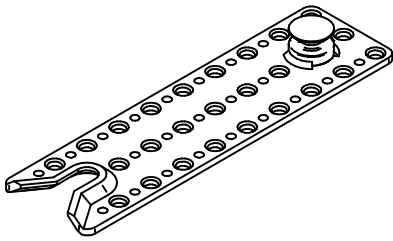


Art.-Nr.



# Montageanleitung

## RICON® S 290/80 VS

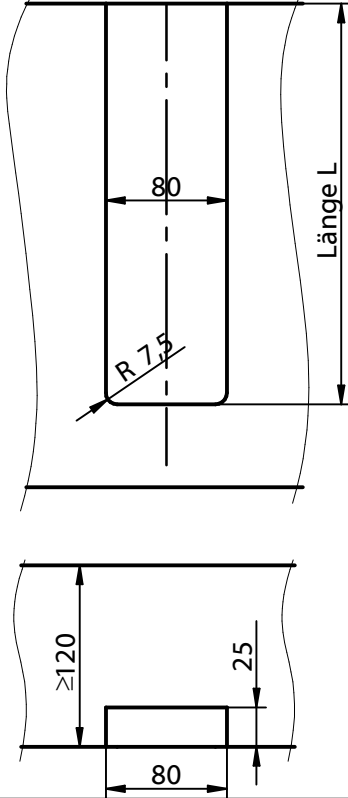
Verschweißter Kragenbolzen

### Ausfräsung im Hauptträger



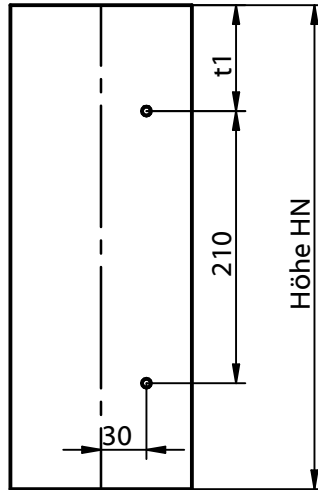
Art.-Nr. K129

### 1. Fräsen im Hauptträger



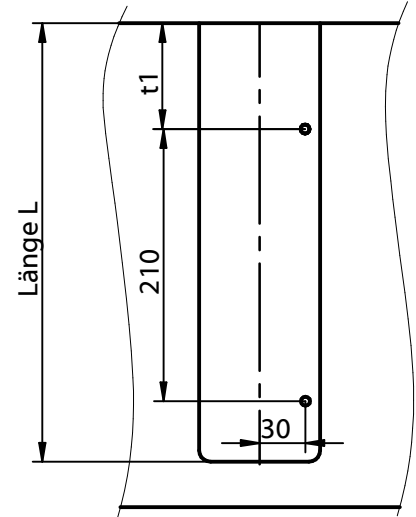
### 2. Positionierbohrungen

Nebenträger



2 Positionierbohrungen  $\varnothing$  6 mm  
im Hirnholz, Tiefe 50 mm

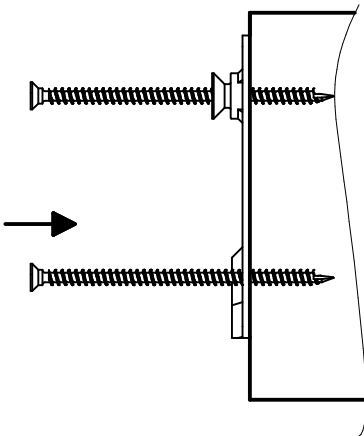
Hauptträger



2 Positionierbohrungen  $\varnothing$  6 mm  
im Längsholz, Tiefe 50 mm

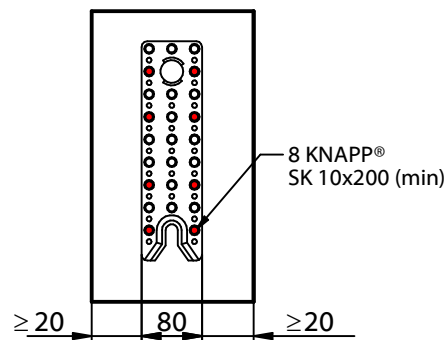
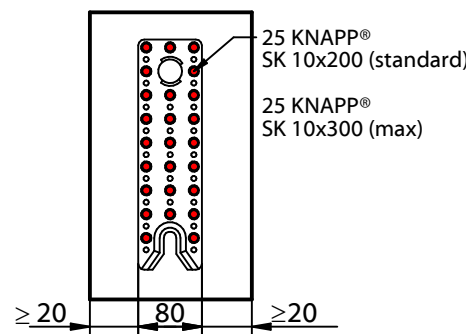
### 3. Verschrauben

1. Verbinder mit 2 Schrauben in Positionierbohrungen befestigen
2. Alle weiteren selbstbohrende Schrauben it. Schraubenbild (siehe rechts) eindrehen



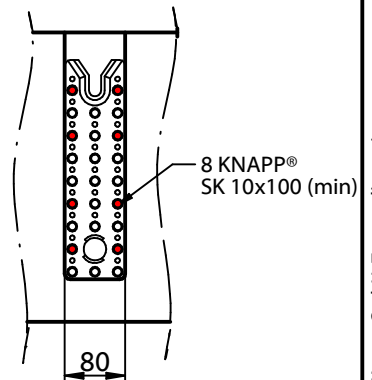
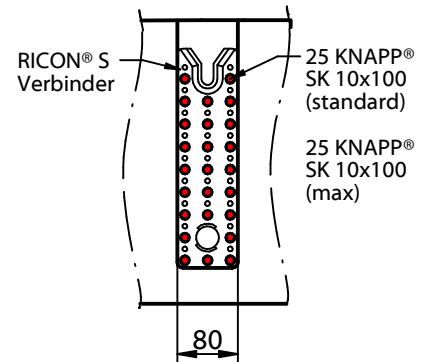
### Befestigung im Nebenträger NT

Schraubenanzahl und Positionen:



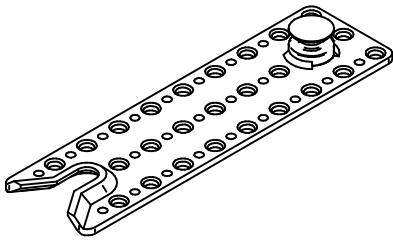
### Befestigung im Hauptträger HT

Schraubenanzahl und Positionen:



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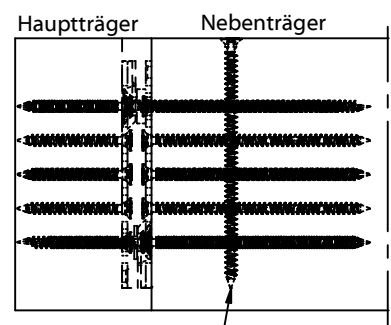
### Einfräslängen L im Hauptträger

Nebenträger- höhe H <sub>N</sub>	RICON® S 290x80	
	Länge L ohne Querzugverstärkung	
[mm]	[mm]	
220	-	
240	-	
260	-	
280	-	
300	-	
320	305	
340	315	
360	325	
380	335	
400	345	

Randabstand der Positionierbohrungen t1 im Haupt- und Nebenträger in Abhängigkeit der Nebenträgerhöhe H <sub>N</sub>		
Nebenträger- höhe H <sub>N</sub>	RICON® S 290x80	
	Randabstand t1 im Nebenträger	
[mm]	Abstand t1	
[mm]	[mm]	
220	-	
240	-	
260	-	
280	-	
300	-	
320	55	
340	65	
360	75	
380	85	
400	95	

**Wichtiger Hinweis:**

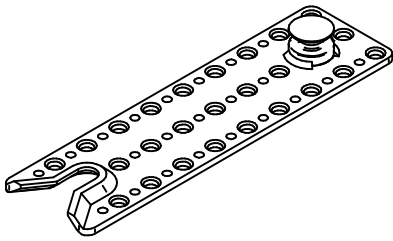
Sollten geringere Nebenträgerhöhen verwendet werden, muss vom Statiker ein Querzugnachweis durchgeführt werden. Der Querschnitt kann mit Vollgewindeschrauben querzugverstärkt werden, die vom Statiker zu bemessen sind (EN 1995-1-1, NAD) !



Vollgewindeschrauben mit Bohrspitze zur Querzugverstärkung des Nebenträgers

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# Montageanleitung

## RICON® S 290/80 VS

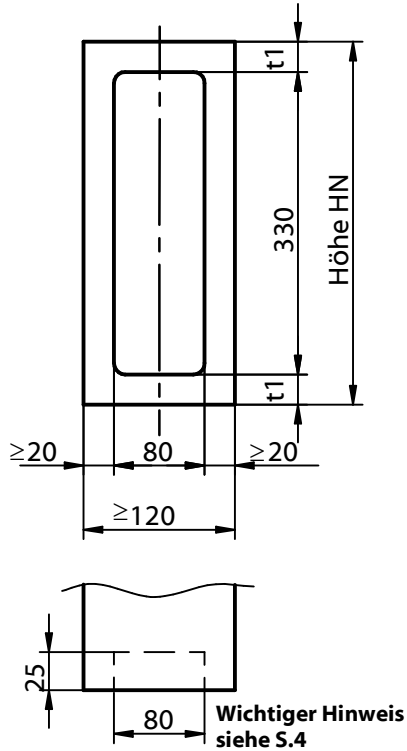
### Verschweißter Kragenbolzen



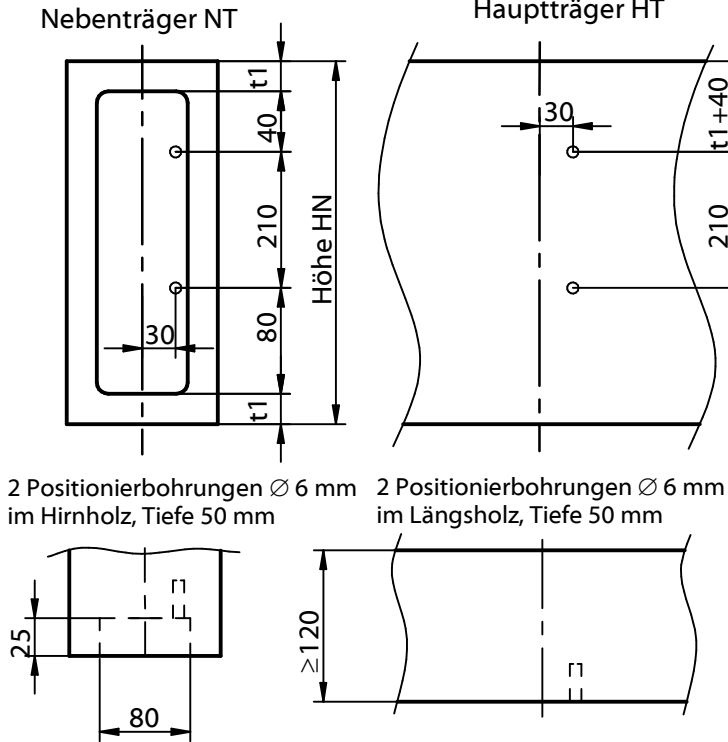
Art.-Nr. K129

Alternativ: Ausfräsung im Nebenträger

### 1. Fräsen im Nebenträger

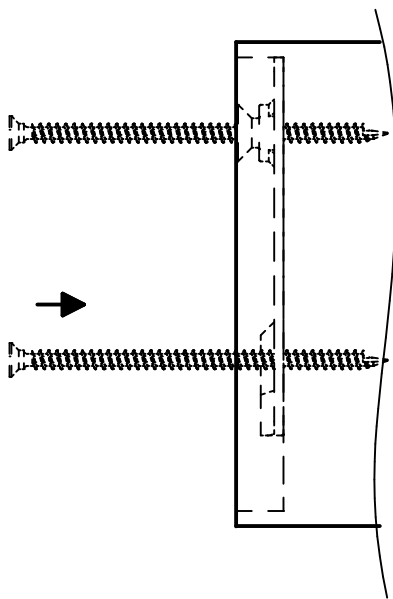


### 2. Positionierbohrungen



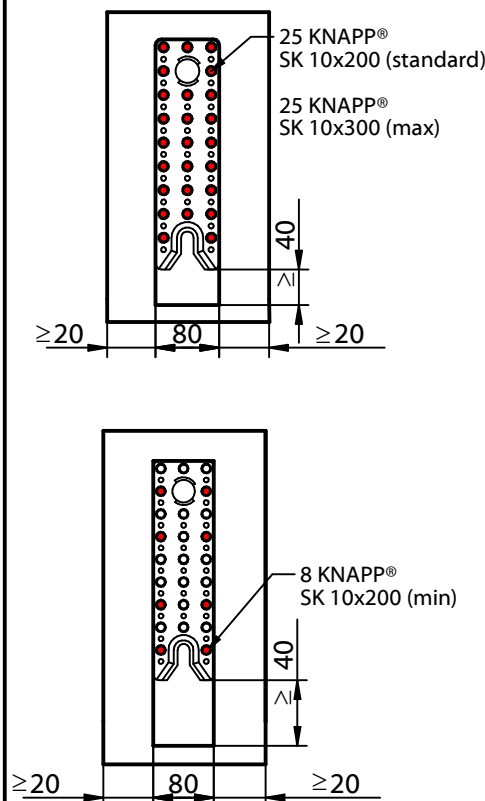
### 3. Verschrauben

1. Verbinder mit 2 Schrauben in Positionierbohrungen befestigen
2. Alle weiteren selbstbohrende Schrauben it. Schraubenbild (siehe rechts) eindrehen



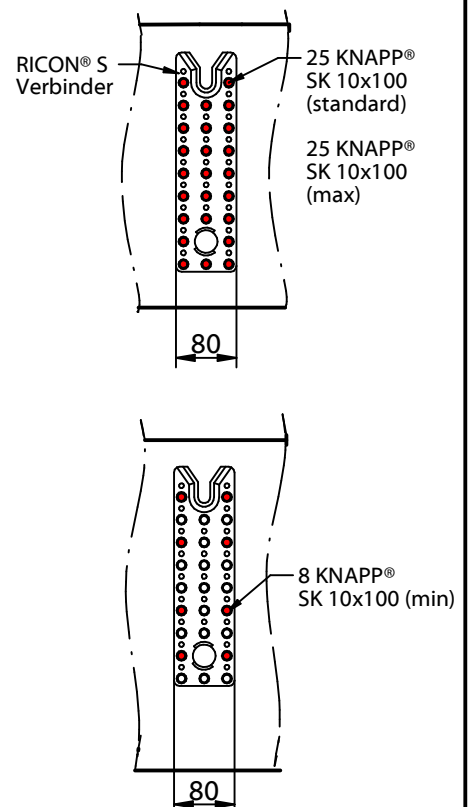
#### Befestigung im Nebenträger NT

Schraubenanzahl und Positionen:



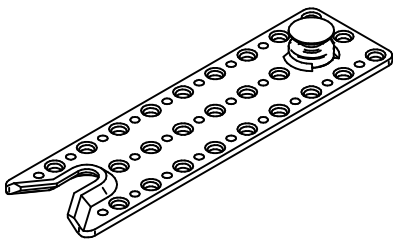
#### Befestigung im Hauptträger HT

Schraubenanzahl und Positionen:



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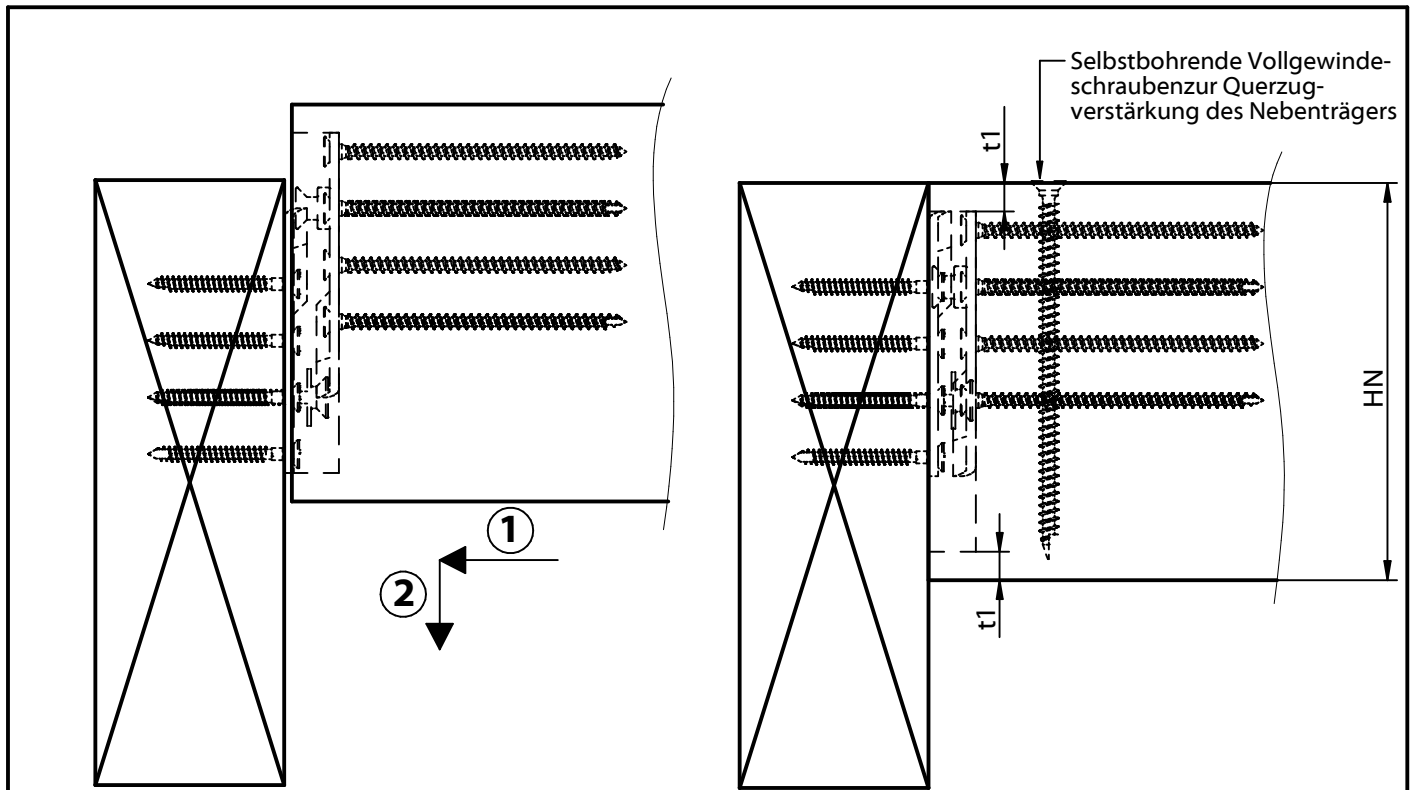
# Montageanleitung RICON® S 290/80 VS

Verschweißter Kragenbolzen



Art.-Nr. K129

Alternativ: Ausfräsung im Nebenträger



**Wichtiger Hinweise:**

Bei der Montage des Nebenträgers zwischen zwei fixierten Hauptträgern oder Stützen muss die Ausfräsung

nach unten durchgefräst werden um den Träger einhängen zu können.

Nebenträger- höhe	RANDABSTAND $t_1$ IN ABHÄNGIGKEIT DER NEBENTRÄGERHÖHE $H_N$
$H_N$	Abstand $t_1$
[mm]	[mm]
260	-
280	-
320	-
360	15
400	35
440	55
480	75
520	95

**Wichtiger Hinweis:**

Sollten geringere Nebenträgerhöhen verwendet werden, muss vom Statiker ein Querkug-nachweis durchgeführt werden. Der Querschnitt kann mit Vollgewindeschrauben querkug-verstärkt werden, die vom Statiker zu bemessen sind (EN 1995-1-1, NAD) !

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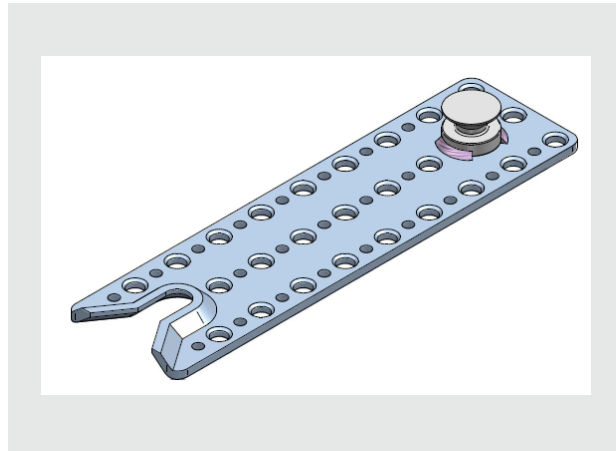




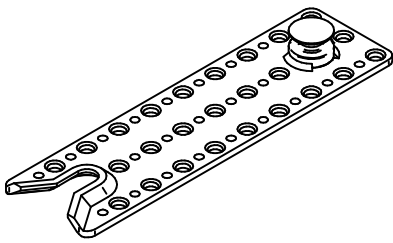
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Knapp GmbH Sàrl ■ Filiale France ■ 1A Rue du Stade ■ F - 67880 Innenheim Tel. : +33 (0)3 88 48 17 87 ■ Fax: +33 (0)9 70 62 81 87 ■ E-Mail : france@knapp-connectors.com





Art.-No.



# Assembly instructions

## RICON® S 290/80 VS

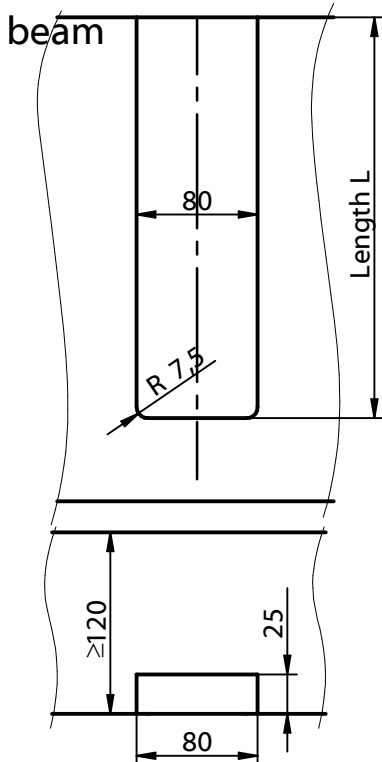
Welded collar bolt

### Milling the main beam



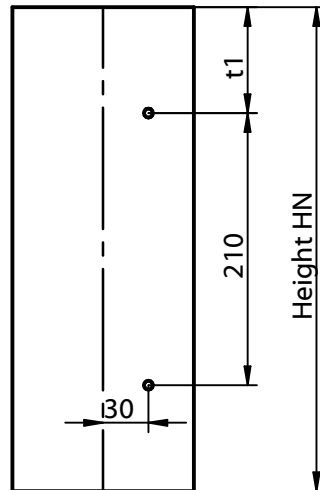
Art.-No. K129

### 1. Milling pattern main beam



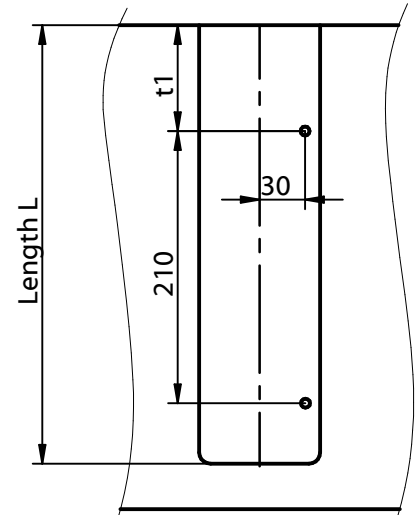
### 2. Pre drilling centered installation of connector

Secondary beam



2 x holes  $\varnothing$  6,  
depth 50 mm

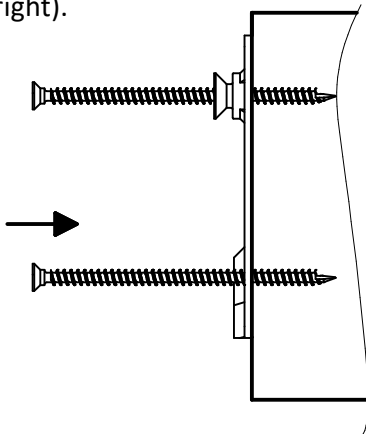
Main beam



2 x holes  $\varnothing$  6,  
depth 50 mm

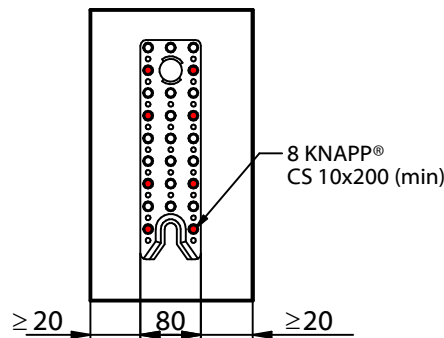
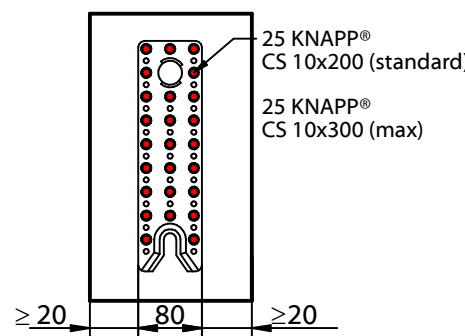
### 3. Screw connection:

1. Fasten the connector using pre drilled positioning holes for 2 screws.
2. Screw in all other self-taping screws according to the screw pattern (see right).



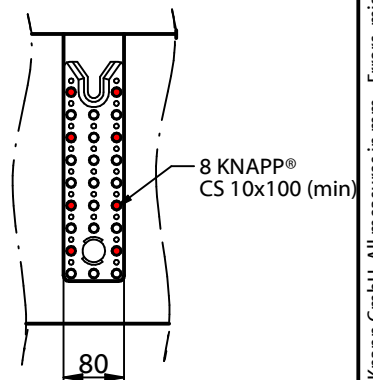
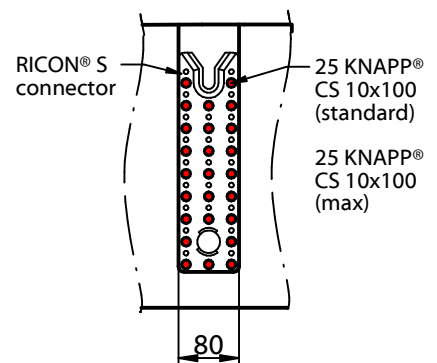
#### Screw pattern secondary beam

Number and position of screws:



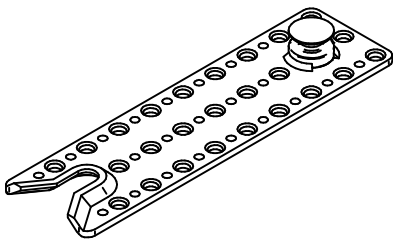
#### Screw pattern main beam

Number and position of screws:



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Art.-No. K129

# Assembly instructions

## RICON® S 290/80 VS

Welded collar bolt

### Milling the main beam



Milling length L in the main beam depending on the secondary beam height HN

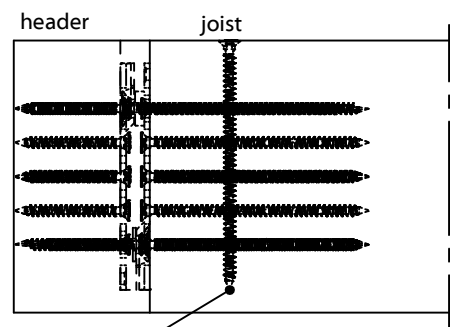
Secondary beam height $H_N$	RICON® S 290x80	
	Length L without shear reinforcement	
[mm]	[mm]	
220	-	
240	-	
260	-	
280	-	
300	-	
320	305	
340	315	
360	325	
380	335	
400	345	

Edge distance of the positioning holes  $t_1$  in the main and secondary beam depending on the secondary beam height HN

Secondary beam height $H_N$	RICON® S 290x80	
	Distance $t_1$ for secondary beam	
[mm]	Distance $t_1$	
[mm]	[mm]	
220	-	
240	-	
260	-	
280	-	
300	-	
320	55	
340	65	
360	75	
380	85	
400	95	

### Important Note:

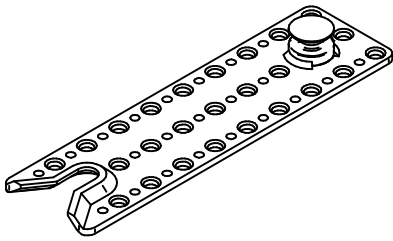
If lower secondary beam heights are used, a shear force verification must be carried out. The cross-section can be reinforced for shear force with fully-threaded screws. The shear force reinforcement has to be verified by a structural engineer (EN 1995-1-1, NAD)!



full thread screw with self tapping tip

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# Assembly instructions

## RICON® S 290/80 VS

Welded collar bolt

### Milling the secondary beam

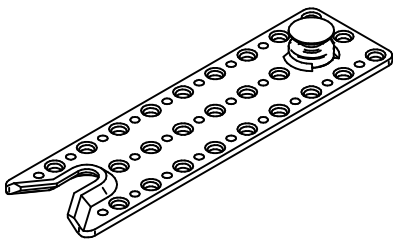


Art.-No. K129

<p><b>1. Milling pattern secondary beam</b></p> <p>Important note see page 4</p>	<p><b>2. Pre drilling centered installation of connector</b></p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="555 398 925 1144"> <p>Secondary beam</p> <p>2 x holes Ø 6, depth 50 mm</p> </div> <div data-bbox="925 398 1527 1144"> <p>Main beam</p> <p>2 x holes Ø 6, depth 50 mm</p> </div> </div>	
<p><b>3. Screw connection:</b></p> <ol style="list-style-type: none"> <li>Fasten the connector using pre drilled positioning holes for 2 screws.</li> <li>Screw in all other self-taping screws according to the screw pattern (see Fig. 3).</li> </ol>	<p><b>Screw pattern secondary beam</b> Number and position of screws:</p> <p>25 KNAPP® CS 10x200 (standard) 25 KNAPP® CS 10x300 (max)</p> <p>8 KNAPP® SK 10x200 (min)</p>	<p><b>Screw pattern main beam</b> Number and position of screws:</p> <p>RICON® S connector 25 KNAPP® CS 10x100 (standard) 25 KNAPP® CS 10x100 (max)</p> <p>8 KNAPP® SK 10x100 (min)</p>

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# Assembly instructions

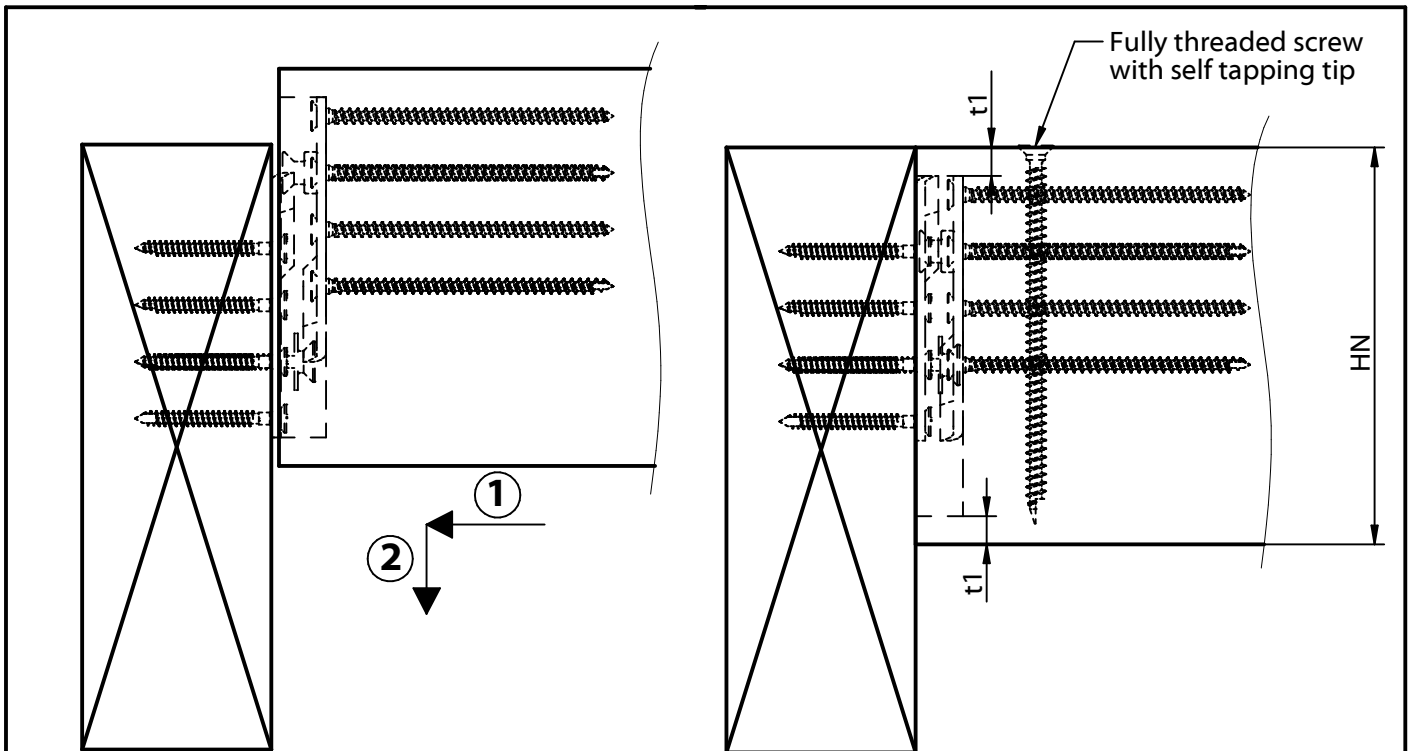
## RICON® S 290/80 VS

Welded collar bolt

### Milling the secondary beam



Art.-No. K129



**Important NOTE:**

When assembling the secondary beam between two main beams or posts, the recess must be milled through on the lower side of the beam in order to be able to hang the beam.

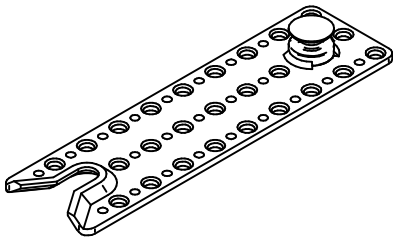
Secondary beam height $H_N$ [mm]	Distance $t_1$ with respect to secondary beam height $H_N$ RICON® S 290x80	
	Distance $t_1$ [mm]	
260	-	
280	-	
320	-	
360	15	
400	35	
440	55	
480	75	
520	95	

**Important NOTE:**

If lower secondary beam heights are used, a shear force verification must be carried out. The cross-section can be reinforced for shear force with fully- threaded screws. The shear force reinforcement has to be verified by a structural engineer (EN 1995-1-1, NAD)!

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# Assembly instructions

## RICON® S 290/80 VS

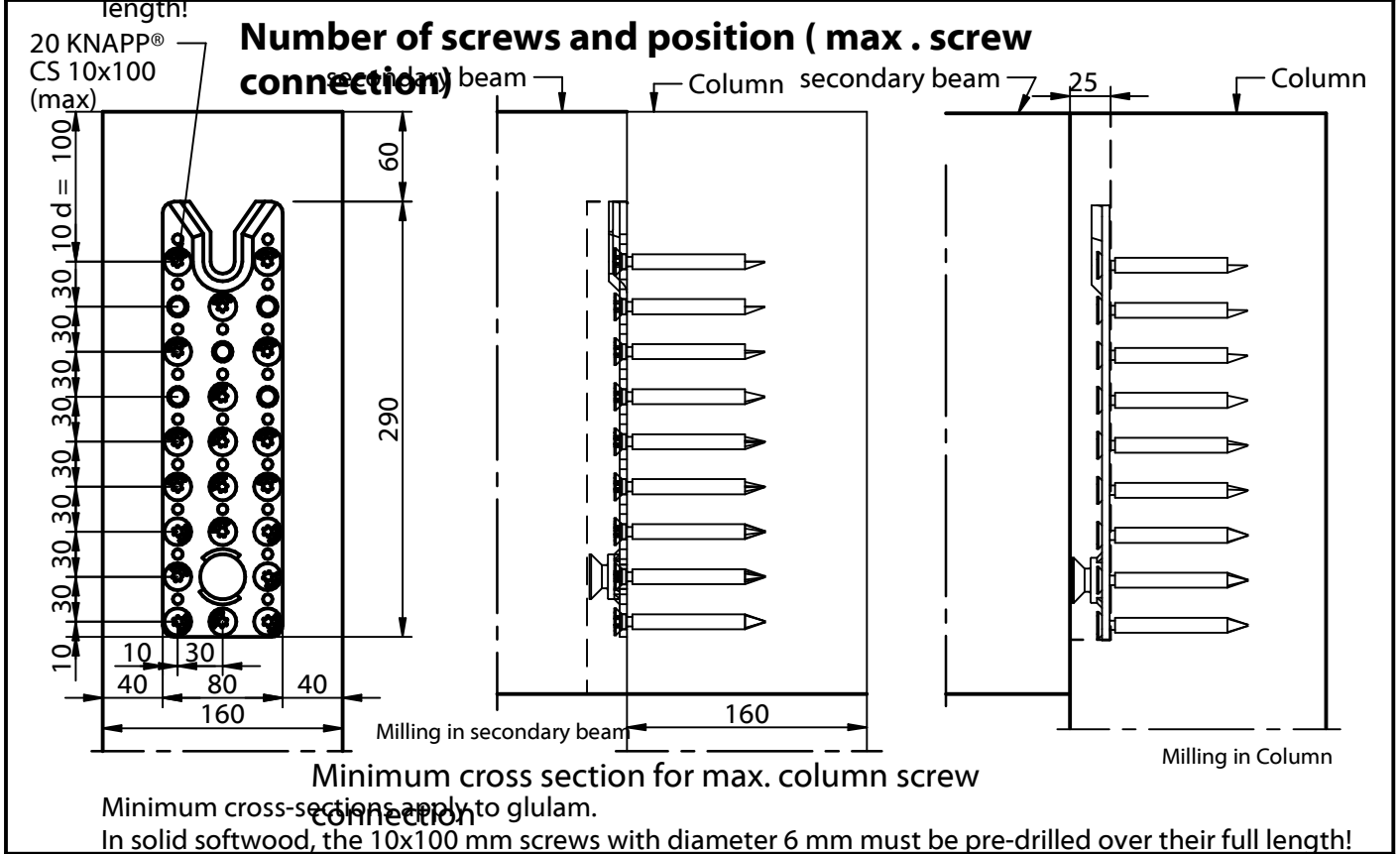
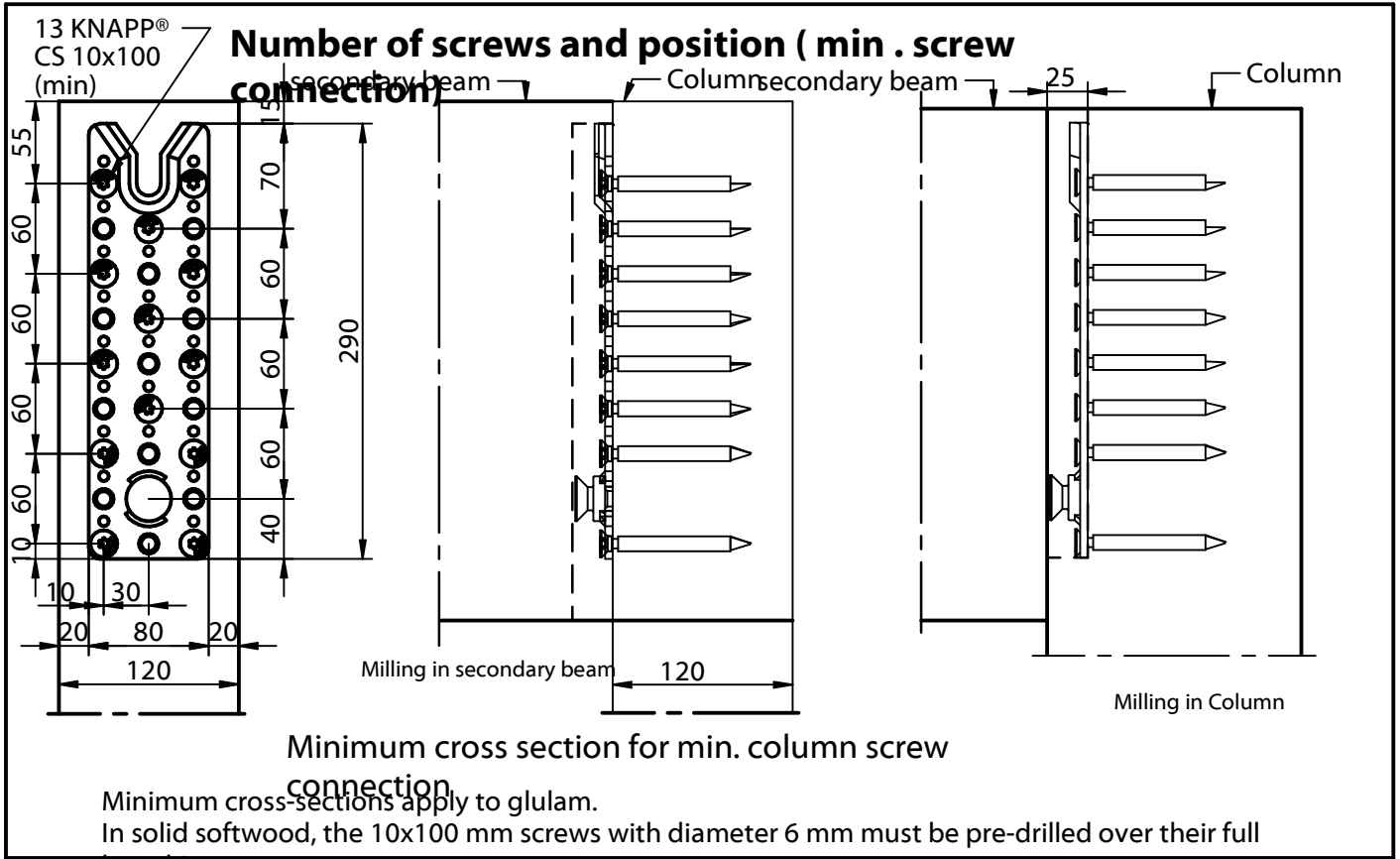
Welded collar bolt



ETA-10/0189

Art.-No. K129

Column connection



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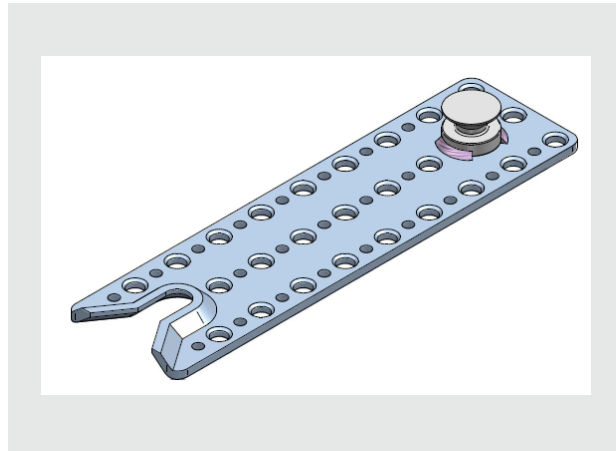
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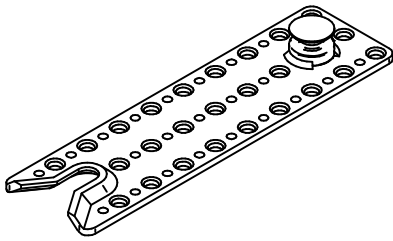
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Réf.



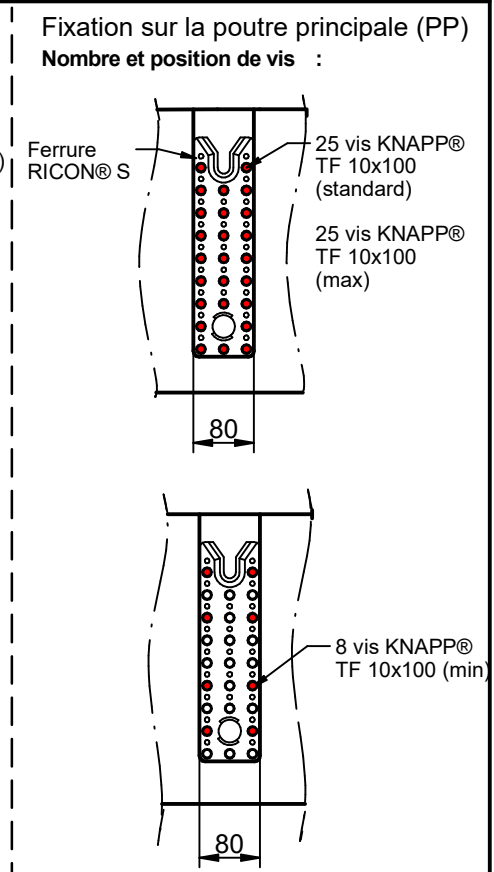
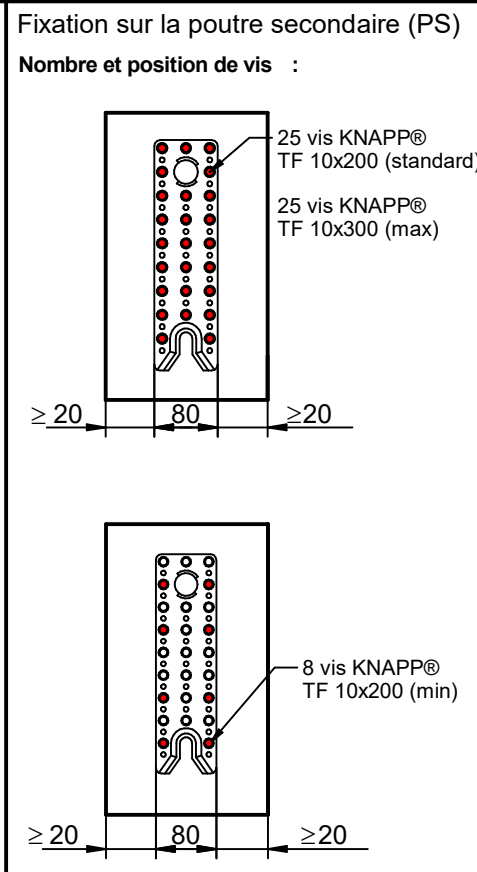
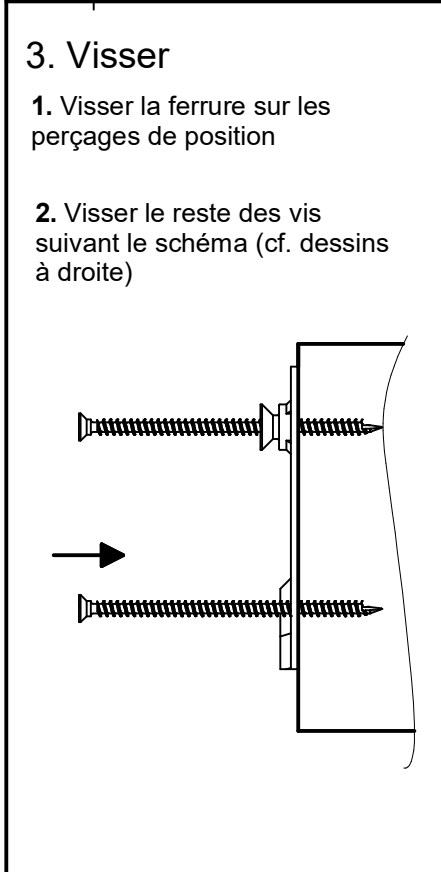
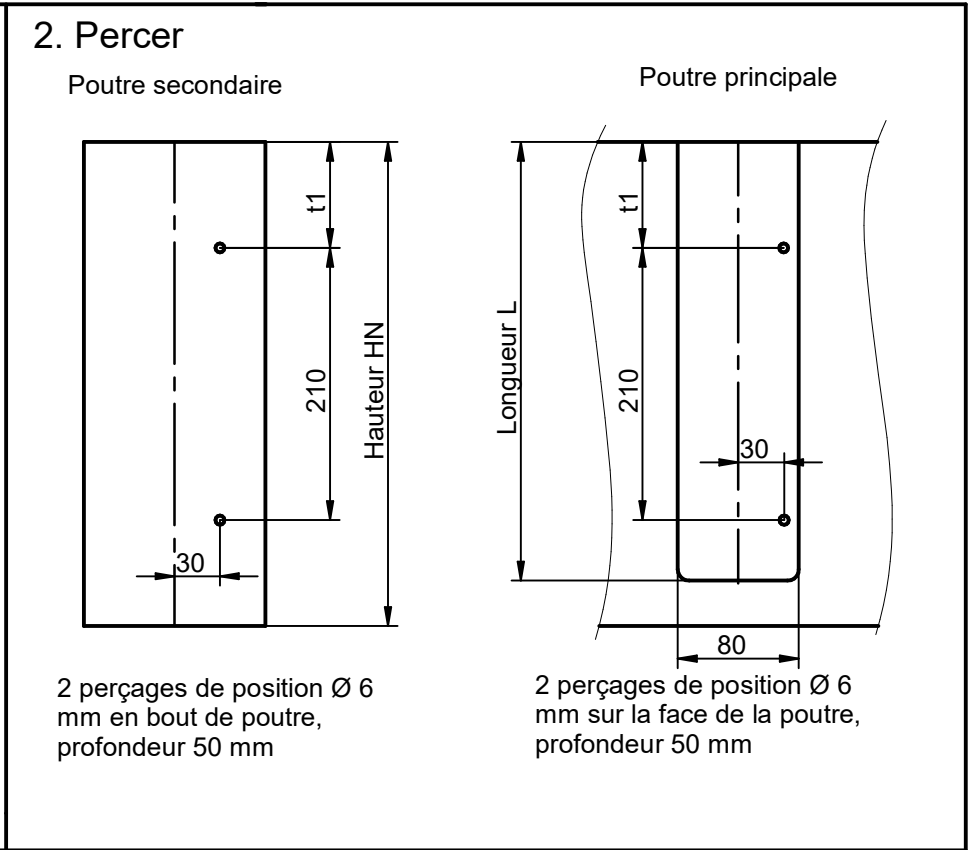
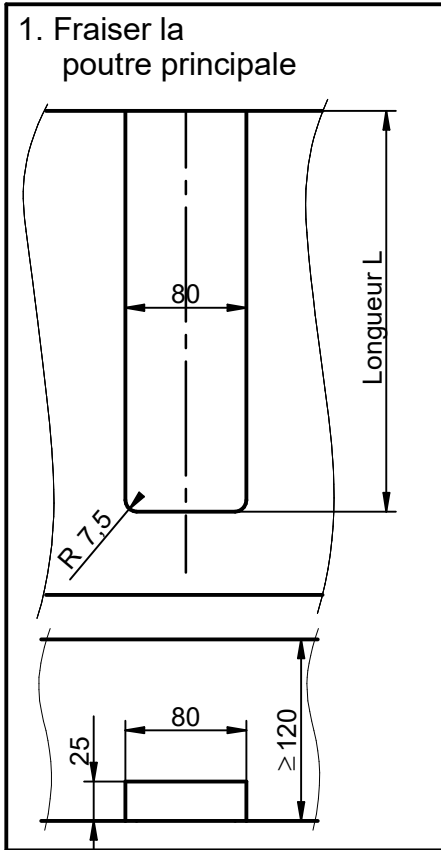
# RICON® S 290/80 VS

Goujon d'accroche soudé



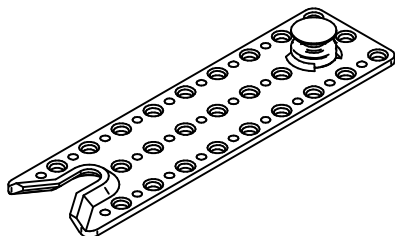
Réf. K129

## Encastrement sur la poutre principale



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### Longueur de fraisage L sur la poutre principale

Longueur de fraisage L dans la poutre principale sans vissage de renfort traversant, en relation avec la hauteur de poutre secondaire  $H_N$

RICON® S 290x80	
Hauteur de poutre secondaire $H_N$	Longueur L sans renfort de traction transversale
[mm]	[mm]
220	-
240	-
260	-
280	-
300	-
320	305
340	315
360	325
380	335

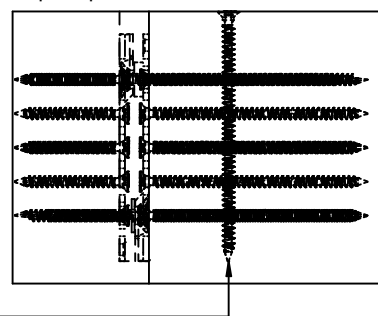
Position de perçage  $t_1$  sur la poutre principale et secondaire en relation avec la hauteur de poutre secondaire  $H_N$

RICON® S 290x80	
Hauteur de poutre secondaire $H_N$	Position de perçage $t_1$ sur la poutre secondaire
	Distance $t_1$
[mm]	[mm]
220	-
240	-
260	-
280	-
300	-
320	55
340	65
360	75
380	85
400	95

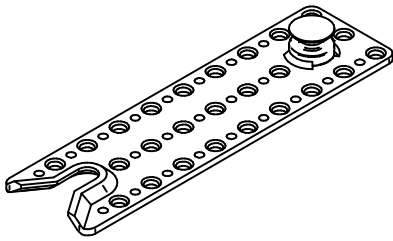
#### Remarque importante :

Faire contrôler par un B.E. compétant dans le cas où la hauteur de la poutre secondaire est plus faible qu'indiquée ci-dessus. Une section plus faible peut être renforcée par des vis de renfort transversales. (EN 1995-1-1, NAD)

Poutre principale Poutre secondaire



Vis à filetage total avec pointe auto-foreuse  
Pour le renfort tranchant des poutres secondaires



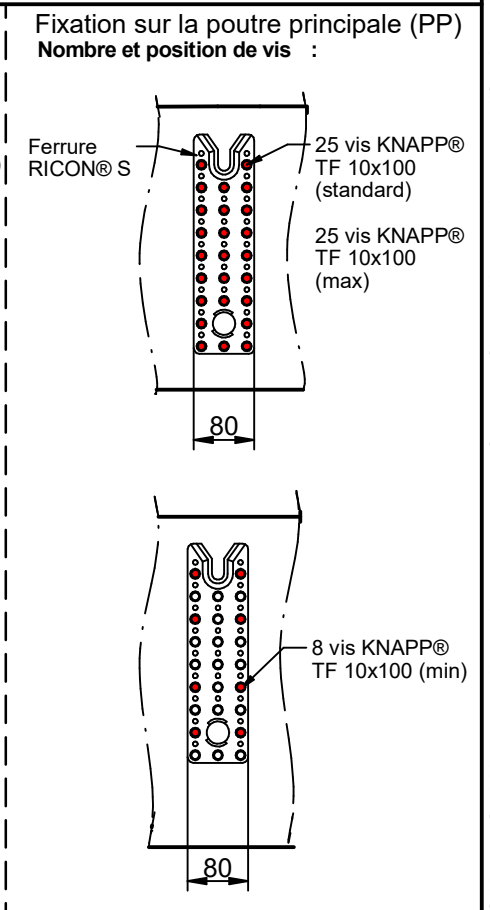
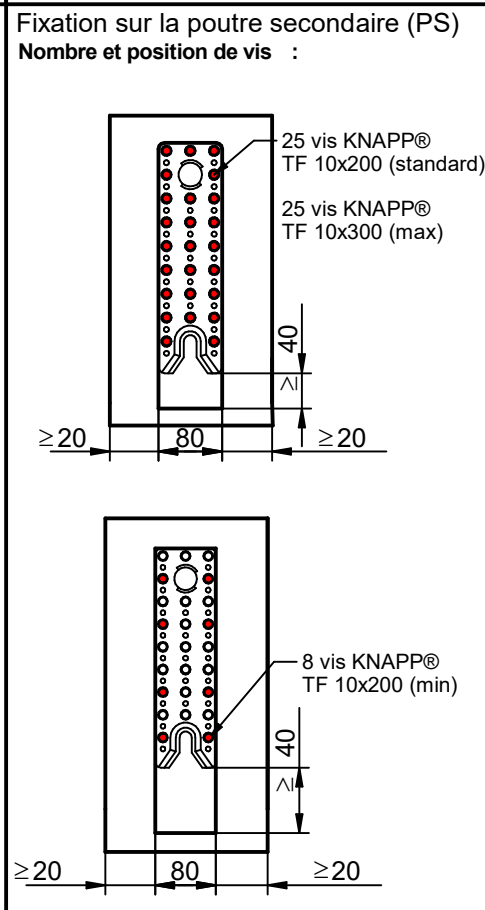
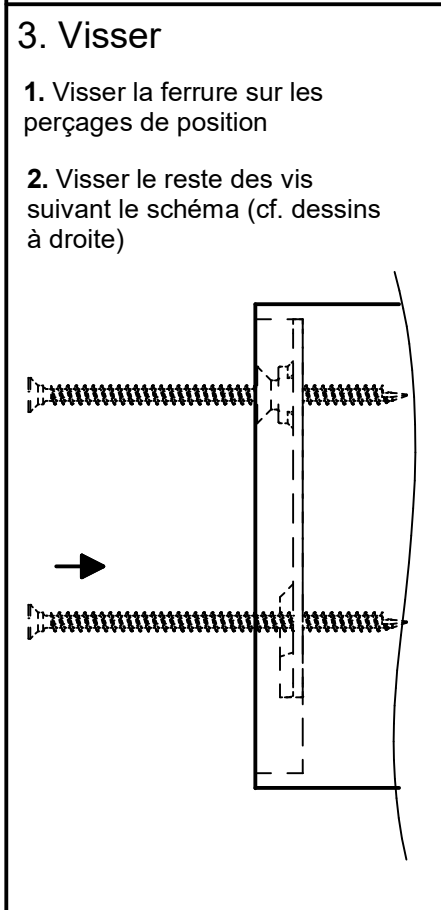
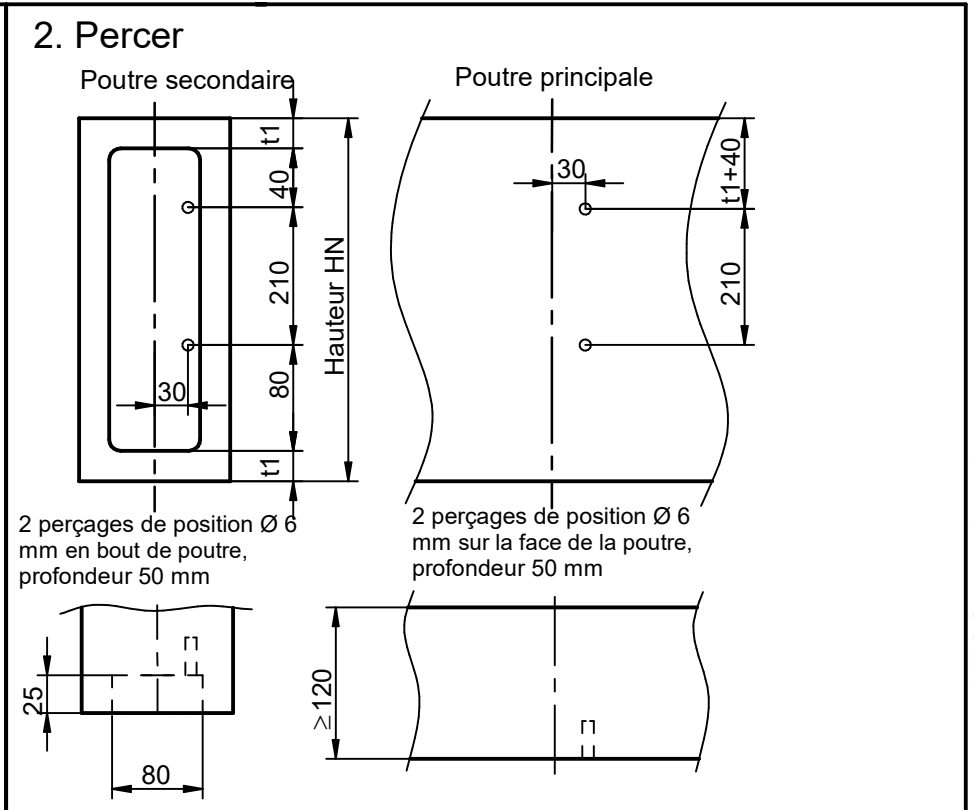
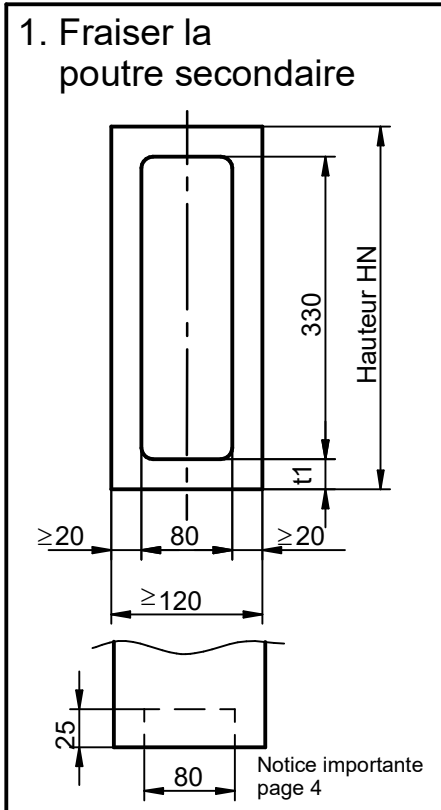
# RICON® S 290/80 VS

Goujon d'accroche soudé



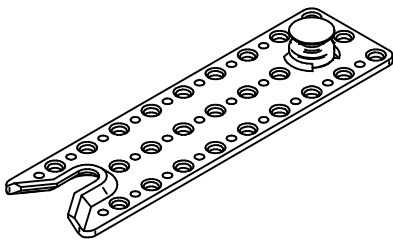
Réf. K129

Variante : Encastrement sur la poutre secondaire



Ce dessin est la propriété de Knapp GmbH.

© Knapp GmbH. Toutes dimensions en mm - sauf erreurs, fautes d'impression ou modifications techniques. VERSION 17. 02. 2021



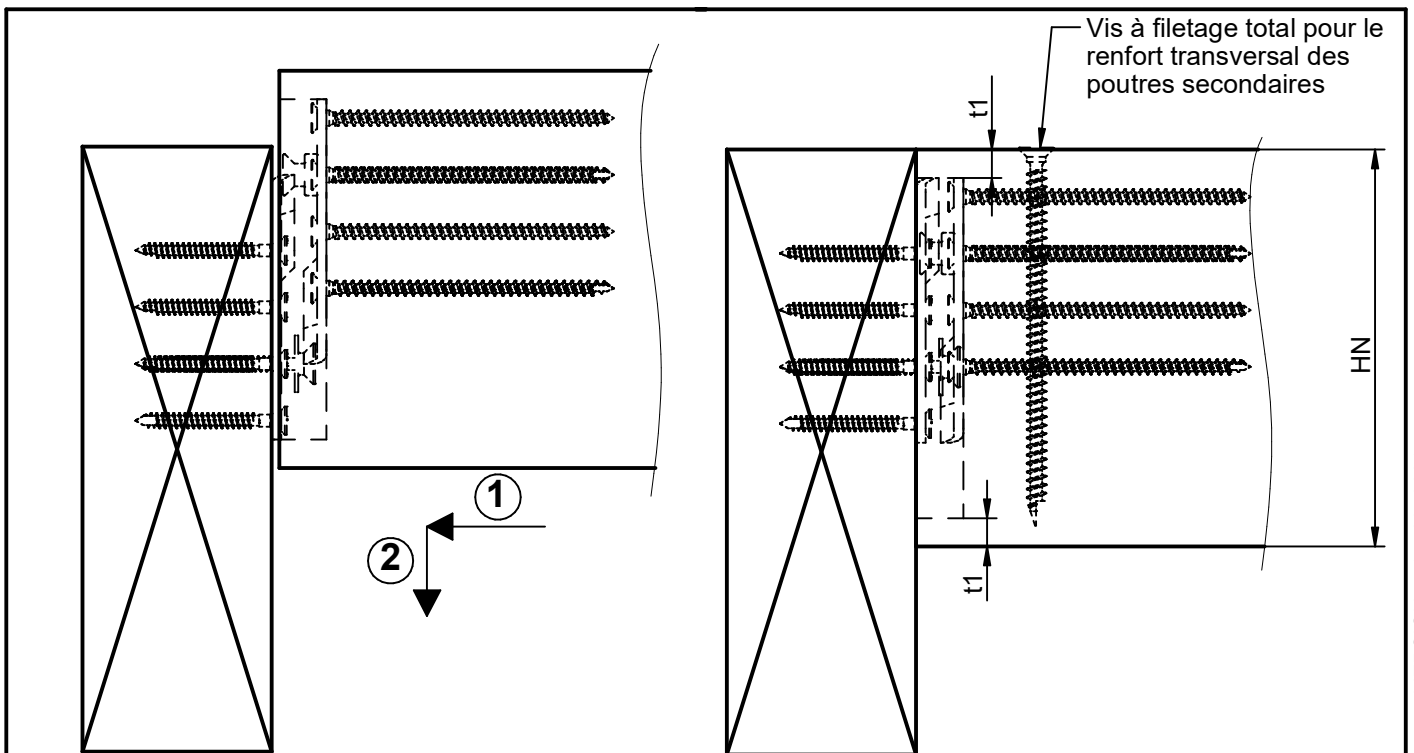
# RICON® S 290/80 VS

Goujon d'accroche soudé



Réf. K129

Variante : Encastrement sur la poutre secondaire



**Remarque importante :**

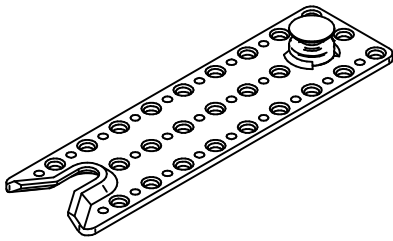
Lors de montage de poutres secondaires entre 2 poutres principales ou 2 poteaux, il est nécessaire de réaliser les usinages débouchants par-dessous pour permettre l'emboîtement.

Hauteur de poutre secondaire	Distance du bord $t_1$ en relation avec la hauteur de la poutre secondaire $H_N$	
	RICON® S 290x80	
$H_N$	Distance $t_1$	
[mm]	[mm]	
260	-	
280	-	
320	-	
360	15	
400	35	
440	55	
480	75	
520	95	

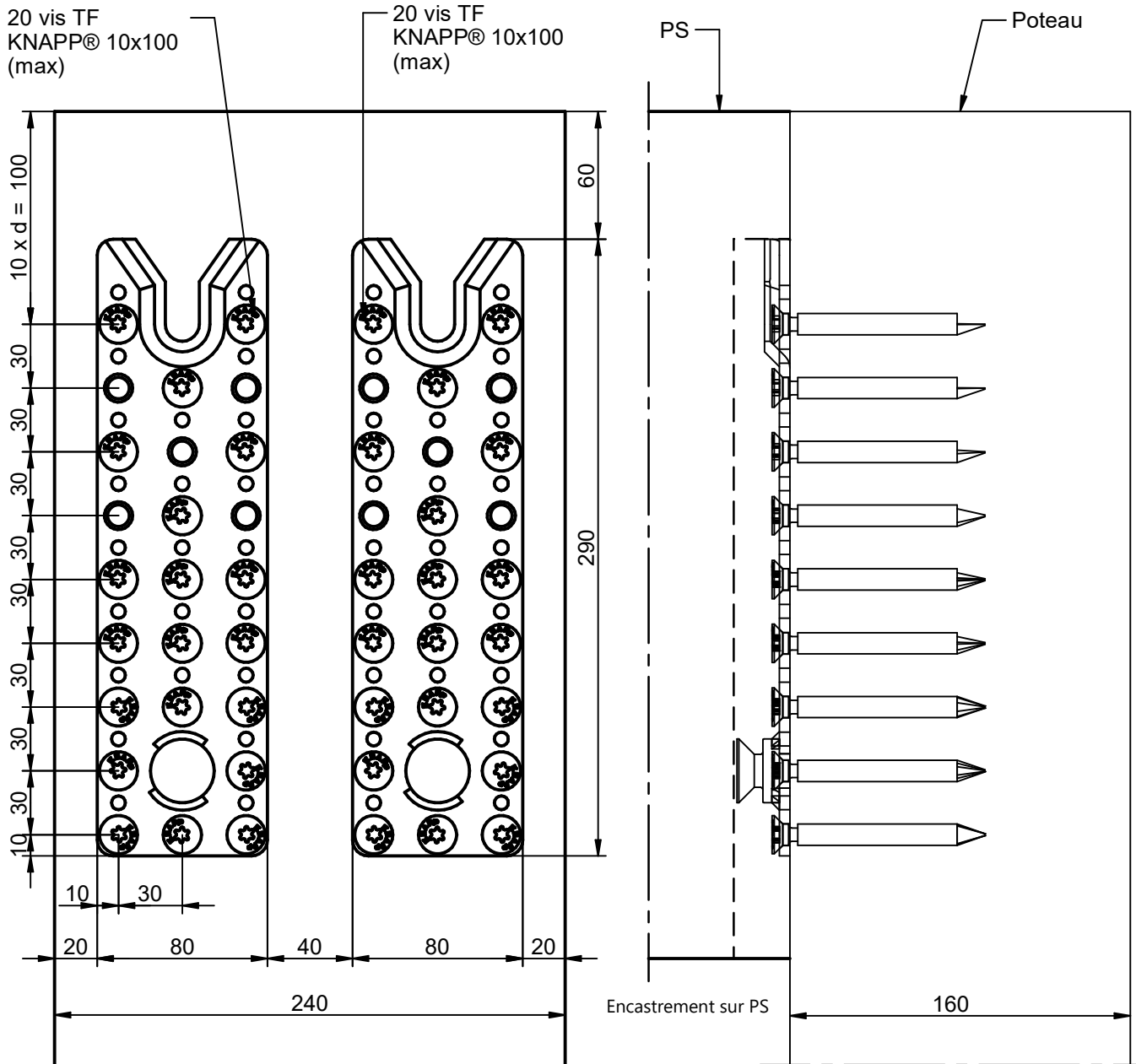
**Remarque importante :**

Faire contrôler par un B.E. compétant dans le cas où la hauteur de la poutre secondaire est plus faible qu'indiquée ci-dessus. Une section plus faible peut être renforcée par des vis de renfort transversales. (EN 1995-1-1, NAD)





### Position et nombre de vis (vissage maximum)



### Section minimum en configuration 2 RICON S 290x80 VS juxtaposés

Dimensions valables pour l'utilisation sur bois lamellés collés.

Pour les résineux massifs, il est recommandé de pré-percer les vis de 10x100 mm à un  $\varnothing$  6 mm sur toute la longueur !

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