



# **7one** 7 Benefits one collector

# 7one Agenda

- 7one Product Benefits
- 7one Collector Specification
  - Efficiency
  - Design
  - Application and Mounting
- 7one Packaging
- 7one Fastening (SS,DB, In-Roof)
- 7one Part Matrix for Installation
- 7one Set Configuration
- 7one Further Customer Advantages

# 7one Collector Specification

Technical data	Collector type FK 8203	Collector type FK 8253
Collector type	Frame collector	
Overall area [m²]	2.02	2.51
Absorber area [m²]	1.84	2.31
Aperture area [m²]	1.84	2.31
L x W x H [mm]	1730 x 1170 x 83	2150 x 1170 x 83
Weight [kg]	35	38
Absorber capacity [l]	1.56	1.77
Housing	Al-frame	
Surface	Al, natural	
Back plate	Al-sheet	
Absorber sheet	Al, highly selectively coated	
Absorption [%]	95	
Emission [%]	5	
Ø manifold [mm]	22	
Ø risers [mm]	8	
Connections	4 x blank (compression joint)	
Glass	3.2 mm tempered solar safety glass - black-frame design	
Transmittance of glass [%]	90	
Insulation	40 mm mineral wool plate	
Max. stagnation temperature	192 °C under norm conditions	
Max. operating pressure	10 bar	
Proper heat transfer medium	Polypropylene glycol / water mixture	
Approved installation angle	min. 15, max. 75°	
Standard packaging	single packed, 8 collectors vertical	

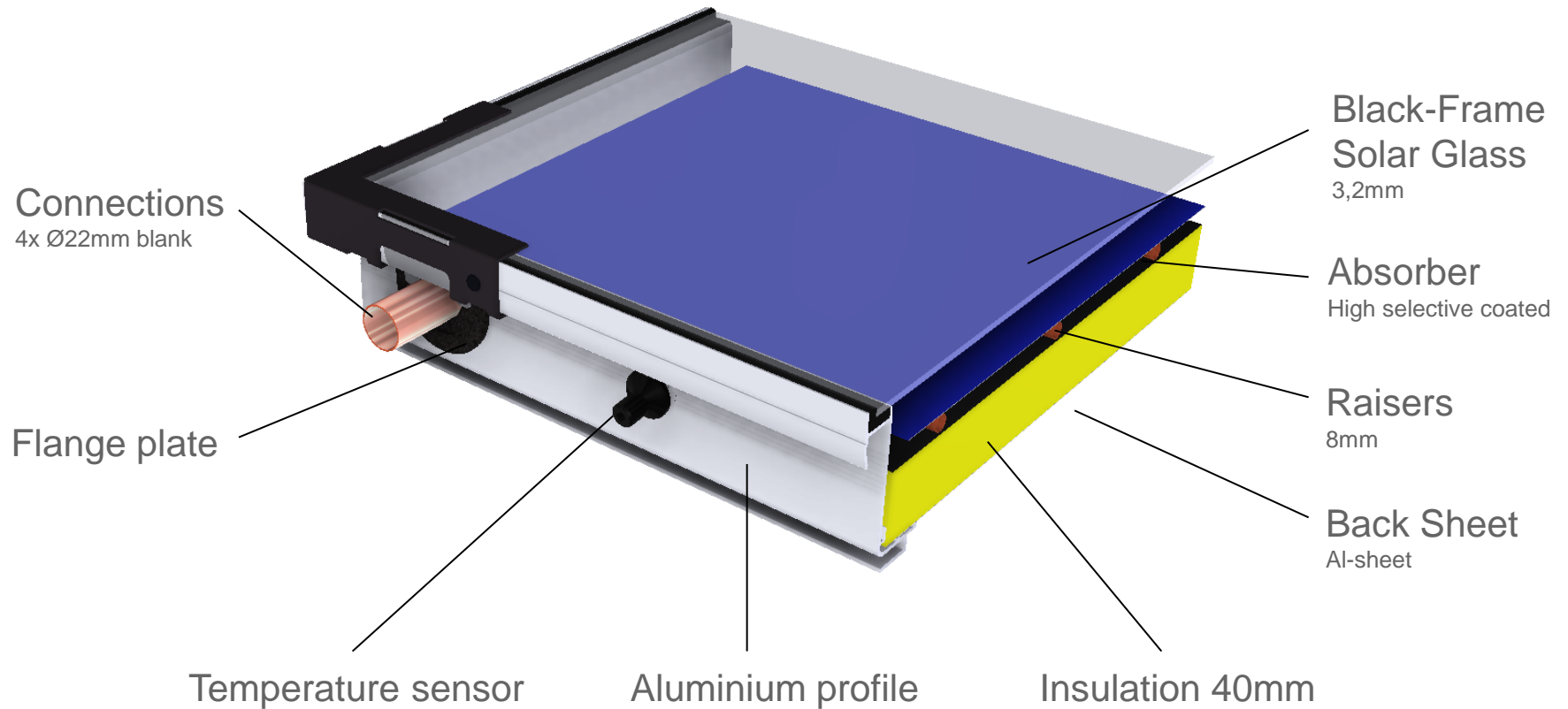


# 7one Product Benefits

- Unique visual appeal
- Excellent value for money
  - intelligent product design
- Mounting options – up to 6 collectors in a row
  - On-roof
  - Flat roof
  - In-roof
- Collector mounting vertical and horizontal
- Intelligent mounting concept – fastest possible installation times
- Maximum precision - manufacturing on a robot-controlled production line
- Solar Keymark Certificate + 10 years warranty



# 7one Collector Specification



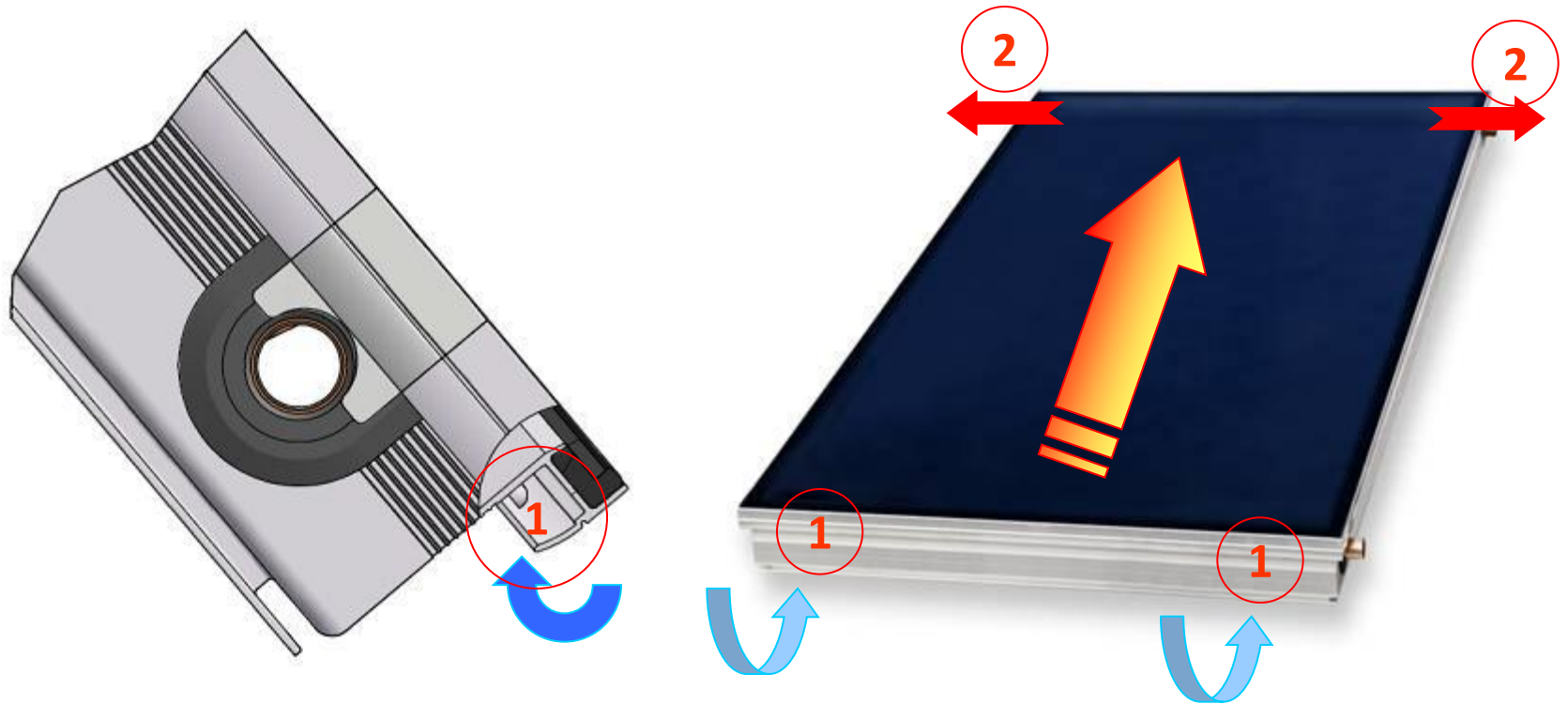
# 7one New Collector Design

- Unique visual appeal
  - Black-frame solar glass
  - Wave design
  - No glass cover strips necessary



- Minimum distance between collectors (only 55 mm)
- Perfect handling during mounting

# 7one Ventilation Concept



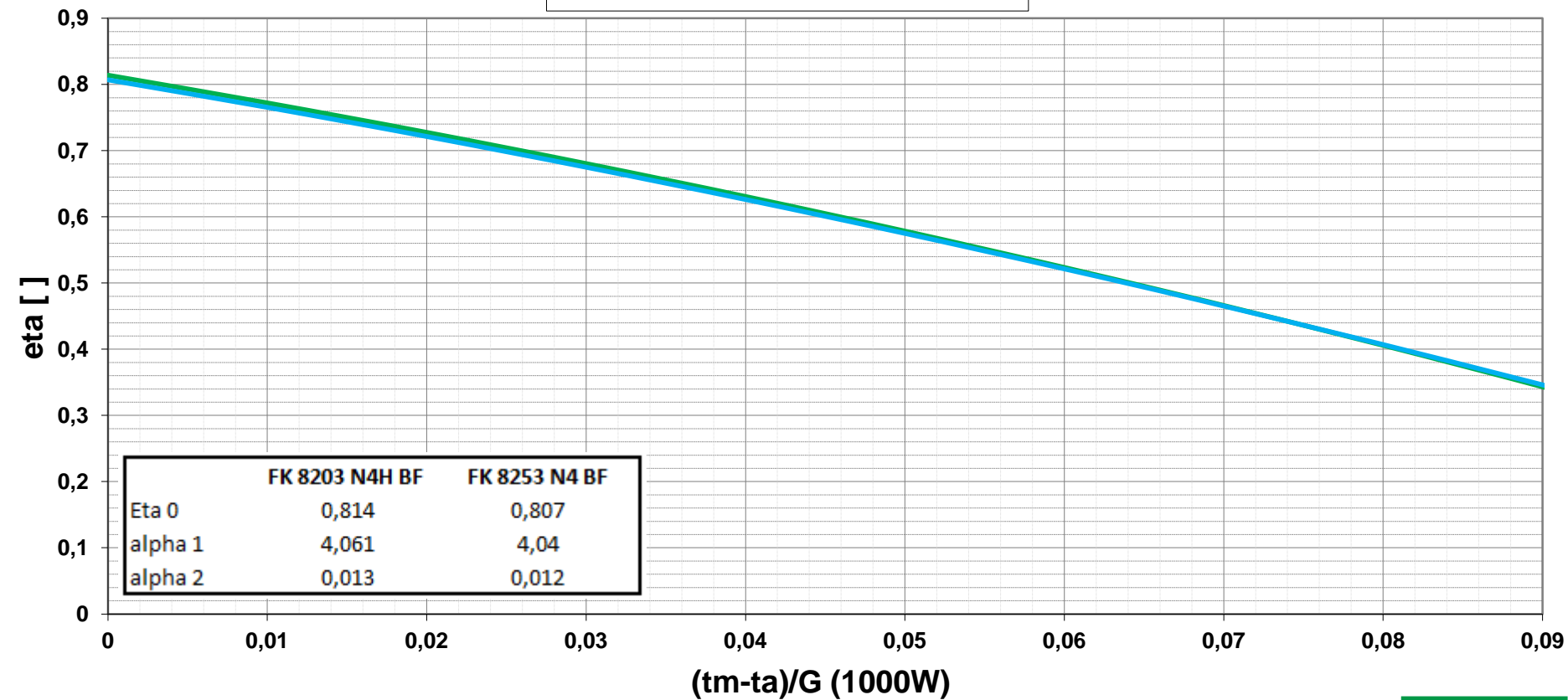
## Ventilation Concept:

1. Ventilation opening at the bottom (2x) based on stamp-punching in the frame
2. Ventilation opening on the top via flange plate

# 7one Efficiency Data

efficiency curves  
(apertur m<sup>2</sup>)

FK 8203 N4H BF    FK 8253 N4 BF





# 7one Collector Application



## Flat Roof

Mounting:

45 °

vertical/horizontal



## On-Roof

Mounting:

min. 15° - 75°

vertical/horizontal



## In-Roof

Mounting:

min. 15° - 75°

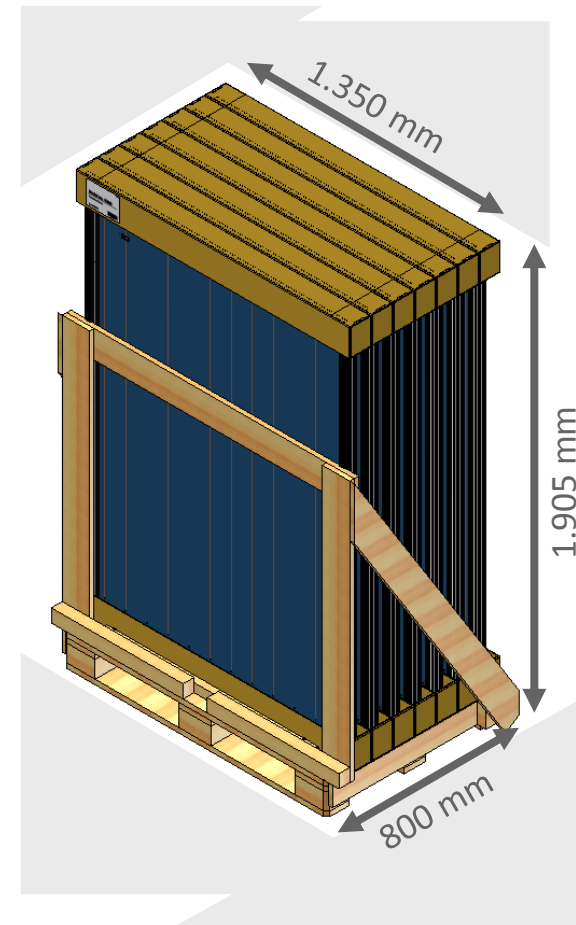
**vertical; single and  
parallel row**

# 7one Packaging

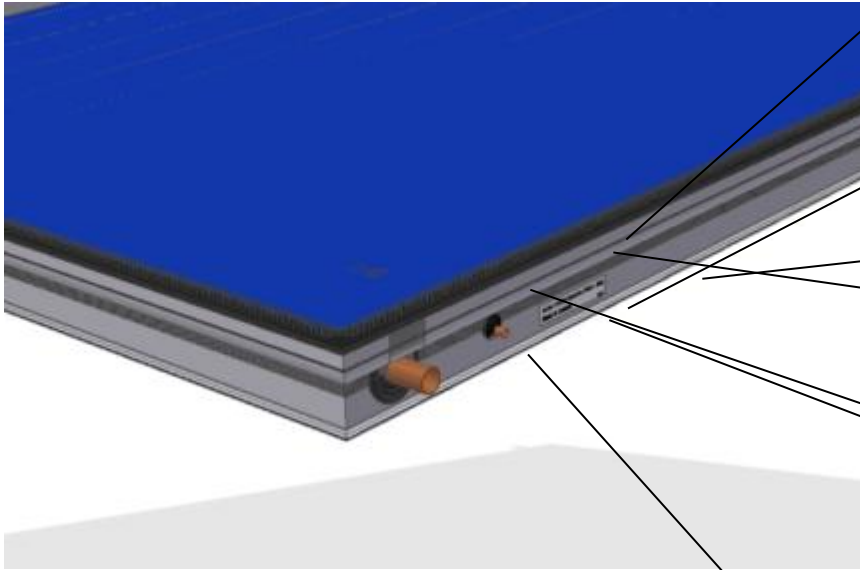
- Packaging Concept - VS7:
  - 7 pcs. per Euro-Pallet
  - standing single packed (carton + shrink foil)
  - Collectors with stretch foil fixed on pallet
  - Single picking possible (rest of collectors are fixed by stretch foil)



- Order Quantities:
  - Minimum order quantity: 6 palletts/42 collectors
  - Maximum full-truck load: 30 palletts/210 collectors



# 7one Customer Specific Labelling



## ***GREENoneTEC Information***

**Art-No.: 110875.1 / Serial No.: 10/05 - 328**  
**Made in Austria**

6903034.1

## ***Customer Specific Information***



## ***Customer Logo***

6903038.1


**Product name Customer**  
**Flat plate collector**

**Art-No.: 130761.1**  
**Serial No.: 0009**

Ag = 2,02 m<sup>2</sup>      t<sub>stg</sub> = 234 °C  
V<sub>F</sub> = 1,56 l      p<sub>max</sub> = 10 bar  
m = 35 kg  
l x b x h = 1,73 x 1,17 x 0,83 m

**Made in Austria**

# 7one Befestigungsvarianten

			
<b>Mounting</b>	<b>Flat Roof</b>	<b>On-Roof</b>	<b>In-Roof</b>
<b>Mounting Set</b>	SS45	DB0 / SS0	Metal sheet flashing
<b>Orientation</b>	vertical / horizontal	vertical / horizontal	vertical single and parallel row
<b>Roof tiles</b>		<ul style="list-style-type: none"> <li>■ Clay roofing tile (DB)</li> <li>■ Crown tile (DB)</li> <li>■ Slate (SS)</li> <li>■ Wave cement asbestos (SS)</li> <li>■ Metal Sheet (SS)</li> </ul>	Clay roofing tile up to 50mm

# 7one Installation Sets Matrix – 2sqm

## FK8203

2.0 m2		FK8203N 4H (2sqm) - vertical (portrait) mounting				
GoT Name	Detailed description	2x collector	3 collector	4 collector	5 collector	6 collector
FK8203N 4H	Solar thermal collector	2	3	4	5	6
Required mounting levels for STANDARD Load (see installation manual)		3	4	5	6	7
TRPN1	Support rail for 1 collector portrait		1		1	
TRPN2	Support rail for 2 collector portrait	1	1	2	2	3
TRPL1	Support rail for 1 collector horizontal					
VS	Support rail connecting bracket set		1	1	2	2
DB0N2	Roof bracket (hook) set for 2 panel installation	1	1	1	1	1
DB0N1	Roof bracket (hook) extension set		1	2	3	4
DB0L1	Roof bracket set for landscape mounting					
DB0L1 ES	Roof bracket extension set for landscape mounting					
SS0N2	Bold screw basic set	1	1	1	1	1
SS0N1	Bold screw extension set		1	2	3	4
SS0L1	Bold screw set for landscape mounting					
SS0L1 ES	Bold screw extension set for landscape mounting					
SS45N2	Bold screw A-frame 45 degree basic set	1	1	1	1	1
SS45N1	Bold screw A-frame 45 degree extension set		1	2	3	4
SS45L1	Bold screw A-frame 45 degree set for landscape mounting					
SS45L1 ES	Bold screw A-frame 45 degree extension set for landscape mounting					
Fittings						
RE	Roof entering set (2x 700mm flexible pipes with insulation)	1	1	1	1	1
GS	Compression basic set for 2 panels	1	1	1	1	1
ES	Compression extension set		1	2	3	4
GS landscape	Compression basic set for landscape mounting (1x Insulated corrugated tube; length 390 mm)					
ES landscape	Compression extension set for landscape mounting (1x Insulated corrugated tube; length 390 mm)					
Flashing sets - for vertical (portrait mounting only)						
BS	Flashing basic set for 2 panels	1	1	1	1	1
ES	Flashing extension set		1	2	3	4

FK8203N 4H (2sqm) - horizontal (landscape) mounting					
1x collector	2x collector	3 collector	4 collector	5 collector	6 collector
1	2	3	4	5	6
2	3	4	7	8	10
1	2	3	4	5	6
	1	2	3	4	5
1	1	1	1	1	1
	1	2	3	4	5
1	1	1	1	1	1
	1	2	3	4	5
1	1	1	1	1	1
	1	2	3	4	5
1	1	1	1	1	1
1		1	2	3	4

# 7one Installation Sets Matrix – 2.5sqm

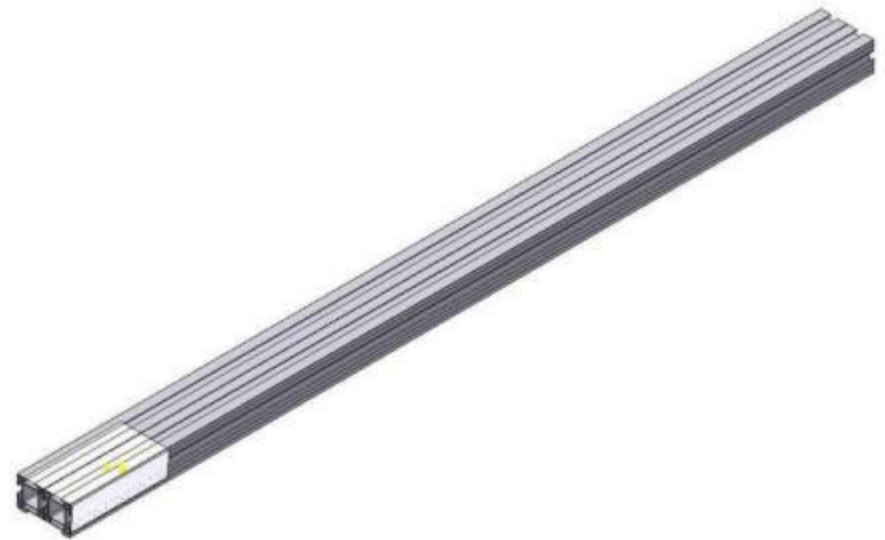
## FK8253

2.5 m2		FK8253N 4H (2.5sqm) - vertical (portrait) mounting				
GoT Name	Detailed description	2x collector	3 collector	4 collector	5 collector	6 collector
FK8253N 4H	Solar thermal collector	2	3	4	5	6
	Required mounting levels for STANDARD Load (see installation manual)	3	4	5	6	7
TRPN1	Support rail for 1 collector portrait		1		1	
TRPN2	Support rail for 2 collector portrait	1	1	2	2	3
TRPL1	Support rail for 1 collector horizontal					
VS	Support rail connecting bracket set		1	1	2	2
DB0N2	Roof bracket (hook) set for 2 panel installation	1	1	1	1	1
DB0N1	Roof bracket (hook) extension set		1	2	3	4
DB0L1	Roof bracket set for landscape mounting					
DB0L1 ES	Roof bracket extension set for landscape mounting					
SS0N2	Bold screw basic set	1	1	1	1	1
SS0N1	Bold screw extension set		1	2	3	4
SS0L1	Bold screw set for landscape mounting					
SS0L1 ES	Bold screw extension set for landscape mounting					
SS45N2	Bold screw A-frame 45 degree basic set	1	1	1	1	1
SS45N1	Bold screw A-frame 45 degree extension set		1	2	3	4
SS45L1	Bold screw A-frame 45 degree set for landscape mounting					
SS45L1 ES	Bold screw A-frame 45 degree extension set for landscape mounting					
	<b>Fittings</b>					
RE	Roof entering set (2x 700mm flexible pipes with insulation)	1	1	1	1	1
GS	Compression basic set for 2 panels	1	1	1	1	1
ES	Compression extension set		1	2	3	4
GS landscape	Compression basic set for landscape mounting (1x Insulated corrugated tube; length 390 mm)					
ES landscape	Compression extension set for landscape mounting (1x Insulated corrugated tube; length 390 mm)					
	<b>Flashing sets - for vertical (portrait mounting only)</b>					
BS	Flashing basic set for 2 panels	1	1	1	1	1
ES	Flashing extenshin set		1	2	3	4

FK8253N 4H (2.5sqm) - horizontal (landscape) mounting					
1x collector	2x collector	3 collector	4 collector	5 collector	6 collector
1	2	3	4	5	6
2	3	4	7	8	10
1	2	3	4	5	6
	1	2	3	4	5
1	1	1	1	1	1
	1	2	3	4	5
1	1	1	1	1	1
	1	2	3	4	5
1	1	1	1	1	1
	1	2	3	4	5
1	1	1	1	1	1
		1	2	3	4

# 7one Support Rail

- **TRPN1:**  
2 x support rail vertical collector  
length fits for one collector
- **TRPN2:**  
2 x support rail vertical collector  
length fits for two collectors
- **TRPL1:**  
2 x support rail horizontal collector  
length fits for one collector

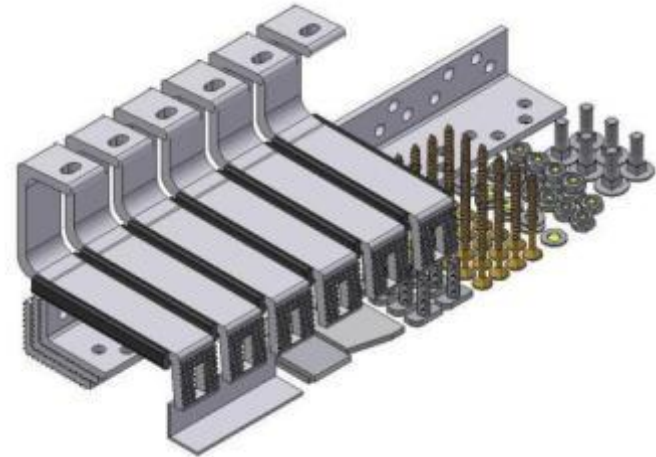




# 7one Roof Bracket 0° (DB0) vertical

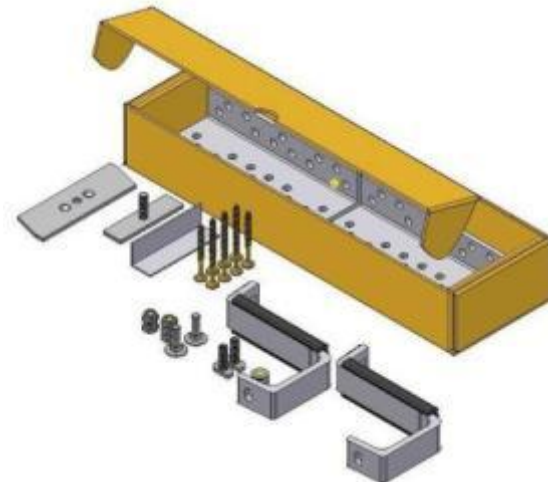
## DB0N2 (Basic Set vertical mounting):

- 6 x roof bracket (incl. lay on rubber )
  - 6 x roof bracket console
  - 24 x Self-tapping screw 6x60
  - 9 x Hammer head bolt M8x25
  - 6 x Cup square bolt M8x25
  - 9 x Washer M8
  - 13 x Hex Nut M8 (thereof 4 x self-securing)
  - 1 x Clamping Piece
  - 2 x Mounting part, top
  - 1 x Mounting jig
  - 2 x Mounting instruction
- Delivery in carton; small parts in PE-bag



## DB0N1 (Extension Set vertical mounting):

- 2 x roof bracket (incl. lay on rubber )
  - 2 x roof bracket console
  - 8 x Self-tapping screw 6x60
  - 2 x Hammer head bolt M8x25
  - 2 x Cup square bolt M8x25
  - 7 x Washer M8
  - 9 x Hex Nut M8 (thereof 4 x self-securing)
  - 1 x Clamping piece
  - 1 x Mounting part, extension
  - 1 x Mounting jig
- Delivery in carton; small parts in PE-bag





# 7one Roof Bracket 0° (DB0) horizontal

## DB0L1 (Basic Set horizontal mounting):

- 4 x roof bracket (incl. lay on rubber )
- 4 x roof bracket console
- 16 x Self-tapping screw 6x60
- 6 x Hammer head bolt M8x25
- 4 x Cup square bolt M8x25
- 6 x Washer M8
- 10 x Hex Nut M8 (thereof 4 x self-securing)
- 2 x Mounting part, top
- 2 x Mounting Instruction
- Delivery in carton; small parts in PE-bag



## DB0L1 ES (Extension Set horizontal mounting):

- 4 x roof bracket (incl. lay on rubber )
- 4 x roof bracket console
- 16 x Self-tapping screw 6x60
- 4 x Hammer head bolt M8x25
- 4 x Cup square bolt M8x25
- 5 x Washer M8
- 9 x Hex Nut M8 (thereof 4 x self-securing)
- 1 x Clamping piece
- 1 x Mounting part, extension
- 1 x Mounting jig
- Delivery in carton; small parts in PE-bag



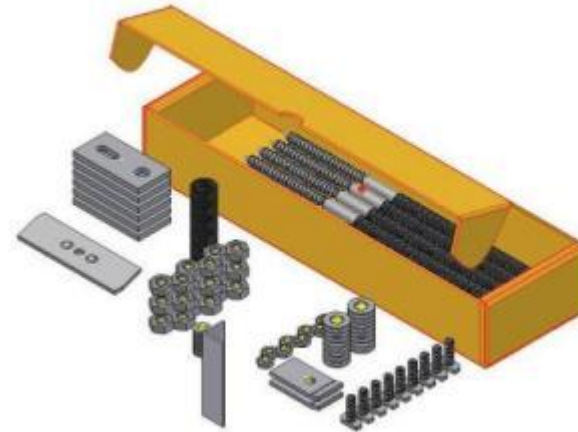
# 7one Bench Screw Set 0° (SS0) vertical

GREENoneTEC  
SOLAR COLLECTORS

1

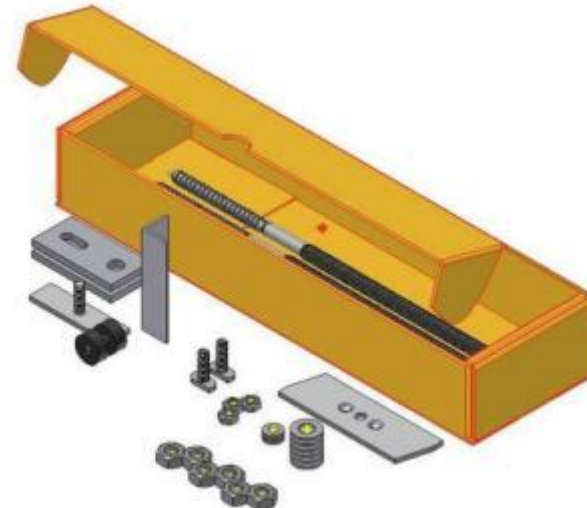
## SS0N2 (Basic Set vertical mounting):

- 6 x Bench screw M12
  - 6 x Mounting part
  - 6 x Rubber seal M12
  - 18 x Washer M12
  - 18 x Hex nut M12
  - 9 x Hammer head bolt M8x25
  - 9 x Washer M8
  - 9 x Hex nut M8
  - 1 x Clamping piece
  - 2 x Mounting part, top
  - 1 x Mounting jig
  - 2 x Mounting instruction
- Delivery in carton; small parts in PE-bag



## SS0N1 (Extension Set vertical mounting):

- 2 x Bench screw M12
  - 2 x Mounting part
  - 2 x Rubber seal M12
  - 6 x Washer M12
  - 6 x Hex nut M12
  - 2 x Hammer head bolt M8x25
  - 3 x Washer M8
  - 3 x Hex nut M8
  - 1 x Clamping piece
  - 1 x Mounting part, extension
  - 1 x Mounting jig
- Delivery in carton; small parts in PE-bag



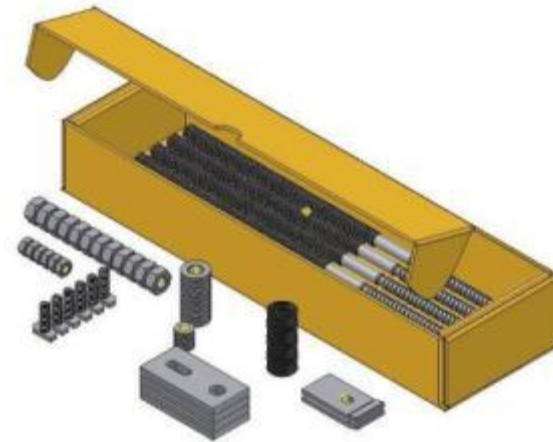
# 7one Bench Screw Set 0° (SS0) horizontal

GREENoneTEC  
SOLAR COLLECTORS

1

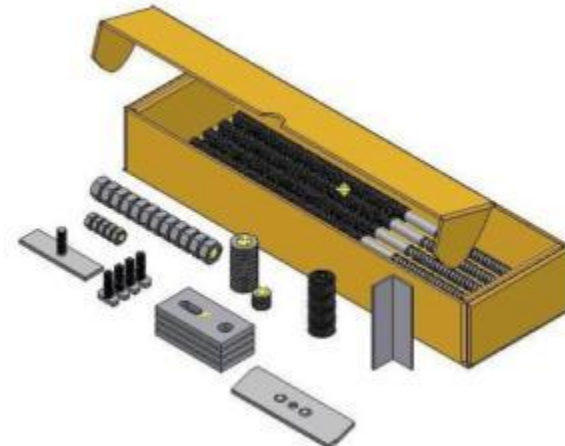
## SS0L1 (Basic Set horizontal mounting):

- 4 x Bench screw M12
  - 4 x Mounting part
  - 4 x Rubber seal M12
  - 12 x Washer M12
  - 12 x Hex nut M12
  - 6 x Hammer head bolt M8x25
  - 6 x Washer M8
  - 6 x Hex nut M8
  - 2 x Mounting part, top
  - 1 x Mounting jig
  - 2 x Mounting instruction
- Delivery in carton; small parts in PE-bag



## SS0L1 ES (Extension Set horizontal mounting):

- 4 x Bench screw
  - 4 x Mounting part
  - 4 x Rubber seal M12
  - 12 x Washer M12
  - 12 x Hex nut M12
  - 4 x Hammer head bolt M8x25
  - 5 x Washer M8
  - 5 x Hex nut M8
  - 1 x Clamping piece
  - 1 x Mounting part, extension
  - 1 x Mounting jig
- Delivery in carton; small parts in PE-bag



# 7one Bench Screw Set 45° (SS45) vertical

## SS45N2 (Basic Set vertical mounting):

- |                            |   |
|----------------------------|---|
| 3 x Base bracket           | 2 x Mounting part, top                    |
| 3 x Support bracket        | 1 x Clamping piece                        |
| 6 x Attachment bracket     | 1 x Mounting jig                          |
| 6 x Bench screw M12        | 2 x Mounting instruction                  |
| 6 x Rubber seal M12        | Delivery in carton; small parts in PE-bag |
| 18 x Washer M12            |   |
| 18 x Hex nut M12           |   |
| 9 x Hammer head bolt M8x25 |   |
| 9 x Hex bolt M8x25         |   |
| 18 x Washer M8             |   |
| 18 x Hex nut M8            |   |



## SS45N1 (Extension Set vertical mounting):

- |                            |   |
|----------------------------|---|
| 1 x Base bracket           | 1 x Clamping piece                        |
| 1 x Support bracket        | 1 x Mounting part, extension              |
| 2 x Attachment bracket     | 1 x Mounting jig                          |
| 2 x Bench screw M12        | Delivery in carton; small parts in PE-bag |
| 2 x Rubber seal M12        |   |
| 6 x Washer M12             |   |
| 6 x Hex nut M12            |   |
| 2 x Hammer head bolt M8x25 |   |
| 3 x Hex bolt M8x25         |   |
| 6 x Washer M8              |   |
| 6 x Hex Nut M8             |   |



# 7one Bench Screw Set 45° (SS45) horizontal

## SS45L1 (Basic Set horizontal mounting):

- |                            |   |
|----------------------------|---|
| 2 x Base bracket           | 2 x Mounting part, top                    |
| 2 x Support bracket        | 2 x Mounting instruction                  |
| 4 x Attachment bracket     | Delivery in carton; small parts in PE-bag |
| 4 x Bench Screw M12        |   |
| 4 x Rubber Seal M12        |   |
| 12 x Washer M12            |   |
| 12 x Hex nut M12           |   |
| 6 x Hammer head bolt M8x25 |   |
| 6 x Hex bolt M8x25         |   |
| 12 x Washer M8             |   |
| 12 x Hex nut M8            |   |



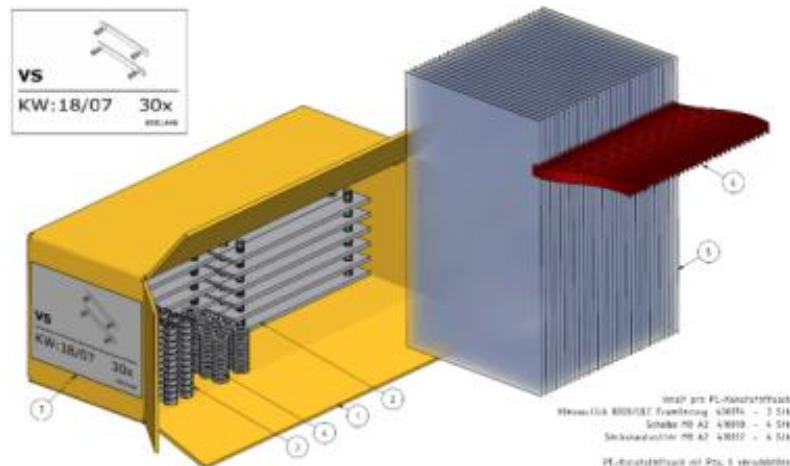
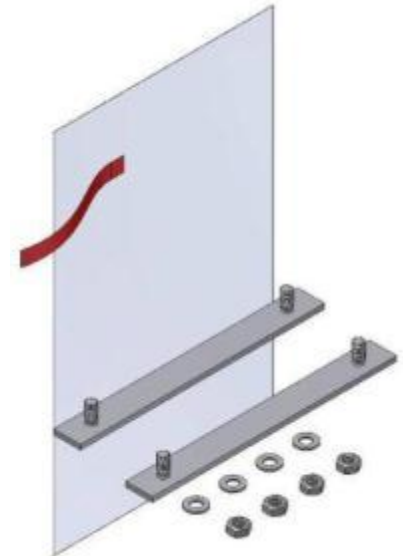
## SS45L1 ES (Extension Set horizontal mounting):

- |                            |   |
|----------------------------|---|
| 2 x Base bracket           | 1 x Clamping piece                        |
| 2 x Support bracket        | 1 x Mounting part, extension              |
| 4 x Attachment bracket     | 1 x Mounting jig                          |
| 4 x Bench bcrew M12        | Delivery in carton; small parts in PE-bag |
| 4 x Rubber beal M12        |   |
| 12 x Washer M12            |   |
| 12 x Hex nut M12           |   |
| 4 x Hammer head bolt M8x25 |   |
| 6 x Hex bolt M8x25         |   |
| 11 x Washer M8             |   |
| 11 x Hex nut M8            |   |



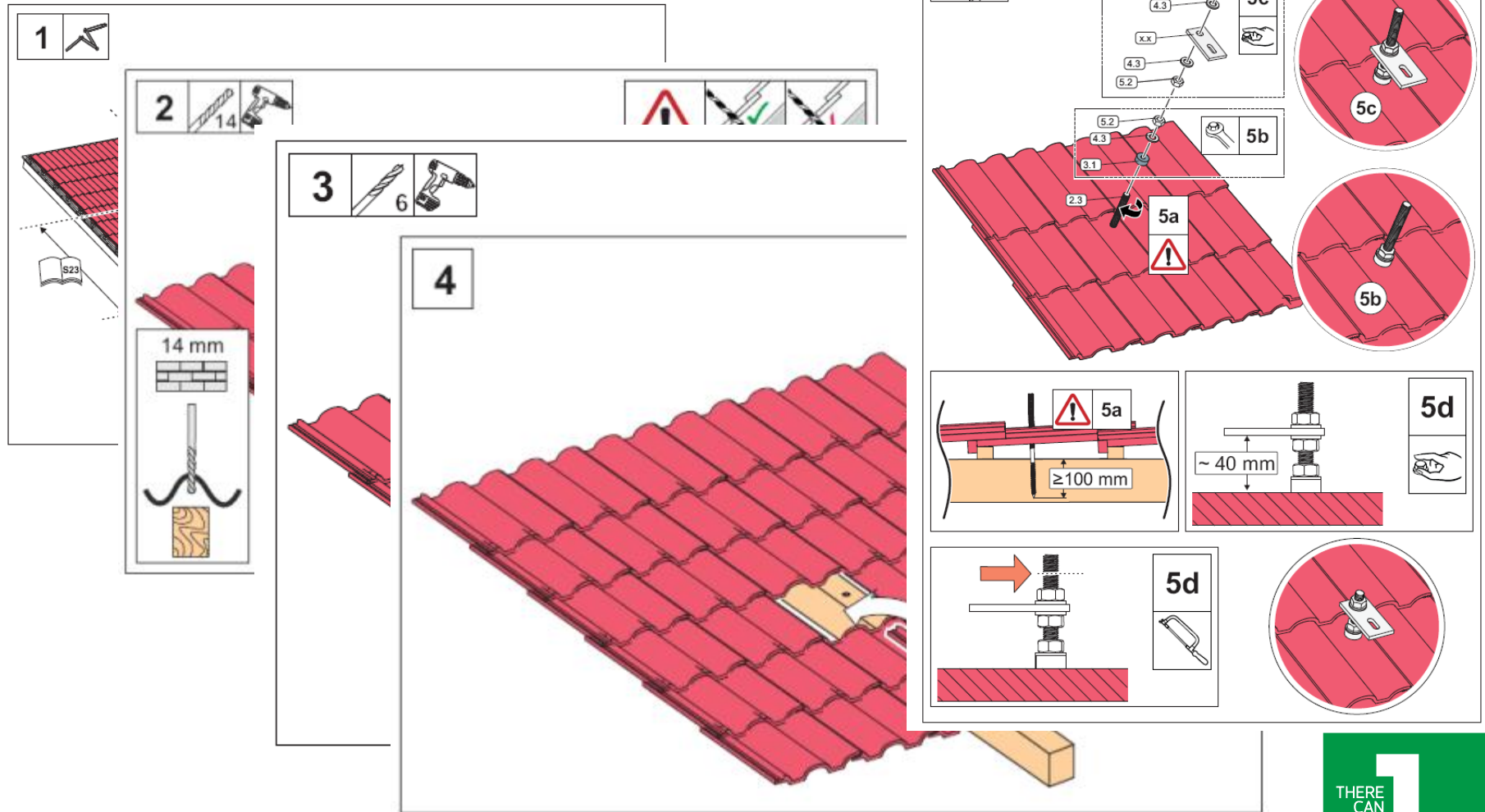
# 7one Connecting Set

- Connecting Set (necessary to combine the support rail):
  - 2 x Clamping piece extension
  - 4 x Washer M8
  - 4 x Hex nut M8
  - all parts in PE-bag
- Delivery: 30 pcs. connecting sets in carton





# 7one Example for Mounting Instruction



# 7one Connection-Sets vertical

## Connection (compression) basic set vertical:

- 4 x Straight compression coupling
- 1 x Blanking coupling
- 2 x Stop end piece
- 1 x Air vent connector
- 1 x Air vent piece
- 1 x Air vent - Key



## Connection (compression) extension set vertical:

- 2 x Straight compression couplings
- 1 x Blanking coupling





# 7one Connection-Sets horizontal

## Connection Basic Set horizontal:

- 1 x Insulated corrugated tube; length 390 mm
- 2 x Stop end piece
- 2 x Air vent connector
- 2 x Air vent piece
- 2 x Adapter piece 22/ 1" flat seal
- 2 x Flat seals
- 1 x Air vent – Key



## Connection Extension Set horizontal :

- 1 x Insulated corrugated tube; length 390 mm
- 1 x Stop end piece
- 1 x Air vent connector
- 1 x Air vent piece
- 2 x Adapter piece 22/ 1" flat seal
- 2 x Flat seals
- 1 x Air Vent – Key



# 7one Roof Entering Set

## Adapter piece for flat sealing and compression parts

2 x Insulated corrugated tube with 1" coupling nut on both sides 700mm

4 x flat seals

2 x compression adapter piece 22/ 1" flat seal

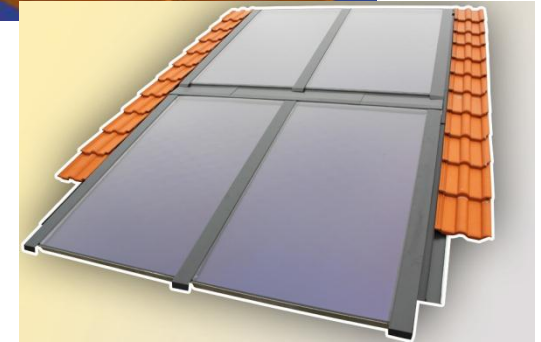


# 7one In – Roof Set

- **Metal Sheet cladding** (colour RAL 7016):
  - Basic Set for 2 collectors (vertical)
  - Extension Set for 1 collector (vertical)
  - Basic Set for 2 collectors in 2<sup>nd</sup> row (vertical)
  - Extension Set for 1 collector in 2<sup>nd</sup> row (vertical)



- **Following parts are included in the Metal Sheet cladding basic set 2 for collectors:**
  - 2 x 90 (elbow) compression parts
  - All collector roof mounting parts (e.g. rail)
  - Mounting instruction (installation manual)



- **Connection Set have to be ordered according number of collectors:**
  - 1 x Basic Set vertical for 2 collectors
  - Number of extension sets vertical = number of additional collectors

# 7one Overview Mounting Sets

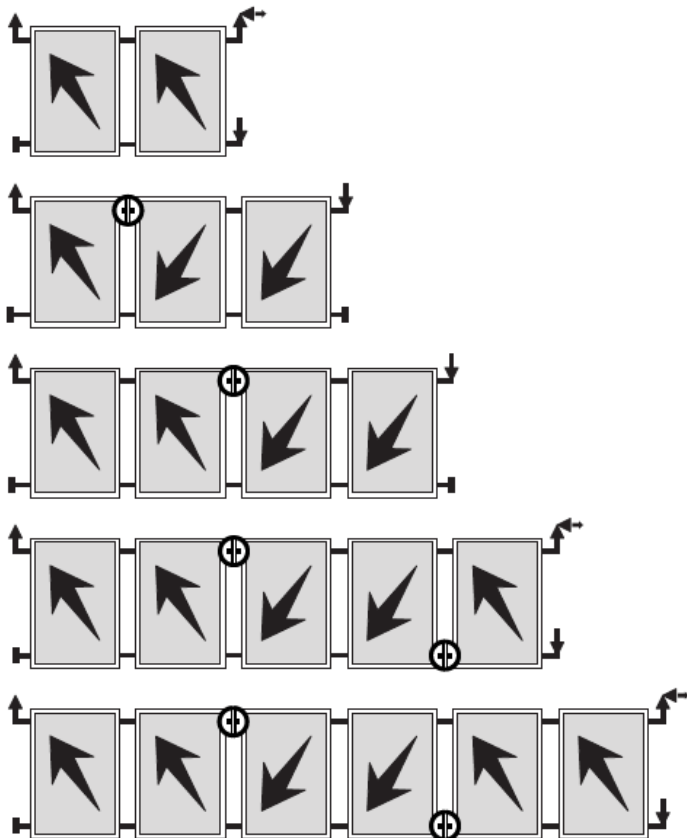
Mounting Set	Packaging Unit (PU)	Packaging Dimension (L/W/H) in mm	Weight per PU in kg	Minimum Order Quantity
DB0N1	1	422 x 134 68	1,55	10
DB0N2	1	422 x 134 x 68	4,06	10
DB0L1	1	412 x 162 x 162	2,72	10
DB0L1 ES	1	412 x 162 x 162	2,81	10
SS0N1	1	422 x 134 x 68	1,32	10
SS0N2	1	422 x 134 x 68	3,26	10
SS0L1	1	422 x 134 x 68	2,14	10
SS0L1 ES	1	422 x 134 x 68	2,31	10
SS45N1	1	1674 x 144 x 90	3,90	10
SS45N2	1	1674 x 144 x 90	10,27	10
SS45L1	1	1512 x 132 x 70	4,93	10
SS45L1 ES	1	1512 x 132 x 70	5,32	10
VS	30	400 x 150 x 150	10,22	1
TRP N 1	1	1225 x 80 x 40	2,91	18
TRP N 2	1	2453 x 80 x 40	5,84	18
TRP L1	1	2205 x 80 x 40	5,25	18
Metal Sheet Flashing BS single row	1	2200 x 880 x 150	34,5	1
Metal Sheet Flashing ES single row	1	2200 x 880 x 150	17,5	1
Metal Sheet Flashing BS double row	1	2200 x 270 x 150	25,0	1
Metal Sheet Flashing ES double row	1	2200 x 270 x 150	14,0	1

# 7one Overview Connection Sets

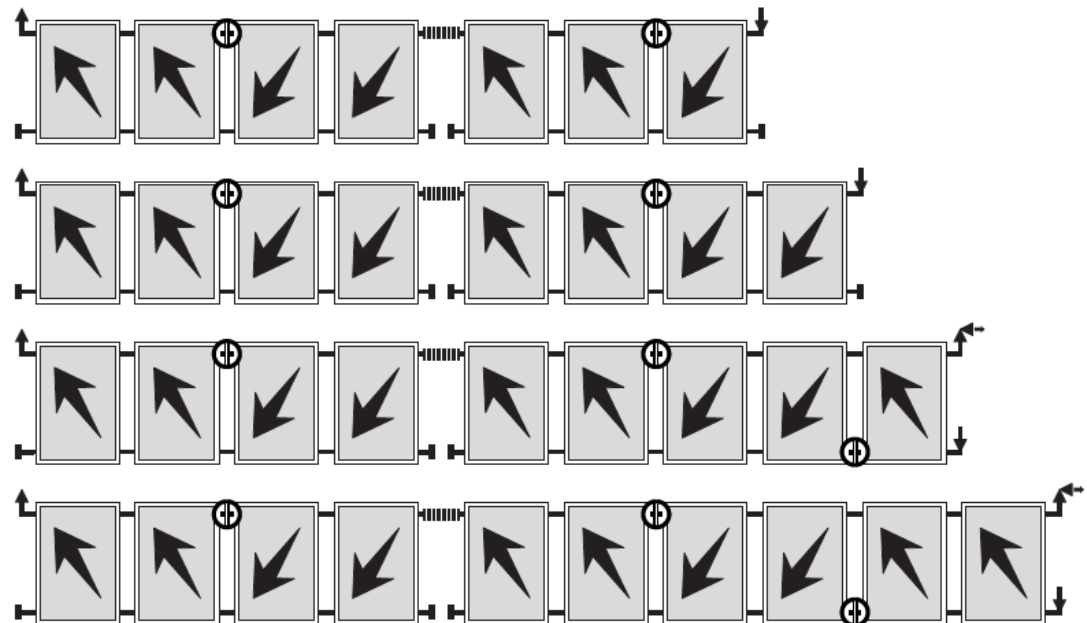
Connection Set	Packaging Unit (PU)	Packaging Dimension (L/W/H) in mm	Weight per PU in kg	Minimum Order Quantity
Basic Set vertical	1	250 x 130 x 60	1,02	10
Extension Set vertical	1	250 x 130 x 60	0,5	10
Basic Set horizontal	1	250 x 130 x 60	1,3	10
Extension Set horizontal	1	250 x 130 x 60	0,8	10
Roof Entering Set	1	1500 x 120 x 60	1,61	10

# 7one Connection Scheme single row (vertical) Example

2 – 6 collectors



7 – 10 collectors



## Legend:

⊕ .....Locking valve

.....Exhauster

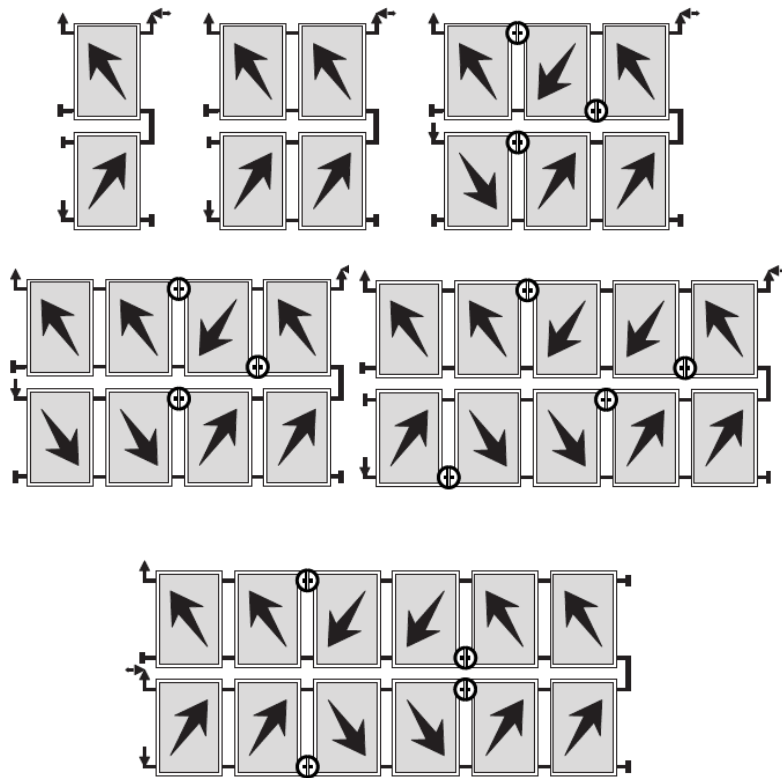
.....Length compensator  
or expansion bend

.....Flow direction

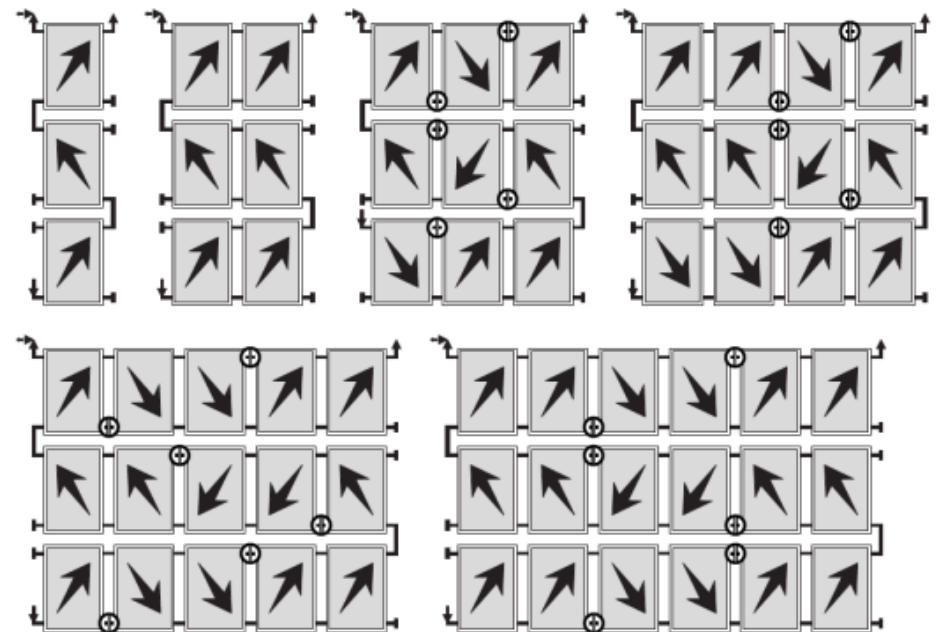
# 7one Connection Scheme

## double-/triple row (vertical) Example

Two rows on top of each other



Three rows on top of each other



Legend:

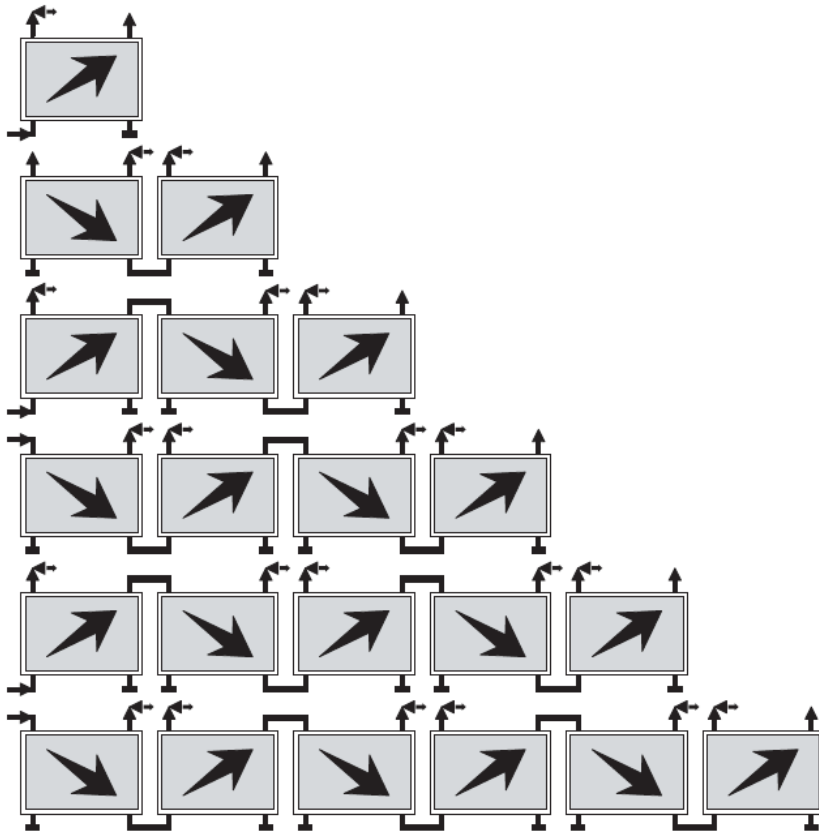
⊕ .....Locking valve

⌞.....Exhauster

▬ ...Length compensator  
or expansion bend  
↗ ...Flow direction

# 7one Connection Scheme single row (horizontal) Example

2 – 6 collectors



Legend:

⊕ ..... Locking valve

..... Exhauster

..... Length compensator  
or expansion bend

..... Flow direction



# 7one Further Customer Advantages

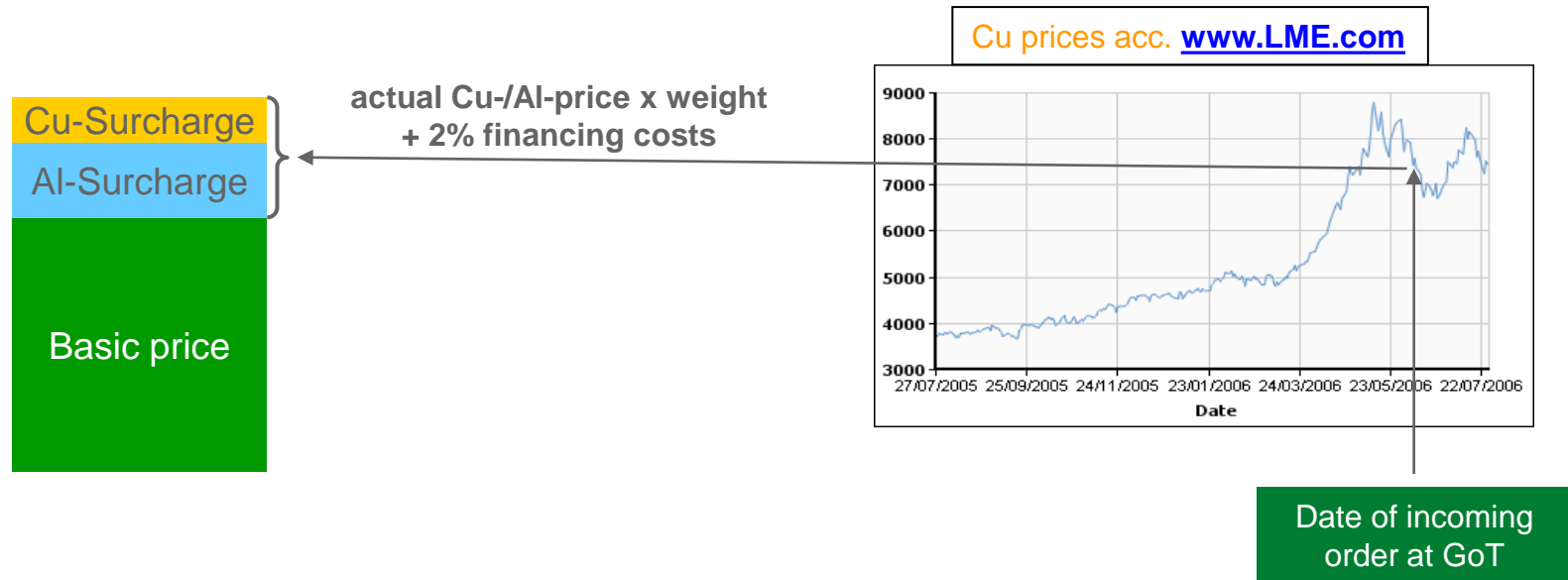
- **7one** Supply from European logistics centre (100% availability)
- **7one** Specific support-service via GoT – Key Account Manager
- **7one** Product training inclusive trail-mounting at GoT
- **7one** Product presentation in PowerPoint
- **7one** Collector sample
- **7one** Design- / product photos for own marketing documents

# 7one Transcription of Solar Keymark Certificate to Customer

- **Transcription of Solar Keymark Test Report to Customer (Submission by GREENoneTEC)**
  - Required Documents for the Test Institute – from GREENoneTEC
    - Signed transcription form
    - Costs for the Customer: up to 630,- EUR
  - Required Documents for the Test Institute - from Customer
    - Type sticker collector with customers data
    - Mounting instruction → Use of Standard – Mounting Instruction
- **Request on Solar Keymark Certification at DinCertco (Submission by Customer)**
  - Required Documents for DinCertco – from GREENoneTEC
    - Letter of Agreement
  - Required Documents for DinCertco – from Customer
    - Signed transcription form
    - Costs for the Customer :
      - Administrative Charges (once): 720,- EUR
      - Yearly charges: 370,- EUR

# 7one Product Prices

- Product price = basic price + actual Al-/Cu- Surcharge

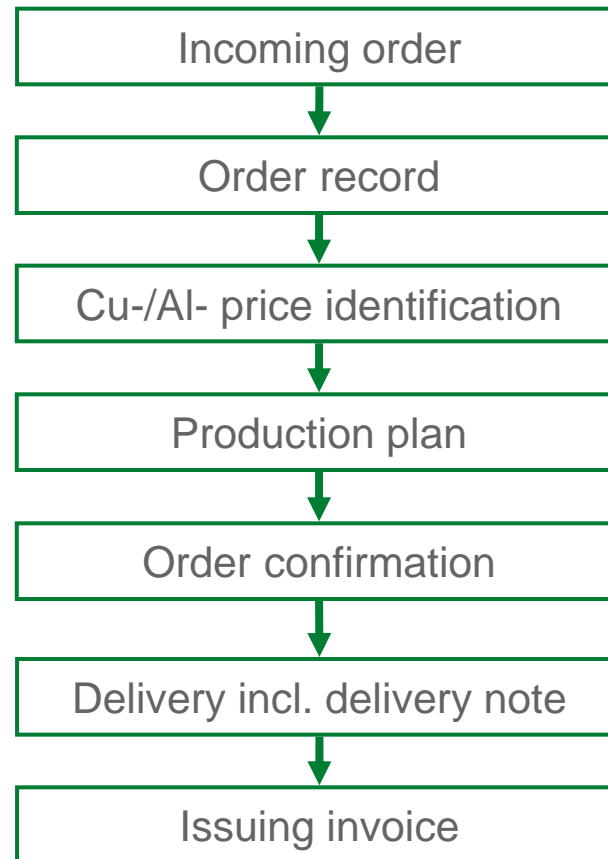


- Fair and transparent price
- Opportunity of fixed prices based on frame orders
- Customer knows exact price with order confirmation

# 7one Monthly/Quarterly Forecast

- Customer sends until the 5<sup>th</sup> calendar day every month a rolling forecast
- Planning horizon = actual month plus three following month
- Volume of the direct following month = fixed order

# 7one Order Process at GREENoneTEC



DANKE FÜR IHRE AUFMERKSAMKEIT

THANK YOU FOR YOUR ATTENTION



**GREENoneTEC Solarindustrie GmbH**

Industriepark St. Veit, Energieplatz 1

9300 St. Veit/Glan

info@greenonetec.com

[www.greenonetec.com](http://www.greenonetec.com)