

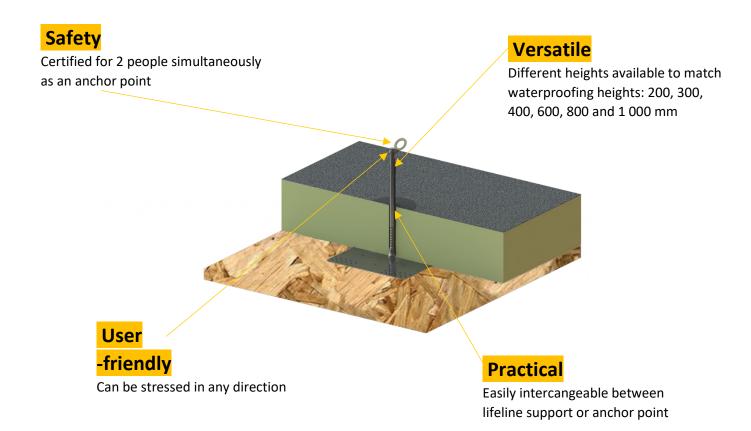


# Support & anchor point



#### **PRODUCT ADVANTAGES**

REEX is installed on wood panels: CTBH or OSB with a minimum thickness of 22 mm. It can be used as an anchor point or as a lifeline support and is available in different heights.





# Support & anchor point



#### **PRESENTATION**

REEX is installed on wood panels: CTBH or OSB with a minimum thickness of 22 mm. It can be used as an anchor point or as a lifeline support and is available in different heights.

#### **TECHNICAL FEATURES**

- Post material: Stainless steel 304.
- Compatible with all types of trapezoidal or sinusoidal profile steel panels, with a minimum thickness of 75/100 and fixed in accordance with the standards in force. Wave spacing: 250, 280, 304 and 333mm.
- Compatible with OSB or CTBH roofing with a minimum thickness of 22 mm.
- Compatible with concrete support.

#### **CONFORMITY**

PARX200, PARX300, PARX400, PARX600, PARX800, PARX1000 anchor points comply with the following standards:

Standard EN 795 : 2012 Type A.

Standard CEN/TS 16415 : 2013



Type testing performed by: DEKRA Testing and Certification GmbH

#### REMINDER OF THE STANDARDS

It is only when it is technically impossible to implement collective protection that recourse to individual protection against falls from height can be considered (Labour Code R4323-61).

Personal protective equipment can also be used as a complement to collective protection. Indeed, the use of this type of protection requires organisational constraints, in particular:

- the definition, implementation and choice of the type of equipment (lifeline, anchor point, etc.),
- working with at least two people,
- definition of an emergency intervention plan,
- implementation and use instructions,
- information and training for workers,
- periodic checks,
- weather conditions.

# As a reminder, extract from recommendation R430 - INRS/CNAMTS (French recommendations):

For buildings to be constructed of any kind, the technical provisions intended to facilitate the prevention of falls from height during subsequent work on the building must be provided for at the time of conception.

The reason of technical impossibility cannot therefore be accepted, as it is now up to the client to modify his project so that no situation remains that cannot be properly resolved, at least, by the implementation of collective protection.



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# DEKRA

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TRANSLATION

# Type Examination Certificate

(2) No. of the Type Examination Certificate: ZP/B068/22

(3) Product: Anchor device type A

Type: REEX

(4) Manufacturer: DELTA PLUS GROUP

(5) Address: ZAC La Peyroliere 84405 APT Cedex

FRANCE

- (6) The design of this product and any acceptable variation thereto are specified in the schedule to this Type Examination Certificate.
- (7) The certification body of DEKRA Testing and Certification GmbH certifies that this product complies with the fundamental requirements of the standard listed under item 8 below. The examination and test results are set out in the report PB 22-022.
- (8) The requirements of the standard are assured by compliance with

DIN EN 795:2012

DIN CEN/TS 16415:2017

- (9) This Type Examination Certificate relates only to the design, examination and tests of the specified product in accordance to the standard list. Further requirements of the Directive apply to the manufacturing process and supply of this personal protective equipment. These are not covered by this certificate.
- (10) This Type Test Certificate is valid until 2027-04-19

DEKRA Testing and Certification GmbH Bochum, 2022-04-20

> signed: Kilisch / Managing director

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

Managing director

Page 1 of 2 of ZP/B068/22 - 342538500

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#### TRANSLATION

- (11) Appendix to
- (12) Type Examination Certificate ZP/B068/22
- (13) 13.1 Subject and Type
  Anchor device type A
  Type: REEX

#### 13.2 Description

The anchor device of type REEX is used to protect a maximum number of two people against falls from a height (Fig. 1 - 4); it is intended for assembly on surfaces of sufficient strength. For that purpose, the anchor device is fastened by means of drill holes in the base plate using appropriate fasteners.

Centrally to the base plate (352 mm x 352 mm x 3 mm) a sleeve is welded which receives the contoured round bar ( $\varnothing$  18 mm). The minimum height of the round bar is 200 mm, and its maximum height is 1000 mm. The upper end of the round bar is provided with an M12 internal thread. An appropriate fastener is used to mount the attachment eyelet made of edged sheet steel (t = 3 mm) to the upper end of the bar. The user connects his personal protective equipment to this attachment eyelet to protect himself against falls from a height. Fig. 2 shows the anchor device of type REEX with the assembled support tube (60.3 mm x 2 mm).

The single anchor point is so designed that, in combination with the wire rope systems of ALTILIGNE and BATILIGNE of the Delta Plus Group, it can absorb the forces to be expected when loaded by a fall. If used with those systems, the anchor device is used as an end stop, intermediate structural anchor or curve anchor of wire rope systems according to EN 795;2012 Type C.

The anchor device is intended for bearing loads exerted from any direction parallel to the roof surface and made of corrosion-resistant steel.



Fig. 1: Anchor device type REEX



Fig.2: Anchor device type REEX with support tube

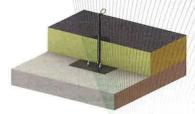


Fig.3 - 4: Anchor device type REEX (assembly examples)

(14) Report

PB 22-022, 2022-04-20

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Date: 26/02/2021

Commentaires du spécificateur:

#### 1 Données d'entrée

Type et diamètre de la cheville: HSA-R2 M10 hnom1

Période de retour (durée de vie en

années):

Code d'article: 2004219 HSA-R2 M10x83 20/10/-Profondeur d'implantation effective:  $h_{\rm sf}$  = 40,0 mm,  $h_{\rm nom}$  = 50,0 mm

Matériau: A2

Homologation: ETA 11/0374

Délivré I Validité: 22/10/2020 I -

Méthode de calcul: Méthode de calcul EN 1992-4, Mécanique Montage avec écartement:  $e_b = 0.0 \text{ mm}$  (sans écartement); t = 3.0 mm

Platine<sup>R</sup>: I<sub>x</sub> x I<sub>y</sub> x t = 350,0 mm x 350,0 mm x 3,0 mm; (Epaisseur de platine recommandée: non calculé)

Profil: Cylindre, ;  $(L \times W \times T) = 18,0 \text{ mm} \times 18,0 \text{ mm}$ 

Matériau de base: Béton non fissuré béton, C20/25, f<sub>c,cyl</sub> = 20,00 N/mm<sup>2</sup>; h = 160,0 mm, coefficient de sécurité du

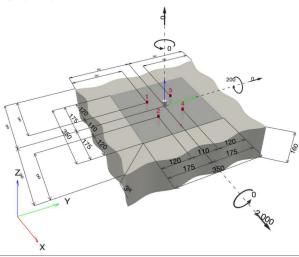
matériau partiel  $\gamma_c$  = 1,500

Installation: trou foré avec perforateur, condition d'installation: sec

Renforcement Pas de renforcement ou distance entre armatures>= 150 mm (tous  $\emptyset$ ) ou >= 100 mm ( $\emptyset$  <= 10 mm)

Pas de renforcement de bord longitudinal

#### 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) 2003-2021, Hillit AG, FL-9494 Schaan. Hillit est une marque déposée de Hillit AG, Schaan



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

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#### 1.1 Combinaison de charges

Cas	Description	Forces [daN] / Moment [daNm]	Sismique	Feu	Util. max. Cheville [%]
1	Combinaison 1	$N = 0.0$ ; $V_x = 2000.0$ ; $V_y = 0.0$ ;	non	non	48
		$M_{\chi} = 0.0$ ; $M_{V} = 200.0$ ; $M_{Z} = 0.0$ ;			

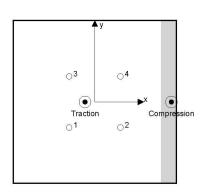
#### 2 Cas de charges/Charges résultantes sur les chevilles

# Réactions des chevilles [daN] Traction: (+Traction, -Compression)

Cheville	Traction	Cisaillement	Cisaillement x	Cisaillement y
1	373,0	500,0	500,0	0,0
2	166,0	500,0	500,0	0,0
3	373,0	500,0	500,0	0,0
4	166,0	500,0	500,0	0,0

Déformation max à la compression du béton: 0,06 [‰] Contrainte max à la compression du béton: 1,94 [N/mm<sup>2</sup>] 1 078,0 [daN] Charges de traction résultantes dans (x/y)=(-21,1/0,0): Charges de compression résultantes dans (x/y)=(164,4/0,0): 1 078,0 [daN]

Les forces sur les chevilles sont calculées avec l'hypothèse d'une platine rigide.



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#### 3 Traction (EN 1992-4, § 7.2.1)

	Charge [daN]	Capacité [daN]	Utilisation $\beta_N$ [%]	Statut
Rupture acier*	373,0	2 542,9	15	ОК
Rupture par extraction/glissement*	373,0	826,7	46	OK
Rupture par cône de béton**	1 078,0	2 254,2	48	OK
Rupture par fendage**	NA	NA	NA	NA

<sup>\*</sup> cheville la plus défavorable \*\* groupe de chevilles (chevilles en traction)

#### 3.1 Rupture acier

 $N_{\text{Ed}} \leq N_{\text{Rd,s}} = \frac{N_{\text{Rk,s}}}{\gamma_{\text{M,s}}}$  EN 1992-4, Tableau 7.1

N <sub>Rk,s</sub> [daN]	$\gamma_{M,s}$	N <sub>Rd,s</sub> [daN]	N <sub>Ed</sub> [daN]
3 560,0	1,400	2 542,9	373,0

#### 3.2 Rupture par extraction/glissement

 $N_{\text{Ed}} \leq N_{\text{Rd,p}} = \frac{\psi_{\text{c}} \cdot N_{\text{Rk,p}}}{\gamma_{\text{M,p}}}$  EN 1992-4, Tableau 7.1

N <sub>Rk,p</sub> [daN]	$\Psi_{c}$	$\gamma_{M,p}$	N <sub>Rd,p</sub> [daN]	N <sub>Ed</sub> [daN]
1 240,0	1,000	1,500	826,7	373,0

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3.3 Rupture	par cône de béton					-
$N_{\text{Ed}} \leq N_{\text{Rd,c}}$	$= \frac{N_{Rk,c}}{\gamma_{M,c}}$		EN 1992-4	I, Tableau 7.1		
$N_{\text{Rk,c}}$	$= N_{Rk,c}^{0} \cdot \frac{A_{c,N}}{A_{c,N}^{0}} \cdot \psi_{s,N} \cdot \psi_{re,N} \cdot$	$\psi_{\text{ec1,N}} \cdot \psi_{\text{ec2,N}} \cdot \psi_{\text{M,N}}$	EN 1992-4	I, Éq. (7.1)		
$\mathbf{N}_{Rk,c}^{0}$ $\mathbf{A}_{c,N}^{0}$	$= k_1 \cdot \sqrt{f_{ck}} \cdot h_{ef}^{1,5}$		EN 1992-4	I, Éq. (7.2)		
	= s <sub>cr,N</sub> · s <sub>cr,N</sub>		EN 1992-4	I, Éq. (7.3)		
$\psi_{\text{s,N}}$	$= 0.7 + 0.3 \cdot \frac{c}{c_{cr,N}} \le 1.00$		EN 1992-4	ł, Éq. (7.4)		
$\Psi_{\text{ec1,N}}$	$= \frac{1}{1 + \left(\frac{2 \cdot e_{N,1}}{s_{crN}}\right)} \le 1,00$		EN 1992-4	1, Éq. (7.6)		
$\Psi_{\text{ec2,N}}$	$= \frac{1}{1 + \left(\frac{2 \cdot e_{N,2}}{2}\right)} \le 1,00$		EN 1992-4	4, Éq. (7.6)		
$\psi_{\text{M,N}}$	= 1		EN 1992-4	1, Éq. (7.7)		
A <sub>c,N</sub> [m	$m^2$ ] $A_{c,N}^0  [mm^2]$	c <sub>cr,N</sub> [mm]	s <sub>cr,N</sub> [mm]	f <sub>c,cyl</sub> [N/mm <sup>2</sup> ]		
52 90		60,0	120,0	20,00		
e <sub>c1,N</sub> [m	m] Ψ <sub>ec1,N</sub>	e <sub>c2,N</sub> [mm]	$\Psi_{\text{ec2,N}}$	$\psi_{\text{s,N}}$	$\psi_{\text{re},N}$	
21,1	0,740	0,0	1,000	1,000	1,000	

 $N_{Rk,c}^0$  [daN]

1 244,5

1,500

N<sub>Rd,c</sub> [daN]

2 254,2

N<sub>Ed</sub> [daN]

1 078,0

185,5 Groupe ID cheville

z [mm]

 $\psi_{M,N}$ 

1,000

11,000

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#### 4 Cisaillement (EN 1992-4, § 7.2.2)

	Charge [daN]	Capacité [daN]	Utilisation β <sub>V</sub> [%]	Statut
Rupture acier (sans bras de levier)*	500,0	1 808,0	28	ОК
Rupture acier (avec bras de levier)*	NA	NA	NA	NA
Rupture par effet de levier**	2 000,0	7 3 1 4, 9	28	ОК
Rupture béton en bord de dalle en direction **	NA	NA	NA	NA

<sup>\*</sup> cheville la plus défavorable \*\*\* groupe de chevilles (chevilles pertinentes)

#### 4.1 Rupture acier (sans bras de levier)

$$\begin{split} & V_{Ed} \leq V_{Rd,s} = \frac{V_{Rk,s}}{\gamma_{M,s}} & \text{EN 1992-4, Tableau 7.2} \\ & V_{Rk,s} & = k_7 \cdot V_{Rk,s}^0 & \text{EN 1992-4, Eq. (7.35)} \\ & \frac{V_{Rk,s}^0 \left[ \text{daN} \right]}{2\,260,0} & k_7 & V_{Rk,s} \left[ \text{daN} \right] & \gamma_{M,s} & V_{Rd,s} \left[ \text{daN} \right] & V_{Ed} \left[ \text{daN} \right]}{2\,260,0} & 1,000 & 2\,260,0 & 1,250 & 1\,808,0 & 500,0 \end{split}$$

#### 4.2 Rupture par effet de levier

	W	
$V_{Ed} \leq V$	$R_{d,cp} = \frac{V_{Rk,cp}}{\gamma_{M,c,p}}$	EN 1992-4, Tableau 7.2
$V_{\rm Rk,cp}$	$= k_8 \cdot N_{Rk,c}$	EN 1992-4, Éq. (7.39a)
$N_{\text{Rk,c}}$	$= N_{Rk,c}^{0} \cdot \frac{A_{c,N}}{A_{c,N}^{0}} \cdot \Psi_{s,N} \cdot \Psi_{re,N} \cdot \Psi_{ec1,N} \cdot \Psi_{ec2,N} \cdot \Psi_{M,N}$	EN 1992-4, Éq. (7.1)
$N_{Rk,c}^0$ $A_{c,N}^0$	$= \mathbf{k}_1 \cdot \sqrt{\mathbf{f}_{ck}} \cdot \mathbf{h}_{ef}^{1.5}$	EN 1992-4, Éq. (7.2)
$A_{c,N}^0$	$= \mathbf{s}_{cr,N} \cdot \mathbf{s}_{cr,N}$	EN 1992-4, Éq. (7.3)
$\psi_{\text{s},N}$	$= 0.7 + 0.3 \cdot \frac{c}{c_{Cr,N}} \le 1,00$	EN 1992-4, Éq. (7.4)
$\psi_{\text{ec1,N}}$	$= \frac{1}{1 + \left(\frac{2 \cdot e_{\vee,1}}{s_{cr,N}}\right)} \le 1,00$	EN 1992-4, Éq. (7.6)
$\psi_{\text{ec2,N}}$	$= \frac{1}{1 + \left(\frac{2 \cdot e_{\vee,2}}{s_{\vee,2}}\right)} \le 1,00$	EN 1992-4, Éq. (7.6)
$\psi_{M,N}$	= 1	EN 1992-4, Éq. (7.7)
	2 0 2	

$A_{c,N}$ [mm $^2$ ]	$A_{c,N}^0$ [mm <sup>2</sup> ]	c <sub>cr.N</sub> [mm]	s <sub>cr.N</sub> [mm]	$\mathbf{k}_8$	f <sub>c.cvl</sub> [N/mm <sup>2</sup> ]	
52 900	14 400	60,0	120,0	2,400	20,00	
e <sub>c1,V</sub> [mm]	$\Psi_{\text{ec1,N}}$	e <sub>c2,V</sub> [mm]	$\Psi_{ec2,N}$	$\psi_{\text{s,N}}$	$\psi_{\text{re},N}$	$\psi_{M,N}$
0,0	1,000	0,0	1,000	1,000	1,000	1,000
$\mathbf{k}_1$	N <sub>Rk,c</sub> [daN]	$\gamma_{M,c,p}$	V <sub>Rd,cp</sub> [daN]	V <sub>Ed</sub> [daN]		
11,000	1 244.5	1,500	7 314.9	2 000.0		

Groupe ID cheville

1-4

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#### 5 Charges combinées traction et cisaillement (EN 1992-4, Paragraphe 7.2.3)

#### Rupture acier

$\beta_N$	$\beta_{V}$	α	Utilisation $\beta_{N,V}$ [%]	Statut	
0,147	0,277	2,000	10	ОК	

$$\beta_N^{\alpha} + \beta_V^{\alpha} \le 1.0$$

#### Rupture béton

$\beta_{N}$	$\beta_{V}$	α	Utilisation $\beta_{N,V}$ [%]	Statut	
0,478	0,273	1,500	48	OK	

$$\beta_N^\alpha$$
 +  $\beta_V^\alpha$   $_{\leq}$  1,0

#### 6 Déplacements (cheville la plus défavorable)

#### Charge à court terme:

Commentaires: Les déplacements en traction sont valides avec la moitié des couples de serrage requis pour Béton non fissuré Béton ! Les déplacements en cisaillement sont valides sans friction entre le béton et la platine ! L'espace entre le trou foré et le trou de passage n'est pas inclus dans ce calcul!

2,0639 [mm]

Les déplacements acceptables dépendent de la construction fixée et doivent être définis par le concepteur !

#### 7 Avertissements

- La redistribution des charges sur les chevilles suite à la déformation élastique de la platine n'est pas prise en compte. La platine est supposée suffisament rigide pour ne pas se déformer lorsqu'elle mise en charge.
- La vérification du transfert de charges dans le support est nécessaire selon EN 1992-4, Annexe A!
- Le calcul n'est valide que si le diamètre du trou de passage n'est pas supérieur aux valeurs données dans le tableau 6.1 de EN 1992-4! Pour des diamètres de trou de passage plus importants, voir le §6.2.2 de EN 1992-4!
- La liste d'accessoires donnée dans cette note de calcul est pour information uniquement. Dans tous les cas, les instructions de pose fournies avec le produit doivent être respectées pour assurer une installation correcte.
- Pour la détermination de  $\psi_{re,v}$  (rupture en bord de dalle) un enrobage du renforcement de bord c = 30 mm est pris en compte.
- Les adhérences caractéristiques dépendent de la période de retour (durée de vie en années): 50

#### La fixation remplit les critères de conception !

Les données d'entrée et les résultats doivent être vérifiés quant aux conditions existantes et leur plausibilité! PROFIS Engineering (c) 2003-2021, Hilti AG, FL-9494 Schaan. Hilti est une marque déposée de Hilti AG, Schaan



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#### 8 Données de pose

Platine, acier: 1.4301; E = 200 000,00 N/mm<sup>2</sup>;  $f_{yk}$  = 190,00 N/mm<sup>2</sup> Profil: Cylindre, ; (L x W x T) = 18,0 mm x 18,0 mm Diamètre du trou de passage:  $d_f = 12,0 \text{ mm}$ Epaisseur de platine (entrée): 3,0 mm Epaisseur de platine recommandée: non calculé Méthode de perçage: Perçage au perforateur

Nettoyage: Un nettoyage manuel du trou est requis conformément aux instructions de pose.

Type et diamètre de la cheville: HSA-R2 M10 hnom1 Code d'article: 2004219 HSA-R2 M10x83 20/10/-

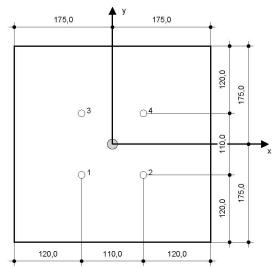
Couple de serrage: 25 Nm

Diamètre du trou dans le matériau de base: 10.0 mm Profondeur du trou dans le matériau de base: 55,0 mm Epaisseur minimum du matériau de base: 100,0 mm

Goujon Hilti HSA M10 hnom1 en Acier inoxydable, profondeur 50 mm, installation par vissage à couple contrôlé selon ETA 11/0374

#### 8.1 Accessoires recommandés

Perçage	Nettoyage	Pose
Perçage en rotation uniquement préférable     Mèche	Pompe soufflante manuelle	<ul> <li>Outil portatif de contrôle du couple</li> <li>Vissage de la cheville à couple contrôlé avec boulonneuse ou clé dynamométrique appropriée</li> <li>Marteau</li> </ul>



#### Coordonnées des chevilles [mm]

Cheville	X	У	C-x	C+x	C <sub>-y</sub>	C <sub>+y</sub>
1	-55,0	-55,0	-	-	-	-
2	55,0	-55,0	-	-	=	-0
3	-55,0	55,0	-	-	=	
4	55,0	55,0	-	-	-	

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Design:	Reex goujon meca Ø10	Date:	26/02/2021
Sous projet I Pos. N°:	50 W 0534444 - 00004 00000000000000000000000000		

#### 9 Remarques, commentaires

- Toutes les informations et toutes les données contenues dans le Logiciel ne concernent que l'utilisation des produits Hilti et sont basées sur des principes, des formules et des réglementations de sécurité conformes aux consignes techniques d'Hilti et sur des instructions d'opération, de montage, d'assemblage, etc., que l'utilisateur doit suivre à la lettre. Tous les chiffres qui y figurent sont des moyennes ; en conséquence, des tests d'utilisation spécifiques doivent être conduits avant l'utilisation du produit Hilti applicable. Les résultats des calculs exécutés au moyen du Logiciel reposent essentiellement sur les données que vous y saisissez. En conséquence, vous êtes seul responsable de l'absence d'erreurs, de l'exhaustivité et de la pertinence des données saisies par vos soins. En outre, vous êtes seul responsable de la vérification des résultats du calcul et de leur validation par un expert, particulièrement en ce qui concerne le respect des normes et permis applicables avant leur utilisation pour votre site en particulier. Le Logiciel ne sert que d'aide à l'interprétation des normes et des permis sans aucune garantie concernant l'absence d'erreurs, l'exactitude et la pertinence des résultats ou leur adaptation à une application spécifique.
- Vous devrez prendre toutes les mesures nécessaires et raisonnables pour empêcher ou limiter les dommages causés par le Logiciel. Plus particulièrement, vous devez prendre vos dispositions pour effectuer régulièrement une sauvegarde des programmes et des données et, si applicable, exécuter les mises à jour régulièrement fournies par Hilti. Si vous n'utilisez pas la fonction AutoUpdate du Logiciel, vous devez vous assurer que vous utilisez dans chaque cas la version actuelle et à jour du Logiciel, en exécutant des mises à jour manuelles via le Site Web Hilti. Hilti ne sera tenu responsable d'aucune conséquence, telle que la nécessité de récupérer des besoins ou programmes perdus ou endommagés, découlant d'un manquement coupable de votre part à vos obligations.

Les données d'entrée et les résultats doivent être vérifiés quant aux conditions existantes et leur plausibilité!



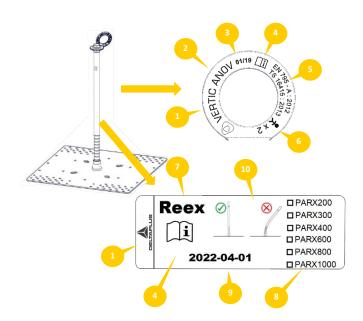


# Support & anchor point

# REEX

#### Marquage produit conforme à la norme EN 365

1	Name of the manufacturer
2	Reference of the ring that makes up the anchorage point
3	Date of manufacturing of the ring
4	Pictogram inviting you to read the instructions
5	Standards to which the product complies with
6	Maximum number of persons authorised to connect simultaneously
7	Product range reference
8	Reference of the anchor point
9	Date of manufacture of the anchor point
10	Pictogram warning not to use the product if it is deformed





# Support & anchor point

#### REEX

#### **USE**

If the product is sold outside the first country of destination, it is essential for the safety of the user that the reseller provides the instructions of use in the language of the country of the product use. These documents can be provided upon request by contacting the manufacturer.

These instructions are intended for users and installers of the Reex® range of anchors references: PARX200, PARX300, PARX400, PARX600, PARX800, PARX1000

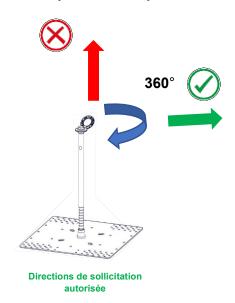
It must be read and understood by each person before using and/or installing the product. In case of doubt, problem of understanding, or if a problem arises that is not covered in this document, please contact your Delta Plus Systems representative or the Delta Plus Systems technical department directly. This manual must always be available and accessible to the user. Any activity at height is dangerous and can cause accidents, serious injury or death. You are responsible for practicing and learning the proper techniques for using the equipment. Before using the product, you must therefore read and understand all the information contained in the instruction manual.

Failure to observe any of these warnings may result in serious injury or death. For safety reasons, the user must be in good health, not under the influence of medication, alcohol or drugs.

This equipment should only be used by persons trained and qualified to use it safely.

The use of the anchor is strictly forbidden if the product is incorrectly installed or damaged. Any modification of the equipment or addition to the equipment shall not be made without the prior written consent of Delta Plus Systems, and any repairs shall be made in accordance with Delta Plus Systems' operating procedures.

The anchorage must not be used beyond its limits, or in any other unintended situation. Prior to any use of the anchor, a rescue plan should be in place to deal with any emergency that may arise during the work. Consideration should of course be given before and during use to ensuring that any such eventual rescue is carried out safely and effectively



Instructions for use

This product is intended exclusively for use as an anchor for personal protective equipment (PPE) against falls from a height and not for lifting equipment. The product must not be used for work positioning. If work positioning is required, a separate system should be used.





# Support & anchor point

## **REEX**

The PARX anchor point is available in different heights: 200, 300, 400, 600, 800, 1000 mm, their reference are respectively: PARX200, PARX300, PARX400, PARX600, PARX800, PARX1000.

They are designed to be installed on:

- A rigid structure using 4 structural anchors of diameter ≥ 12mm.
- A steel structure with a minimum thickness of 0.75mm using 20 screws, reference BVA019
- A CTBH panel structure with a minimum thickness of 22mm using 18 screws **BVA020** and 2 screws **BV021** through the beam
- An OSB structure with a minimum thickness of 22mm using 18 screws BVA020 and 2 screws BV021 through the beam

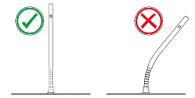
# The strength of the structure must be greater than 13kN.

The anchor point is suitable for use by two people simultaneously with the following approved connections:

- Mobile fall arrester on a flexible lanyard EN353-2
- Self-retracting lanyards EN360
- Energy absorber EN355

The user must be equipped with a means of limiting the maximum dynamic forces exerted on him/her when stopping a fall to a maximum value of 6kN.

The permitted connections shall be made to the person by using a fall arrest harness in accordance with EN 361. The fall arrest harness is the only bodygripping device allowed to be used as a fall arrest system. The ring at the top of the product rotates through 360°, allowing the user to secure himself in any position around the anchorage point.



The product has the particularity of deforming in case of a fall. Please consider an additional distance equivalent to the height of the product in the calculation of the clearance. If the product is deformed, a high load has occurred. Do not use the anchorage point until it has been checked and repaired by a competent person authorised by Delta Plus Systems.

### Service life - Disposal

For Delta Plus Systems products, plastics and textiles, the maximum life span is 10 years from the date of manufacture. There is no limit for metal products.

ATTENTION, an exceptional event may lead you to reject a product after only one use (type and intensity of use, environment of use: aggressive environments, marine environment, sharp edges, extreme temperatures, chemical products, etc.).

A product must be scrapped when:

- It is more than 10 years old and made of plastic or textile.
- It has been subject to a major fall (or stress).
- ► The result of the product checks is not satisfactory.
- You have doubts about its reliability.
- You do not know its complete history of use.
- Its use is obsolete (legislative, normative, technical evolution or incompatibility with other equipment, etc.).



# Support & anchor point

## **REEX**

Détruisez ces produits pour éviter une future utilisation.

Destroy these products to avoid future use.

#### **Maintenance and inspection**

Any modification or addition to the equipment without the prior written consent of the manufacturer is prohibited.

Any repairs to system components must be carried out in accordance with Delta Plus Systems procedures. If in doubt about the condition of the product, replace it with a genuine Delta Plus Systems part.

A dirty product should be washed and rinsed with clean water and dried. It must not be brought into contact with corrosive or aggressive materials, nor stored at extreme temperatures. Chemicals and solvents may affect the strength of the system components. If the product is likely to come into contact with these products, please inform us of the exact name of the chemical components and we will respond after an appropriate study.

It is mandatory to check the state of the PPE at least every 12 months by an accredited and competent person in strict compliance with Delta Plus Systems' operating procedures. These periodic and regular examinations are necessary because the safety of the user is linked to the maintenance of the efficiency and resistance of the equipment. The inspection and the results must be recorded in writing in a maintenance logbook by means of the identification and verification sheet provided by Delta Plus Systems.

Delta Plus Systems also assists you in the verification, control and maintenance of your permanent fall arrest and PPE systems.

You can also ensure that your teams are well trained in the use of these fall arrest solutions and in the basic concepts required to work at height in complete safety, by offering them comprehensive and personalised training courses, conducted by our training centre.



Delta Plus Training - 691, Chemin des Fontaines – Cidex 8F - 38190 BERNIN - France



# Instructions for use



### **Distributed by**

# Support & anchor point



#### **INSTALLATION**

It is essential for safety reasons that the anchorage point is always correctly positioned and that the work is carried out in such a way as to minimise the risk of falls and the height of fall. It is also important to check the free space required under the user in the workplace, so that in the event of a fall, there is no collision with the ground, nor any other obstacle in the path of the fall. The anchorage must therefore be installed taking into account all these safety parameters. The installation of the product must be carried out by installers authorised or trained by Delta Plus Systems. Installers must ensure that the support materials in which the structural anchors are fixed are suitable.

Delta Plus Systems cannot be held responsible for incorrect installation of the anchor point.

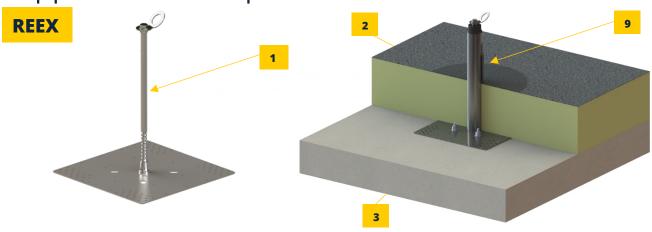
A schematic drawing should be affixed to the building so that it is visible to all.

Where multiple anchor points are to be photographed for identification purposes, it is recommended that the anchor points are marked with numbers and that this numbering is incorporated into the anchor inspection records and the floor plan of the installation area.





Support & anchor point



#### **GENERAL COMPONENTS**



1



2

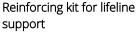




4

Post WVRXx

Available in the following heights: 200, 300, 400, 600, 800, 100 (ref WVRX200)



WVRXRx

Available in the following heights: 200, 300, 400, 600, 800, 100 (ref WVRX200)

Fixing kit on concrete slab WVANCRM12

Fixing kit on steel deck
WVKVBAC



Fixing kit on OSB or CTBH - WVKVBOIS

Self-drilling screws M 4.2x25 A2 Self-drilling screws ASSY SK 6 x 120 A2



PVC sleeve

WVM010 Can be cut to the required height



required height

PVC sleeve WVM011 Dedicated to lifeline support posts - Can be cut to the



8

Bitumen sleeve

WVM012 Can be cut to the required height



Bitumen sleeve

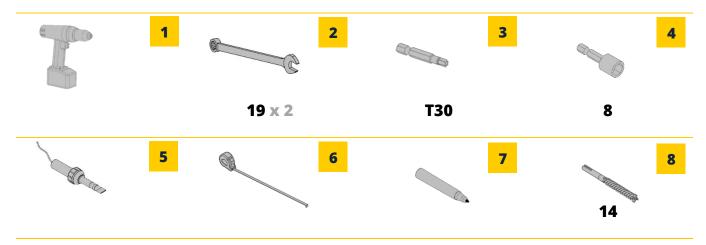
WVM013

Dedicated to lifeline support posts - Can be cut to the required height

# Support & anchor point



## **TOOLS & PERSONNEL REQUIRED**





## **REQUIREMENTS**



Béton

Concrete



Panneau de grandes particules

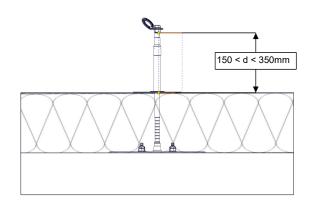
Oriented strand board



Bac support d'étanchéité



Panneau de particules

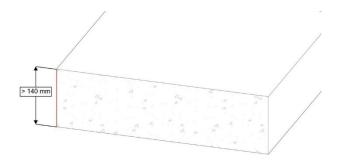




# Support & anchor point

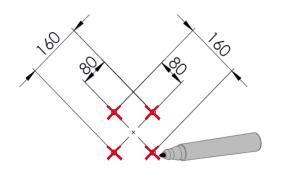
REEX



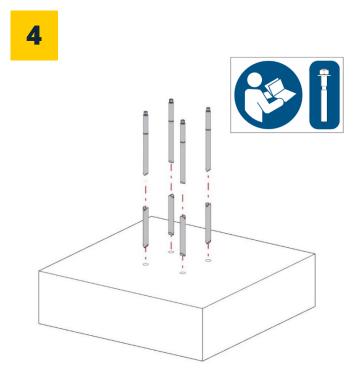




Béton Concrete Concreto Beton Beton Calcestruzzo Concreto









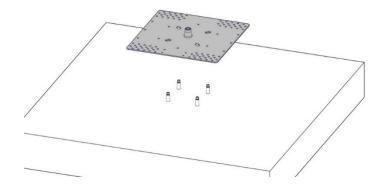


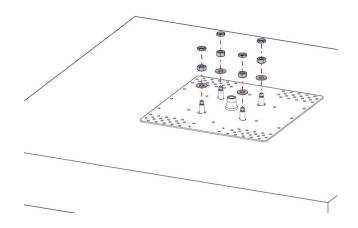
# Support & anchor point

REEX

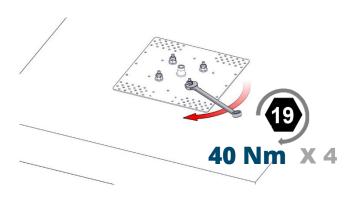
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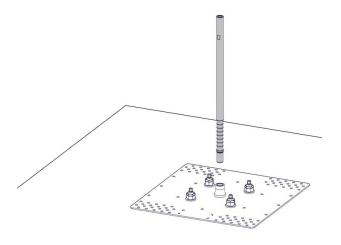
6





7

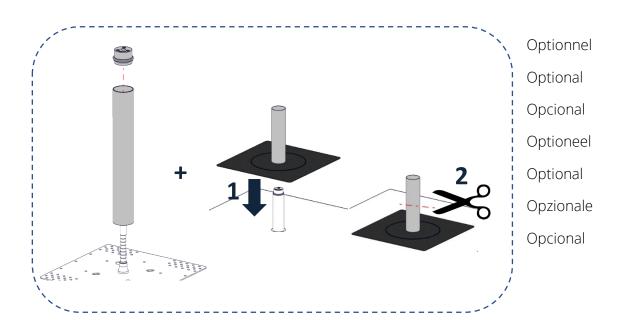




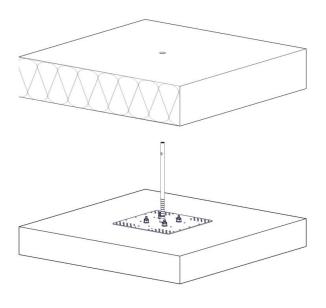
# Installation

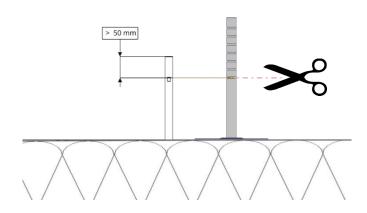
# Support & anchor point

## **REEX**



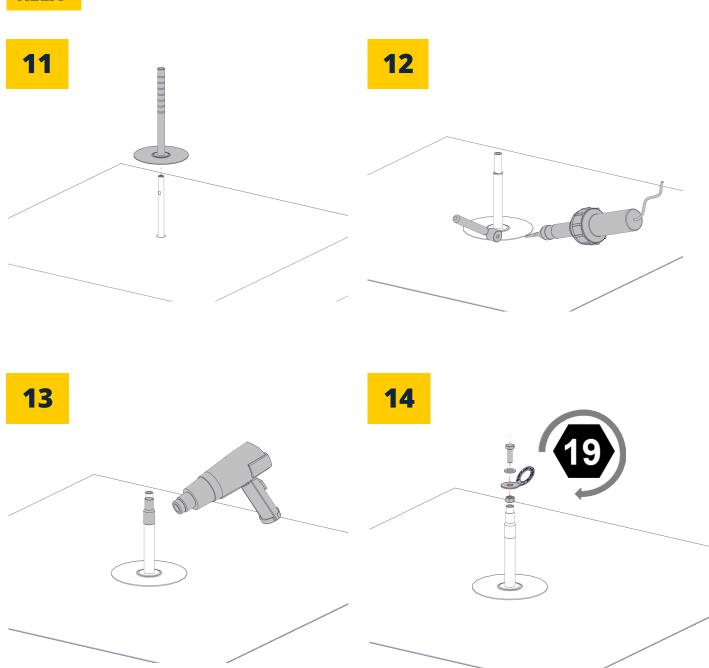
9







# Support & anchor point



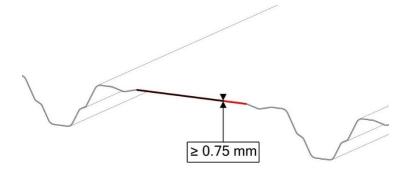


# Support & anchor point

REEX



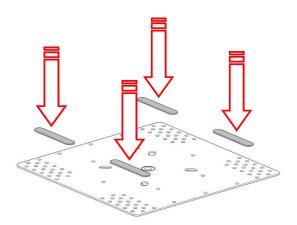
Bac support d'étanchéité Steel roof decking Bandeja de soporte estanca Waterdichte steunbak Wasserdichtes Auflagetablett Vassoio di supporto a tenuta stagna Bandeja de suporte estanque

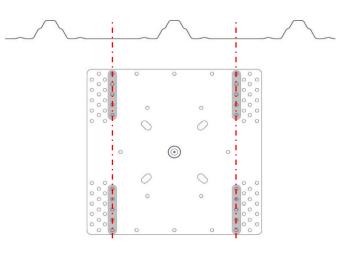




Acier Steel Acero Staal Stahl Acciaio Aço

1

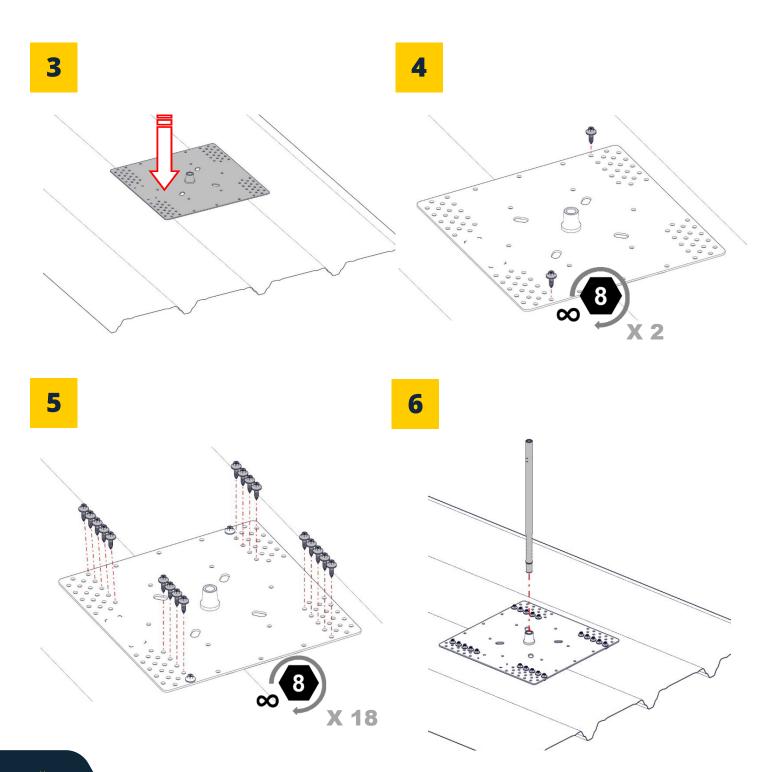






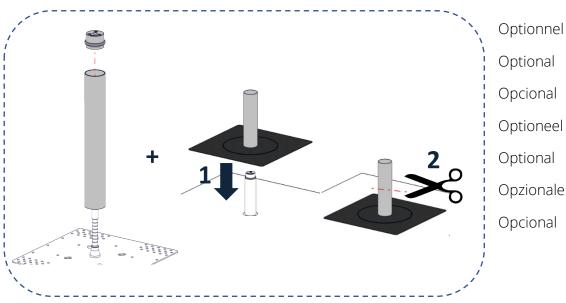


# Support & anchor point



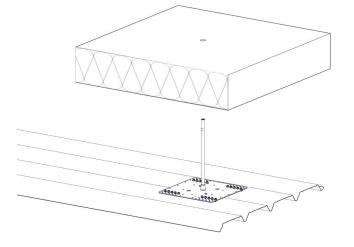


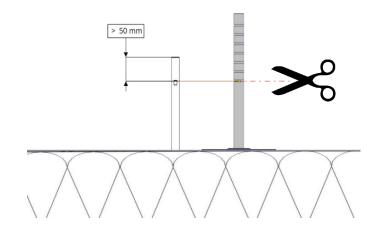
# Support & anchor point







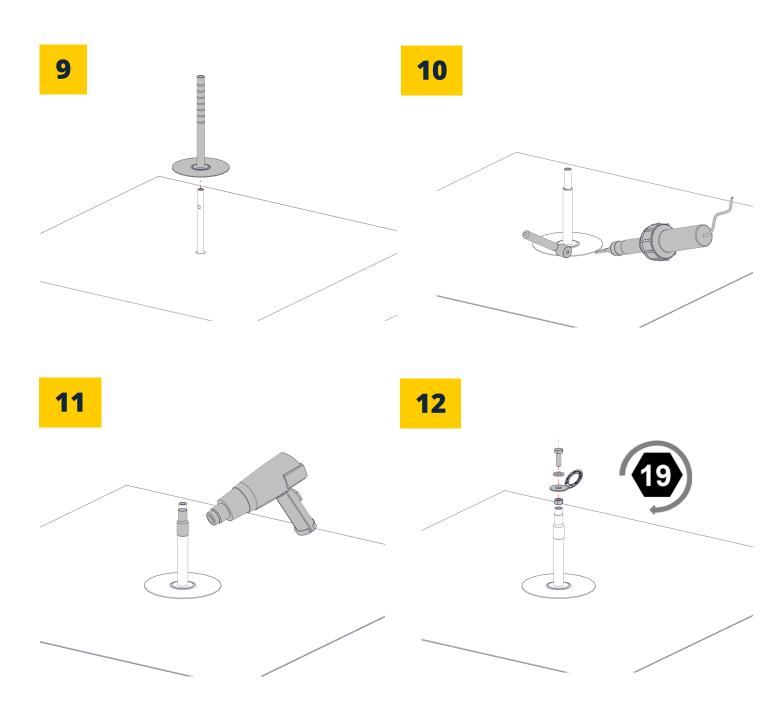








# Support & anchor point





# Support & anchor point

## **REEX**



## **CTBH (NF EN 312)**



Panneau de particules Particleboard Panel de partículas

Spaanplaat

Spanplatte Pannello di particelle

Painel de partículas

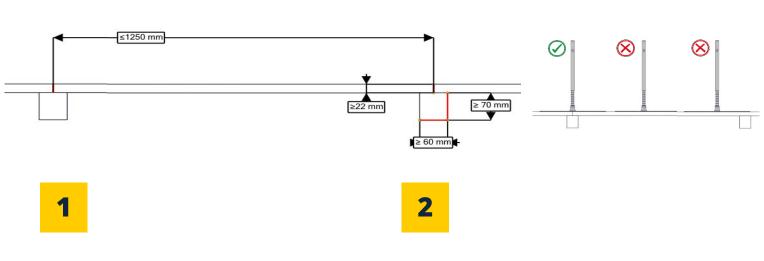


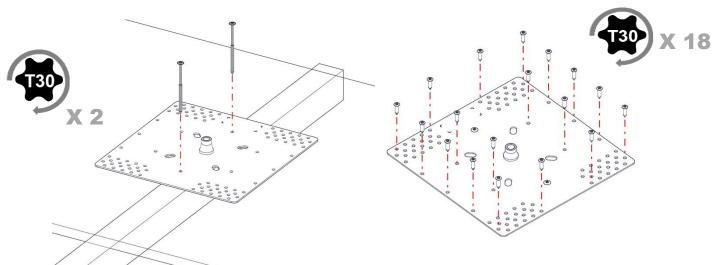
#### **OSB (NF EN 300)**



Panneau de lamelles bois Oriented strand board Panel de fibras orientadas Oriented strand board Grobspanplatte Pannello a fibre orientate

Aglomerado de partículas de madeira longas e orientadas



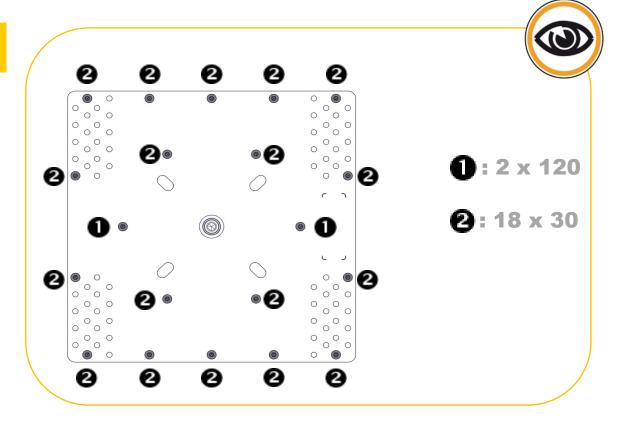




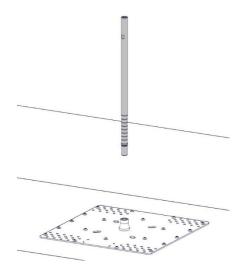


# Support & anchor point

REEX

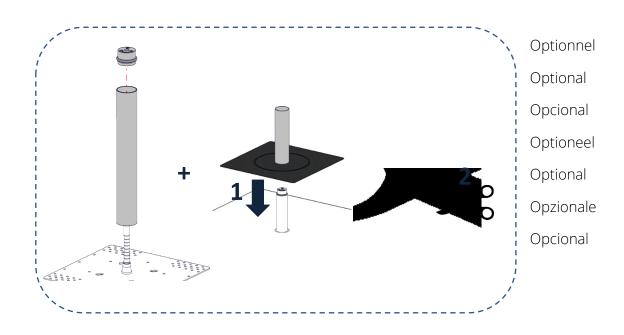






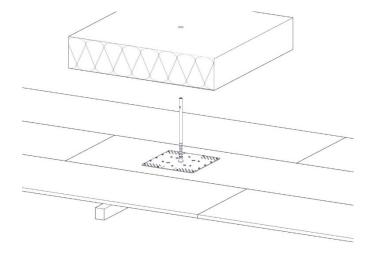


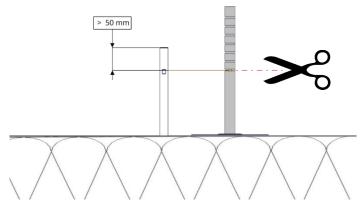
# Support & anchor point









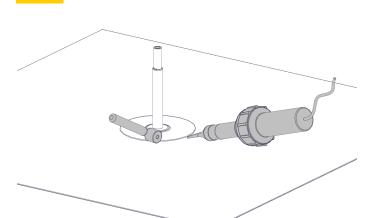




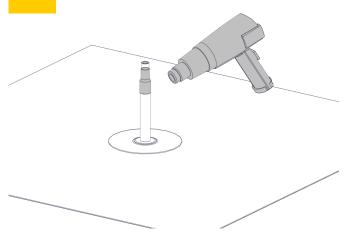
# Support & anchor point

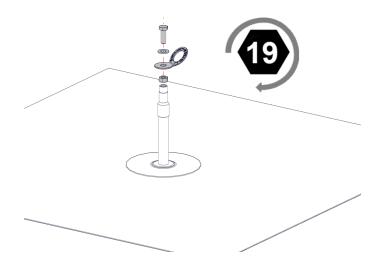
**REEX** 















# Support & anchor point

## **REEX**



#### **CTBH (NF EN 312)**



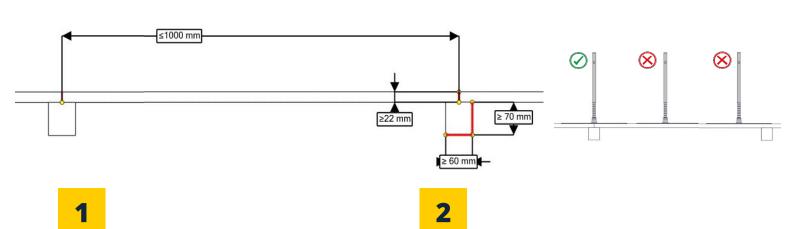
Panneau de particules Particleboard Panel de partículas Spaanplaat Spanplatte Pannello di particelle Painel de partículas

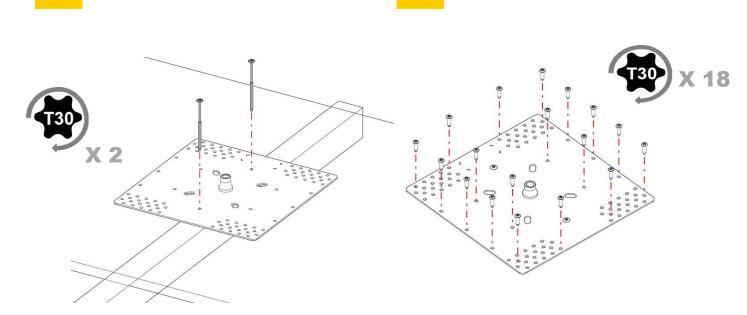


#### **OSB (NF EN 300)**



Panneau de lamelles bois
Oriented strand board
Panel de fibras orientadas
Oriented strand board
Grobspanplatte
Pannello a fibre orientate
Aglomerado de partículas de madeira longas e orientadas



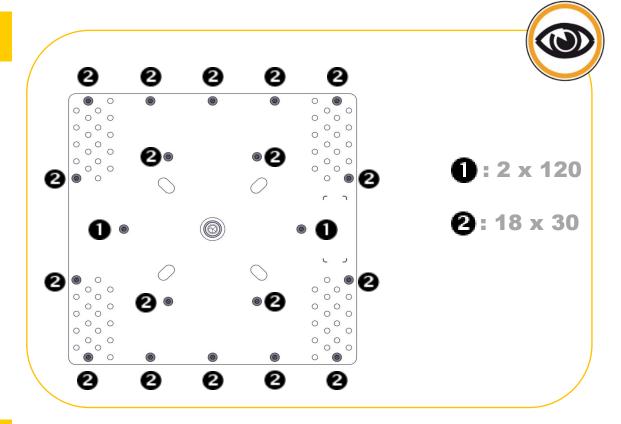




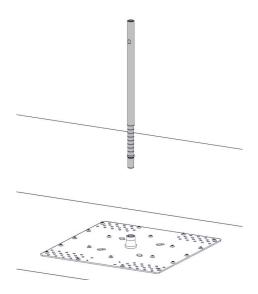


# Support & anchor point

REEX





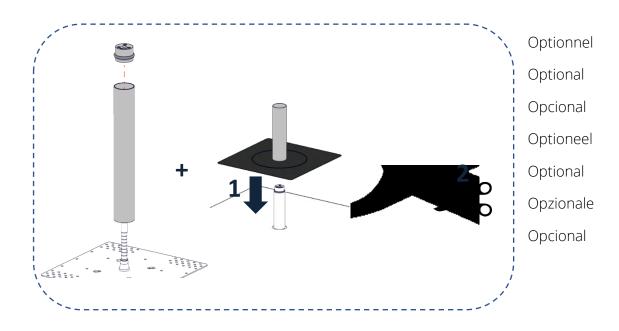




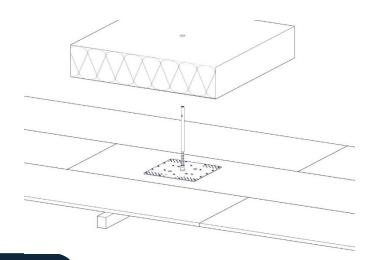


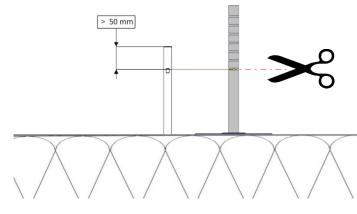
# Support & anchor point

# REEX











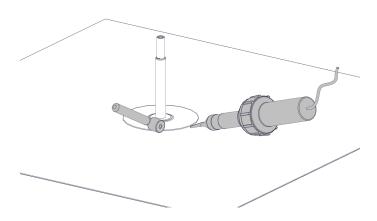


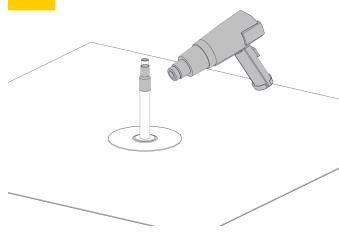
# Support & anchor point

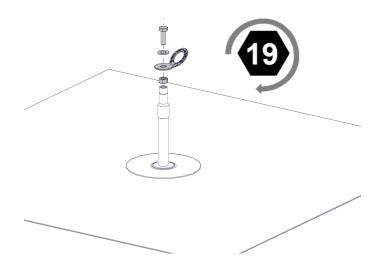
REEX

7











# Support & anchor point



#### **POINT D'ANCRAGE PARX**

Product identity	
Manufacturer/Provider:	Delta Plus Systems
System's name:	PARX200 – PARX300 – PARX400 – PARX600 – PARX800 – PARX1000
Standards:	EN 795 : 2012 + TS16415 : 2013
Id number:	
Purchase date:	
Date of 1st use:	



Identification of the person responsible for the installation					
Name :	Name :	Name :	Name :		
User's identification					
Name :	Name :	Name :	Name :		

The controller declines all responsibility in the event of inaccuracy in the information concerning the historical verification which must be made by the user. The user is required to keep the entire history of the periodic examinations and the repairs carried out.

#### Lifetime / Disposal

For Delta Plus Systems products, plastics and textiles, the maximum lifespan is 10 years from the date of manufacture. It is not limited for metal products. CAUTION, an exceptional event may lead you to reject a product after a single use (type and intensity of use, environment of use: aggressive environments, marine environment, sharp edges, extreme temperatures, chemicals, etc.).

A product must be scrapped when:

- It is more than 10 years old and is made of plastic or textile, except for the seals, which must be inspected regularly.
- He suffered a major fall (or effort).
- The result of the product checks is not satisfactory. You have doubts about its reliability.
- You do not know its full usage history.
- When its use is obsolete (legislative, normative, technical evolution or incompatibility with other equipment, etc.).

Destroy these products to prevent future use.











# Support & anchor point

REI	EX								
Com	ments	Good	Q To	o monitor	<b>★</b> To repa	ir	TO	o dispos	e of
Visual ch	eck of compone	nts					Q	*	
General co	ndition of the ancho	or post (deformed pos	t, wear, corrosion	)					
Presence a	and condition of the	fastener (Tightening, c	corrosion)						
Presence o	of the identification n	nark with the normativ	e information						
Condition	of the waterproofing	membrane (Peripher	al waterproofing, cr	racks)					
Function	al check of comp	oonents					Q	*	Ó
Free rotation	on of the ring around	d the fastening elemer	nt						
Free move	ment of the various o	carabiners inside the r	ring						
Correct loc	ation of the anchora	ge point in relation to	the area to be sec	ured					
F_									
Commer	nts :								
			Inspe	ction report					
Th	e product <b>can</b> remai	n in use.	•		product <b>cannot</b> rema	nin in use.			
		ı	Identification &	visa of the co	ontroller				
Name:	Name: Company:								



Date of control:

Date of the next control:

Controller stamp and signature: