

SONNENKRAFT®



Ⓓ Handbuch

ⒼⒷ Manual

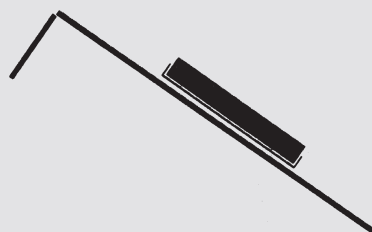
Ⓘ Manuale

Ⓕ Manuel

Ⓔ Manual

Ⓟ Manual

ⒹⓀ Manual



SK/R500
SSPR/BDPR



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Bei waagrechter Anordnung der Kollektoren gilt die Anleitung sinngemäß!

For horizontal positioning of the collectors, the assembly instructions apply accordingly!

Nel caso in cui i collettori siano disposti orizzontalmente, seguite comunque le istruzioni di montaggio!

En cas de disposition horizontale des capteurs, les instructions de montage s'appliquent en conséquence!

Realice el montaje horizontal de los colectores según las instrucciones de montaje!

Executar montagem horizontal dos coletores de acordo com as instruções!

Monteringsvejledningen er også gældende for horisontal placering af solfangerne!



DE

Materialübersicht	5
Werkzeugübersicht	8
Montage, SSPR	9
Montage Blechdachbefestigung, BDPR	21
Empfehlung für Befestigungsebenen SKR500	22
Empfehlung für Befestigungsebenen SKR500L	24
Statische Einsatzgrenzen und Regeln	26

EN

Overview of materials	5
Overview of tools	8
Mounting, SSPR	9
Tin roof mounting systems, BDPR	21
Recommendation for fastening planes SKR500	22
Recommendation for fastening planes SKR500L	24
Static operating tolerances and rules	26

IT

Panoramica dei materiali	5
Panoramica degli utensili	8
Montaggio, SSPR	9
Sistemi di fissaggio per tetto in lamiera, BDPR	21
Raccomandazione per i piani di fissaggio SKR500	22
Raccomandazione per i piani di fissaggio SKR500L	24
Limiti statici di applicabilità e regole	26

FR

Vue d'ensemble du matériel	5
Vue d'ensemble des outils	8
Montage, SSPR	9
Systèmes de fixations pour toit en tôle, BDPR	21
Recommandation concernant les plans de fixation SKR500	22
Recommandation concernant les plans de fixation SKR500L	24
Limites d'utilisation statiques et règles	26

ES

Vista general de los materiales	5
Vista general de las herramientas	8
Montaje, SSPR	9
Sistemas de fijación para tejado en lámina, BDPR	21
Recomendaciones para las superficies de fijación SKR500	22
Recomendaciones para las superficies de fijación SKR500L	24
Límites estáticos de uso y reglas	26

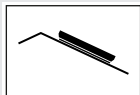


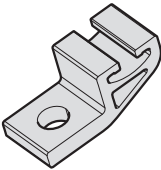
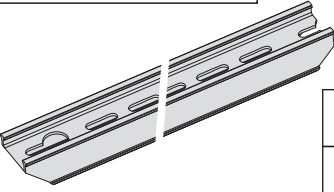
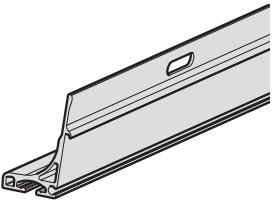
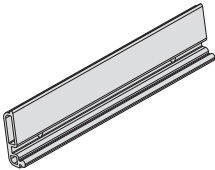
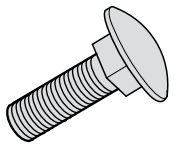
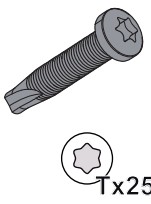
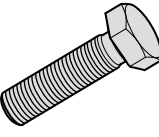
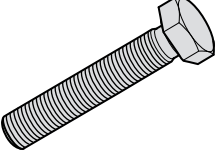
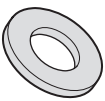
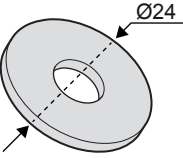
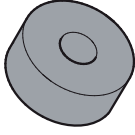
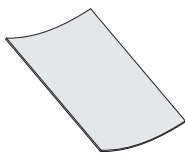
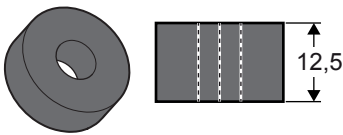
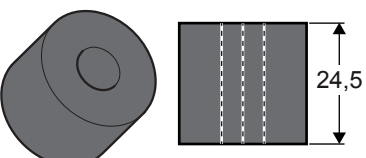
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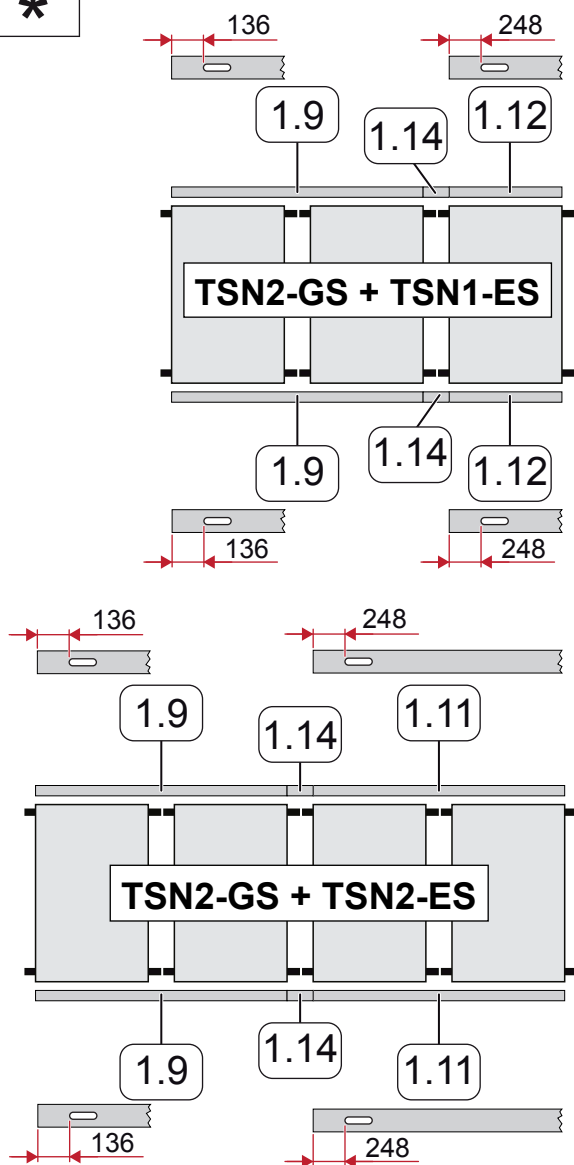
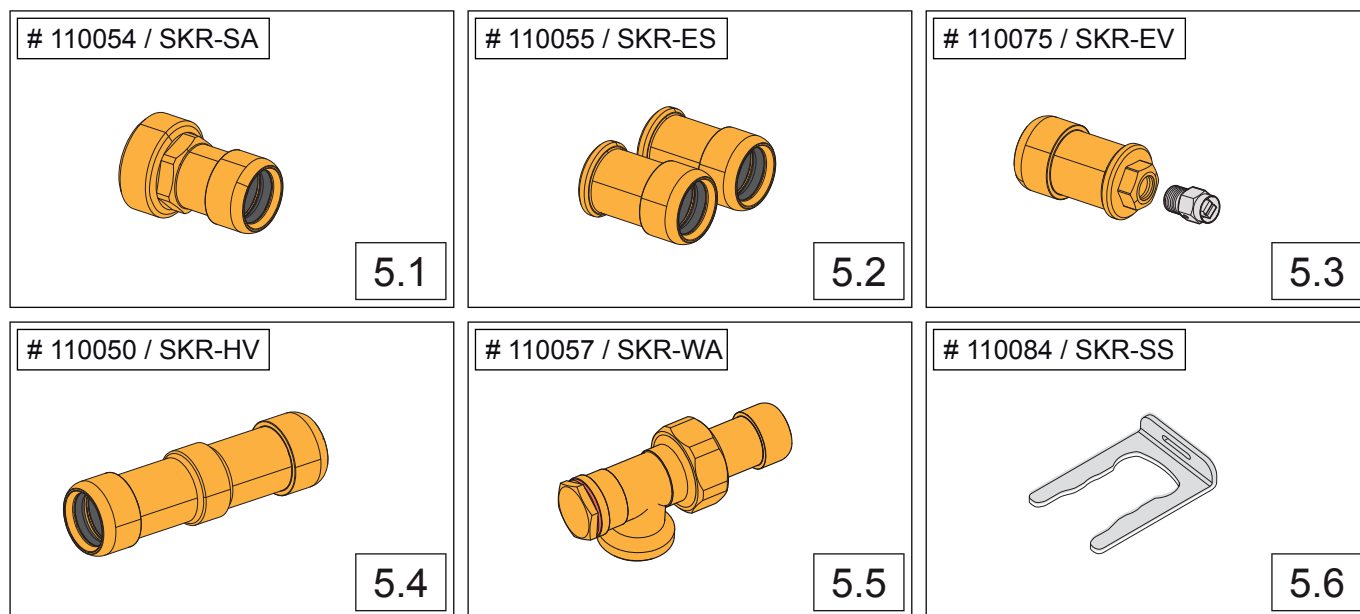
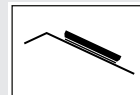
Vista geral do material.	5
Vista geral da ferramenta.	8
Montagem, SSPR	9
Equipamento de montagem para telhado de metal, BDPR	21
Sugestão de plataformas de fixação SKR500	22
Sugestão de plataformas de fixação SKR500L	24
Limites de aplicação estática e regras	26

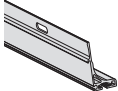
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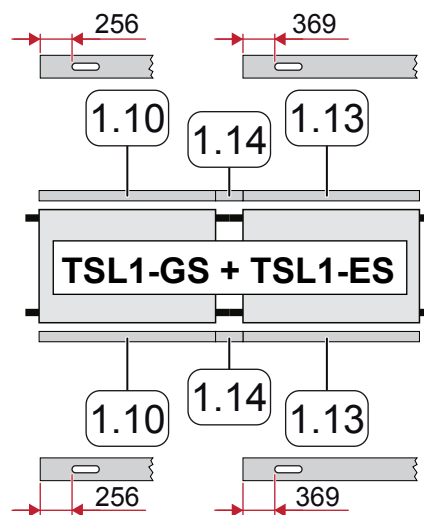
Materialeoversigt	5
Værktøjsoversigt.	8
Montering, SSPR.	9
Monteringssystem for metaltag, BDPR.	21
Anbefalede fastgøringspunkter SKR500	22
Anbefalede fastgøringspunkter SKR500L	24
Statiske anvendelsesgrænser og regler	26

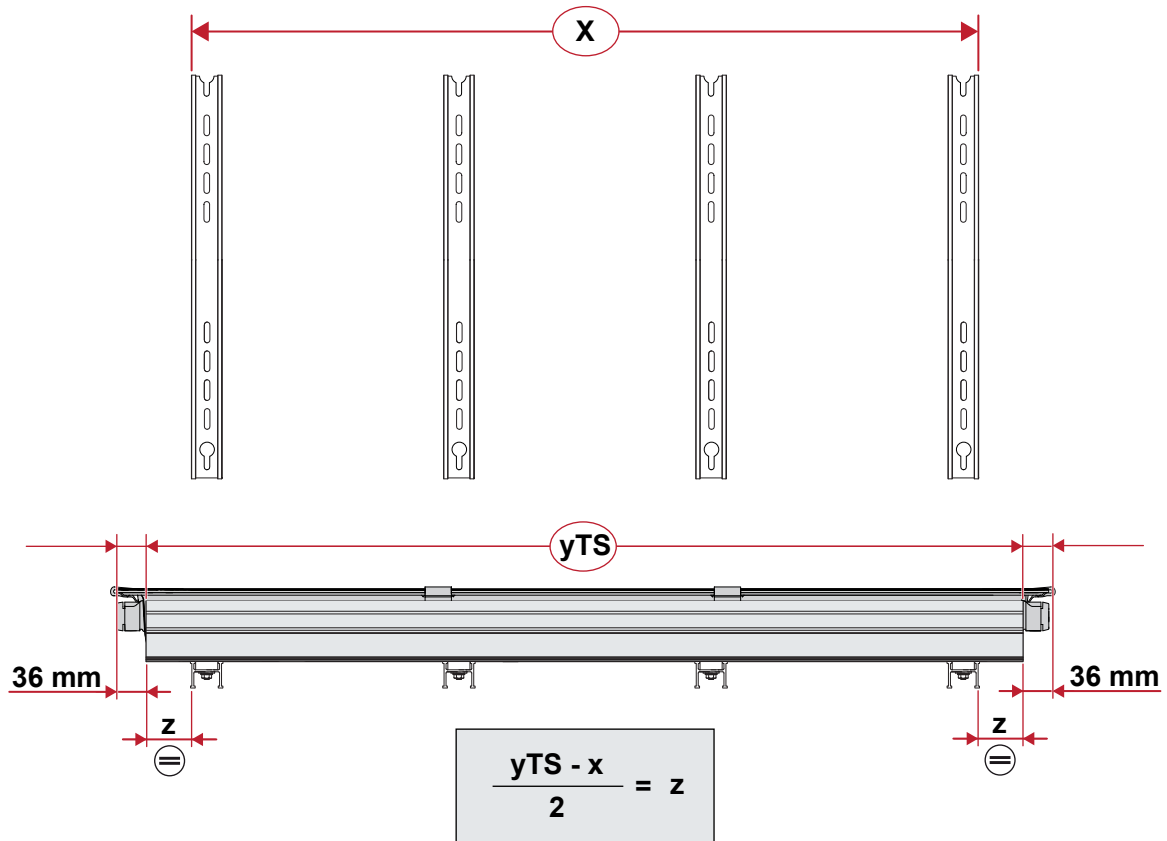


# 110356 / AW-SSPR  1.1	# 110350 / SKR-AWN # 110351 / SKR-AWL  1.6 1.7	 *
# 110342 / TSV-B  1.14	# 110325 / SS12300  M12x300 2.1	# 110401 / TBS818  M8x18 2.3
# 110402 / TBS830  M8x30 2.4	# 110411 / BS4,819B  M4,8x19 Tx25 2.6	# 110407 / SKTS820  M8x20 2.7
# 110408 / SKTS850  M8x50 2.8	# 110329 / ZSM12  M12 3.1	# 110404 / ZSM8  M8 3.2
# 110406 / UL DM16/8  M8 3.3	# 110139 / UL DM24/8  M8 3.4	# 110114 / SSDG12350  4.1
 4.2	# 110413 / SKR-DH12,5  12,5 4.3	# 110414 / SKR-DH24,5  24,5 4.4

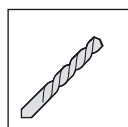
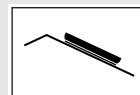


		
# 110336	TSN1-GS	L = 1168 mm
# 110338	TSN2-GS (1.9)	L = 2448 mm
# 110340	TSL1-GS (1.10)	L = 2007 mm
# 110339	TSN2-ES (1.11) 	L = 2560 mm
# 110337	TSN1-ES (1.12) 	L = 1280 mm
# 110341	TSL1-ES (1.13) 	L = 2119 mm
# 110342	TSV-B (1.14)	





y TS		
Kollektoren Collectors Collettori Capteurs Colectores Colectores Solfangere		
	TS Länge [mm] - TS lenght - TS lungo - TS longueur - TS longitud - TS længde	
1	1168	2007
2	2448	4126
3	3728	6245
4	5009	8365
5	6289	10484
6	7569	12603
7	8849	14722
8	10129	16841
9	11410	18961
10	12690	21080
11	13970	-
12	15250	-



DE Bohren/Vorbohren
GB Drill/pre-drill
IT Forare/fissare
FR Perçage/pré-perçage
ES Taladrar/taladrar previamente
PT Furos/Furos prévios
DK Bor/forbor



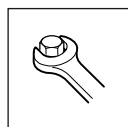
DE Heiße Oberfläche!
GB Hot surface!
IT Superficie calda!
FR surface chaude!
ES Superficie caliente!
PT Superfície quente!
DK Hot overfladiskhed!



DE Siehe Seite
GB See page
IT Vedi pag.
FR Consulter la page
ES Ver la página
PT Consulte a página
DK Se side



DE Wichtiger Hinweis
GB Important note
IT Note importante
FR Remarque importante
ES Nota importante
PT Nota importante
DK Vigtig info



DE Fest anziehen
GB Tighten firmly
IT Serraggio con utensile
FR Resserrer fermement
ES Apretar fuertemente
PT Apertar bem
DK Stram fast



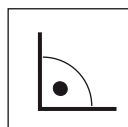
DE Befugte Elektrofachkraft
GB Qualified electrician
IT Tecnico elettrico autorizzato
FR Électricien spécialisé agréé
ES Técnico eléctrico autorizado
PT Electricista qualificado autorizado
DK Autoriseret elektriker



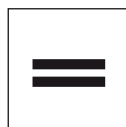
DE Handfest
GB Hand-tight
IT Serraggio manuale
FR Serrage manuel
ES Apretar a mano
PT Apertar bem
DK Håndspænd



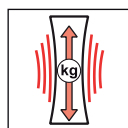
DE Wiederkehrender Hinweis
GB Recurring note
IT Nota ricorrente
FR Remarque récurrente
ES Indicación recurrente
PT Nota recorrente
DK Retur henvisning



DE Rechter Winkel
GB Right angle
IT Angolo retto
FR Angle droit
ES Ángulo recto
PT Ângulo direito
DK Ret vinkel



DE Gleicher Abstand
GB Equally spaced
IT Distanza uguale
FR Distance identique
ES La misma distancia
PT Distância igual
DK Samme afstand

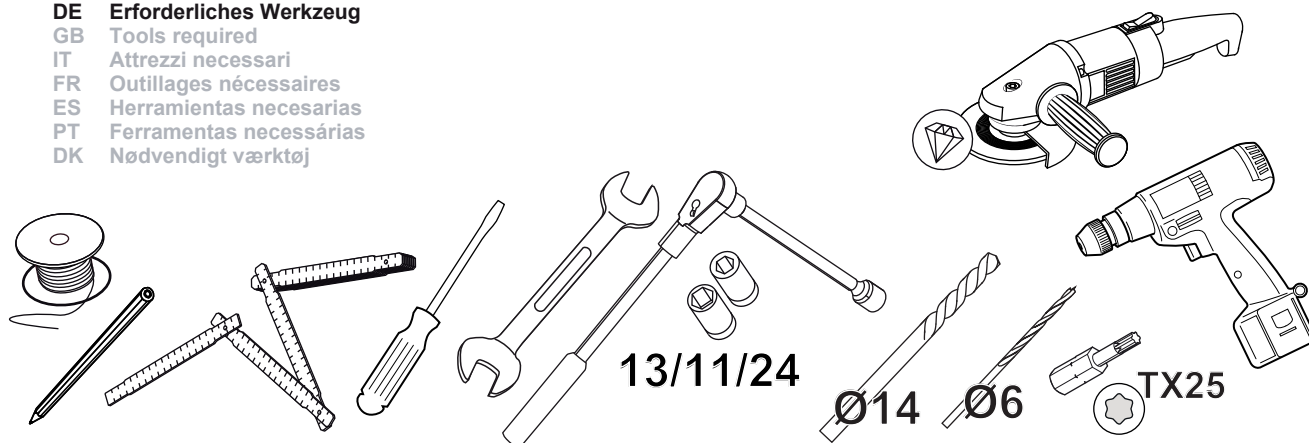


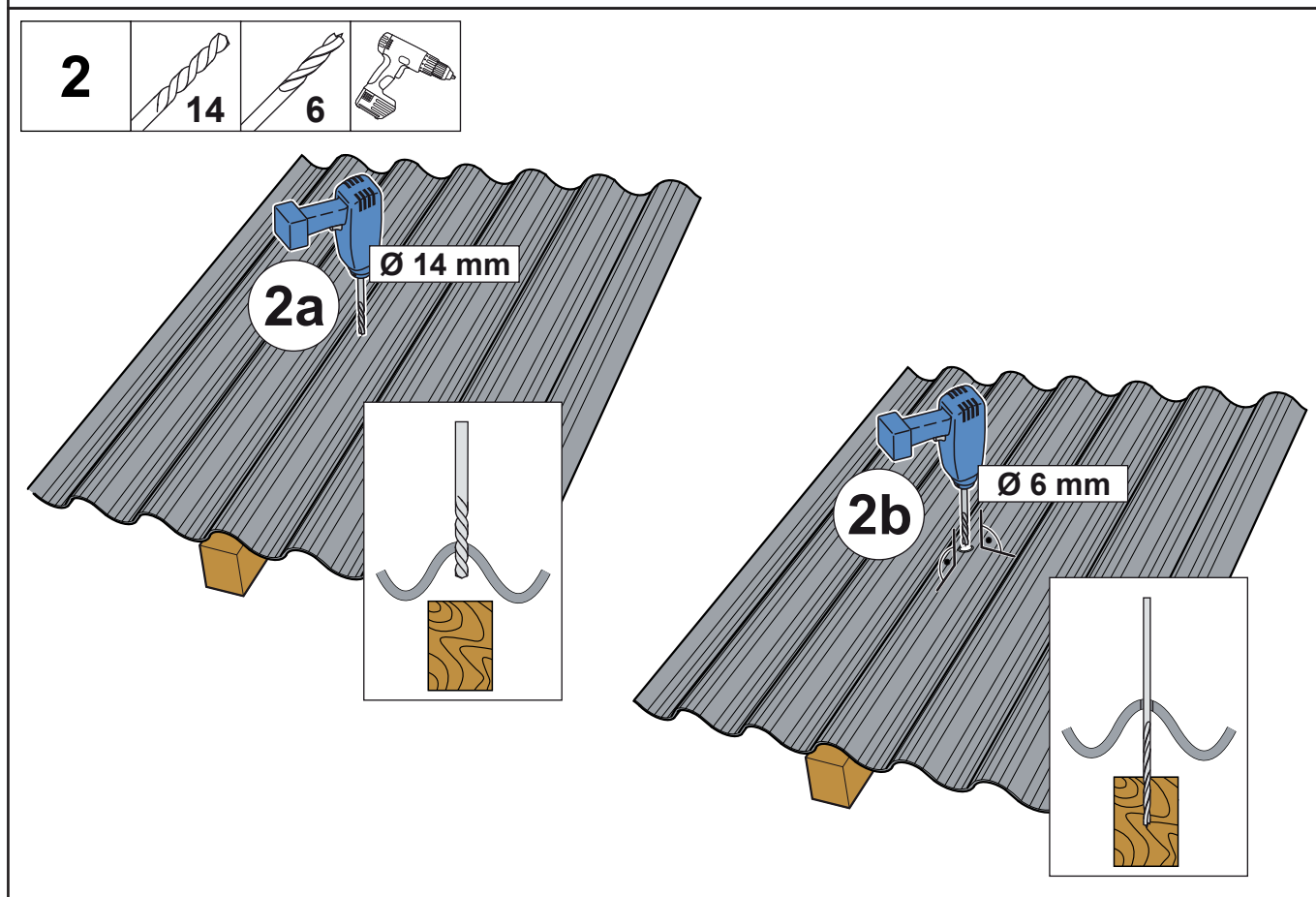
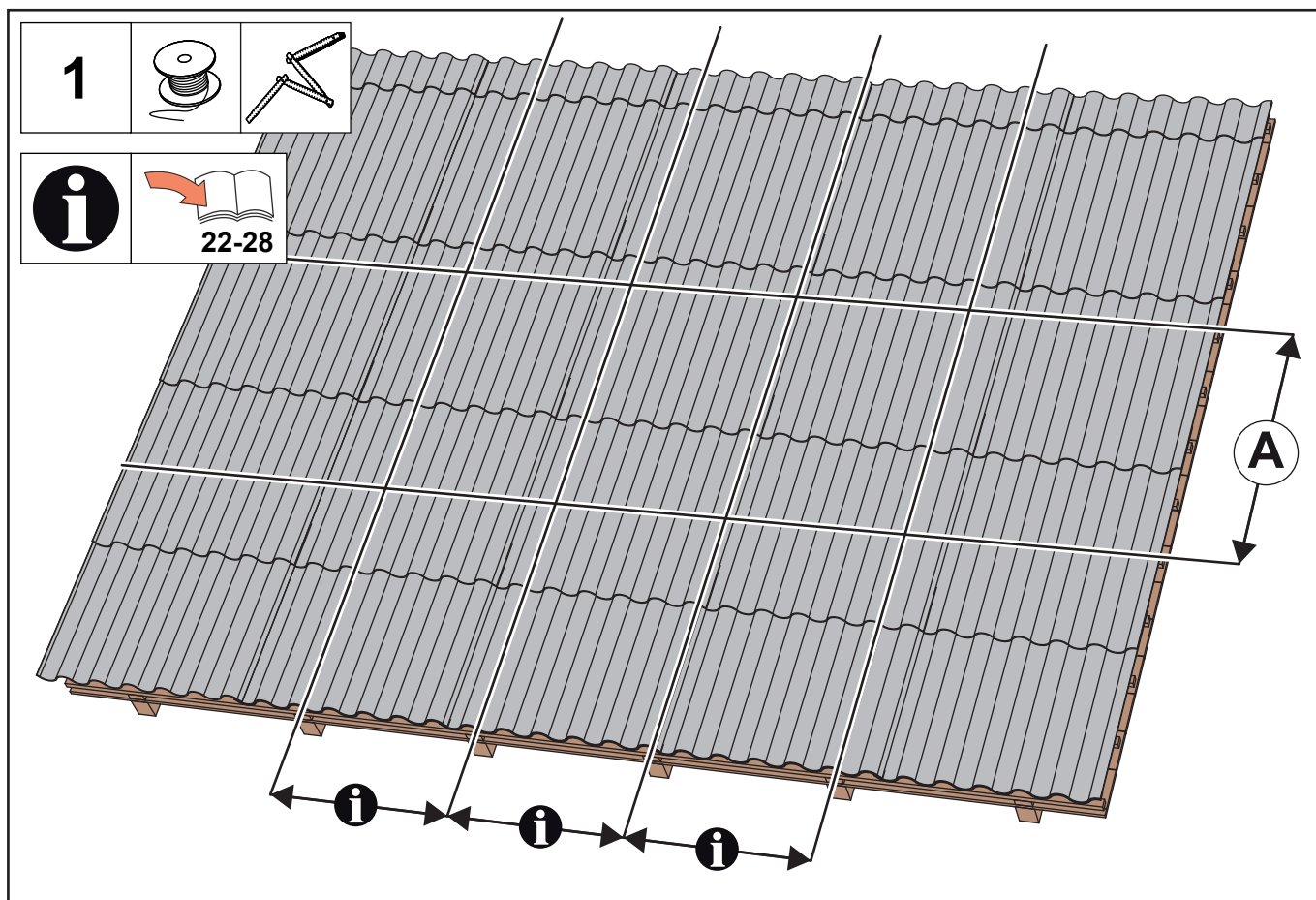
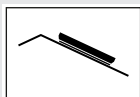
DE Zugentlastung
GB Strain relief
IT Serracavo
FR Relâchement de la traction
ES Liberación de tensión
PT Alívio de tensão
DK Trækafastning



DE Bauseits zu stellendes Material
GB Materials to be provided by others
IT Materiale a cura del committente
FR Matériels à fournir pour la mise en œuvre
ES Material a suministrar en obra
PT Material a fornecer no local
DK Materiale, der skal stå til rådighed på anvendelsesstedet

DE Erforderliches Werkzeug
GB Tools required
IT Attrezzi necessari
FR Outillages nécessaires
ES Herramientas necesarias
PT Ferramentas necessárias
DK Nødvendigt værktøj



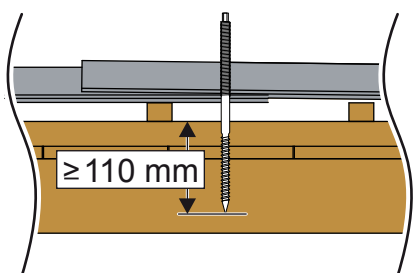
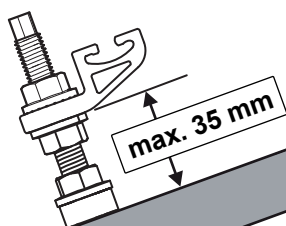




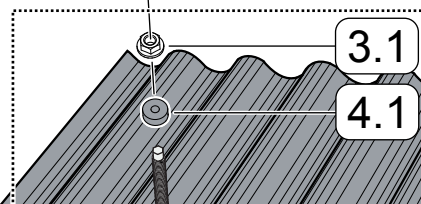
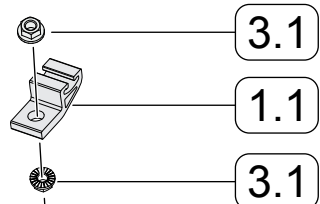
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3b

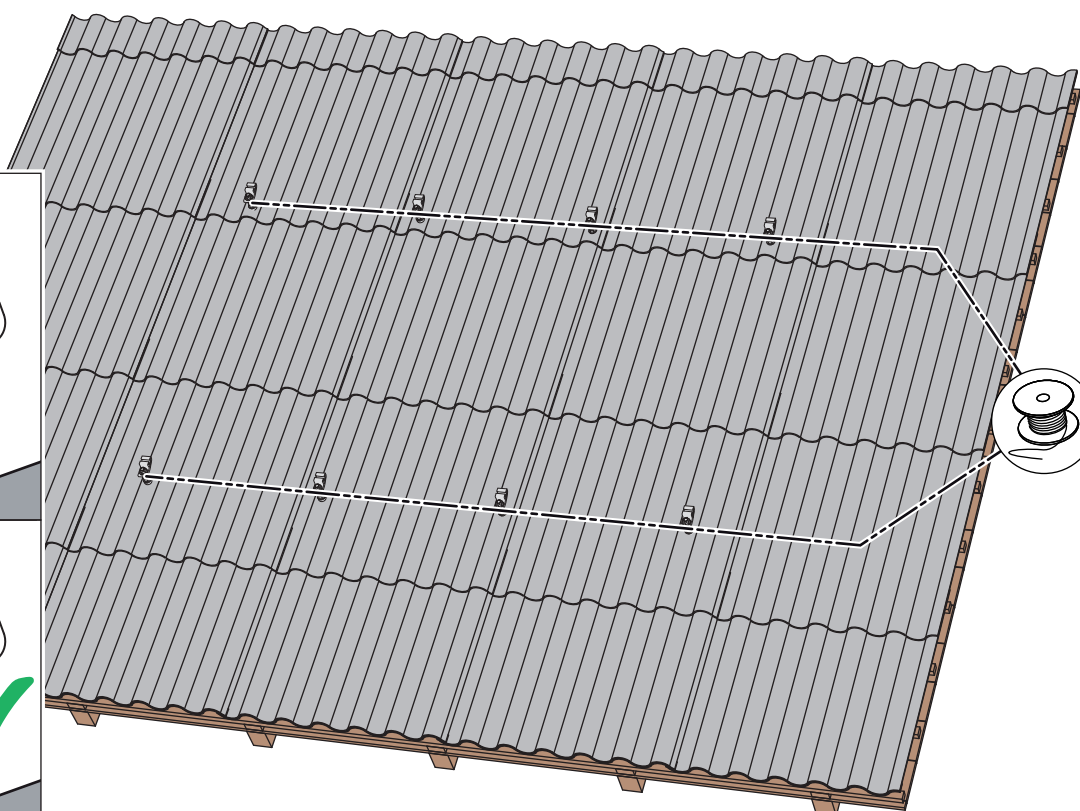
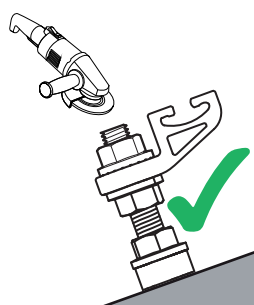
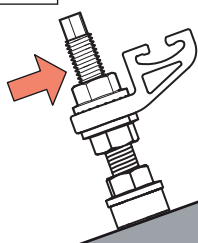
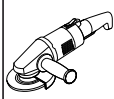


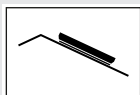
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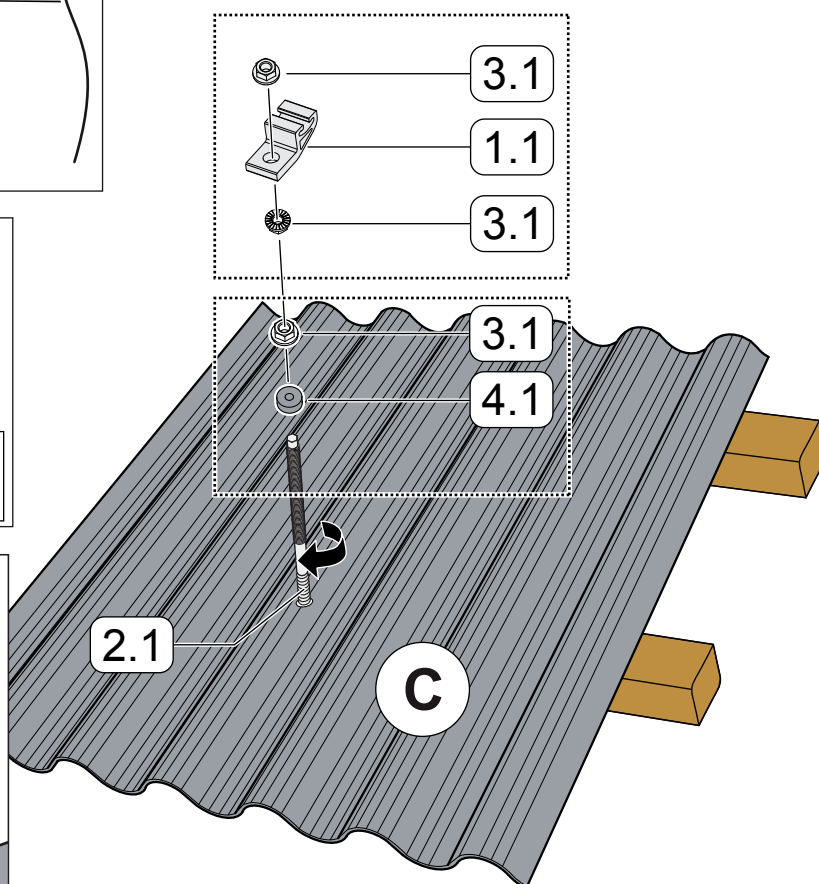
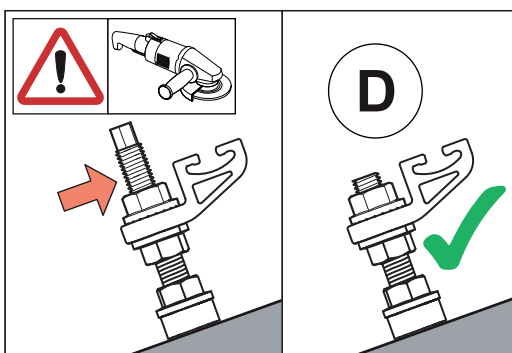
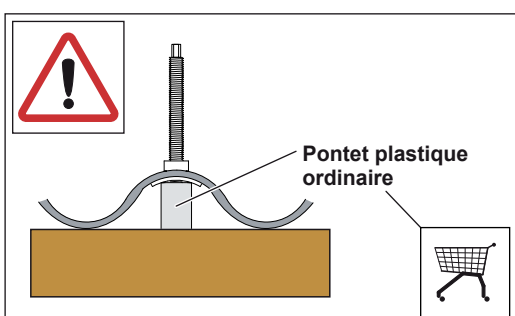
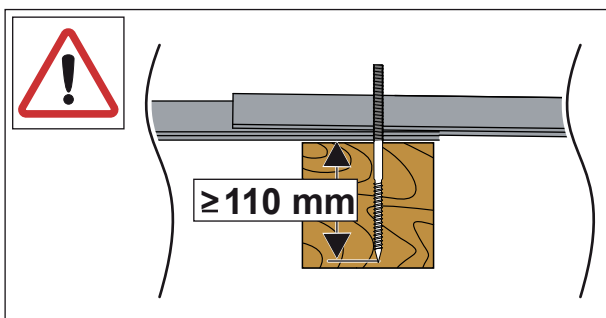
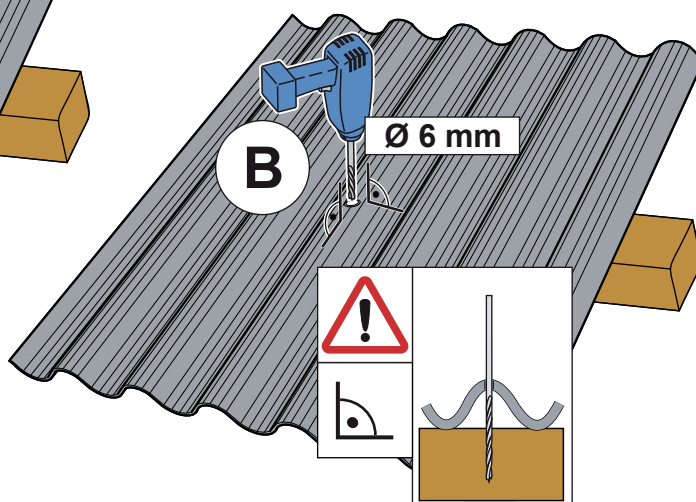
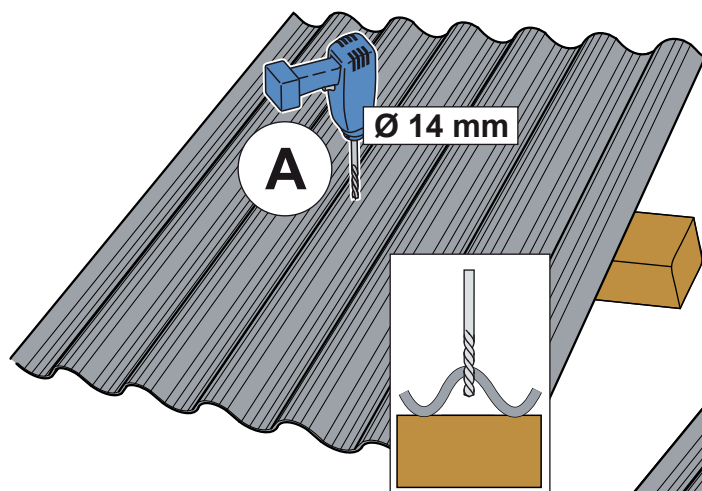


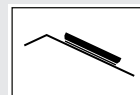
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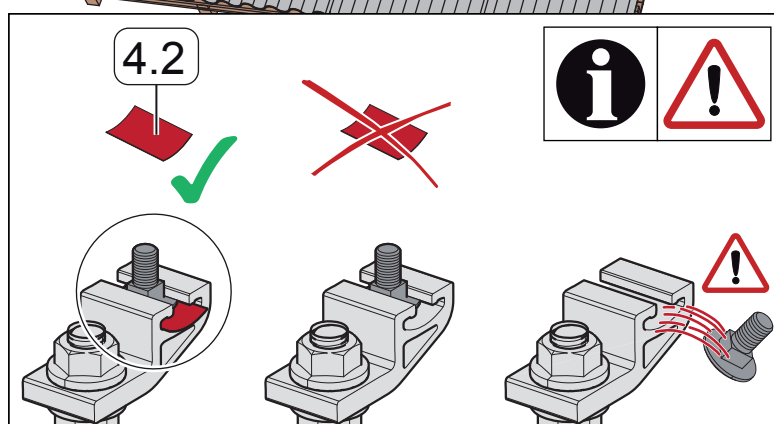
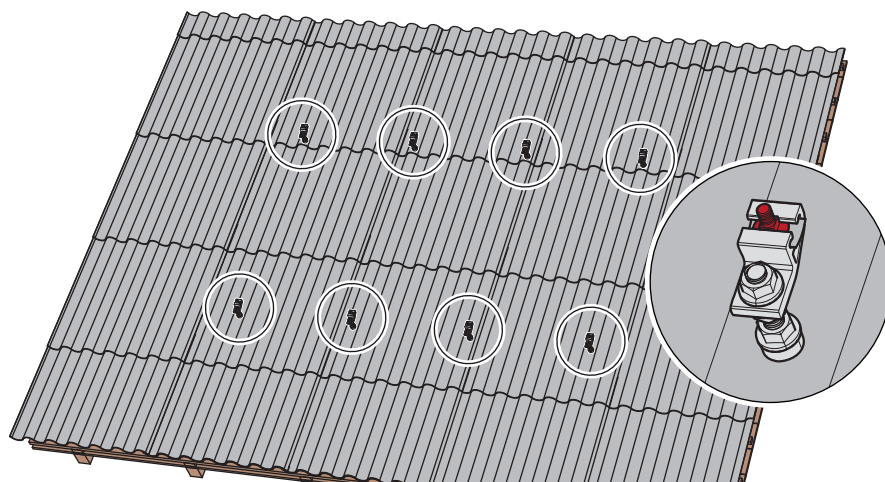
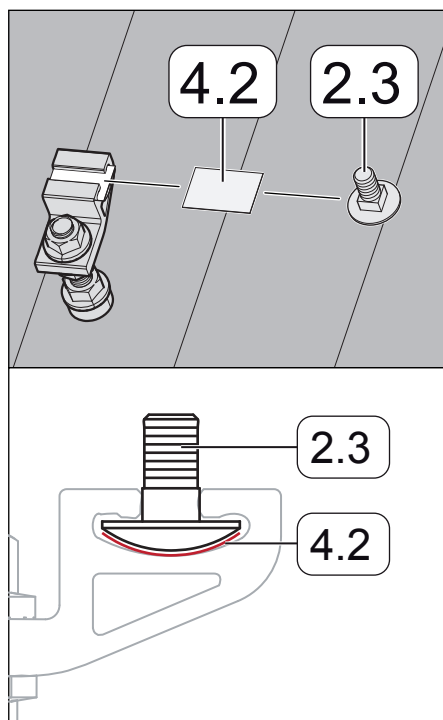
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En France, la mise en oeuvre des constructions de toits en tôle ondulée se fait de façon traditionnelle comme réalisé dans les représentations A/B/C.

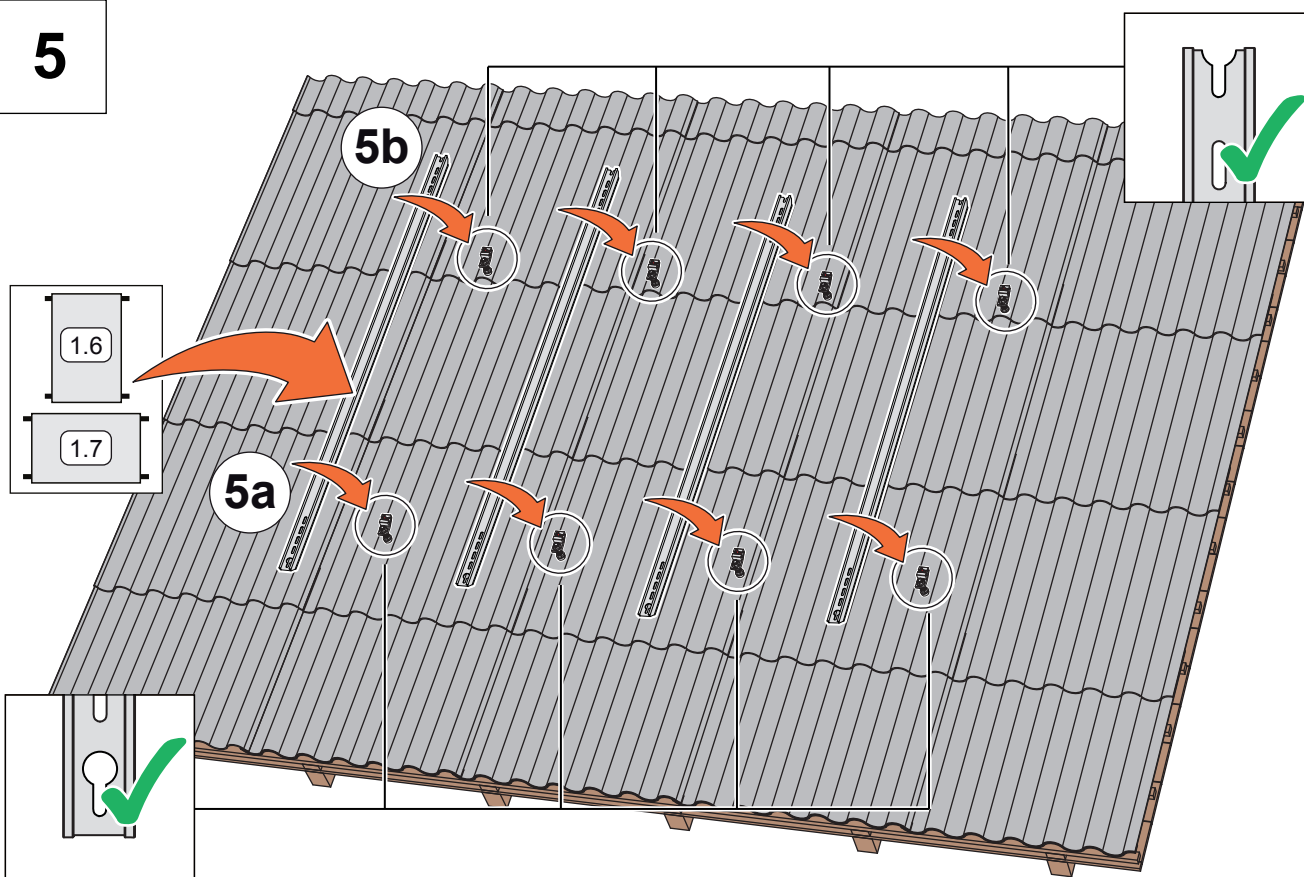




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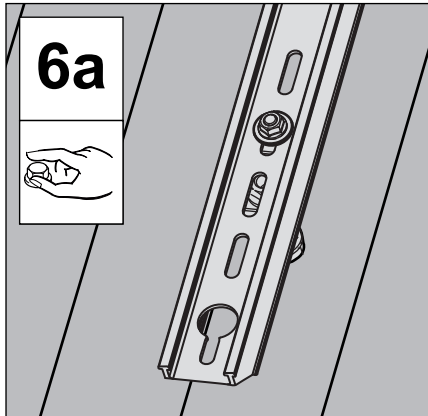
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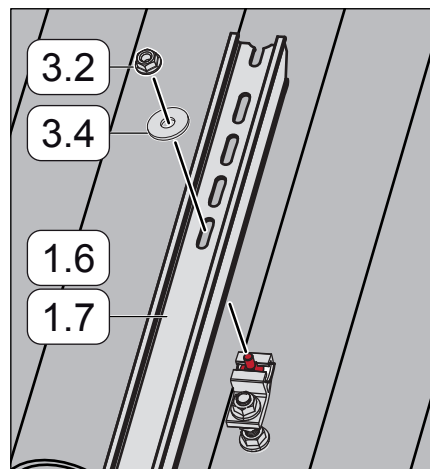
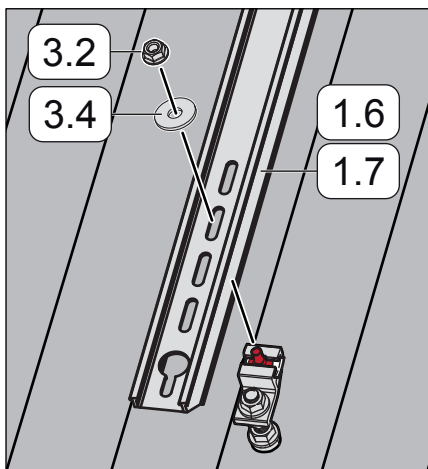
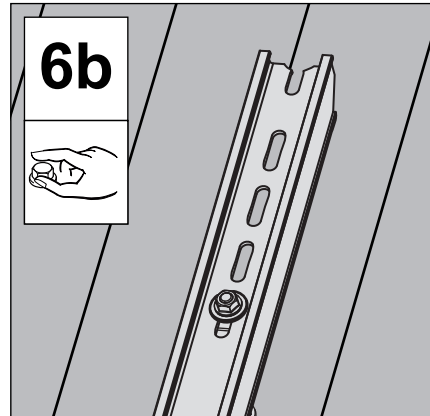


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6a



6b

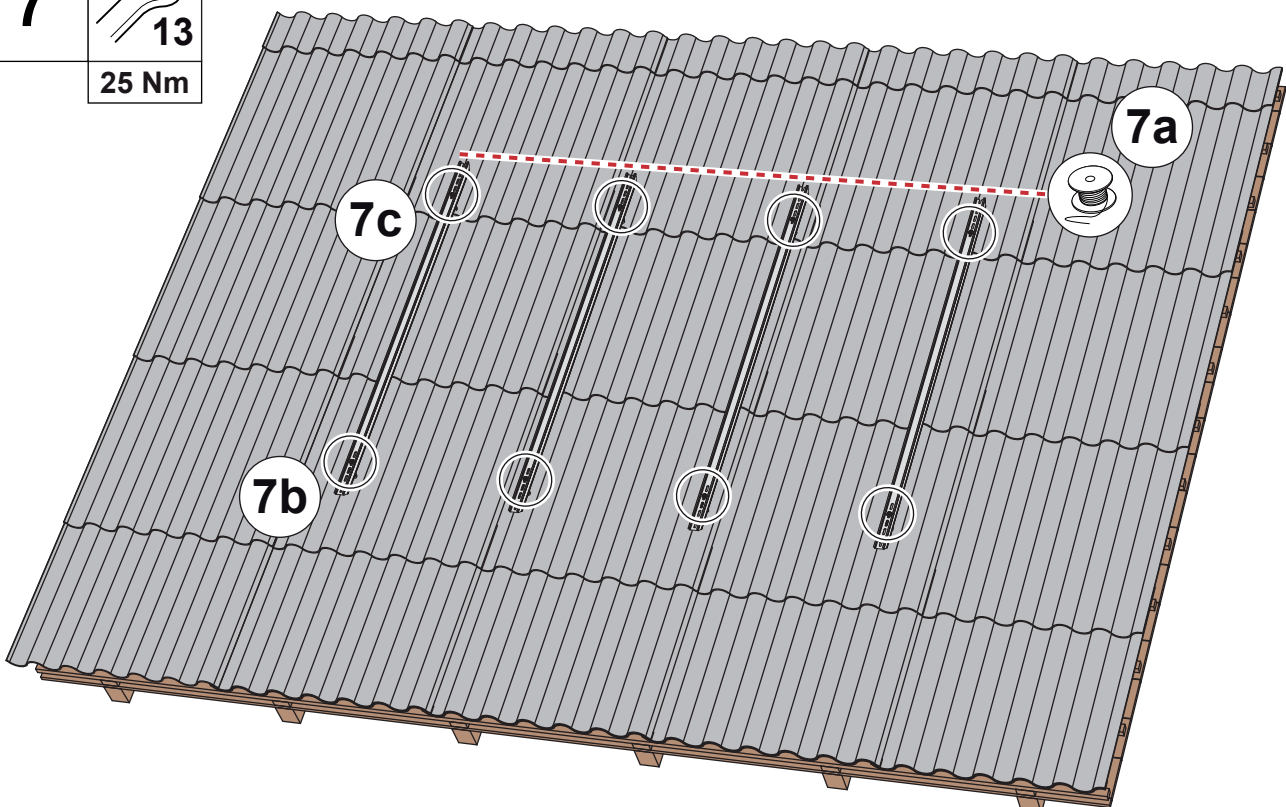


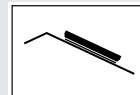
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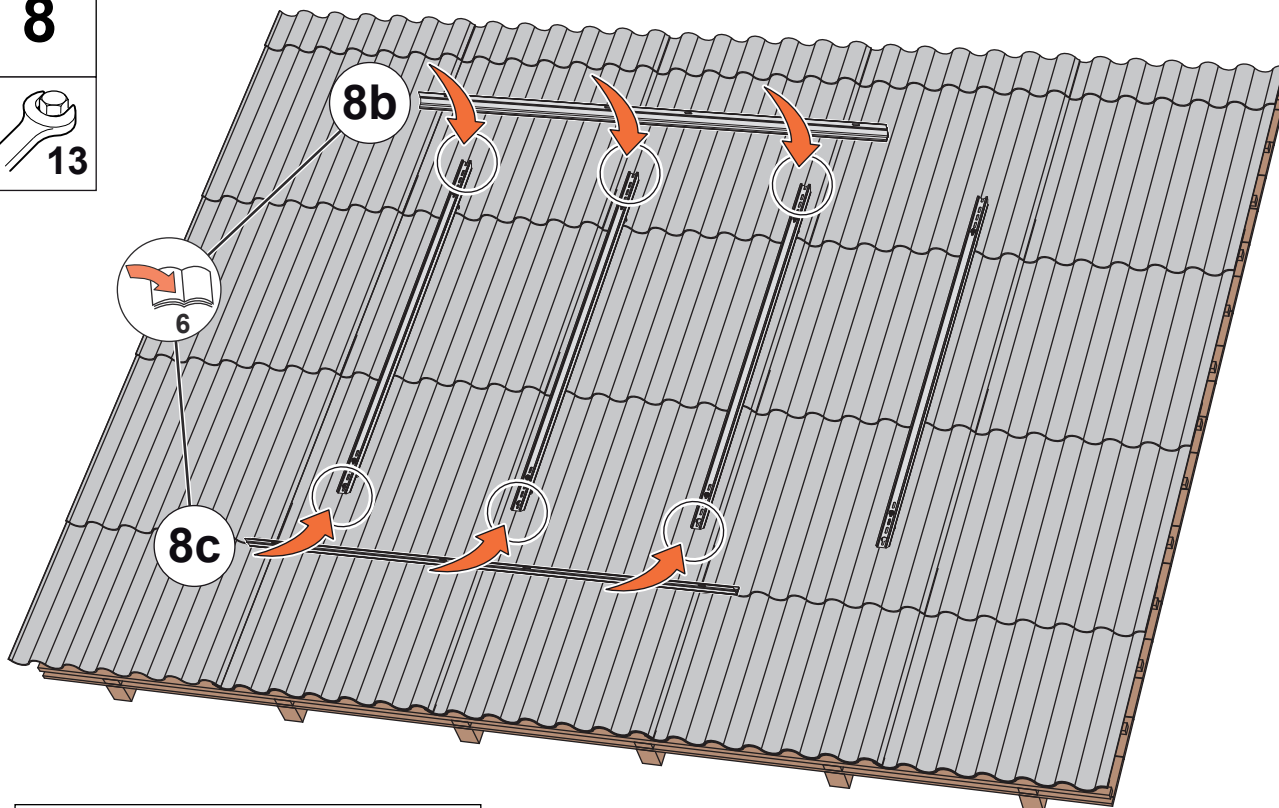
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25 Nm

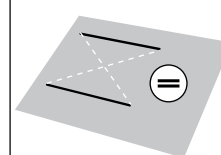
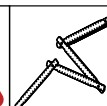
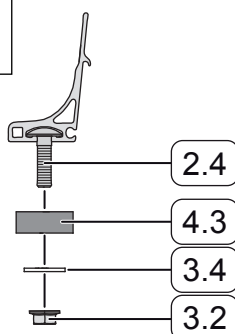




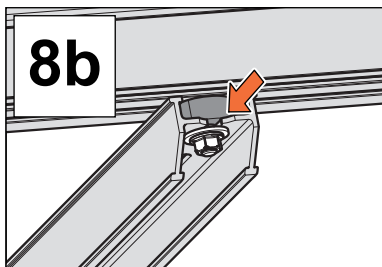
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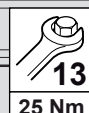
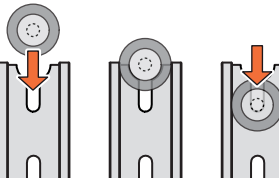
8a



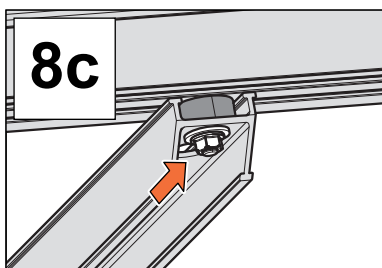
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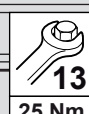
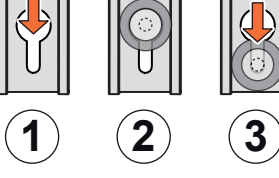
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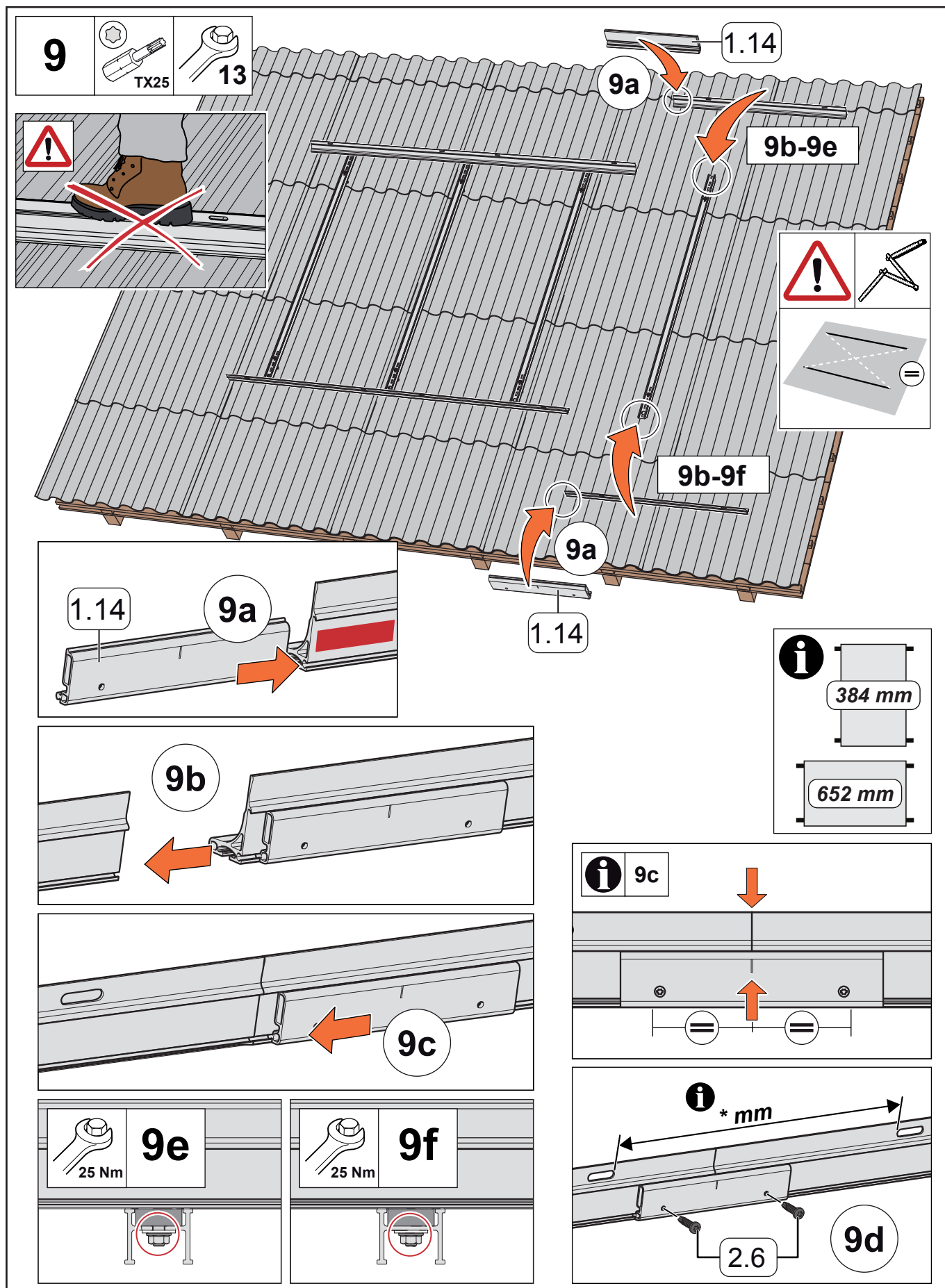
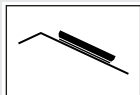


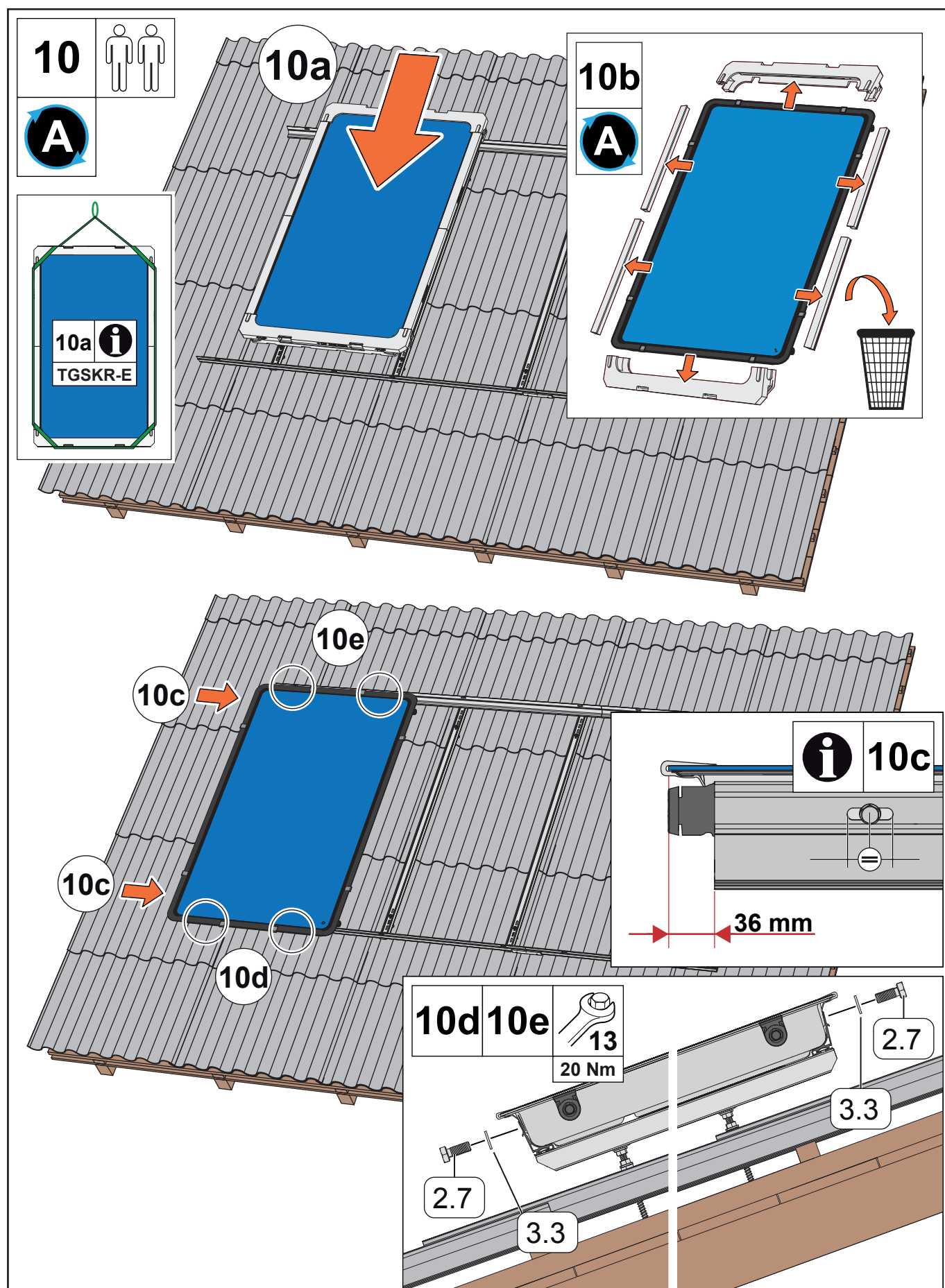
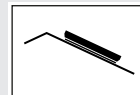
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1 2 3

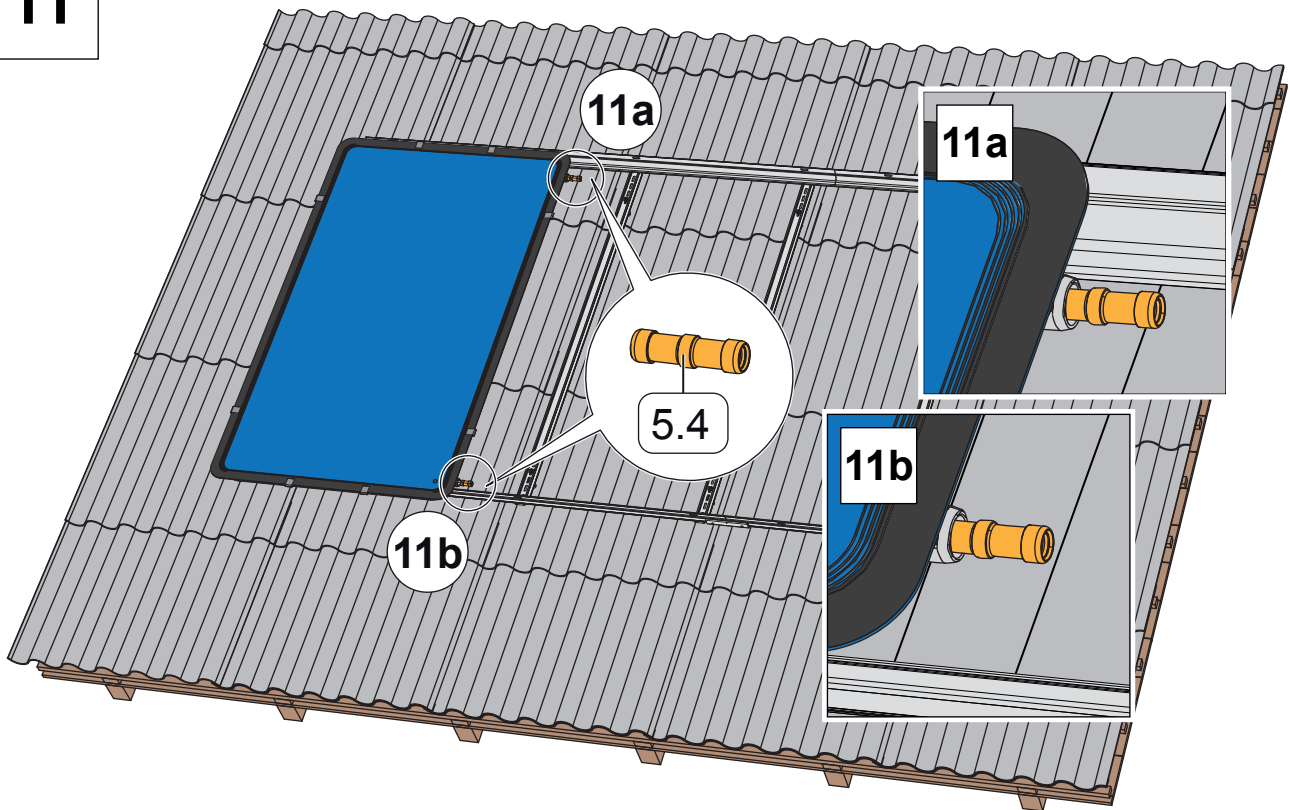




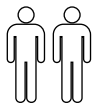




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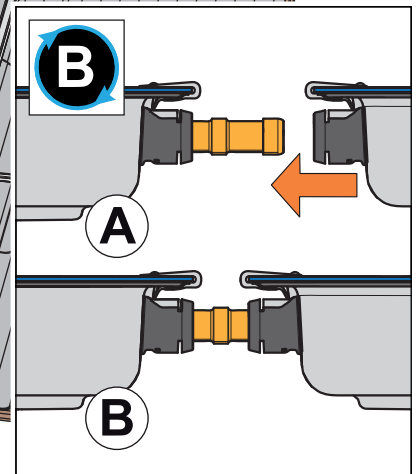
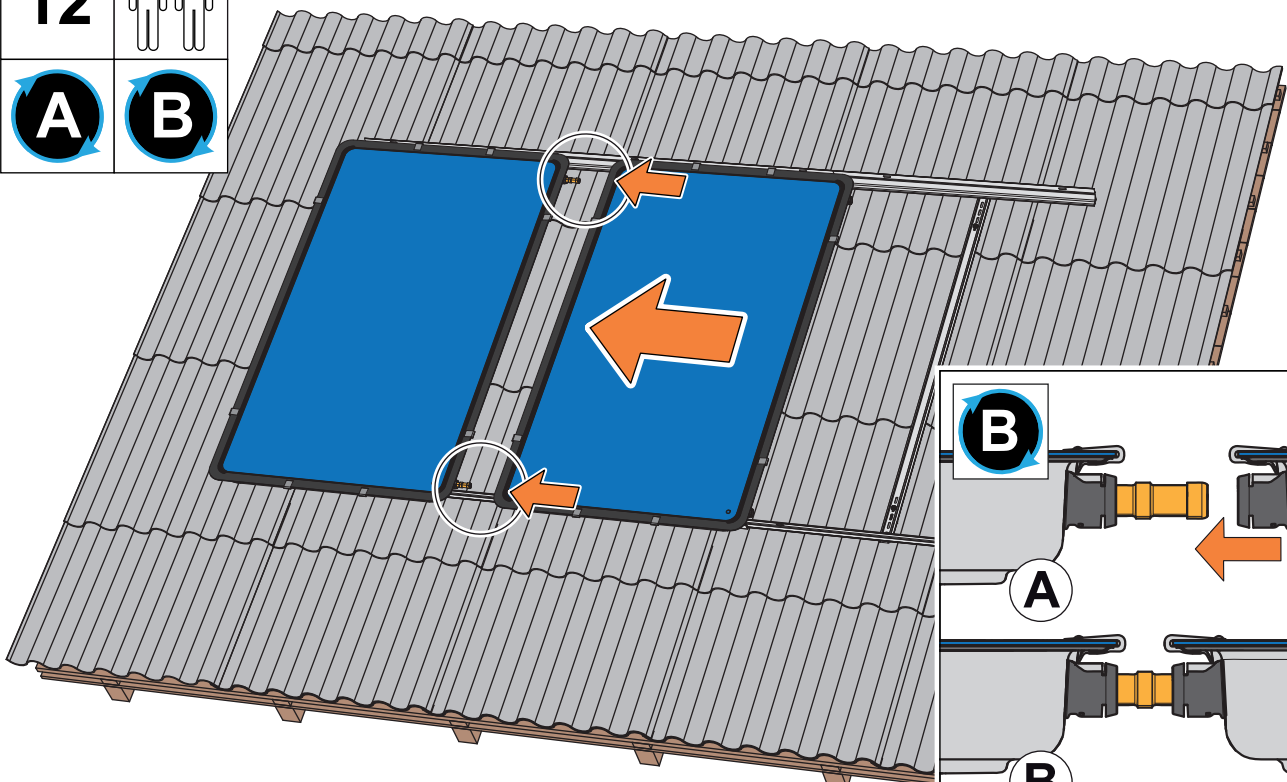


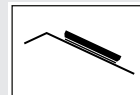
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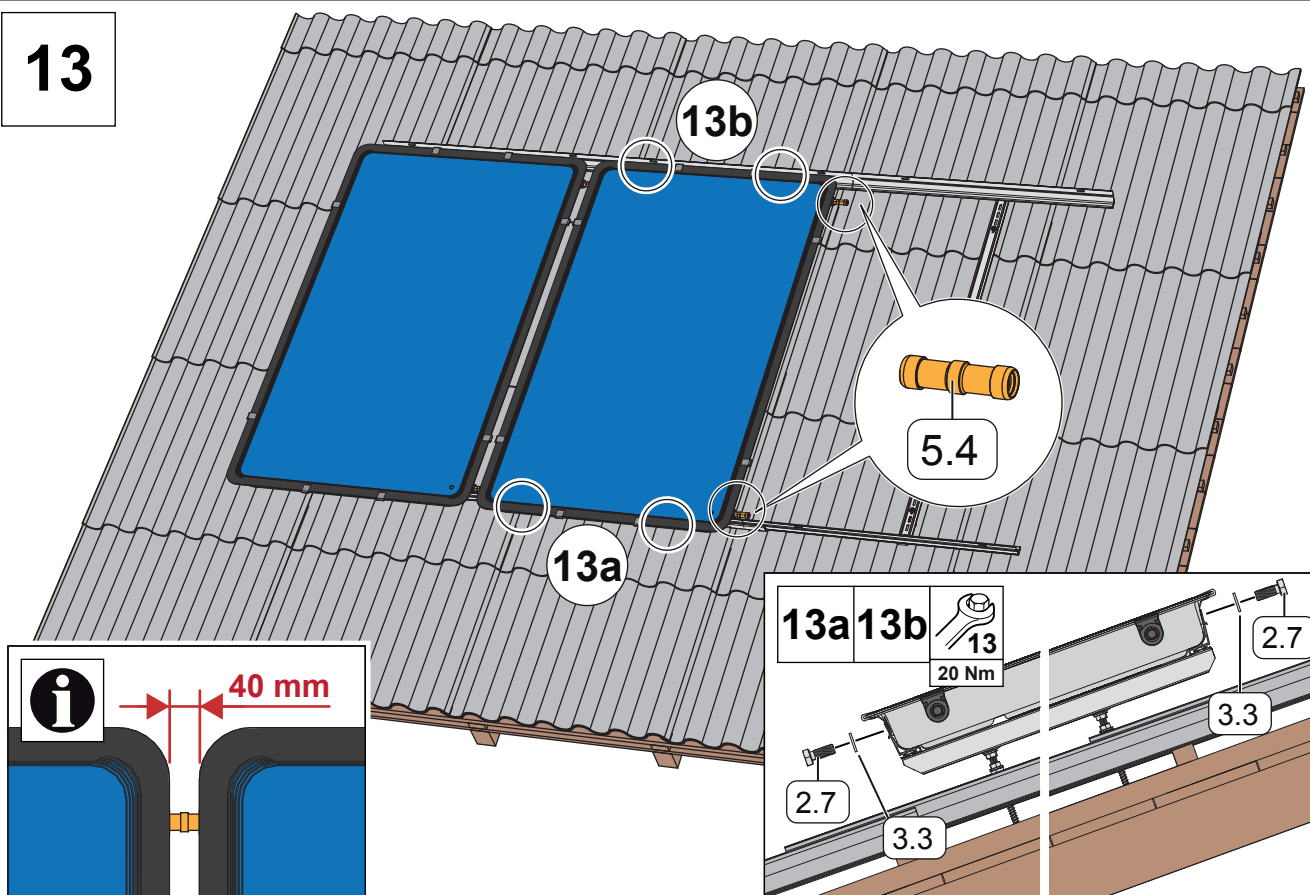
A

B

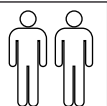




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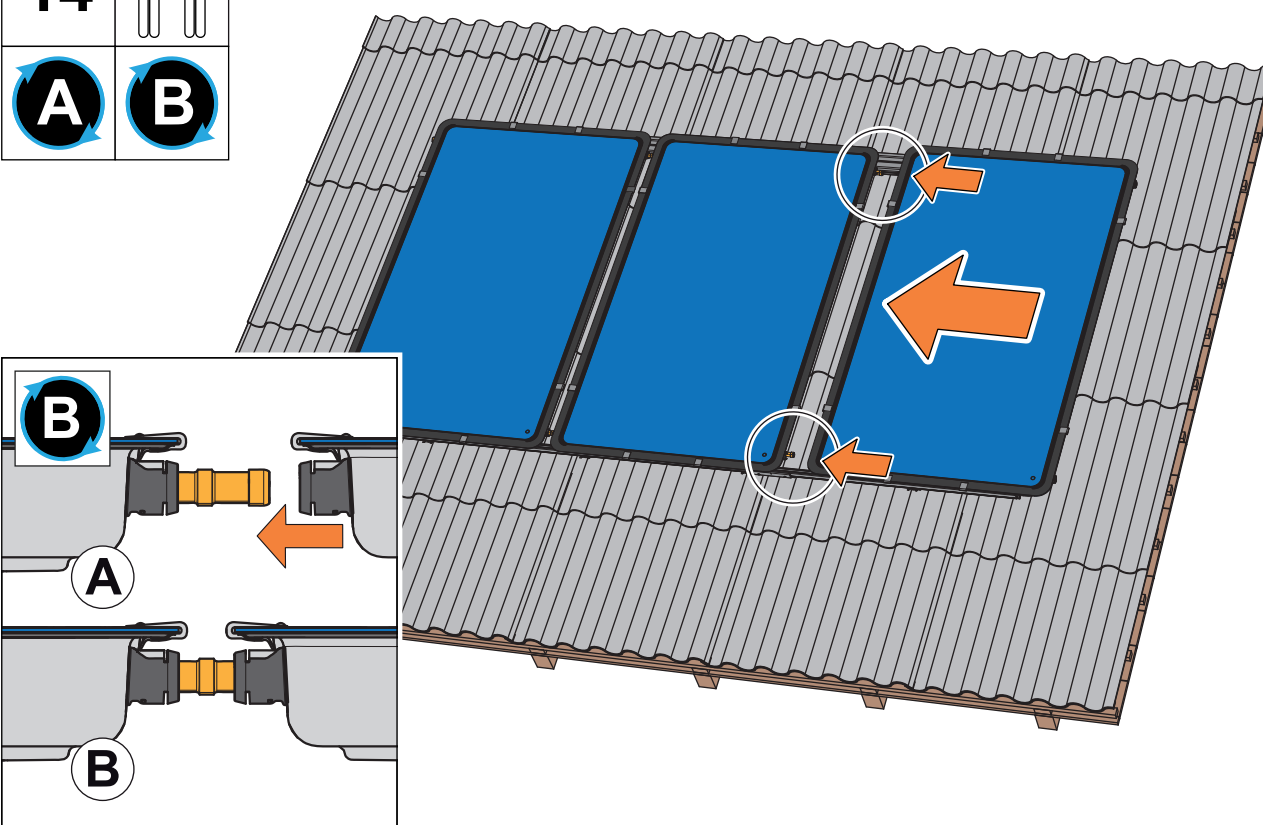


14



A

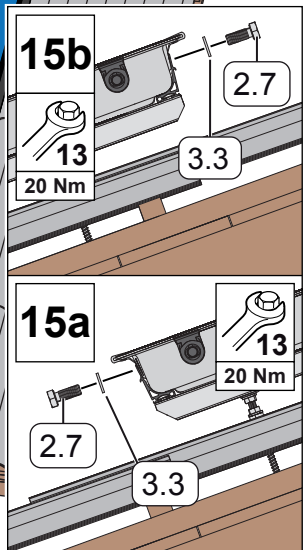
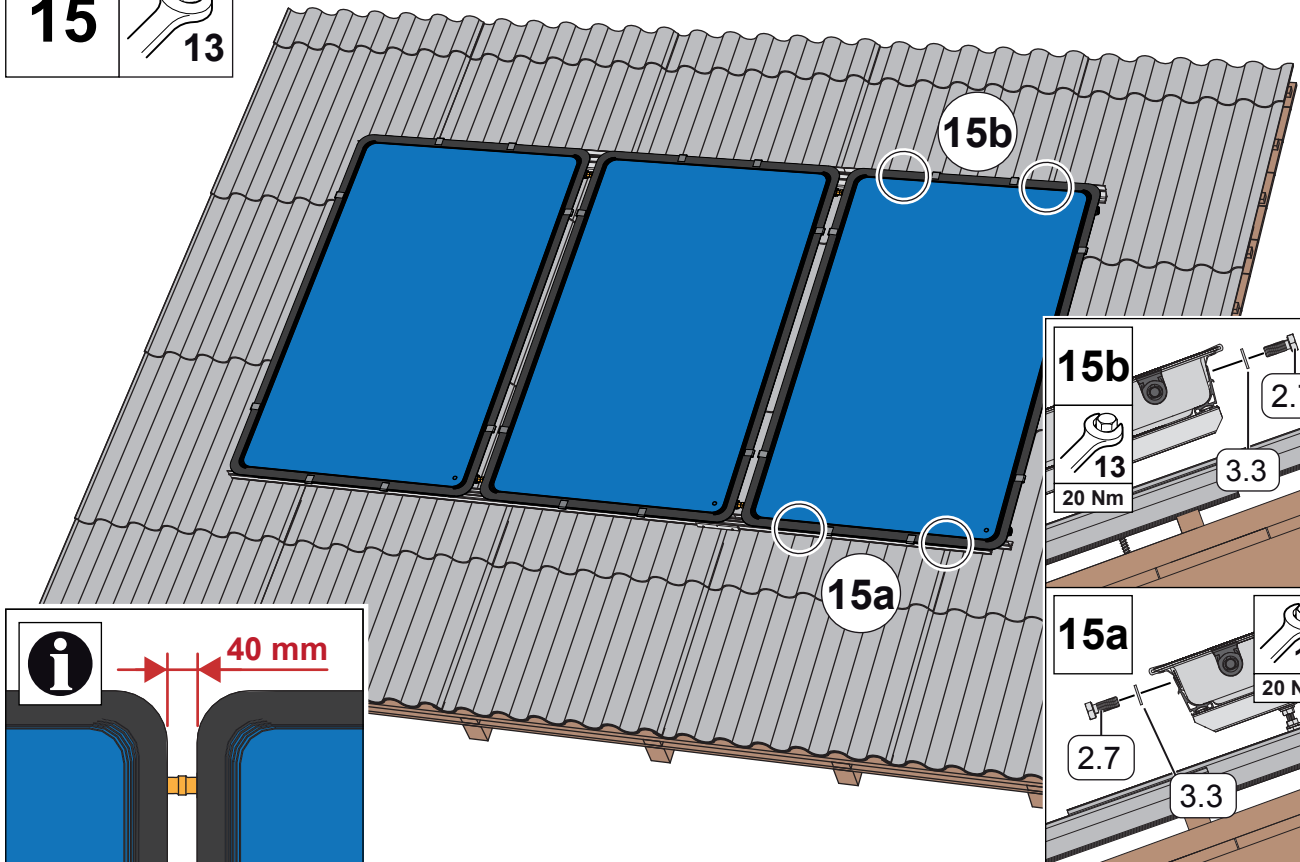
B



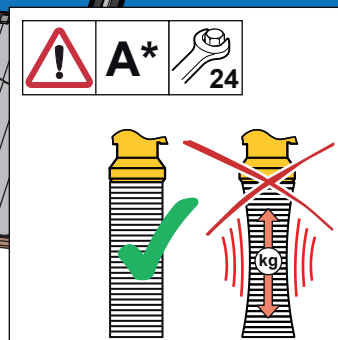
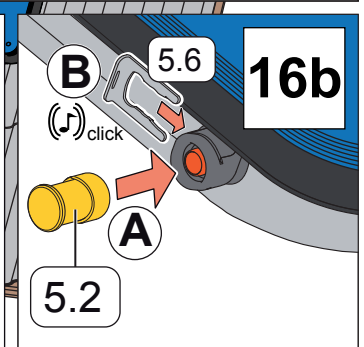
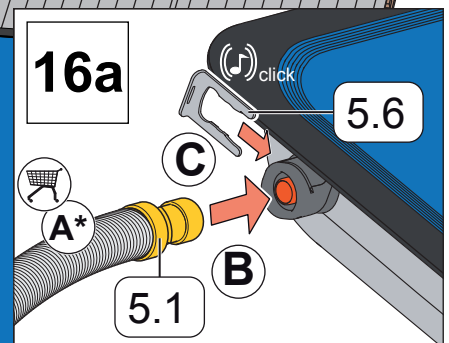
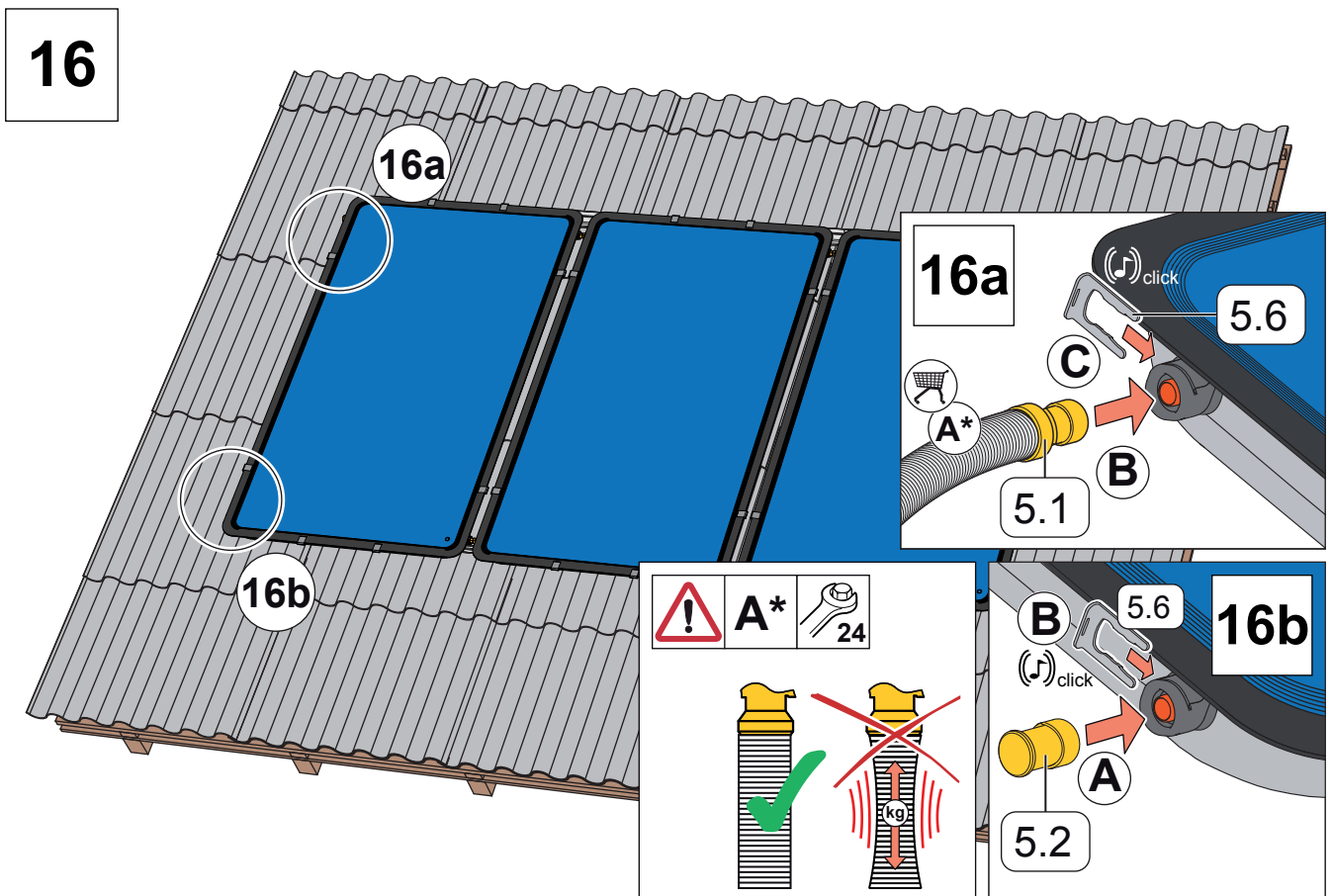


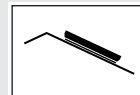
Montage, SSPR
Mounting, SSPR
Montaggio, SSPR
Montage, SSPR
Montaje, SSPR
Montagem, SSPR
Montering, SSPR

15

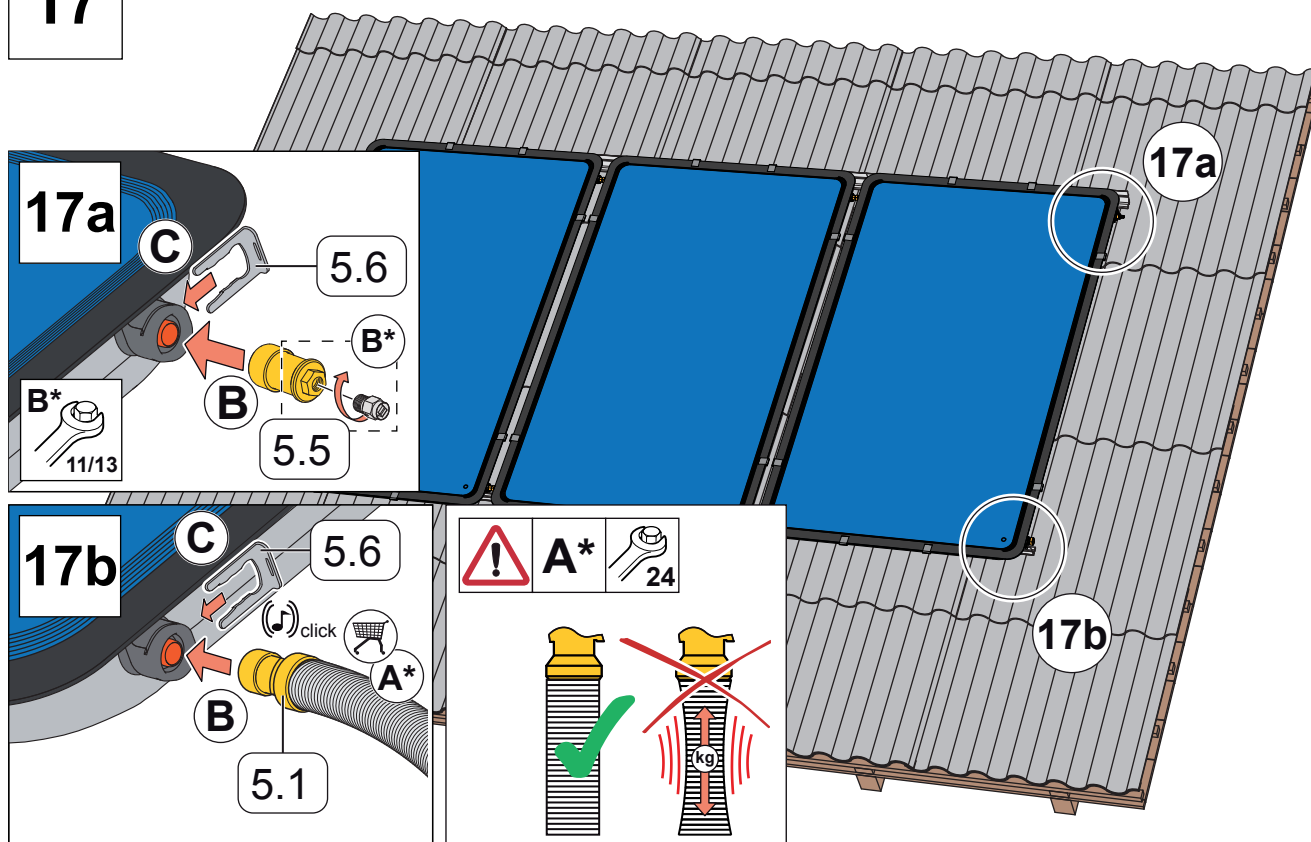


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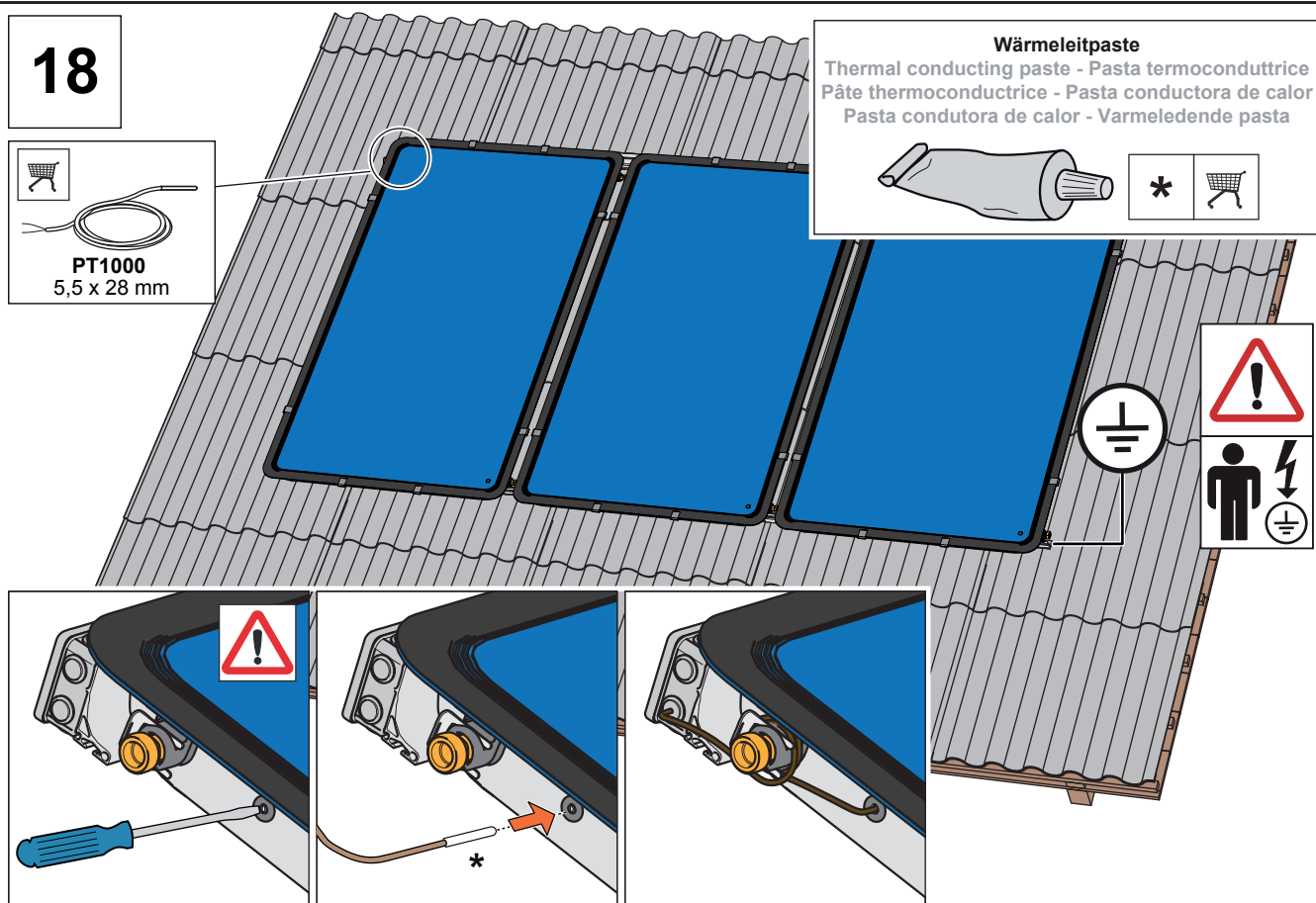


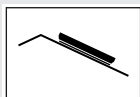


17



18





DE Trägerplatte
GB Support plate
IT Piastra portante
FR Plaque de support
ES Placa de soporte
PT Peça de suporte
DK Bæreplade

DE Ausschnitt
GB Cut-out
IT Ritaglio
FR Découpe
ES Sección
PT Secção
DK Sektion

A2

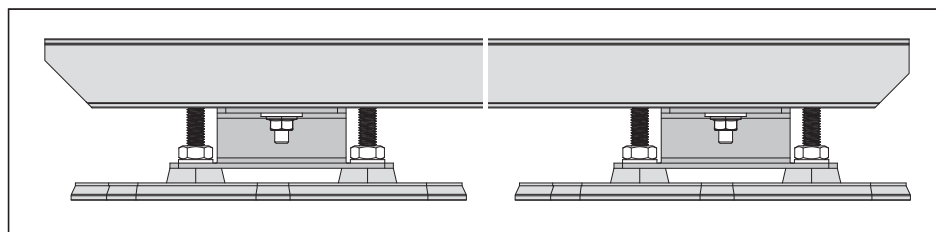
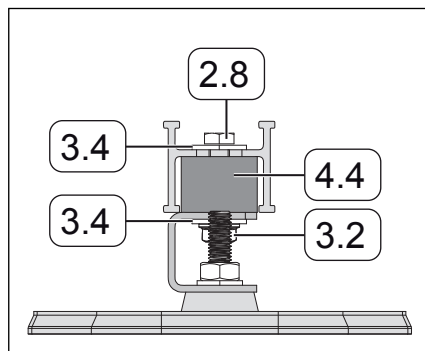
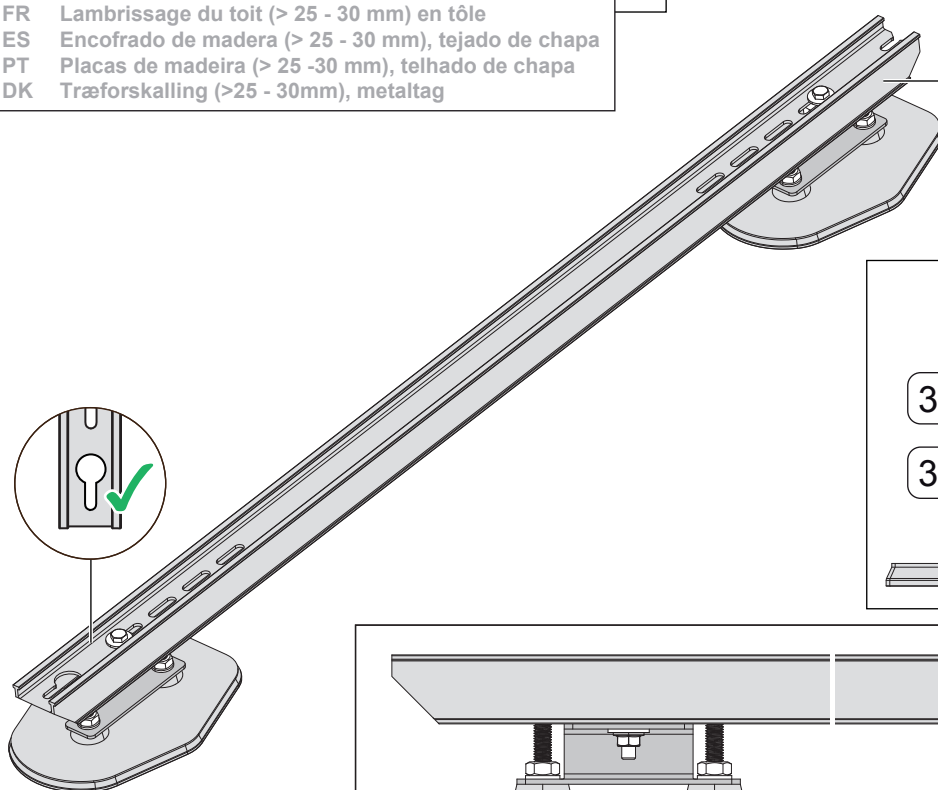
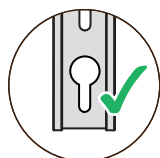


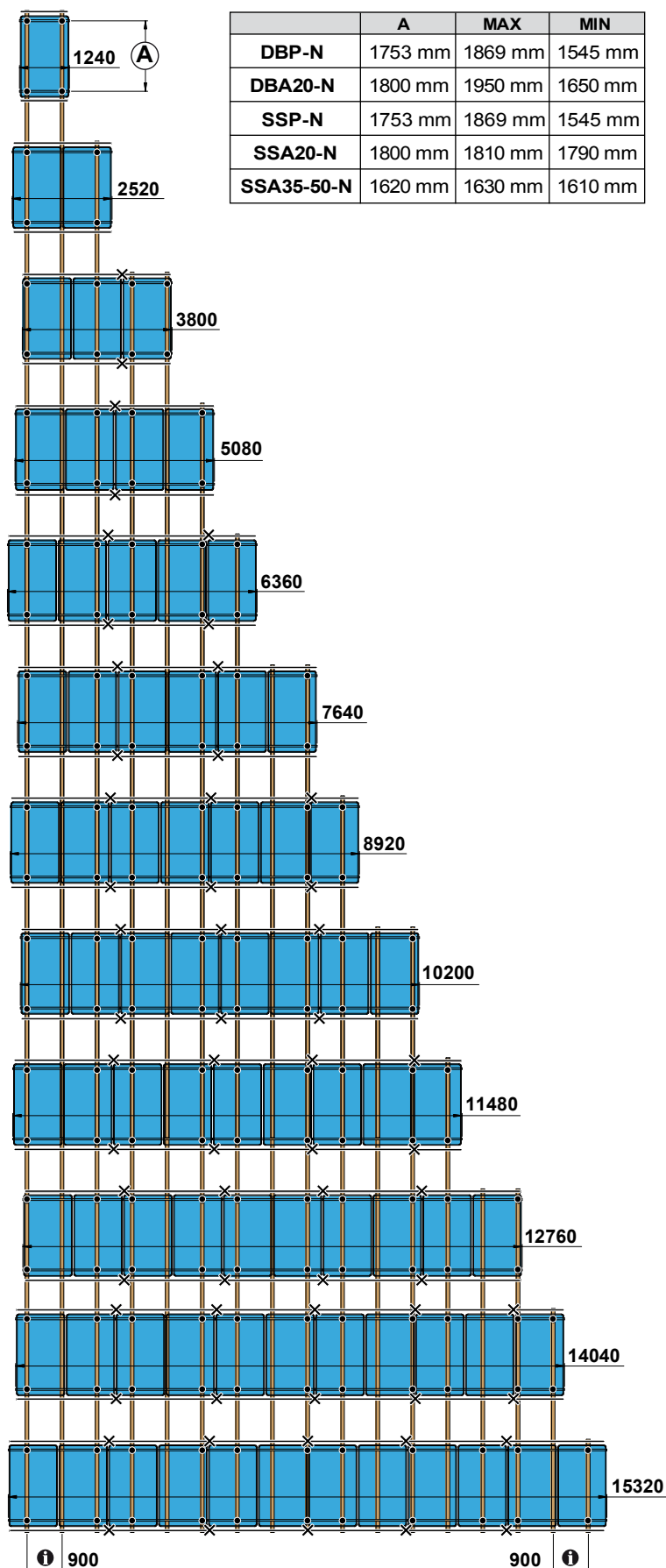
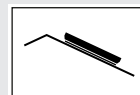
16x5*60

DE Al-Abdeckplatte
GB Al cover plate
IT Piastra di copertura in alluminio
FR Al-Plaque de recouvrement
ES Placa de cubierta Al
PT Placa para cobrir em alumínio
DK Aluminium dækplade

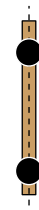
DE EPDM-Gummidichtung
GB EPDM rubber seal
IT Guarnizione in gomma EPDM
FR Joint en caoutchouc EPDM
ES Junta de goma EPDM
PT Junta de vedação em EPDM
DK EPDM-gummipakning

DE Holzschalung (> 25 - 30 mm), Blechdach
GB Planking (> 25 - 30mm), tin roof
IT Cassaforma in legno (> 25 - 30 mm), tetto in lamiera
FR Lambrissage du toit (> 25 - 30 mm) en tôle
ES Encofrado de madera (> 25 - 30 mm), tejado de chapa
PT Placas de madeira (> 25 - 30 mm), telhado de chapa
DK Træforskalling (>25 - 30mm), metaltag





SKR500



DE Befestigungsebene
GB Fastening planes
IT Piani di fissaggio
FR Plans de fixation
ES Superficies de fijación
PT Plataformas de fixação
DK Fastgøringspunkt



DE TSV Verbinder
GB TSV connectors
IT Collegamento TSV
FR Connecteur TSV
ES Elemento de unión TSV
PT Conector TSV
DK TSV forbinder



[S_K]
DE Schneelast
GB Snow load
IT Carico di neve
FR Charge de neige
ES Carga de nieve
PT Carga de neve
DK Snebelastning
kN/m²



I1
DE Winddruck
GB Wind pressure
IT Pressione del vento
FR Pression du vent
ES Presión del viento
PT Pressão do vento
DK Vindtryk
kPa

we (ρ = 1,25 kg/m³)



I2
DE max. Böengeschwindigkeit
GB max. gust speed
IT max. velocità di raffica
FR vitesse de rafales maxi
ES max. velocidad de ráfagas
PT max. velocidade de rajadas
DK max. vindstødshastighed
km/h



Empfehlung für Befestigungsebenen SKR500
Recommendation for fastening planes SKR500
Raccomandazione per i piani di fissaggio SKR500
Recommandation concernant les plans de fixation SKR500
Recomendaciones para las superficies de fijación SKR500
Sugestão de plataformas de fixação SKR500
Anbefalede fastgøringspunkter SKR500

SSP-N / STANDARD LOAD (SL)										
		700 mm			800 mm			900 mm		
		1,20 / 150	1,91	3,29	1,10 / 144	1,67	2,88	0,98 / 136	1,48	2,56
 DE Befestigungsebene GB Fastening planes IT Piani di fissaggio FR Plans de fixation ES Superficies de fijación PT Plataformas de fixação DK Fastgøringspunkt	1	2			2			2		
	2	3			2			2		
	3	4			3			4		
	4	4			4			4		
	5	6			5			5		
	6	6			6			6		
	7	8			8			7		
	8	8			8			8		
	9	10			10			9		
	10	10			10			10		
	11	11			12			11		
	12	12			12			11		

SSP-N / HIGH LOAD (HL)										
		700 mm			800 mm			900 mm		
		1,20 / 150	2,33	4,00	1,20 / 150	2,04	3,58	1,20 / 150	1,77	3,05
 DE Befestigungsebene GB Fastening planes IT Piani di fissaggio FR Plans de fixation ES Superficies de fijación PT Plataformas de fixação DK Fastgøringspunkt	1	2			2			2		
	2	4			4			3		
	3	6			5			5		
	4	8			7			6		
	5	9			8			8		
	6	11			10			9		
	7	13			12			10		
	8	15			13			12		
	9	17			15			13		
	10	19			16			15		
	11	20			18			16		
	12	22			20			17		

| * | 30° bis 45° kann Linear Interpoliert werden

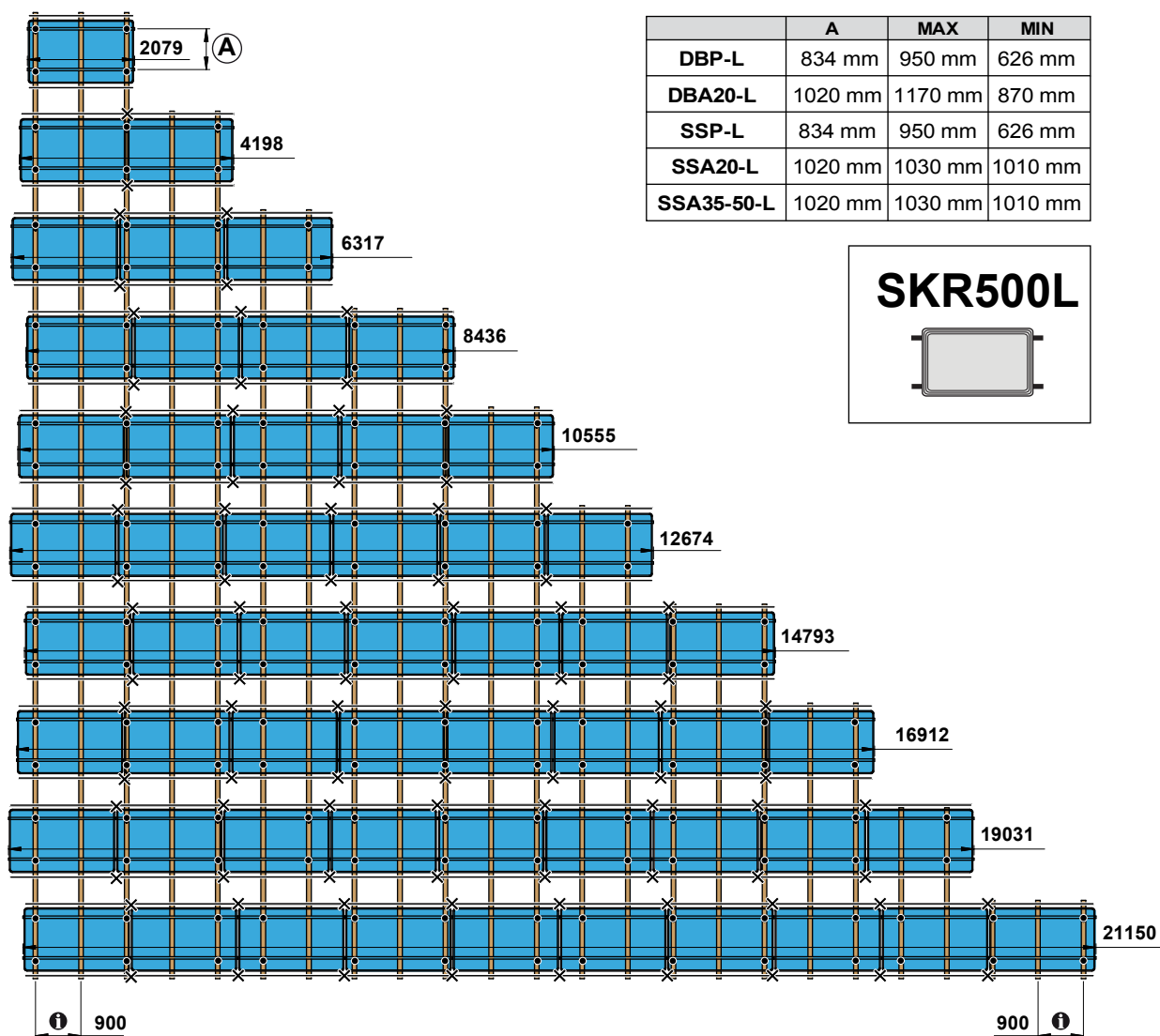
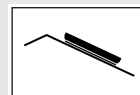
Linear interpolation between 30° and 45°
 Interpolazione lineare tra 30° e 45°
 Interpolation linéaire entre 30° et 45°
 Interpolación lineal para valores entre 30° y 45°
 A interpolação linear para valores entre 30° e 45°
 Hældning kan udføres i 30° til 45°

| 1 | Winddruck we (ρ = 1,25 kg/m³)

Wind pressure we (ρ = 1,25 kg/m³)
 Pressione del vento we (ρ = 1,25 kg/m³)
 Pression du vent we (ρ = 1,25 kg/m³)
 Presión del viento we (ρ = 1,25 kg/m³)
 Pressão do vento we (ρ = 1,25 kg/m³)
 Vindtryk we (ρ = 1,25 kg/m³)

| 2 | max. Böengeschwindigkeit

max. gust of wind
 max. velocità di raffica
 vitesse de rafales maxi
 max. velocidad de ráfagas
 max. velocidade de rajadas
 max. vindstødshastighed



	DE Befestigungsebene GB Fastening planes IT Piani di fissaggio FR Plans de fixation ES Superficies de fijación PT Plataformas de fixação DK Fastgøringspunkt	I1 DE Winddruck GB Wind pressure IT Pressione del vento FR Pression du vent ES Presión del viento PT Pressão do vento DK Vindtryk kPa
[S_K] kN/m²	DE Schneelast GB Snow load IT Carico di neve FR Charge de neige ES Carga de nieve PT Carga de neve DK Snebelastning	we (ρ = 1,25 kg/m³)
	DE TSV Verbinder GB TSV connectors IT Collegamento TSV FR Connecteur TSV ES Elemento de unión TSV PT Conector TSV DK TSV forbinder	I2 DE max. Böengeschwindigkeit GB max. gust speed IT max. velocità di raffica FR vitesse de rafales maxi ES max. velocidad de ráfagas PT max. velocidade de rajadas DK max. vindstødshastighed km/h



Empfehlung für Befestigungsebenen SKR500L
Recommendation for fastening planes SKR500L
Raccomandazione per i piani di fissaggio SKR500L
Recommandation concernant les plans de fixation SKR500L
Recomendaciones para las superficies de fijación SKR500L
Sugestão de plataformas de fixação SKR500L
Anbefalede fastgøringspunkter SKR500L

SSP-L / STANDARD LOAD (SL)										
		700 mm			800 mm			900 mm		
		1,20 / 150	2,45	4,00	1,20 / 150	2,14	3,79	1,20 / 150	1,86	3,23
 DE Befestigungsebene GB Fastening planes IT Piani di fissaggio FR Plans de fixation ES Superficies de fijación PT Plataformas de fixação DK Fastgøringspunkt	1	2			2			2		
	2	4			4			3		
	3	6			5			4		
	4	8			7			6		
	5	10			8			7		
	6	12			10			8		
	7	14			12			10		
	8	16			14			11		
	9	18			15			12		
	10	20			17			14		

SSP-L / HIGH LOAD (HL)										
		700 mm			800 mm			900 mm		
		1,20 / 150	3,03	4,00	1,20 / 150	2,65	4,00	1,20 / 150	2,32	4,00
 DE Befestigungsebene GB Fastening planes IT Piani di fissaggio FR Plans de fixation ES Superficies de fijación PT Plataformas de fixação DK Fastgøringspunkt	1	3			3			3		
	2	6			6			5		
	3	9			8			7		
	4	12			11			10		
	5	15			14			12		
	6	18			16			15		
	7	21			19			17		
	8	24			22			19		
	9	27			24			22		
	10	30			27			24		

| * | 30° bis 45° kann Linear Interpoliert werden

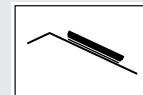
Linear interpolation between 30° and 45°
 Interpolazione lineare tra 30° e 45°
 Interpolation linéaire entre 30° et 45°
 Interpolación lineal para valores entre 30° y 45°
 A interpolação linear para valores entre 30 ° e 45 °
 Hældning kan udføres i 30° til 45°

| 1 | Winddruck we (p = 1,25 kg/m³)

Wind pressure we (p = 1,25 kg/m³)
 Pressione del vento we (p = 1,25 kg/m³)
 Pression du vent we (p = 1,25 kg/m³)
 Presión del viento we (p = 1,25 kg/m³)
 Pressão do vento we (p = 1,25 kg/m³)
 Vindtryk we (p = 1,25 kg/m³)

| 2 | max. Böengeschwindigkeit

max. gust of wind
 max. velocità di raffica
 vitesse de rafales maxi
 max. velocidad de ráfagas
 max. velocidade de rajadas
 max. vindstødshastighed



DE

Statische Einsatzgrenzen, Regeln zum Positionieren von Befestigungspunkten im Bereich von TSV - Schienenverbinder:

- Die Kollektoren und Befestigung sind für eine maximale Böengeschwindigkeit von siehe Tabelle ausgelegt.
- Die Kollektoren und Befestigung sind für eine max. charakteristische Schneelast von siehe Tabelle (SL) ausgelegt. Bei Befestigungen mit zusätzlichen Stützen sind charakteristische Schneelasten bis siehe Tabelle (HL) zulässig (Die charakteristische Schneelast ist nach EN 1991 NA definiert).
- Befindet sich der Schienenverbinder zwischen zwei Sparren (und ist weniger als 400 mm vom nächstgelegenen Sparren entfernt), so muss auf diesem Sparren ein Befestigungspunkt gesetzt werden.
- Befindet sich der Schienenverbinder zwischen zwei Sparren (und ist mehr als 400 mm vom nächstgelegenen Sparren entfernt) so muss auf beiden Sparren links und rechts vom Verbinder ein Befestigungspunkt gesetzt werden.
- Befindet sich der Schienenverbinder auf einen Sparren, so muss auf dem betroffenen Sparren ein Befestigungspunkt gesetzt werden.
- Die oben genannten Regeln sind für übliche Sparrenabstände von 700 mm bis 900 mm gültig.
- Bei der Standardbefestigung bis siehe Tabelle Schneelast (SL) darf zwischen den Befestigungspunkten max. 1 Sparren freigelassen werden. Bei der Befestigung mit zusätzlichen Stützen bis siehe Tabelle Schneelast (HL) darf zwischen den Befestigungspunkten kein Sparren freigelassen werden.
- Überstand der Trageschiene über den äußersten Befestigungspunkt bei SL N/L Montage max. 525 mm, bei HL N/L Montage max. 425 mm.

EN

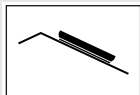
Static operating tolerances, rules for positioning mounting points in the vicinity of the TSV - support profile connector:

- The collectors and fastener are designed for a maximum gust speed according table.
- The collectors and fastener are designed for a maximum characteristic snow load according table.(SL) In the case of mountings with additional supports, characteristic snow loads according table (HL) are permissible. (The characteristic snow load is defined in accordance with EN 1991 NA).
- If the connector rail is located between two spars (and is situated less than 400mm from the nearest rafter), a mounting point needs to be fitted on this rafter.
- If the connector rail is located between two rafters (and is situated more than 400mm from the nearest rafter), a mounting point needs to be fitted on both rafters to the left and right of the connector.
- If the support profile connector is located on a rafter, a mounting point needs to be fitted on the rafter in question.
- The aforementioned rules are valid for characteristic distances between rafters of between 700mm and 900mm.
- In the case of the standard mounting up to a snow load (SL) according table no more than 1 rafter may be omitted between mounting points. In the case of a mounting with additional supports up to a snow load according table (HL) it is not permitted to omit any rafter between mounting points.
- Protrusion of the support rail beyond the furthest mounting point is max. 525mm for SL N/L installation and max. 425mm in the case of HL N/L installation.

IT

Limiti statici di applicabilità, regole per il posizionamento dei punti di fissaggio in corrispondenza dei collegamenti delle guide TSV:

- I collettori e i fissaggi sono ideati per una velocità di raffica massima indicata in tabella.
- I collettori e i fissaggi sono ideati per un carico di neve caratteristico massimo come da tabella per carichi standard (SL). In presenza di fissaggi con supporti addizionali i carichi di neve caratteristici ammessi raggiungono i valori riportati nella tabella per carichi elevati (HL) (il carico di neve caratteristico è definito dalla norma EN 1991 NA).
- Se la giunzione tra le guide si trova fra due travetti (e dista dal travetto successivo meno di 400 mm), su questo travetto deve essere collocato un punto di fissaggio.
- Se la giunzione tra le guide si trova fra due travetti (e dista dal travetto successivo più di 400 mm), deve essere collocato un punto di fissaggio a sinistra e a destra della giunzione tra le due guide.
- Se la giunzione tra due guide cade su un travetto, sul travetto interessato deve essere collocato un punto di fissaggio.
- Le regole di cui sopra sono valide per distanze fra travetti comprese fra 700 mm e 900 mm.
- Con un fissaggio standard per un carico di neve fino al pertinente valore indicato dalla tabella carichi standard (SL), fra due punti di fissaggio deve essere lasciato libero al massimo 1 travetto. Nel caso si intenda realizzare un sistema atto a sopportare un carico neve fino ai valori indicati nella tabella per carichi elevati (HL), occorre posizionare un fissaggio su ogni travetto.
- Sporgenza della guida di supporto oltre i punti di fissaggio più esterni: con montaggio SL (tabella carichi standard) max. 525 mm, con montaggio HL (tabella carichi elevati) max. 425 mm.



FR

Limites d'utilisation statiques, règles de positionnement des points de fixation dans la zone du connecteur de rails TSV:

- Les capteurs et leur fixation sont conçus pour une vitesse de rafales de vent maximale selon tableau.
- Les capteurs et leur fixation sont conçus pour une charge de neige spécifique maximale selon tableau (SL). Pour les fixations dotées de supports supplémentaires, les charges de neige spécifiques du tableau (HL) sont autorisées (la charge de neige spécifique est définie conformément à EN 1991 NA).
- Si le coupleur de profilés se situe entre deux chevrons (et se trouve à moins de 400 mm du chevron le plus proche), un point de fixation doit être placé sur ce chevron.
- Si le coupleur de profilés se situe entre deux chevrons (et se trouve à plus de 400 mm du chevron le plus proche), un point de fixation doit être placé sur les deux chevrons à droite et à gauche du coupleur.
- Si le coupleur de profilés se situe sur un chevron, un point de fixation doit être placé sur le chevron concerné.
- Les règles ci-dessus s'appliquent aux distances ordinaires entre chevrons de 700 mm à 900 mm.
- En cas de fixation standard jusqu'à une charge de neige selon tableau (SL), 1 chevron au maximum peut être laissé libre entre les points de fixation. En cas de fixation au moyen de supports supplémentaires jusqu'à une charge de neige selon tableau (HL), aucun chevron ne doit être laissé libre entre les points de fixation.
- Porte-à-faux du profilé de support par rapport au point de fixation le plus extérieur en cas de montage SL N/L maxi 525 mm, en cas de montage HL N/L maxi 425 mm.

ES

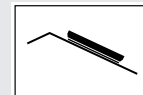
Límites estáticos de uso, reglas para posicionar puntos de fijación en la zona del elemento de unión de carriles TSV:

- Los colectores y la fijación han sido diseñados para ráfagas de viento máximas según la tabla.
- Los colectores y la fijación han sido diseñados para una carga de nieve máxima característica según la tabla (SL). En el caso de instalar soportes adicionales, se permiten cargas de nieve características de acuerdo con la tabla (HL) (la carga de nieve característica está definida por EN 1991 NA).
- Si el elemento de unión de los carriles se encuentra entre dos vigas (y está a menos de 400 mm de la más cercana), deberá instalarse un punto de fijación en dicha viga.
- Si el elemento de unión de los carriles se encuentra entre dos vigas (y está a más de 400 mm de la más cercana), deberán instalarse puntos de fijación en ambas vigas a la derecha y a la izquierda del elemento de unión.
- Si el elemento de unión de los carriles se encuentra en una viga, deberá instalarse un punto de fijación en dicha viga.
- Las reglas mencionadas son válidas para distancias entre vigas habituales de 700 y 900 mm.
- Con la fijación estándar para carga de nieve normal (SL) según la tabla, se puede dejar como máximo 1 viga libre entre los puntos de fijación. En caso de fijación con soportes adicionales para una alta carga de nieve (HL) según la tabla, no está permitido dejar ninguna viga libre entre los puntos de fijación.
- Saliente del carril portador sobre el punto más externo de fijación: en montaje SL N/L máx. 525 mm; en montaje HL N/L máx. 425 mm.

PT

Limites de aplicação estática, regras para posicionar os pontos de fixação na área de TSV - ligação das calhas:

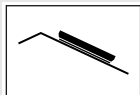
- Coletor e fixação são projetados para rajadas de vento forte na tabela.
- Os coletores e fixação são projetados para uma carga máxima de neve característica tabela (SL). No caso da instalação de suportes adicionais, características de carga de neve de acordo com a tabela (HL) são permitidos (característica de carga de neve é definida pela EN 1991 NA).
- Caso a ligação de perfis se encontre entre dois caibros (e esteja situada a menos de 400 mm do caibro mais próximo), terá que ser colocada no caibro um ponto de fixação
- Caso a ligação de perfis se encontre entre dois caibros (e esteja situada a mais de 400 mm do caibro mais próximo), terá que ser colocado um ponto de fixação em ambos os caibros à esquerda e direita da ligação.
- Caso a ligação das calhas se encontre num caibro, terá que ser colocado no dado caibro um ponto de fixação.
- As regras acima referidas são válidas para as distâncias entre caibros habituais de 700 mm a 900 mm.
- Com montagem padrão para carga de neve normal (SL) por tabela, você pode deixar no máximo 1 feixe livre entre os pontos de fixação. Se suportes de fixação adicionais para carga de neve elevado (HL) por tabela não é permitido deixar qualquer feixe livre entre os pontos de fixação
- Saída do canal portador no ponto de fixação externa: na montagem SL N / L máx. 525 mm, com montagem HL N / L max. 425 milímetros.

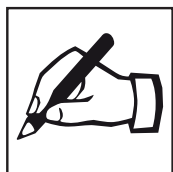


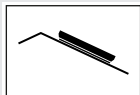
DK

Statiske anvendelsesgrænser, regler for positionering af fastgøringspunkter inden for TSV - skinneforbindernes område:

- Solfangerne og fastgøringen er konstrueret til en maksimal vindstødshastighed ifølge tabel.
- Solfangerne og fastgøringen er konstrueret til en maks. karakteristisk snebelastning ifølge tabel (SL). Ved fastgøring med ekstra støtter er karakteristiske ifølge tabellen (HL) tilladt (Den karakteristiske snebelastning er defineret efter EN 1991 NA).
- Hvis skinneforbindelsen befinder sig mellem to spær (og er beliggende mindre end 400 mm fra de nærmeste spær), skal der sættes et fastgøringspunkt på dette spær.
- Hvis skinneforbindelsen befinder sig mellem to spær (og er beliggende mere end 400 mm fra de nærmeste spær), skal der sættes et fastgøringspunkt på begge spær til venstre og højre for forbinderen.
- Hvis skinneforbindelsen er på et spær, skal der sættes et fastgøringspunkt på det pågældende spær.
- De ovennævnte regler gælder for karakteristiske afstande mellem spærene på mellem 700 mm og 900 mm.
- Ved standardfastgøringen op til en snebelastning (SL) ifølge tabel må der maks. holdes 1 spær fri mellem fastgøringspunkterne. Ved fastgøring med ekstra støtter op snebelastning (HL) ifølge tabel må der ikke være nogen frie spær mellem fastgøringspunkterne.
- Udhæng for bæreskinen over det yderste fastgøringspunkt ved SL N/L montering maks. 525 mm, og maks. 425 mm for HL N/L installation.









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