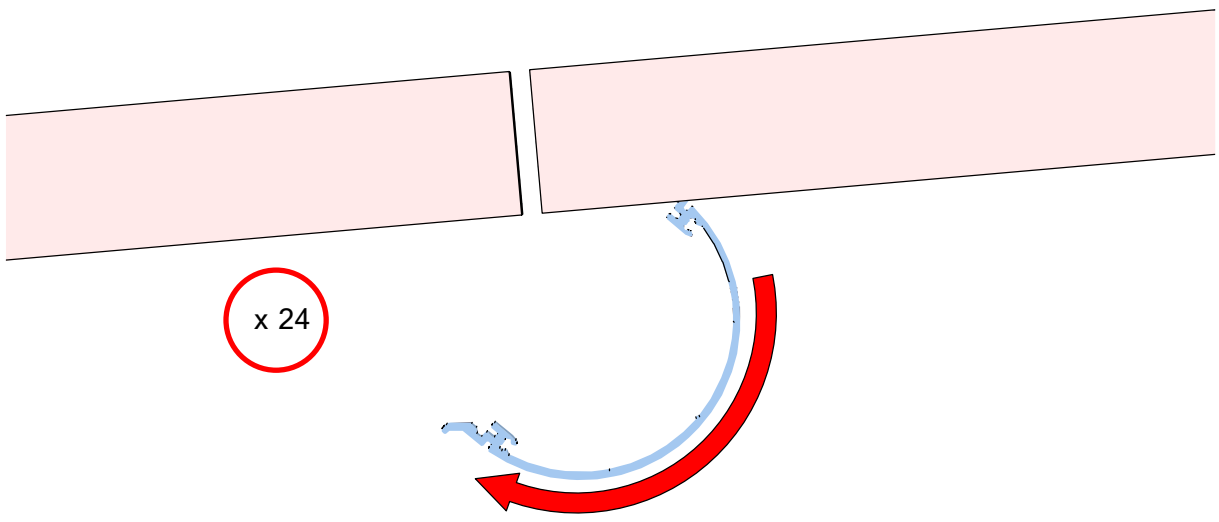


### 2-2

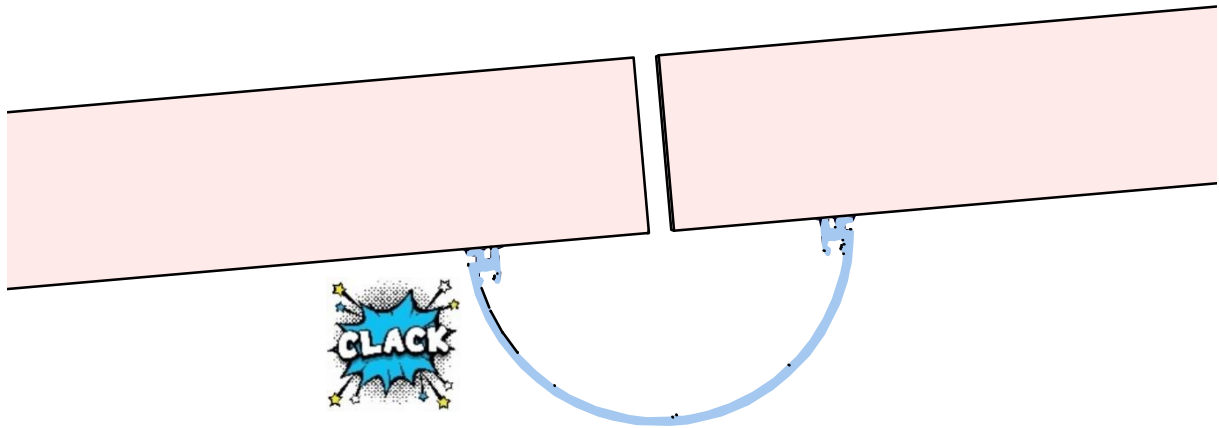




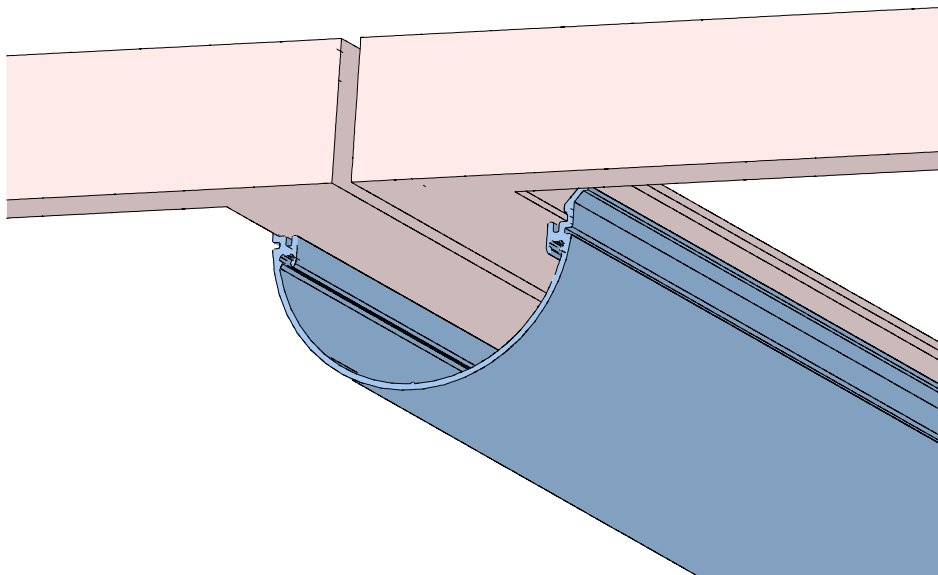
**2-3**



**2-4**



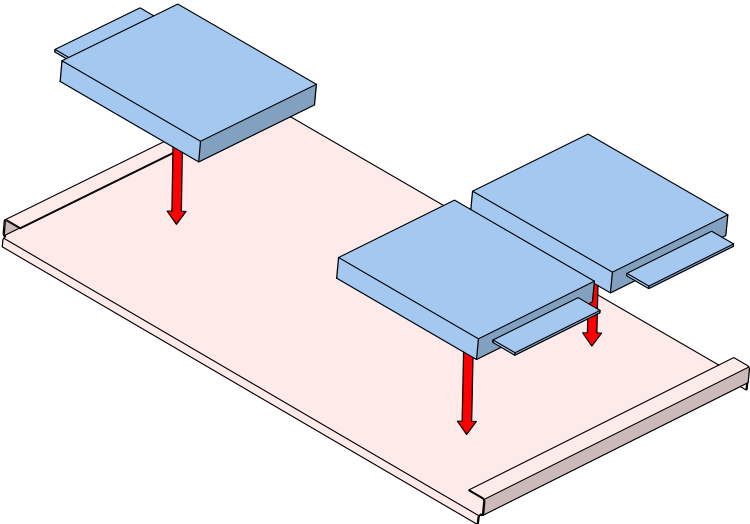
2-5



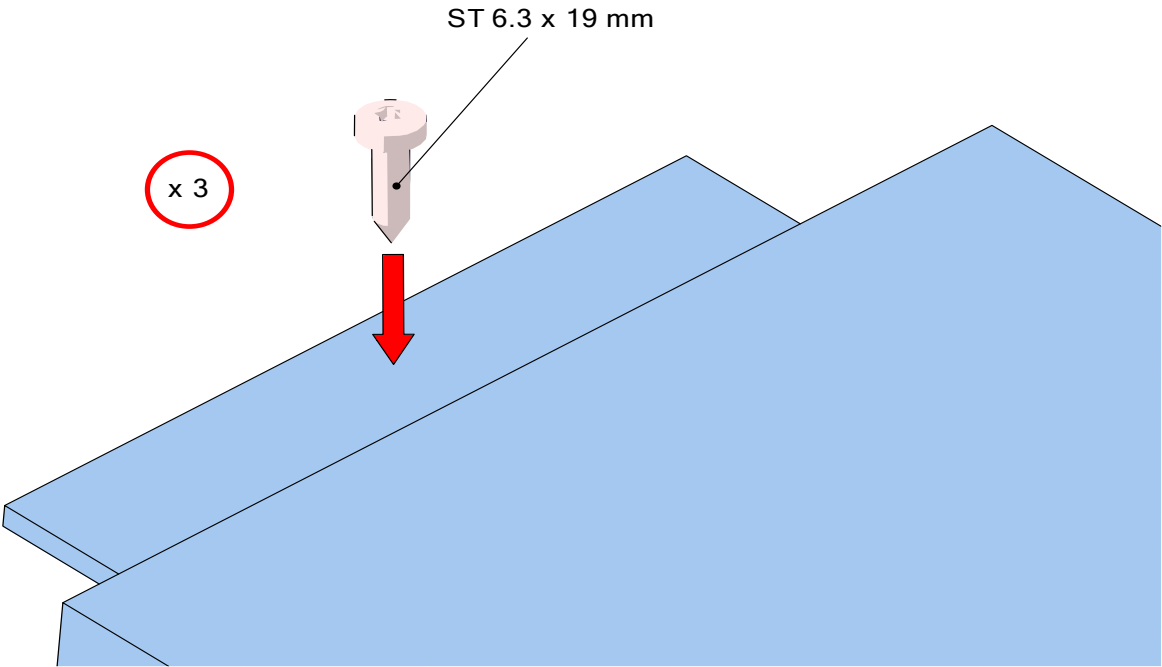
# Montage des onduleurs et câbles

## 1 Montage onduleurs

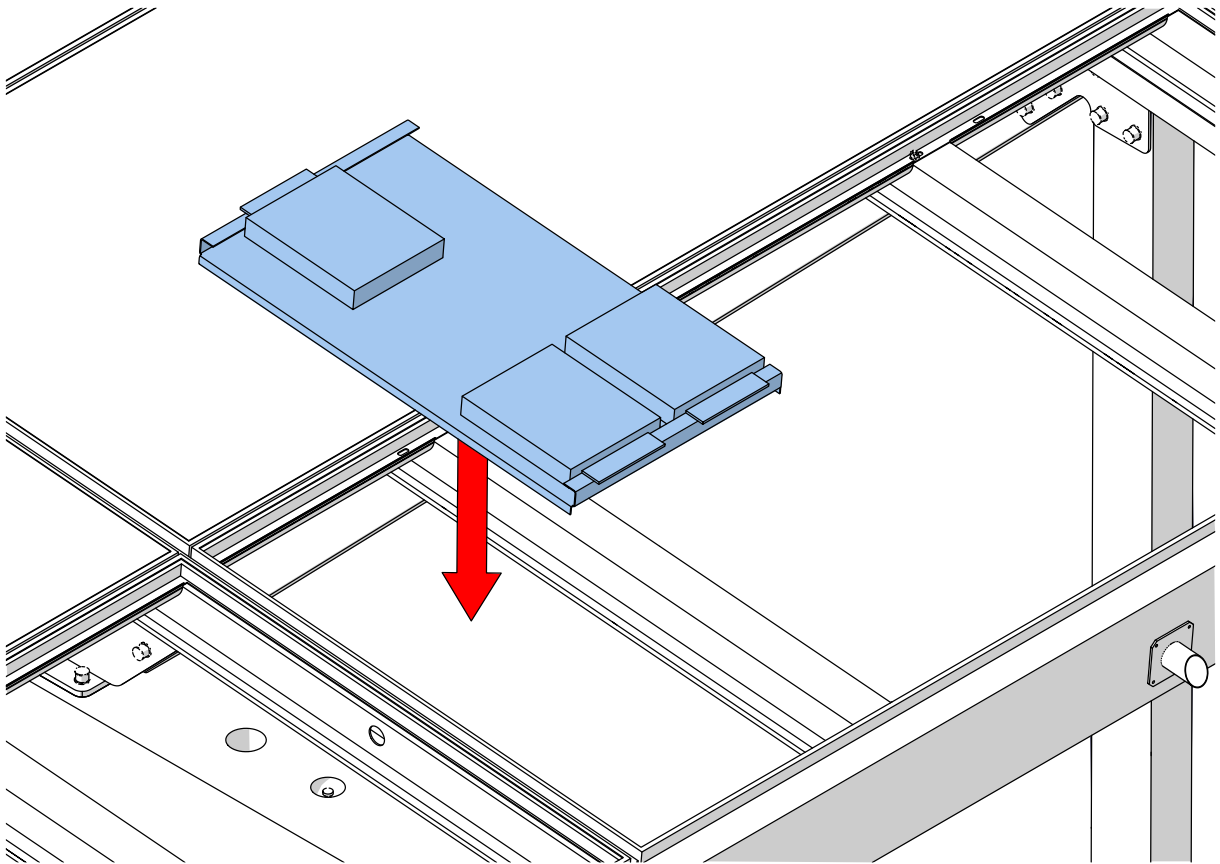
### 1-1



### 1-2



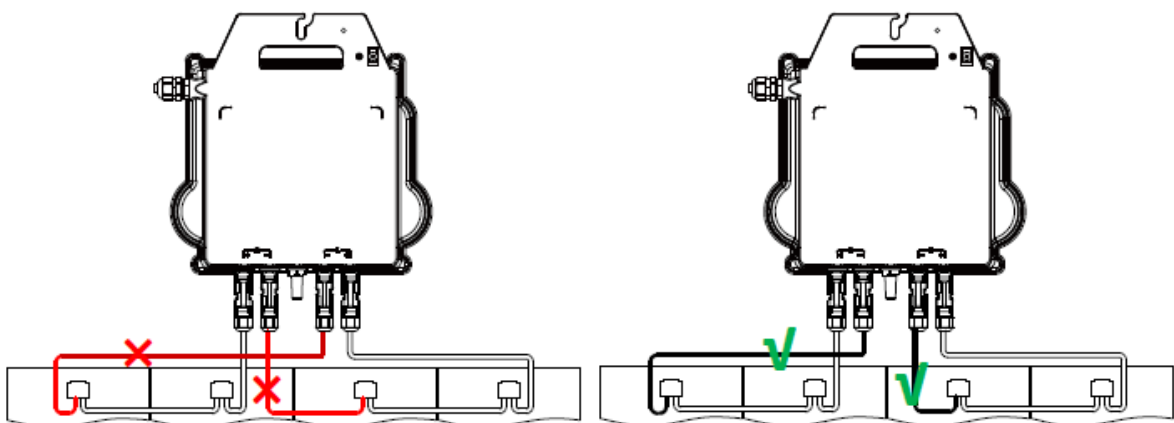
1-3



**Nota : la plaque est posée sur la structure, non vissée**

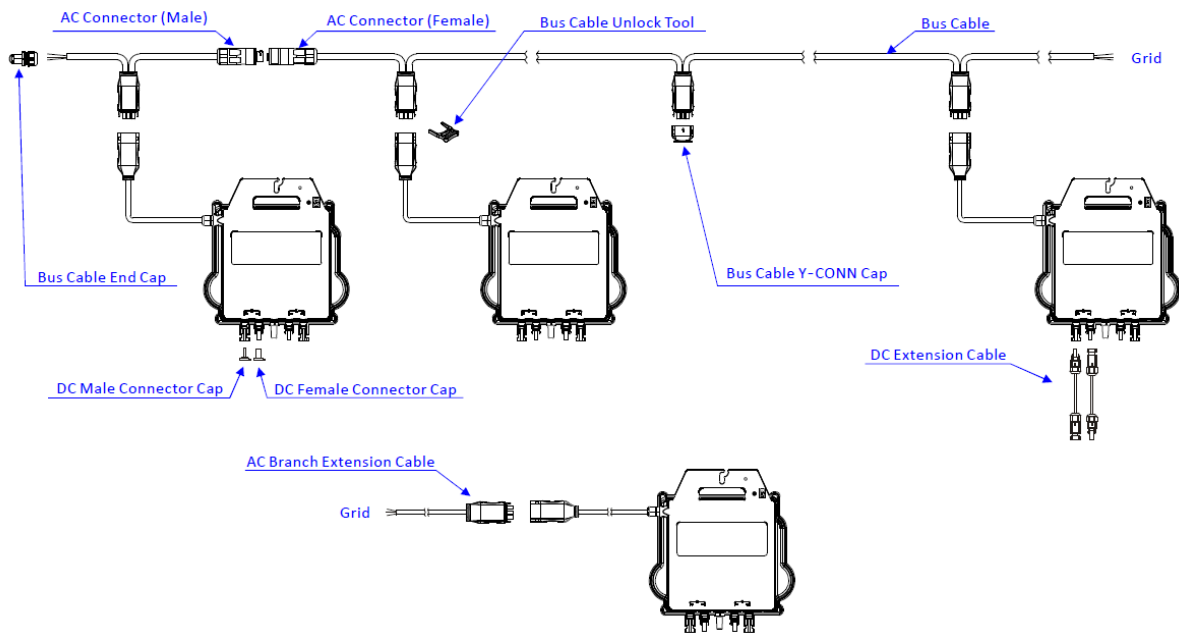
## 2 Montage câbles

2-1

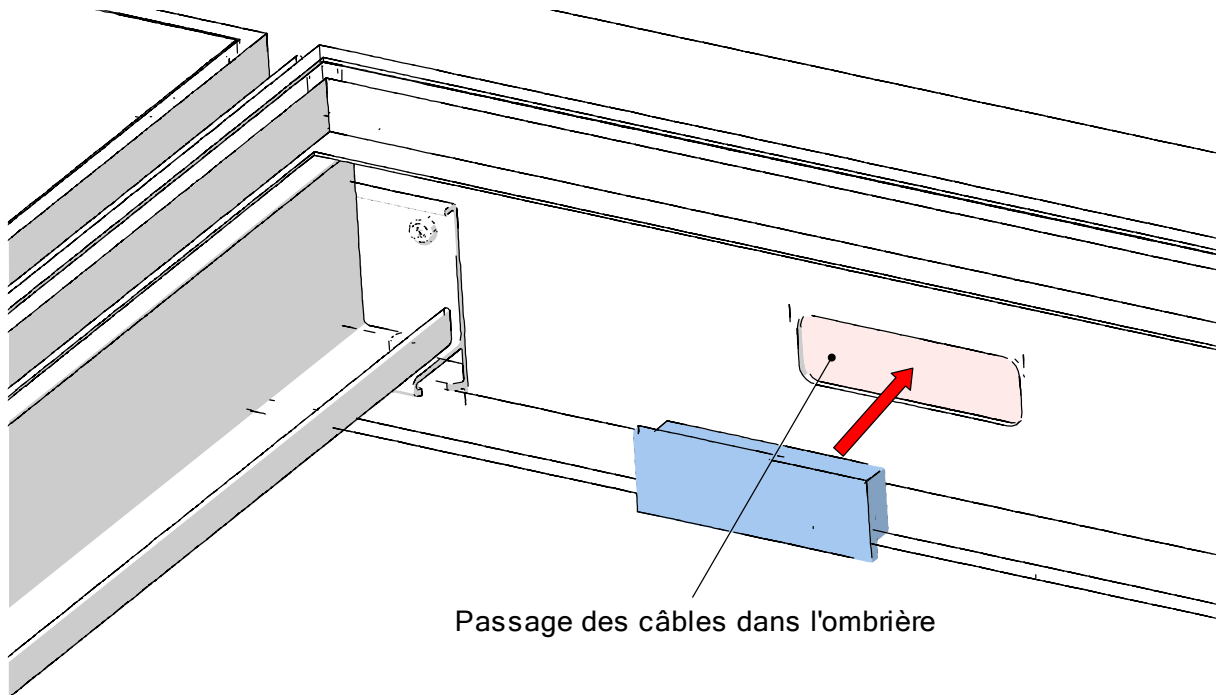




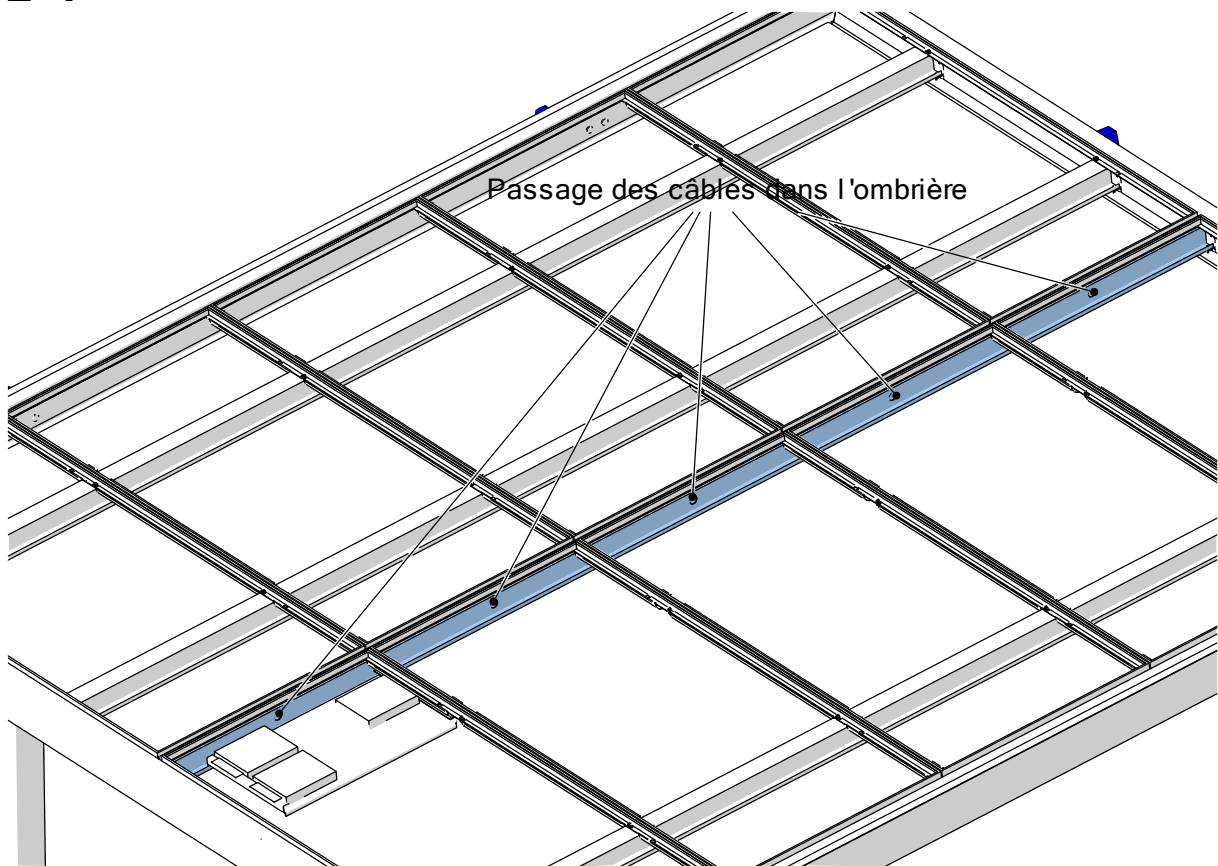
## 2-2



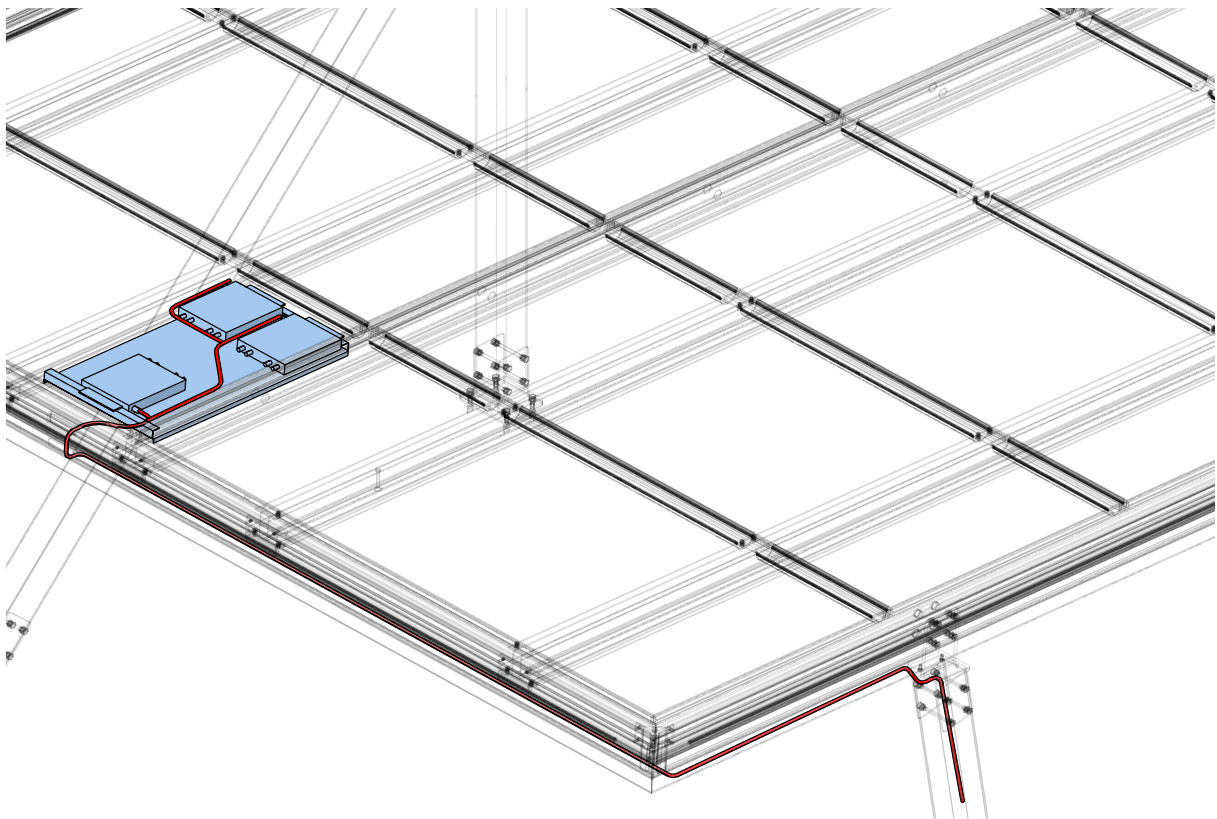
## 2-3



## 2-4

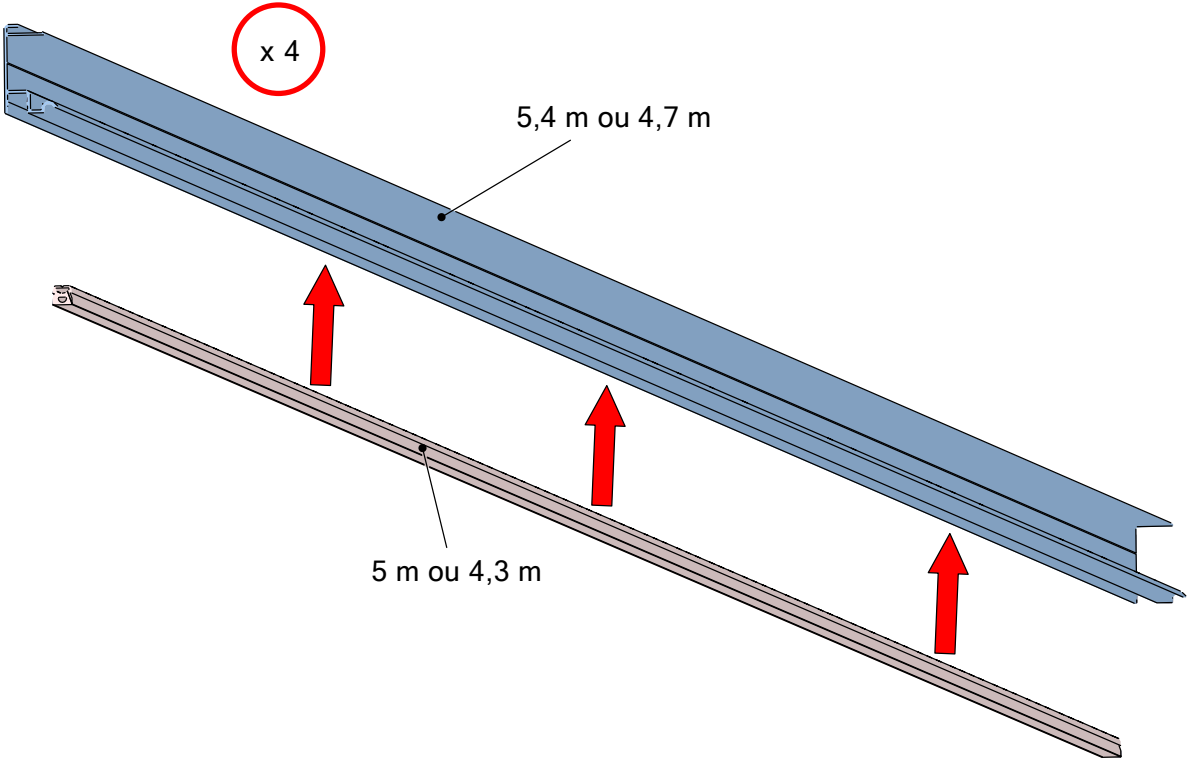


## 2-5

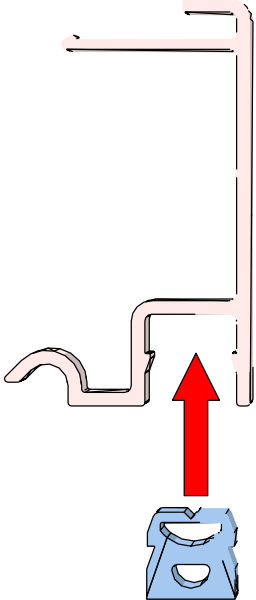


# Montage des capots et bandeau LED

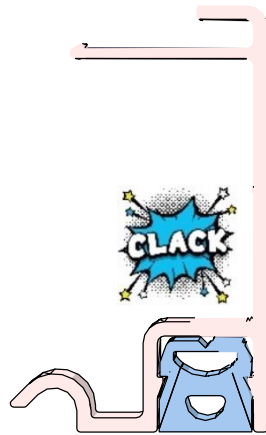
## 1-1



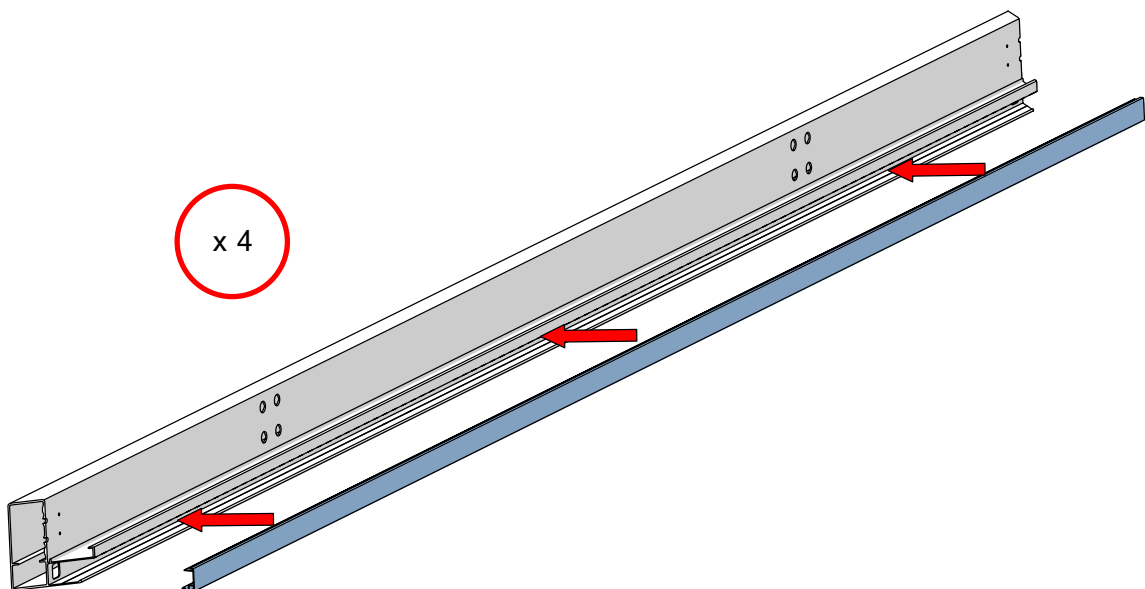
## 1-2



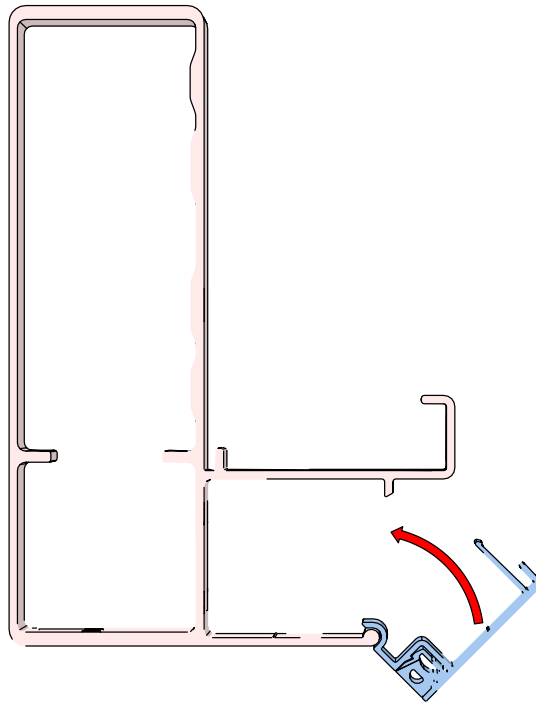
1-3



1-4

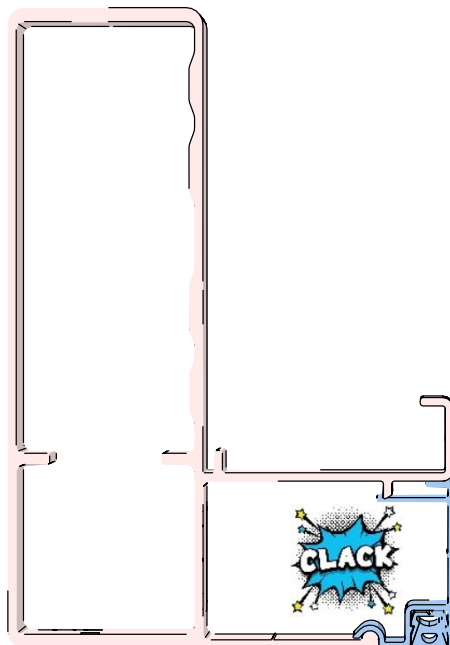


**1-5**

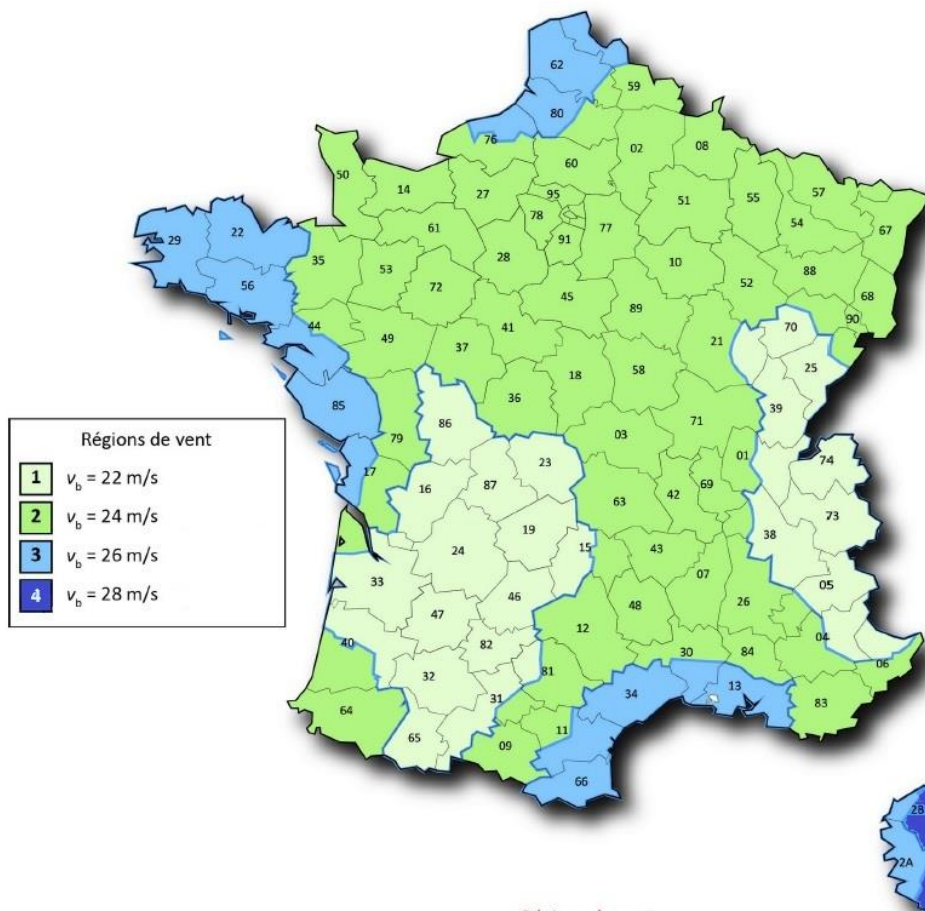
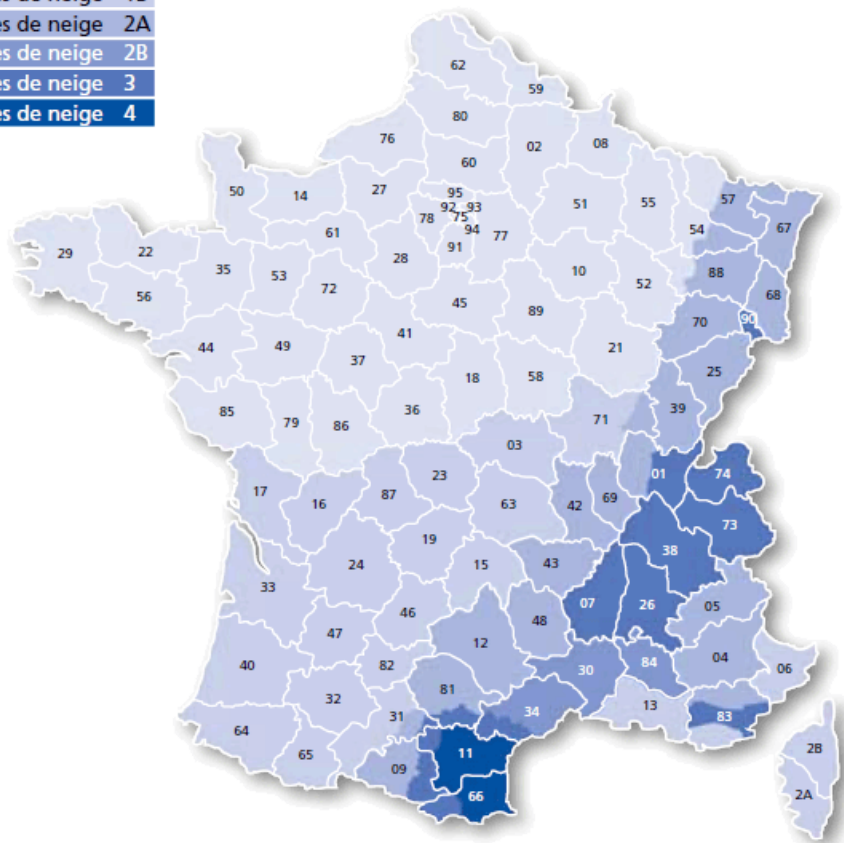


**Monter d'abord les capots sur les côtés, ensuite celui à l'avant puis celui à l'arrière**

**1-6**



- zones de neige 1A
- zones de neige 1B
- zones de neige 2A
- zones de neige 2B
- zones de neige 3
- zones de neige 4



Régions de vent	
1	$v_b = 22 \text{ m/s}$
2	$v_b = 24 \text{ m/s}$
3	$v_b = 26 \text{ m/s}$
4	$v_b = 28 \text{ m/s}$

Régions de vent  
Annexe Nationale de l'EN 1991-1-4