

COBRA AK / Evo X

Aufdachmontage (mehrrichtig)
Montage sur toit (plusieurs rangs)
Installazione sul tetto (multiseriate)
Installation on roof (multiple-row)



Montageanleitung
Instructions de montage
Istruzioni di montaggio
Installation instructions

! WARNING

Absturzgefahr
Ungesichertes Arbeiten auf Dachflächen ist lebensgefährlich.
Sichern sie sich und ihr gesamtes Arbeitsumfeld normengerecht!

Montagearbeiten dürfen nur durch ausgebildetes Fachpersonal ausgeführt werden.

Für Montagearbeiten auf der gesamten Baustelle sind die Sicherheitsbestimmungen der SUVA zwingend einzuhalten.

Detaillierte Informationen dazu erhalten Sie unter www.suva.ch oder unter Telefon 0848 83 08 30. Suva, Fluhmattstrasse 1, 6002 Luzern

Ist eine Montagehilfe der Firma SOLTOP Energie AG vor Ort, sind den Anweisungen dieser Person zwingend Folge zu leisten.

Das gesamte Kollektorfeld muss wenn vorhanden, an die Blitzschutzanlage des Hauses angeschlossen werden.

Die Kollektoren dürfen nicht bei intensiven Sonnenschein befüllt werden.

max. Betriebsdruck: 6.0 bar (g)
zulässige Schneelast: 100 kg/m²
zulässige Windlast: 130 kg/m²
Stagnations-Temperatur: 195° C

! AVERTISSEMENT

Risque de chute
Les travaux non sécurisés sur toitures plates présentent un danger de mort.
Protégez-vous, ainsi que tout votre environnement de travail conformément aux normes!

Les travaux de montage doivent être exécutés uniquement par un personnel spécialisé formé.

Pour les travaux de montage sur tout le chantier, les consignes de sécurité de la SUVA doivent être impérativement respectées.

Vous trouverez de plus amples informations à ce sujet en consultant le site www.suva.ch ou en appelant au numéro de téléphone 0848 83 08 30. Suva Fluhmattstrasse 1, 6002 Lucerne

Si un assistant de montage de la société SOLTOP Energie AG se trouve sur place, il faut impérativement suivre les instructions de cette personne.

Si la maison est équipée d'un système de parafoudre, tous les capteurs doivent y être connectés.

Ne pas remplir les capteurs quand le soleil brille intensément.

Pressione di esercizio max.: 6.0 bars (g)
Carico di neve ammissibile: 100 kg/m²
Carico dovuto al vento ammissibile: 130 kg/m²
Temperatura di stagnation: 195° C

! ATTENTIONE

Pericolo di caduta
Chi lavora sui tetti senza applicare i dispositivi di sicurezza corre un pericolo mortale.
Applicate i dispositivi di sicurezza secondo le norme per voi e per il vostro ambiente lavorativo!

Il lavori di montaggio possono essere eseguiti unicamente da personale specializzato e qualificato!

Per le operazioni di montaggio in tutto il cantiere si devono assolutamente rispettare le disposizioni di sicurezza SUVA.

Informazioni dettagliate in proposito al sito www.suva.ch o telefonando al numero 0848 83 08 30. Suva, Fluhmattstrasse 1, 6002 Lucerna

Se sul posto è presente un assistente al montaggio della SOLTOP Energie AG, si devono assolutamente rispettare le istruzioni di questa persona.

Tutto il campo di collettori deve essere collegato all'impianto parafulmini della casa, se presente.

I collettori non devono essere riempiti in caso di forte irraggiamento solare.

Pressione di esercizio max.: 6.0 bar (g)
Carico di neve consentito: 100 kg/m²
Carico dovuto al vento consentito: 130 kg/m²
Ristagno di temperatura: 195° C

! WARNING

Danger! Risk of Falling
Unsecured work on roof surfaces is extremely dangerous.
Protect yourself and make sure that your entire working space is safe.
Follow guidelines.

Assembly work may only be carried out by trained specialised staff.

Compliance with SUVA safety regulations is mandatory for all installation work anywhere on the building site.

You can obtain detailed information at www.suva.ch or by calling 0848 83 08 30. Suva Fluhmattstrasse 1, 6002 Lucerne

If an installation technician from SOLTOP Energie AG is on location, his instructions must be complied with.

If the building has a lightning protection system, the entire collector field must be connected to it.

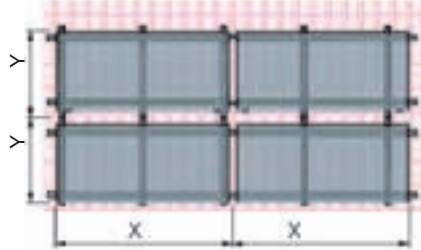
The collectors cannot be filled during intense sunlight.

Max. operating pressure: 6.0 bar (g)

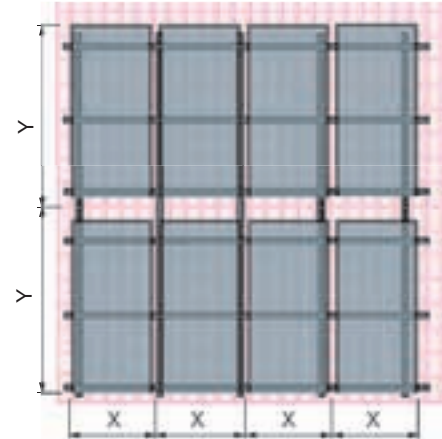
Maximum snow load: 100 kg/m²
Maximum wind load: 130 kg/m²
Stagnation temperature: 195° C



min. 20°
max. 90°

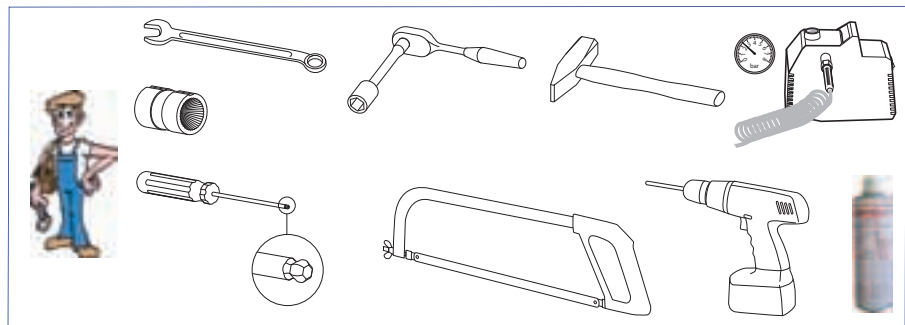
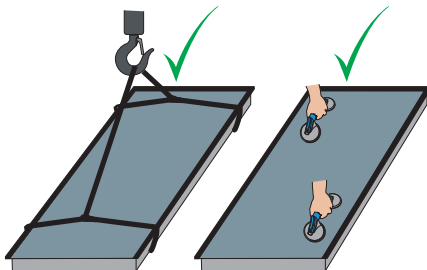
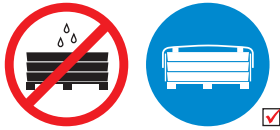
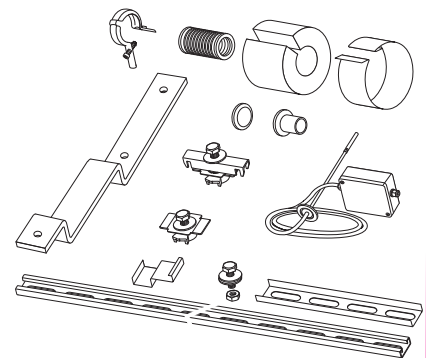
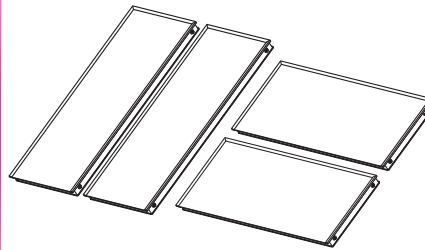


H



V

Typ		X	Y		
		cm	cm	kg	
	COBRA AK	2.2V	121	193	38
	COBRA AK	2.8V	121	240	47
	COBRA Evo X	2.8V	121	240	49
	COBRA AK	2.3H	239	100	41
	COBRA AK	2.8H	239	122	48
	COBRA Evo X	2.8H	239	122	51



deutsch

Wartung/ Pflege

SOLTOP Hochleistungskollektoren sind selbstreinigend, befreien Sie diese nicht von Schnee und anderen Umwelteinflüssen. Bei Störungen am SOLTOP Solarsystem wenden Sie sich bitte an den SOLTOP Service.

Füllmedium

0–1000 m ü. M 38% Antifrogen L₂O
1001–2500 m ü. M 50% Antifrogen L₂O
Giftklassenfrei. 38% ± -20°C, 50% ± -40°C

Entsorgung

Alle Baustoffe welche in den SOLTOP Hochleistungskollektoren verbaut sind, sind fachgerecht zu entsorgen, dem Umweltschutz ist Rechnung zu tragen.

français

Entretien / soins

Les capteurs à haute performance SOLTOP sont autonettoyants. Il n'est pas nécessaire d'éliminer une éventuelle charge de neige ou de les protéger d'autres influences environnementales. En cas de dysfonctionnement du système solaire SOLTOP, veuillez vous adresser au Service SOLTOP.

Fluide

0–1000 m ü. M 38% Antifrogen L₂O
1001–2500 m ü. M 50% Antifrogen L₂O
Non-toxiques. 38% ± -20°C, 50% ± -40°C

Elimination

Tous les matériaux de constructions utilisés dans les capteurs à haute performance SOLTOP doivent être éliminés dans les règles de l'art afin de tenir compte de l'environnement.

italiano

Manutenzione / cura

I collettori SOLTOP ad alto rendimento sono autopulenti e non vanno liberati da neve ed altri agenti atmosferici. In caso di anomalie al sistema solare SOLTOP, rivolgersi al servizio assistenza SOLTOP.

Fluido

0–1000 m ü. M 38% Antifrogen L₂O
1001–2500 m ü. M 50% Antifrogen L₂O
Non tossico. 38% ± -20°C, 50% ± -40°C

Smaltimento

Tutti i materiali utilizzati nei collettori SOLTOP ad alto rendimento devono essere smaltiti a regola d'arte tenendo conto della tutela dell'ambiente.

english

Maintenance / care

SOLTOP high performance collectors are self-cleaning; do not remove snow or other such substances from them. Please contact SOLTOP Service if you experience any difficulties with your SOLTOP Solarsystem.

Fluid

0–1000 m ü. M 38% Antifrogen L₂O
1001–2500 m ü. M 50% Antifrogen L₂O
Non-toxic. 38% ± -20°C, 50% ± -40°C

Disposal

All materials present within SOLTOP high performance collectors are to be disposed of properly in accordance with environmental protection considerations.

Aufdachmontage / Montage sur toit / Installazione sul tetto / Installation on roof

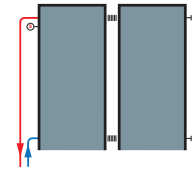
Einreihige Anordnung, bis 8 m² Absorberfläche.

Arrangement de la ligne, juque' 8 m² Surface de l'absorbeur.

Disposizione in fila, fina 8 m² Superficie di assorbimento.

Row arrangement, until 8 m² Absorber area.

≤ 8 m²



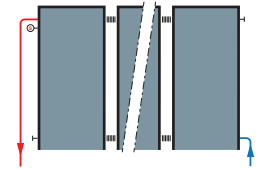
Einreihige Anordnung, grösser als 8 m² Absorberfläche.

Arrangement de la ligne supérieure à 8 m² Surface de l'absorbeur.

Disposizione in fila, maggiore di 8 m² Superficie di assorbimento.

Row arrangement, greater than 8 m² Absorber area..

> 8 m²

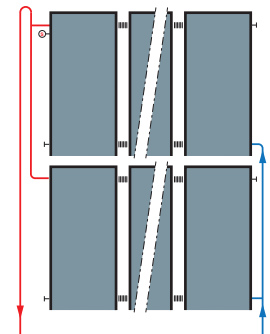
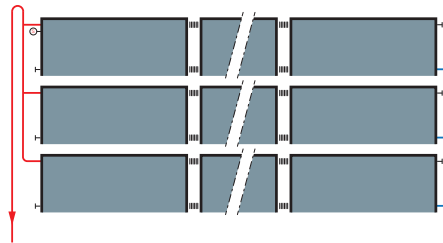


Mehreihige Anordnung

Disposition en séries.

Disposizione in serie.

Multiple rows.



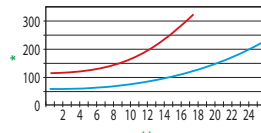
Druckverlusttabelle

Graphique perte de pression

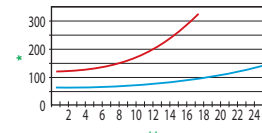
Perdita di pressione grafico

Pressure loss chart

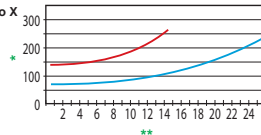
COBRA AK 2.3H



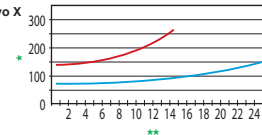
COBRA AK 2.2V



COBRA AK / Evo X 2.8H



COBRA AK / Evo X 2.8V



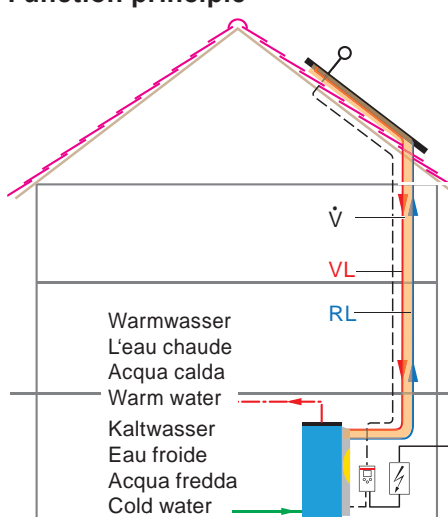
- d *mbar gesamt
 - **Kollektoren pro Reihe
 - f *total mbar
 - **Collectionneurs par ligne
 - i *totale mbar
 - **Collezionisti per fila
 - e *mbar total
 - **Collectors per row
- 30l/m²h — 15l/m²h

Funktionsprinzip

Principe de fonctionnement

Principio di funzionamento

Function principle



Solarkollektoren / Les capteurs solaires
Collettori solari / Solar collectors

Solarleitungen / Lignes solaire
Condotte solari / Solar pipes

Steuerung / Pilotage / Comando / Control

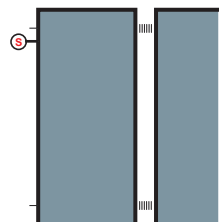
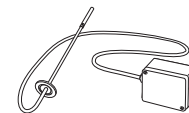
Solarspeicher / Stockage de solaire
Boiler solare / Solar storage

Kollektorfühler

Sonde de collecteur

Sonda collettore

Collector sensor



\dot{v}

Low-Flow = 15l/h m²

High-Flow = 30l/h m²

Swimming-Pool = 40l/h m²

VL (v = max. 1.5 m/s)

Vorlauf

Marche en avant

Avanzamento rapido Flow

RL v = max. 1.5 m/s)

Rücklauf

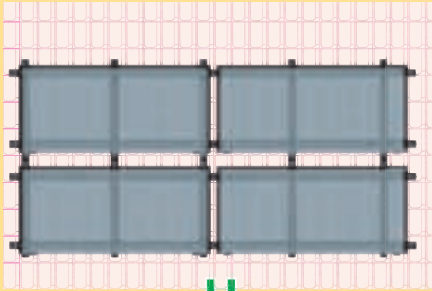
Reflux

Riflusso

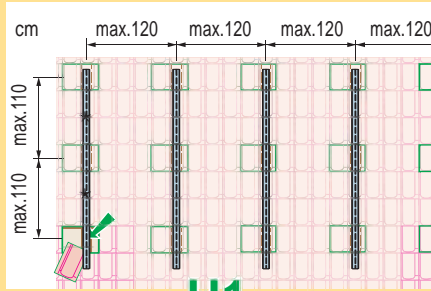
Return



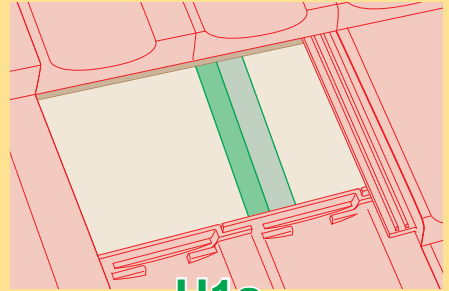
Serie: AK 011-7S2296 F
Evo X 011-7S1870 F



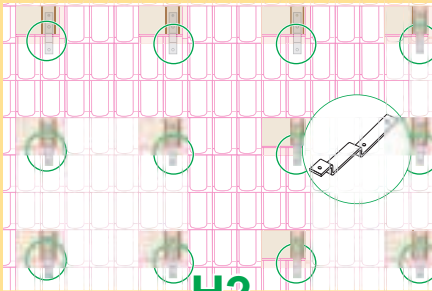
H



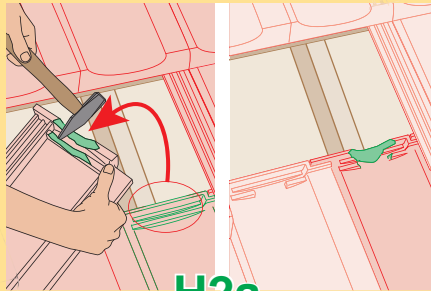
H1



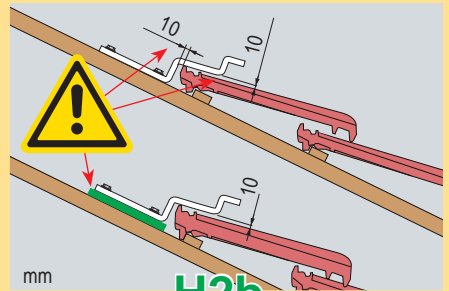
H1a



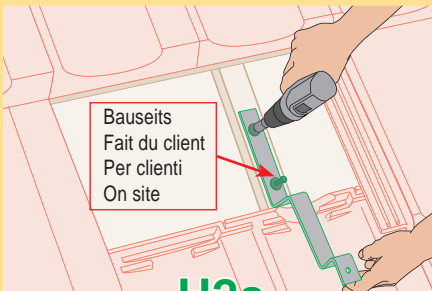
H2



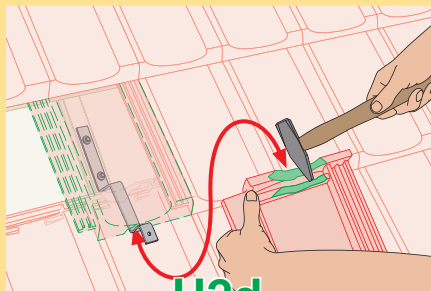
H2a



H2b



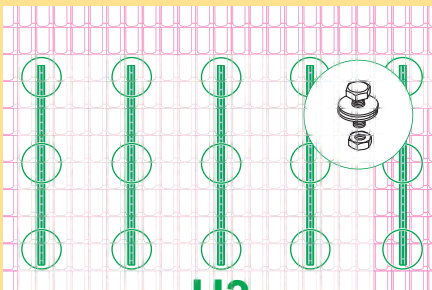
H2c



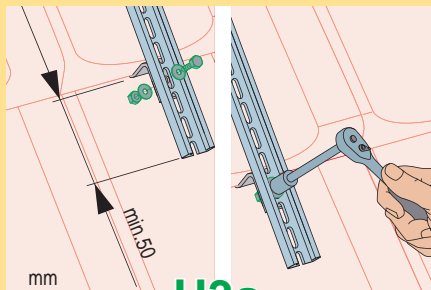
H2d



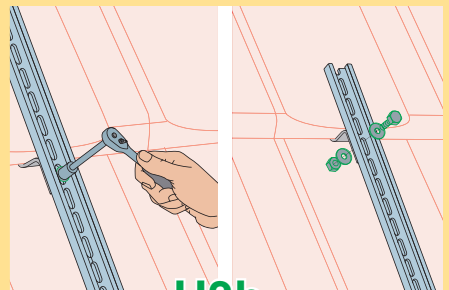
H2e



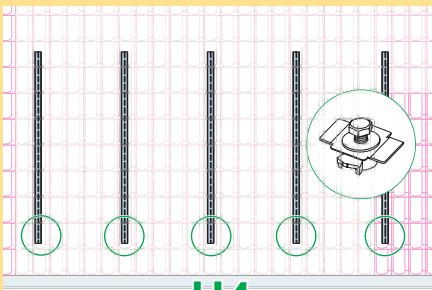
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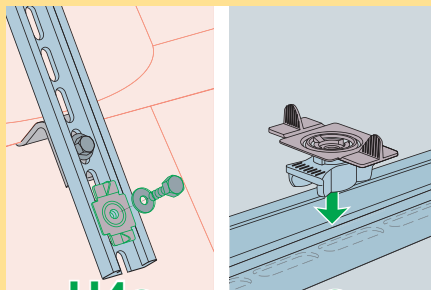
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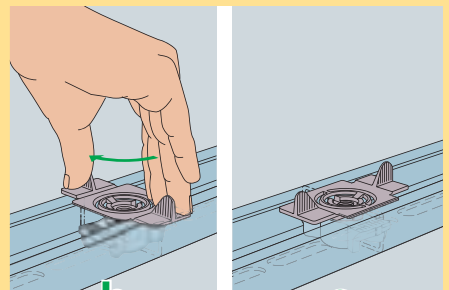
H3b



H4

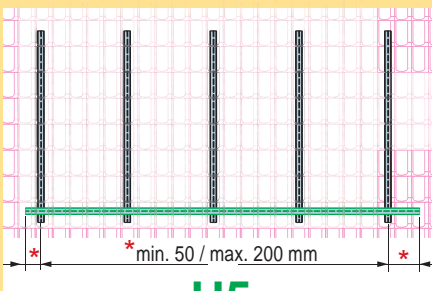


H4a

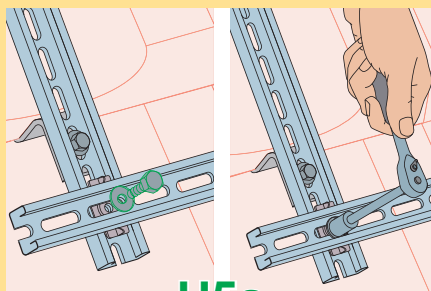


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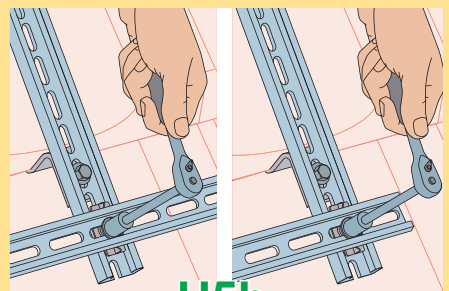
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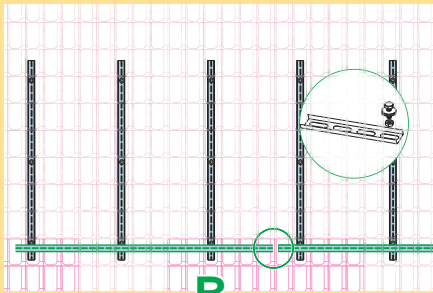
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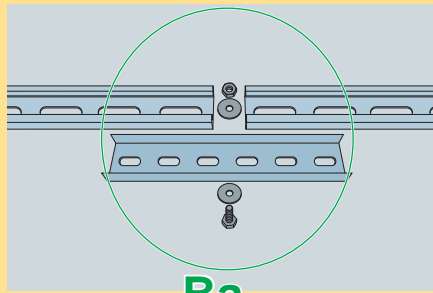
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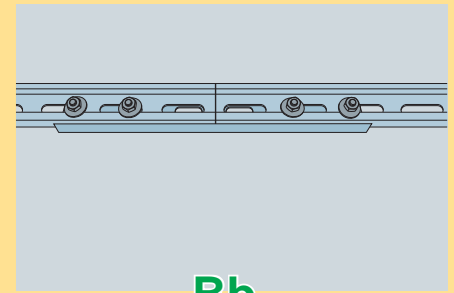
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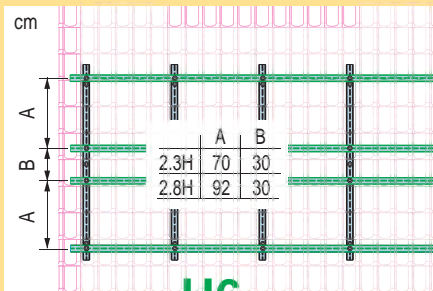
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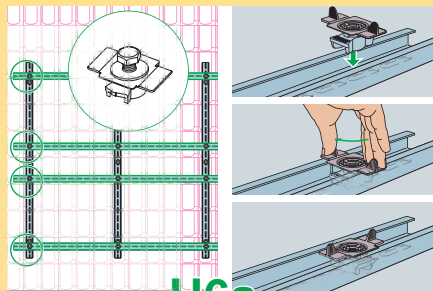
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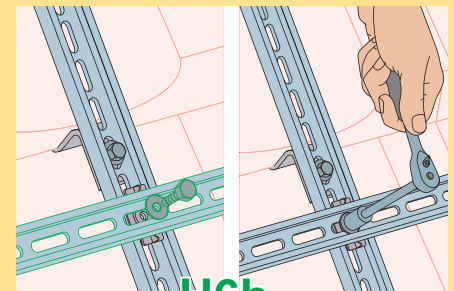
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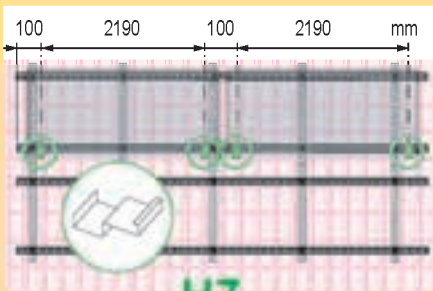
H6



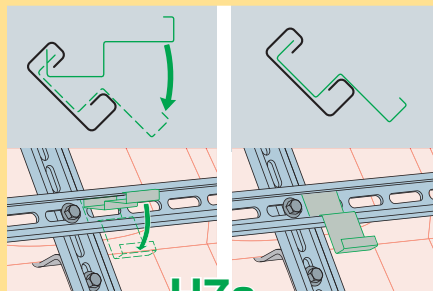
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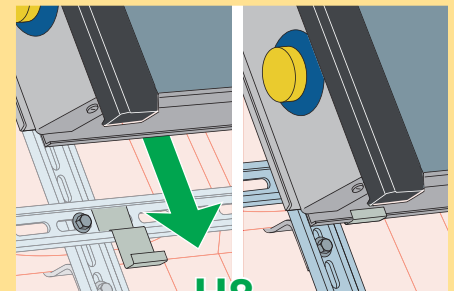
H6b



H7



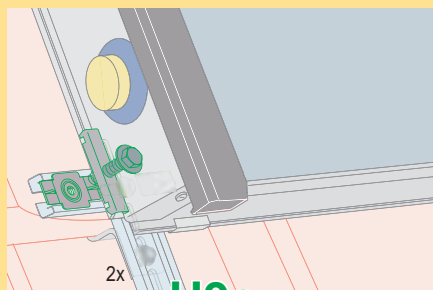
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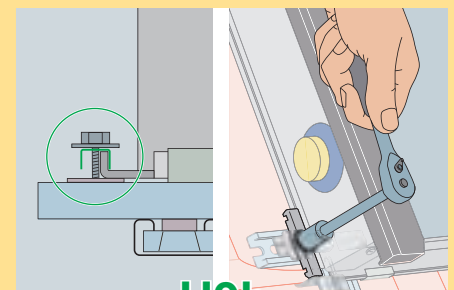
H8



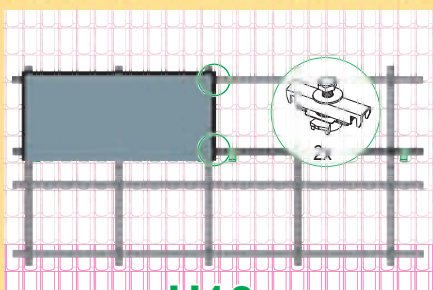
H9



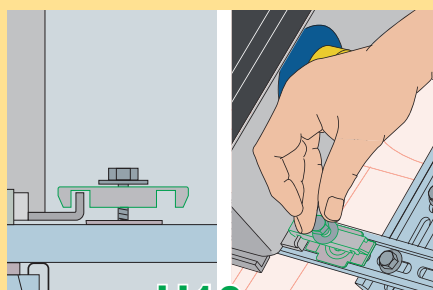
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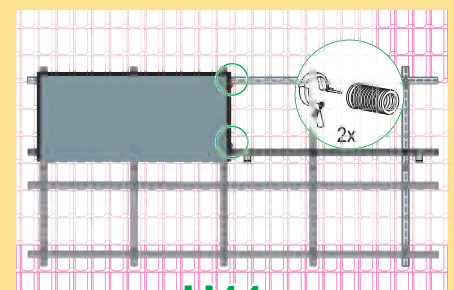
H9b



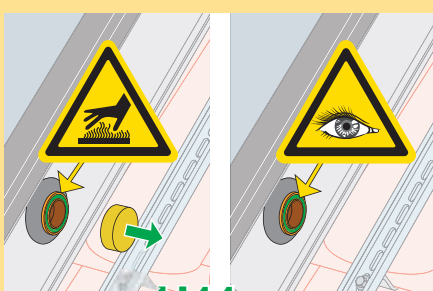
H10



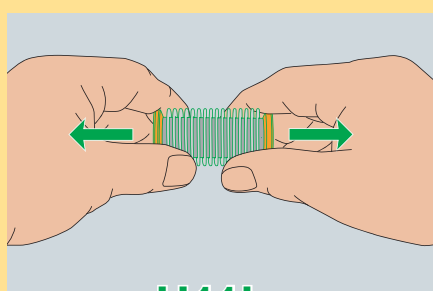
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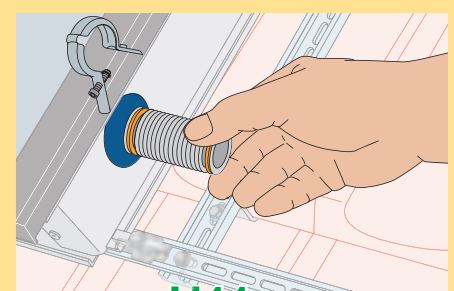
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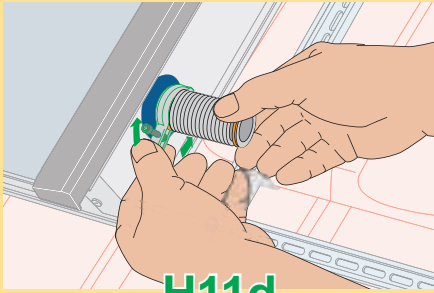
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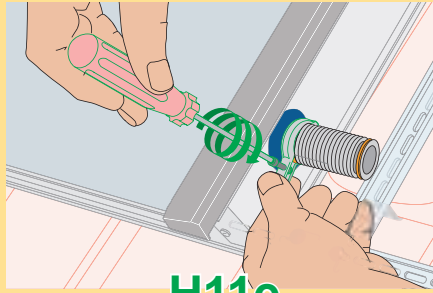
H11b



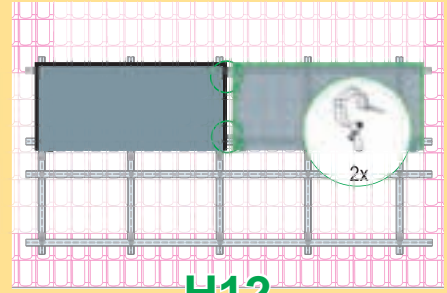
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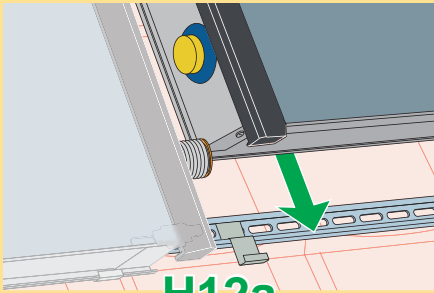
H11d



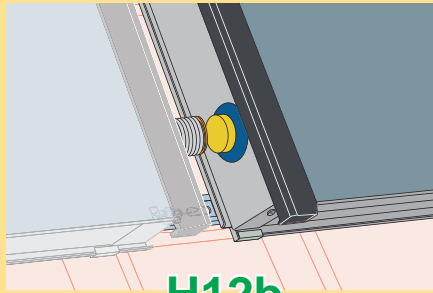
H11e



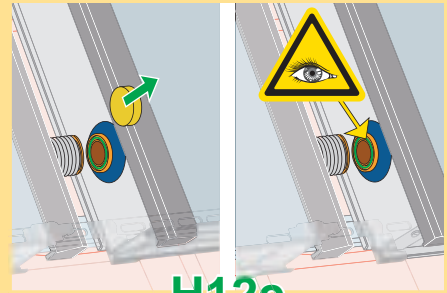
H12



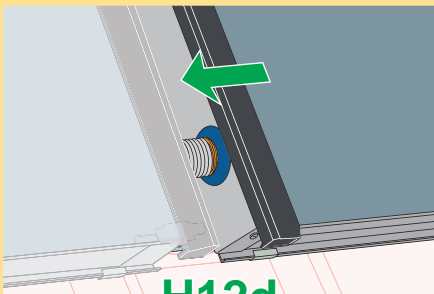
H12a



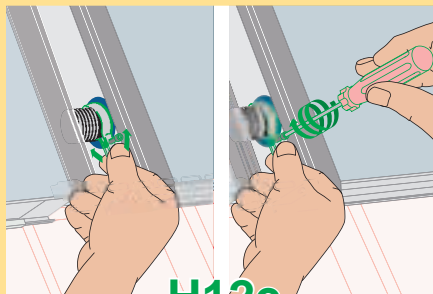
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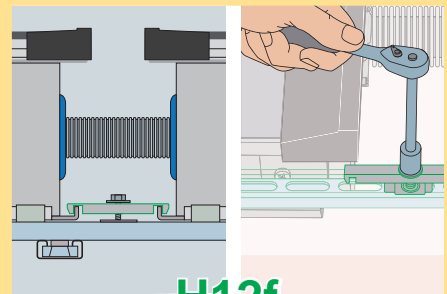
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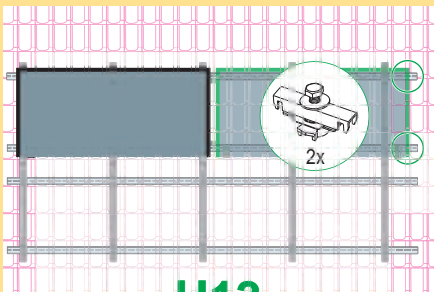
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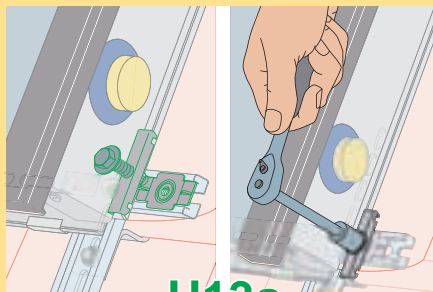
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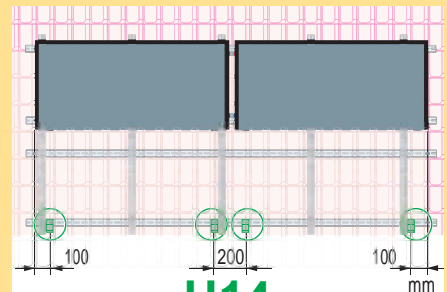
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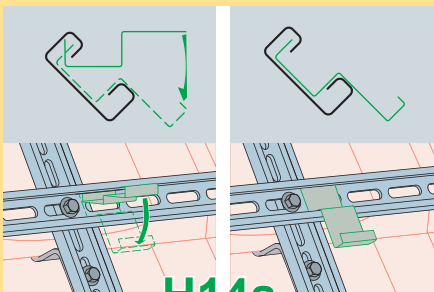
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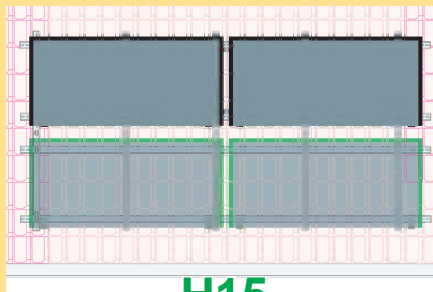
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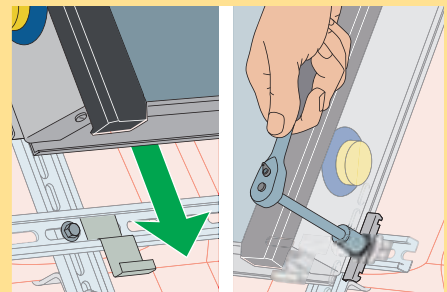
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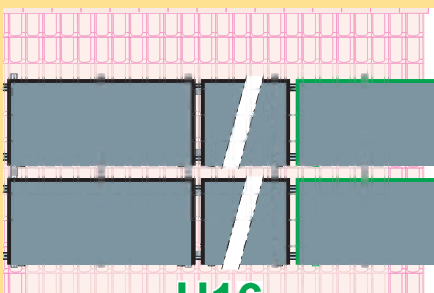
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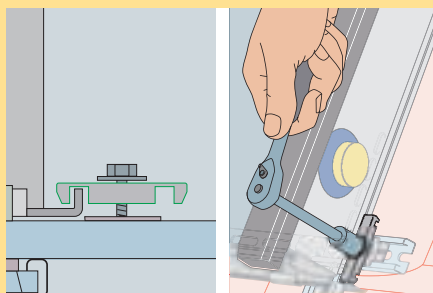
H15



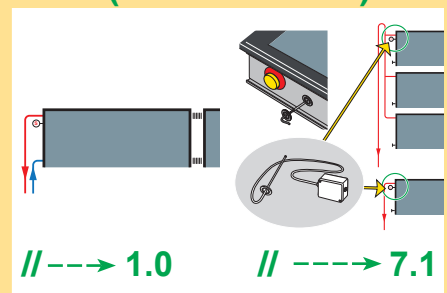
(H9a--->H13a)



H16

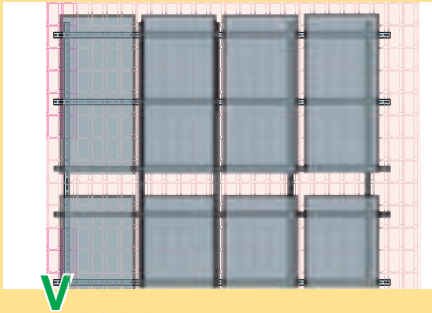


(H10----->H13a)

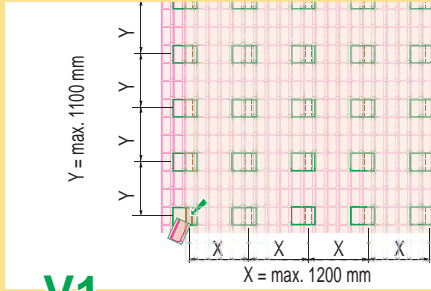


//---> 1.0

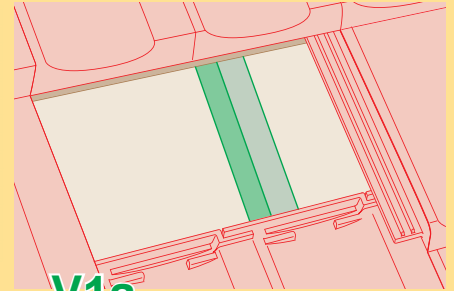
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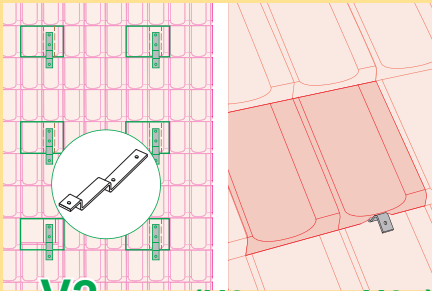
V



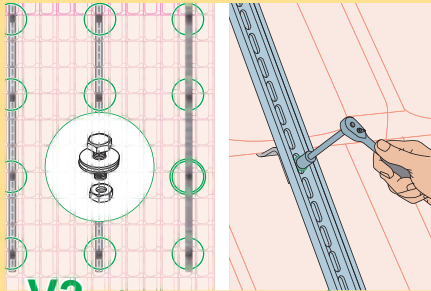
V1



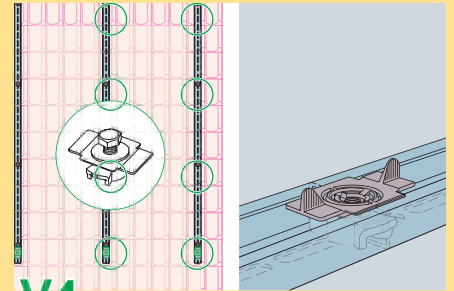
V1a



V2 (H2 -----> H2e)



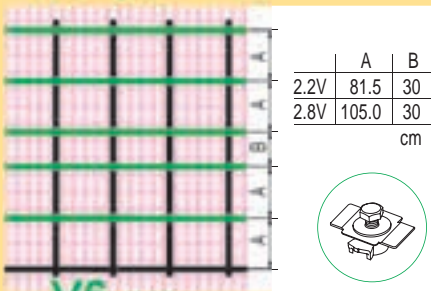
V3 (H3 -----> H3b)



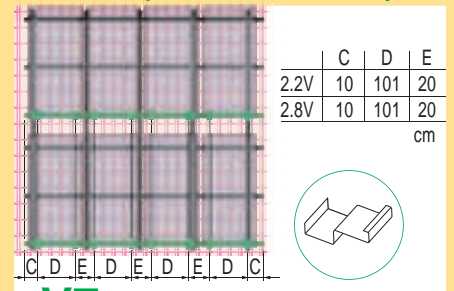
V4 (H4 -----> H4c)



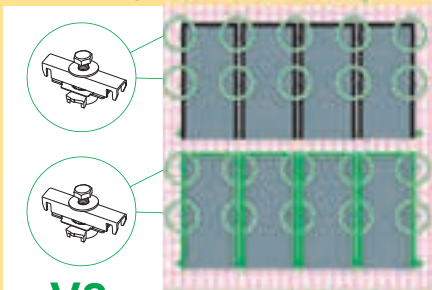
V5 (H5a ----> H6b)



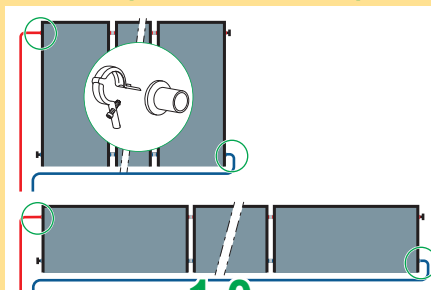
V6 (H6a ----> H6b)



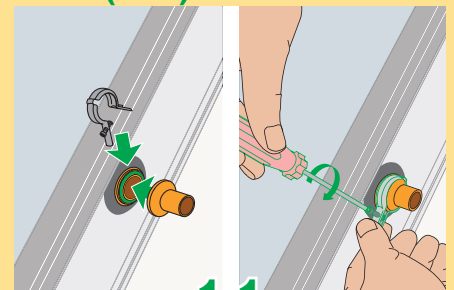
V7 (H7a)



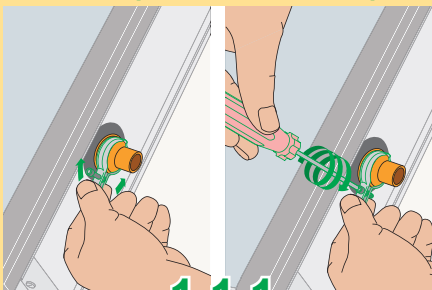
V8 (H7a ----> H13a)



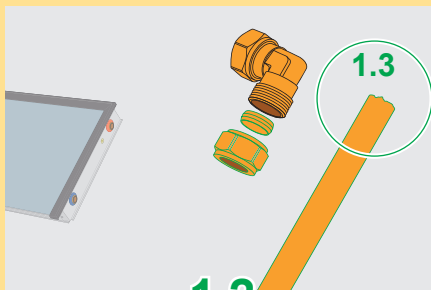
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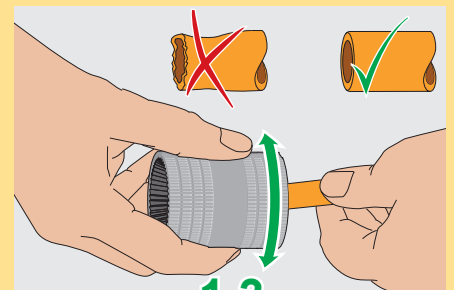
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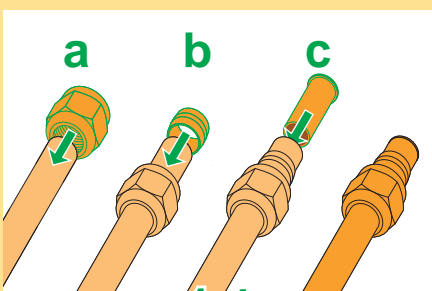
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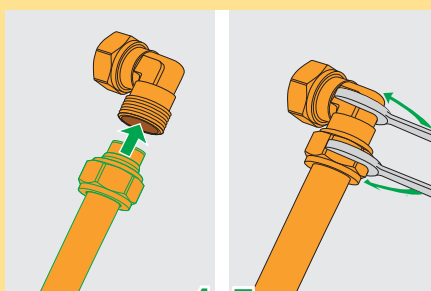
1.2



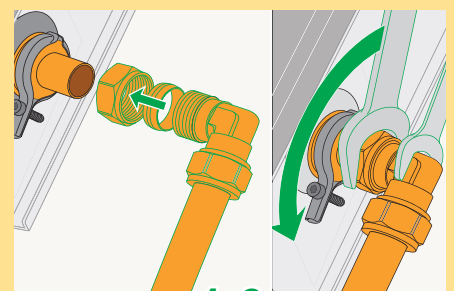
1.3



1.4



1.5



1.6

