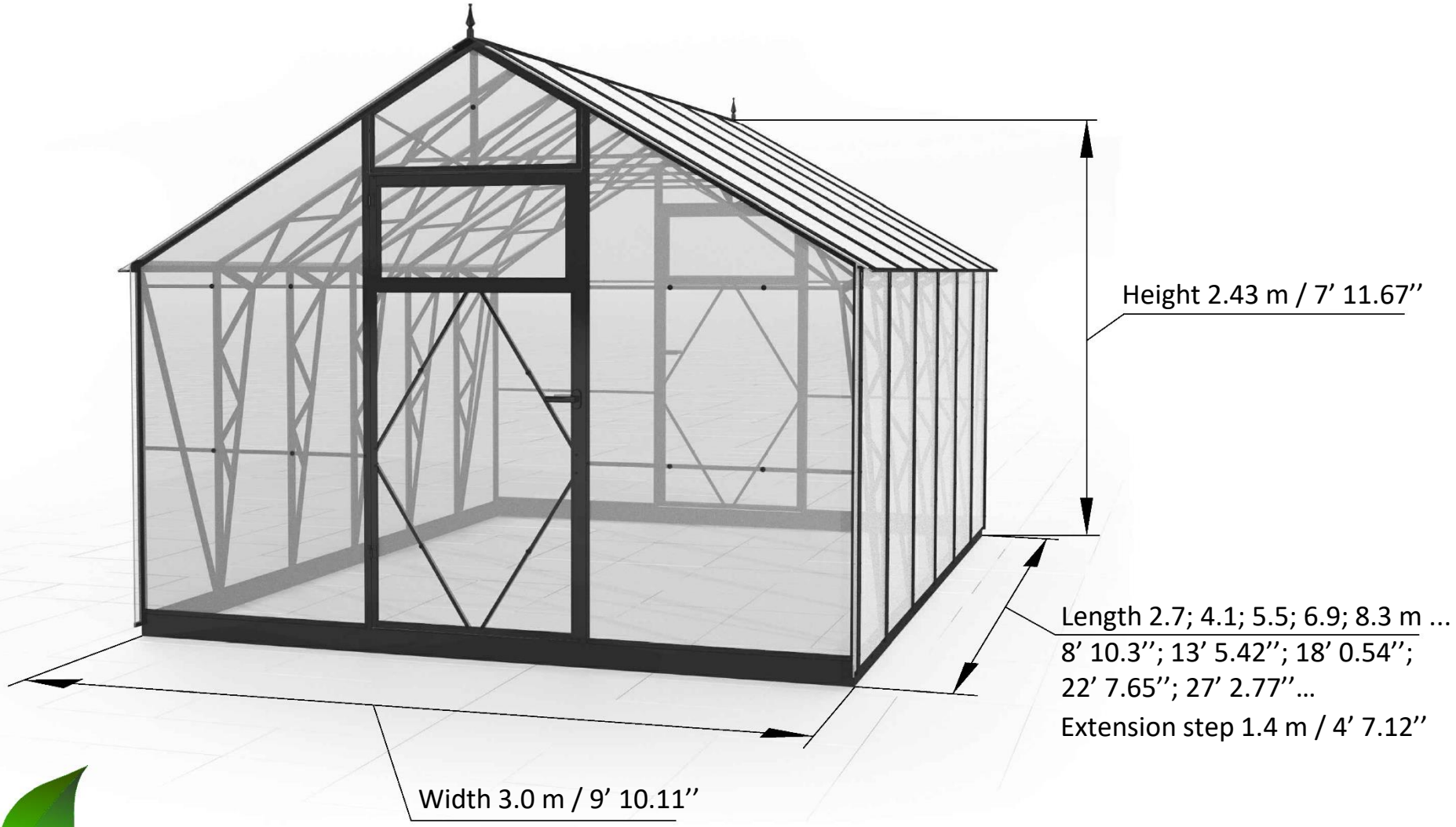
Greenhouse EHL 3.0 / 9’ 10.11’’

Assembly and Installation Guide



ECOSLIDER HEIKKINEN

Guide version V1
10.05.2025

Before You Begin

Dear Customer,
Thank you for choosing Ecoslider Greenhouses!

Description:

Ecoslider Greenhouses are designed to create a microclimate favorable for plant growth.

The length of the greenhouse can vary depending on the buyer's preference. The desired length of the greenhouse is achieved by purchasing additional extension kits. Each extension kit extends the basic length of the greenhouse by 1.4 (4’ 7.12’’) meters. The length of the basic kit is 2.7 (8’ 10.3’’) meters. The installed frame height of the greenhouse is 2.43 (7’ 11.67’’) meters.

The greenhouse frame is made of galvanized steel profile with a high zinc content, ensuring high strength, reliability, and protection against external factors. The greenhouse is covered with cellular polycarbonate from leading European manufacturers, providing high strength, excellent thermal insulation properties, protection against ultraviolet radiation, and high natural transparency.

Goods acceptance:

Upon receiving the goods, please check the number of boxes you are supposed to receive. If you find any damage to the boxes, please note this on the transport document. Check for any damage to the parts in these boxes. Contact customer support at +(372) 528-4100 or email us at info@ecoslider.com. Photos will help us identify the parts and assess their degree of damage. Please inform us of any issues before starting installation within the shortest possible time (3 days after receiving the goods) to avoid warranty complications.

Minor scratches and paint abrasions on the visible surface of the metal parts of the greenhouse are allowed.

On the polycarbonate sheets, punctures, creases (defects resulting from sharp bending), and dents (damage in the form of a depression with sharp edges) are not allowed.

Should you have any further inquiries or require assistance, please do not hesitate to contact us.

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Operating rules:

- Before starting to use the greenhouse, it must be assembled and installed according to the instructions. When installing the greenhouse by third parties, the buyer should ensure the quality of assembly compliance with the instructions.
- Do not install the greenhouse close to buildings and trees from which snow or ice can fall. The recommended distance is at least 2 meters away from such structures or trees.
- The greenhouse is rated to withstand winds of 38 m/s (137 km/h), but the warranty applies to a maximum of 21 m/s (76 km/h).
- Do not leave the greenhouse door open unattended during strong winds.
- If the greenhouse will be unattended for the entire winter, the buyer must either assess the possible snow load or remove snow from the roof.

Warranties:

- The general warranty for our greenhouses, including movable elements such as doors, windows, locks, hinges, etc., is 2 years.
- Manufacturer's warranty for polycarbonate - 10 years.
- Warranty for galvanized trusses - 10 years.
- The manufacturer is responsible for the completeness of the kit.
- The manufacturer is responsible for the ease of assembly of the structure according to the instructions.
- The manufacturer is responsible for the structural strength within the specified operating rules.

Our warranty does not cover instances of:

- Improper installation contrary to instruction requirements.
- Breach of operating guidelines.
- Misuse of the greenhouse for unintended purposes.
- Unauthorized modifications to the greenhouse structure.
- Deformation due to exceeding snow load capacities.
- Structural damage resulting from ground movement.

Table of contents

Assembly and installation recommendations

Please read the instructions carefully before assembling.
Follow the steps indicated in the instructions. Final assembly and Installation must be performed by at least two people.

Safety:

- Some parts may have sharp edges. Be careful when working with them. Use gloves.
- Pre-assembly of greenhouse parts pp. (11÷18) can be done indoors, for example in a garage. The complete installation of the greenhouses should be done within one day.
- When using ladder and electrical appliances, follow the manufacturer's safety instructions.
- Do not install the greenhouse when the wind is more, then 4÷5 m/s or when it is raining.

Assembly:

- Select a flat surface to assemble the greenhouse components.
- Polycarbonate sheets must be installed with the **UV** protected side**,** facing out.
- Prior to installation of polycarbonate, remove the protective film from both sides of the sheets.
- If there is a protective film on metal parts, remove the film.
- If there is a protective film on the metal parts of greenhouse, remove it.
- When fastening polycarbonate sheets with screws and nuts, do not apply great effort to avoid leaving dents.
- Secure the greenhouse to a solid leveled surface to ensure proper functioning.

Tools

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EHL30 V1

Complete set

Equipment			Quantity, pcs.							Note
			(BASE)	Number of extensions in the greenhouse						
			0	1	2	3	4	...	N	
Name	Qty (BASE)	Col. In 1 extend	EHL 3.0 / 9' 10.11'' greenhouse length range, m/ft							
			2.7	4.1	5.5	6.9	8.3	...	2.7+(1.4*N)	
			8' 10.3''	13'5.42''	18' 0.54''	22' 7.65''	27' 2.77''		8' 10.3''+(4' 7.12''*N)	
Details										
C3	2	0	2	2	2	2	2		2	frame
C4	2	0	2	2	2	2	2		2	frame
C7	2	0	2	2	2	2	2		2	frame
C8	2	0	2	2	2	2	2		2	frame
J11	2	0	2	2	2	2	2		2	frame
J11R	2	0	2	2	2	2	2		2	frame
J12	2	0	2	2	2	2	2		2	frame
J13	0	2	0	2	4	6	8		2N	frame
J14	0	2	0	2	4	6	8		2N	frame
J15	2	0	2	2	2	2	2		2	frame
25M1	6	4	6	10	14	18	22		6+4N	trusses
25M2	6	4	6	10	14	18	22		6+4N	trusses
25M3	6	4	6	10	14	18	22		6+4N	trusses
3M7	6	4	6	10	14	18	22		6+4N	trusses
3M2	6	4	6	10	14	18	22		6+4N	trusses
3M3	6	4	6	10	14	18	22		6+4N	trusses
U3	3	2	3	5	7	9	11		3+2N	trusses
MS11	4	0	4	4	4	4	4		4	mauerlat
MS13	0	2	0	2	4	6	8		2N	mauerlat
SK11	2	0	2	2	2	2	2		2	roof ridges
SK12	2	0	2	2	2	2	2		2	roof ridges
SK13	0	1	0	1	2	3	4		N	roof ridges
SK14	0	1	0	1	2	3	4		N	roof ridges
H1 with hinges	2	0	2	2	2	2	2		2	end
H2	2	0	2	2	2	2	2		2	end
H3	4	0	4	4	4	4	4		4	end
H4	8	0	8	8	8	8	8		8	end
H5	2	0	2	2	2	2	2		2	end
H6	2	0	2	2	2	2	2		2	end
H1R	2	0	2	2	2	2	2		2	end
H2R	2	0	2	2	2	2	2		2	end
H5R	2	0	2	2	2	2	2		2	end
H6R	2	0	2	2	2	2	2		2	end
H8	2	0	2	2	2	2	2		2	end
H9L	2	0	2	2	2	2	2		2	end
H12L	2	0	2	2	2	2	2		2	end
H13	4	0	4	4	4	4	4		4	end
H14	2	0	2	2	2	2	2		2	end
T9	2	0	2	2	2	2	2		2	end
L_55x75	4	0	4	4	4	4	4		4	frame
L_40x90	6	2	6	8	10	12	14		6+2N	frame
Fittings	6	2	6	8	10	12	14		6+2N	frame
Z6	2	0	2	2	2	2	2		2	roof
DV12	2	0	2	2	2	2	2		2	door

Equipment			Quantity, pcs.							Note
			(BASE)	Number of extensions in the greenhouse						
			0	1	2	3	4	...	N	
Name	Qty (BASE)	Col. In 1 extend	EHL 3.0 / 9' 10.11'' greenhouse length range, m/ft							
			2.7	4.1	5.5	6.9	8.3	...	2.7+(1.4*N)	
			8' 10.3''	13'5.42''	18' 0.54''	22' 7.65''	27' 2.77''		8' 10.3''+(4' 7.12''*N)	
Details										
D1	2	0	2	2	2	2	2		2	door
D2 with hinges	2	0	2	2	2	2	2		2	door
D3	2	0	2	2	2	2	2		2	door
D4L with hinges	2	0	2	2	2	2	2		2	door
D5	8	0	8	8	8	8	8		8	door
D8	2	0	2	2	2	2	2		2	door
FD1L with M4 PEM	2	0	2	2	2	2	2		2	door
FD2	4	0	4	4	4	4	4		4	door
FD8	2	0	2	2	2	2	2		2	door
PP1	10	4	10	14	18	22	26		10+4N	wall
3PP2	10	4	10	14	18	22	26		10+4N	roof
UL6*	16	8	16	24	32	40	48		16+8N	panel
KR2	8	4	8	12	16	20	24		8+4N	wall
KR3	8	4	8	12	16	20	24		8+4N	roof
KR6	10	4	10	14	18	22	26		10+4N	wall
PL	2	0	2	2	2	2	2		2	reinforcement
PR	2	0	2	2	2	2	2		2	reinforcement
3PV1	2	0	2	2	2	2	2		2	reinforcement
3PV2	2	0	2	2	2	2	2		2	reinforcement
Polycarbonate panels										
Panel 3P1 (1050x2060)	2	0	2	2	2	2	2		2	end
Panel 3P2 (1050x2060)	2	0	2	2	2	2	2		2	end
Panel 3P3 (874x482)	2	0	2	2	2	2	2		2	smartventor
Panel P4 (820x405)	2	0	2	2	2	2	2		2	hatch
Panel P5 (880x1365)	2	0	2	2	2	2	2		2	door
Panel P6 (696x1500)	8	4	8	12	16	20	24		8+4N	wall
Panel 3P7 (696x1780)	8	4	8	12	16	20	24		8+4N	roof
Accessories										
Door handle	4	0	4	4	4	4	4		4	door
Door lock	2	0	2	2	2	2	2		2	door
Square	2	0	2	2	2	2	2		2	door
Lock Screw M5x35	4	0	4	4	4	4	4		4	door
Valve	2	0	2	2	2	2	2		2	door
Magnet assembly	2	0	2	2	2	2	2		2	end
Pressure profile, m	66	26,4	66	92,4	118,8	145,2	171,6		66+26,4N	PP plank
Protective Tape, m	42	11,2	42	53,2	64,4	75,6	86,8		42+11,2N	panel
Fasteners										
Screw 4.2x13 DIN 7981	620	244	620	864	1108	1352	1596		620+244N	total
Screw 4.2x19 DIN 7504 T	118	16	118	134	150	166	182		118+16N	total
Screw 4.2x25 DIN 7981	14	4	14	18	22	26	30		14+4N	panel
Screw 4.2x32 DIN 7981	106	44	106	150	194	238	282		106+44N	PP plank
Washer 20x4.3x1.25	26	0	26	26	26	26	26		26	end
Washer 25x6.5x1.25	24	16	24	40	56	72	88		24+16N	panel
Washer 15x5.3x1.2	16	0	16	16	16	16	16		16	end
Washer plastic 22x8.4x2	4	0	4	4	4	4	4		4	end
Bolt M6x16 DIN 912	12	8	12	20	28	36	44		24+12N	trusses
Butterfly nut M6	12	8	12	20	28	36	44		24+12N	trusses
Screw M4x12 DIN 7046	8	0	8	8	8	8	8		8	door

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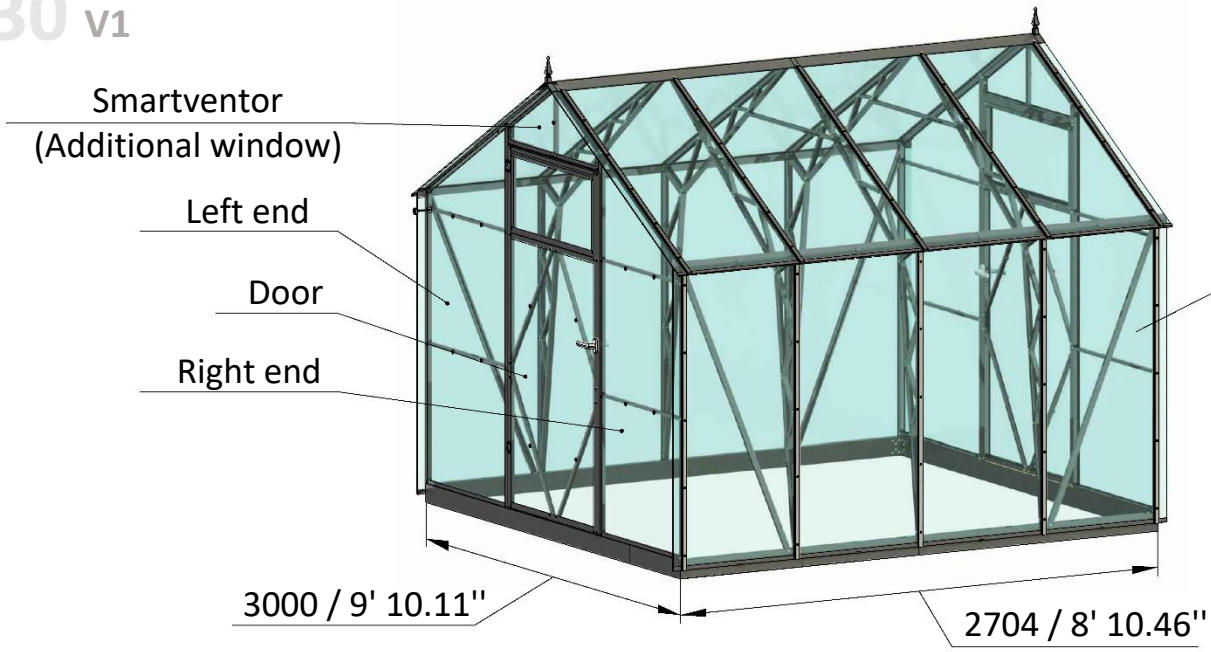
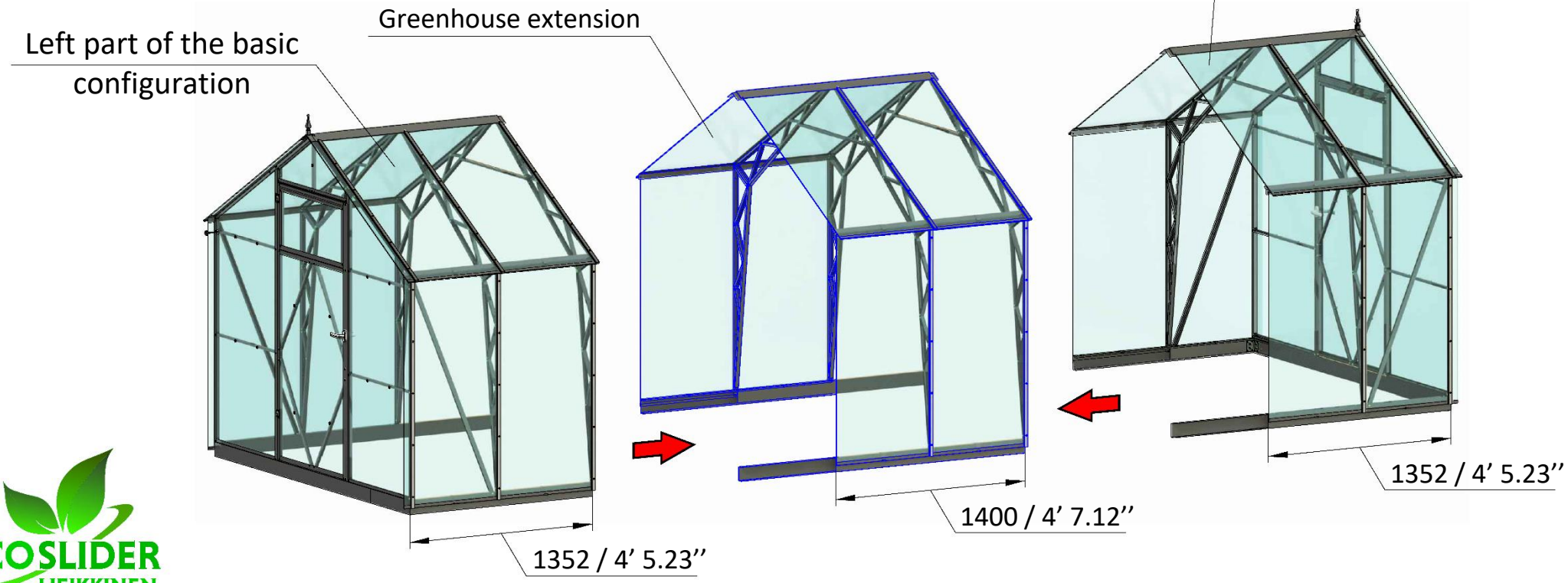
N – number of standard extensions (1.4 m / 4' 7.12'') in addition to the base length of the greenhouse. Base length - 2.7 m /8' 10.3''.

* - When using monolithic polycarbonate, UL6 parts and Protective Tape will be missing/ When using polycarbonate in combination, check with managers for the complete set.

Complete set





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Content

Support frame

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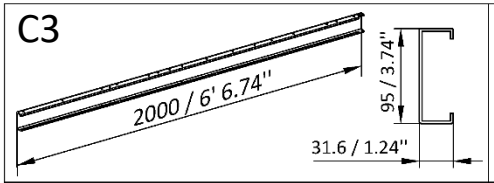

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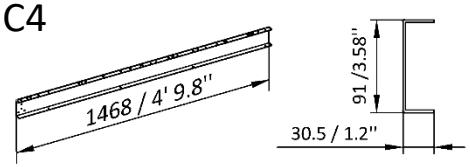

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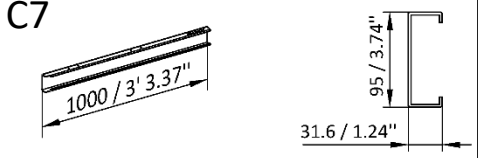

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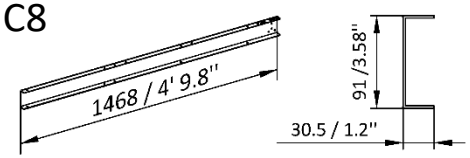

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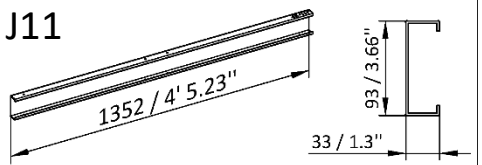

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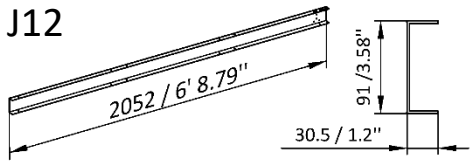

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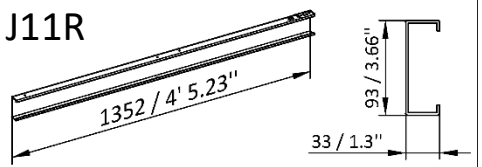

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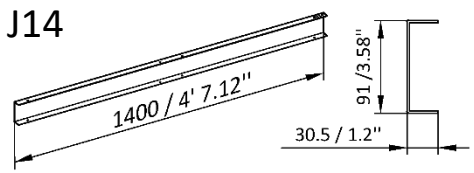

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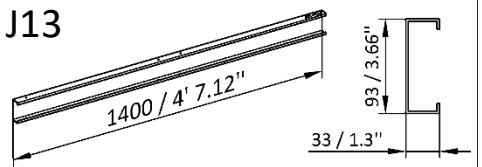

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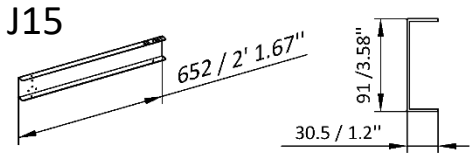

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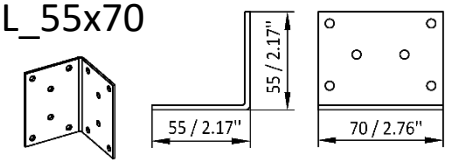

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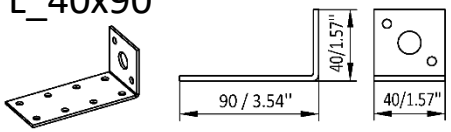

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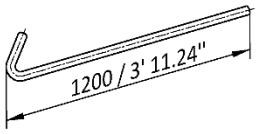

Trusses

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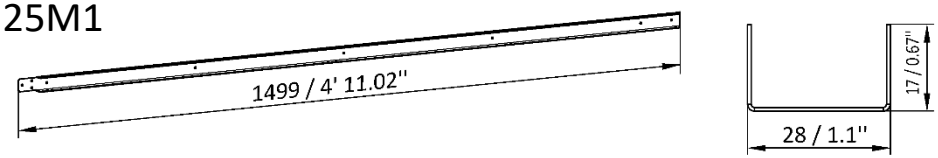

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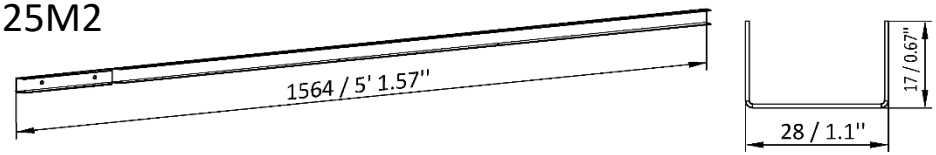

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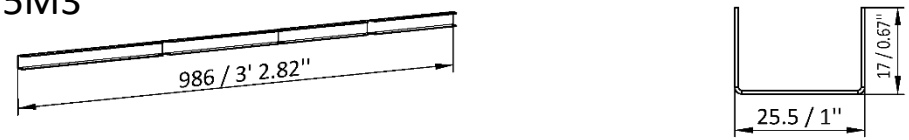

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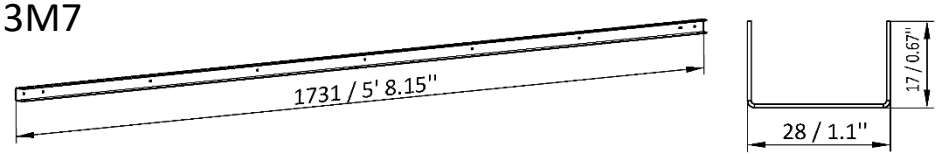

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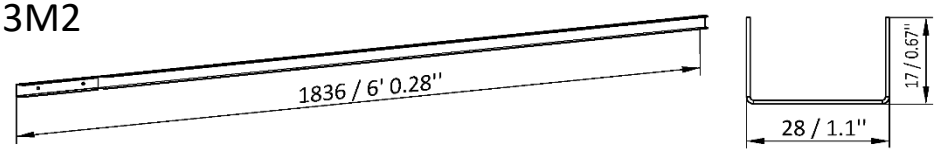

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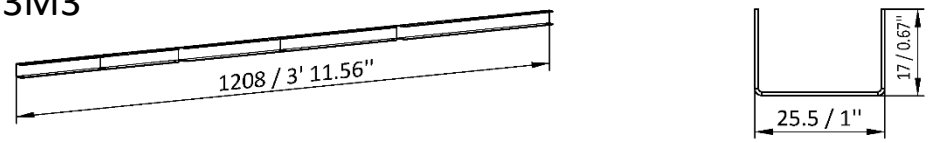

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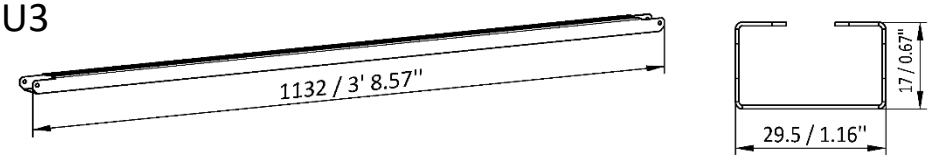

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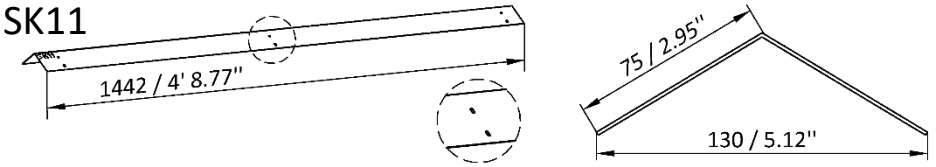
Content

Roof ridges and mauerlat

SK11



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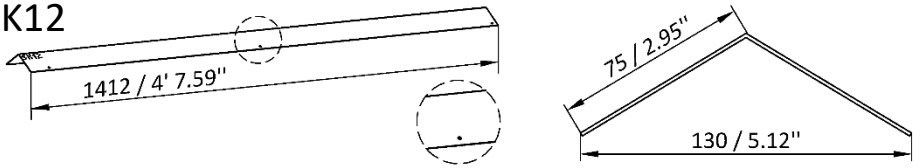

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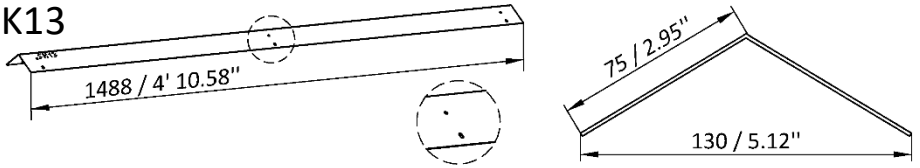

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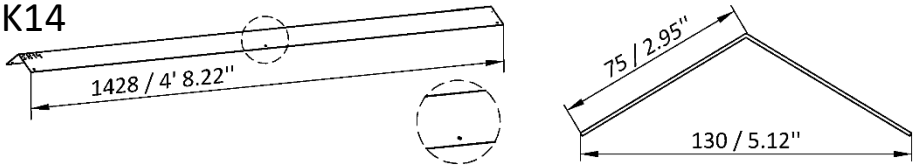

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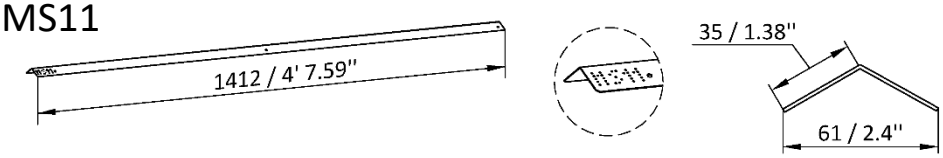

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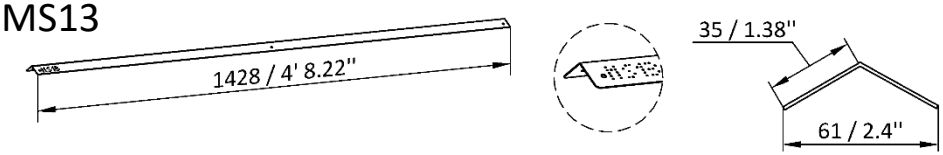
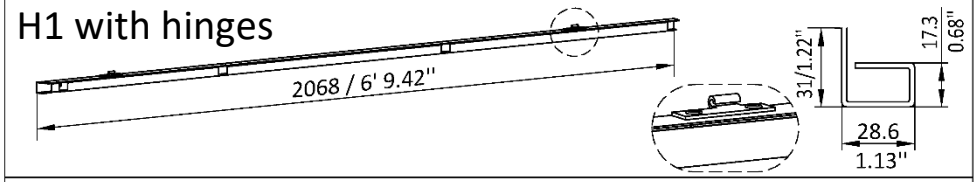
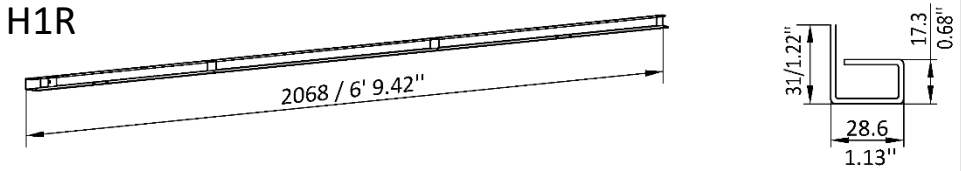


End walls

H1 with hinges



H1R



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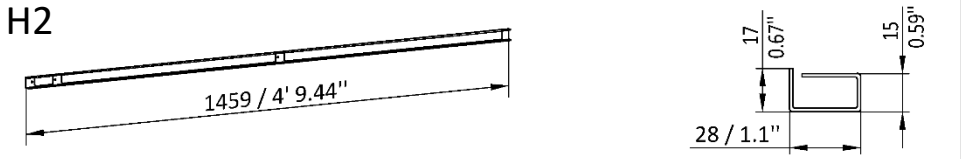

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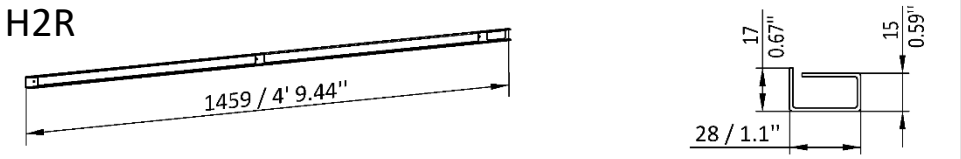

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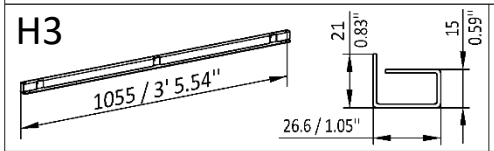

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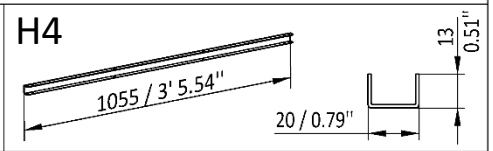

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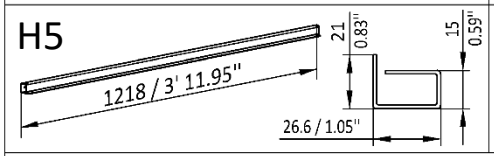

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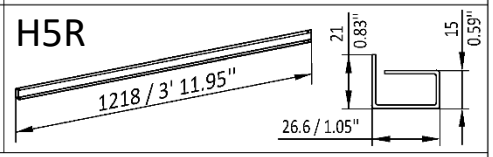

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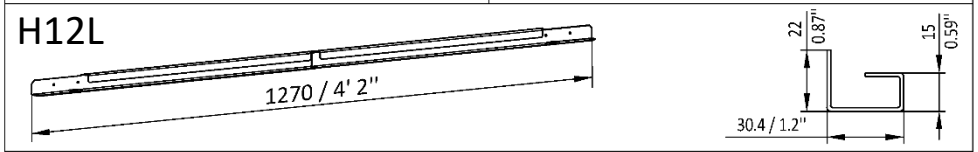

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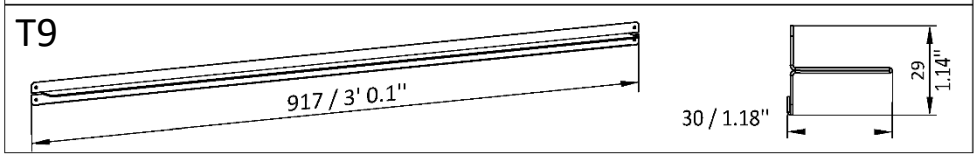

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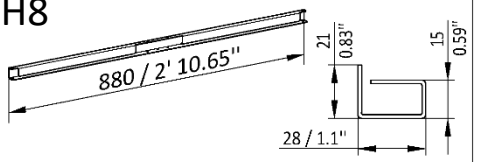
Content

Smartventor

H8



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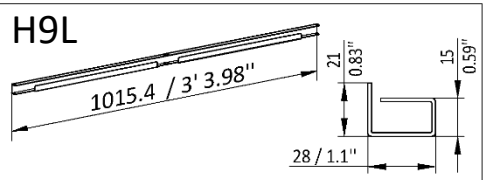

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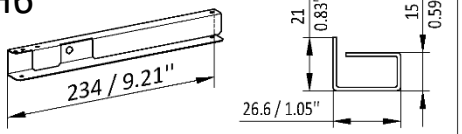

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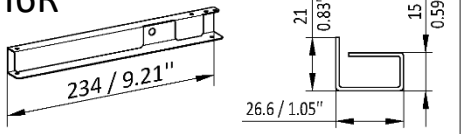

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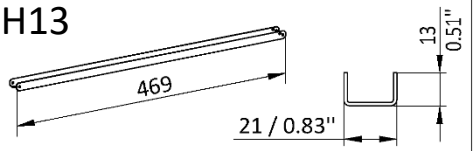

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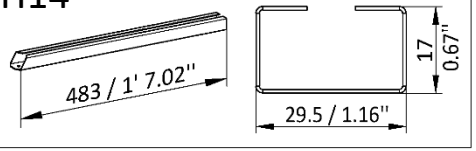
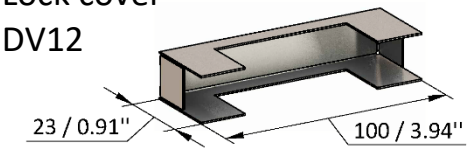


Installation of handles

Door handle

Door lock

Lock cover DV12

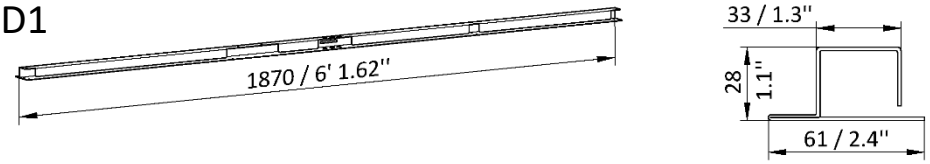


Square

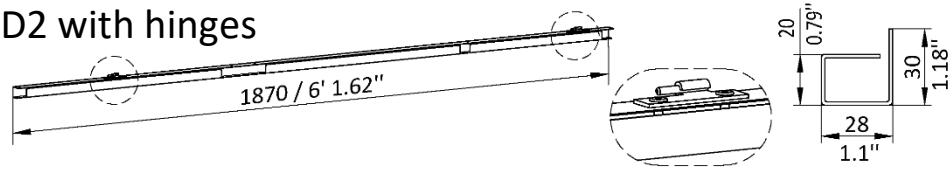
Lock screw M5x35

Door

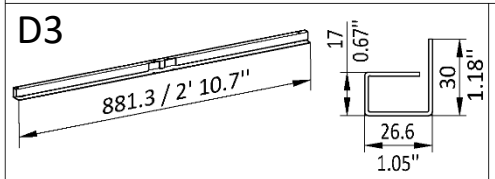
D1



D2 with hinges



D3



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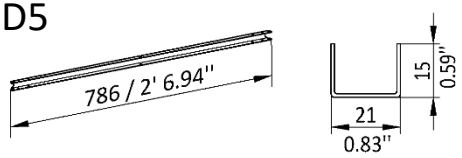
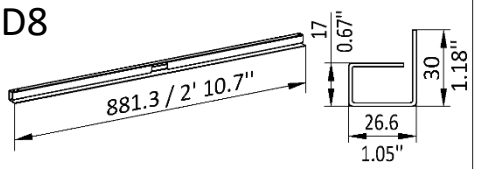
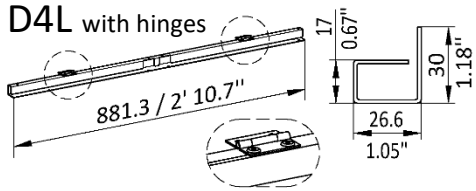


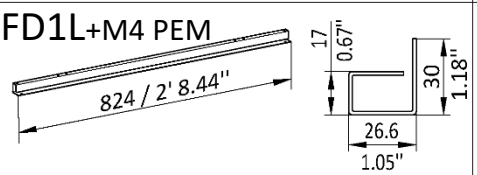
D8



D4L with hinges



FD1L+M4 PEM



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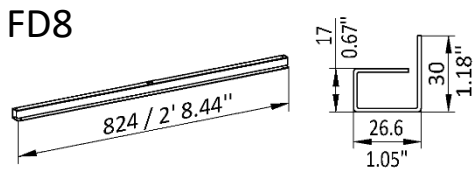
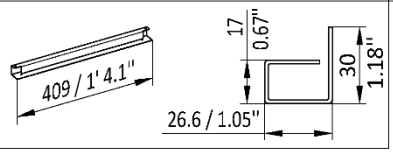


FD2



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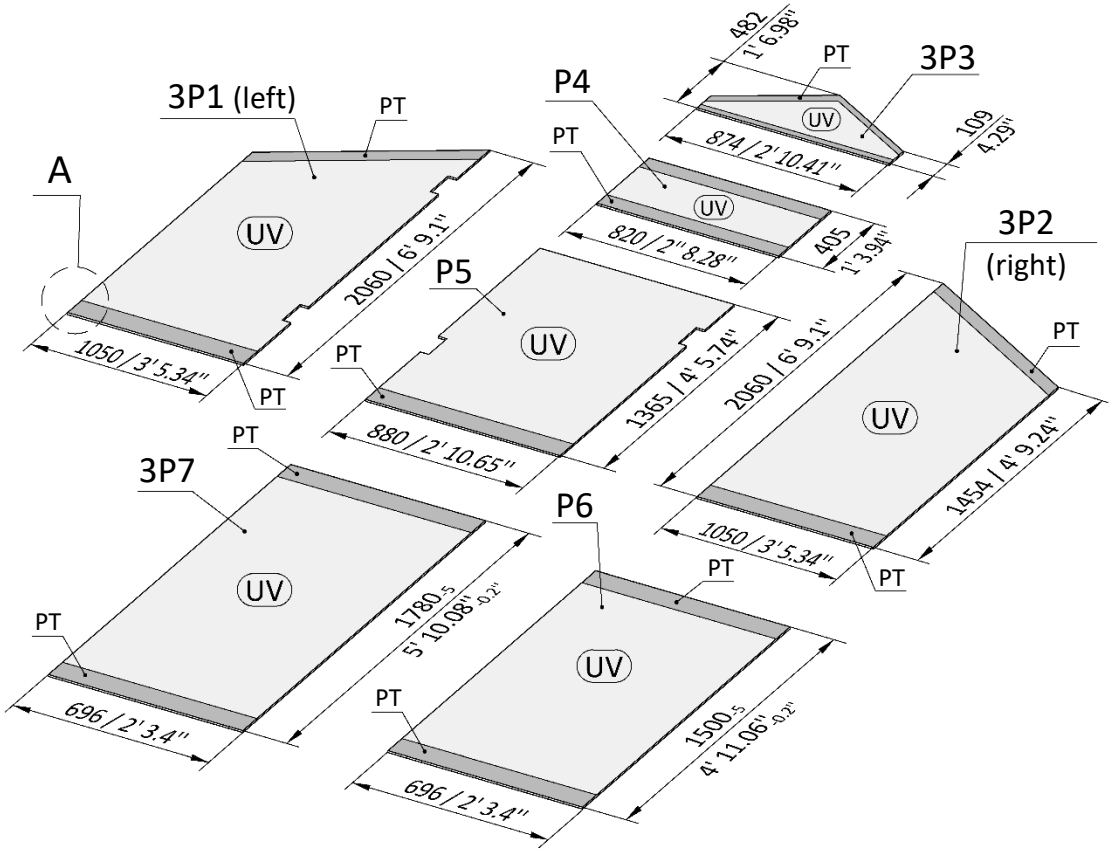
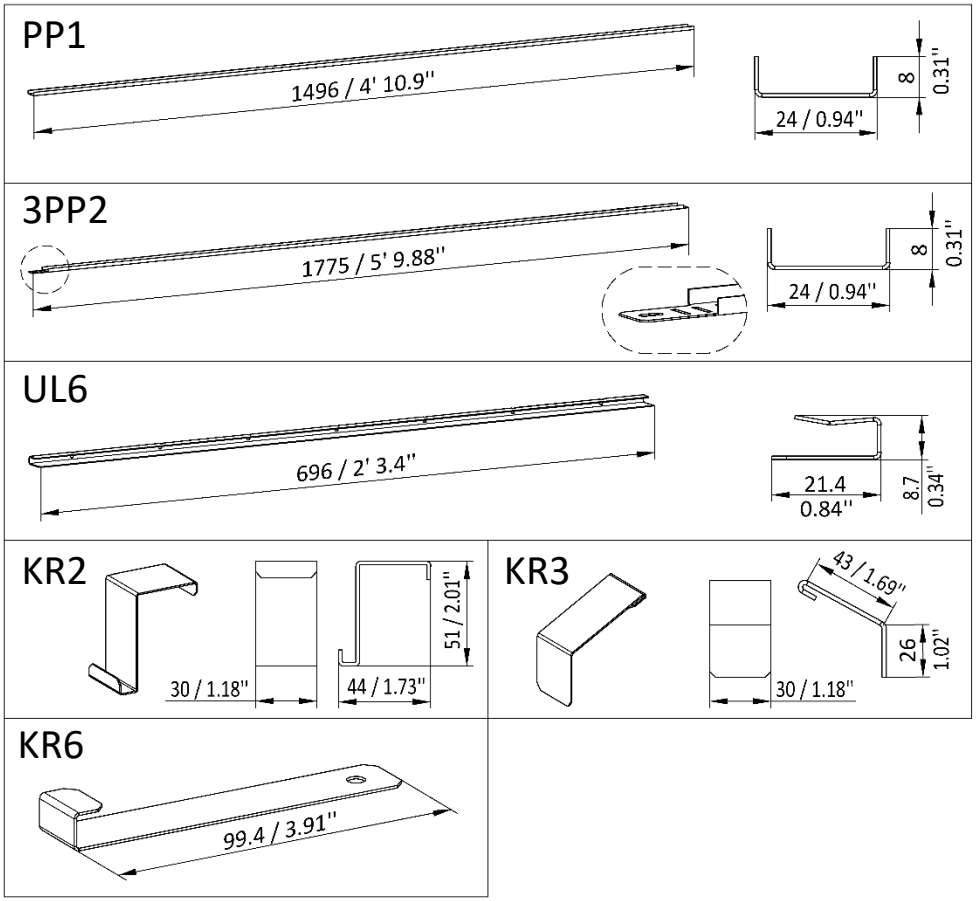


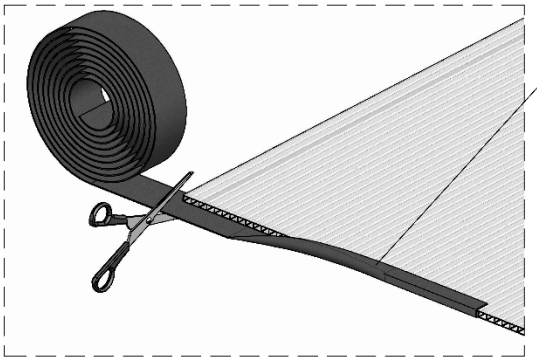


UV protected side (covered with white film)
facing outwards during installation

side without UV protection

Before installation, remove the film from both sides of the polycarbonate sheet

A



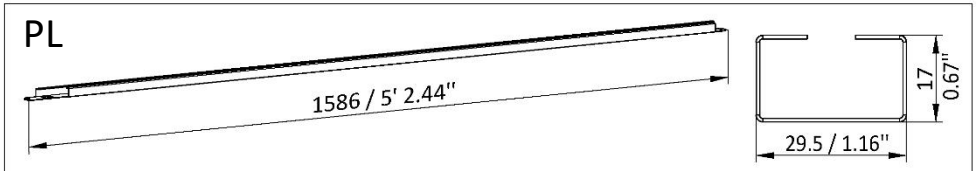
Protective Tape (PT)

- Protects PC against dust, dirt, insects.
- Allows condensation to escape.
- Prevents fungus formation.

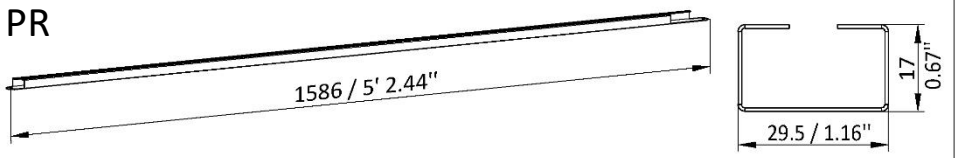
Content

Braces

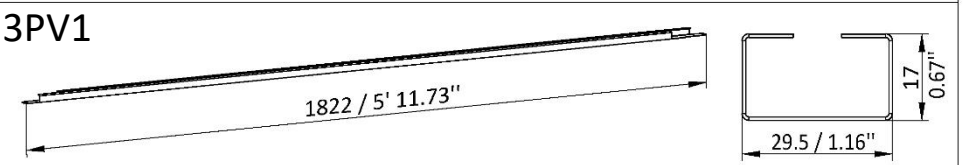
PL



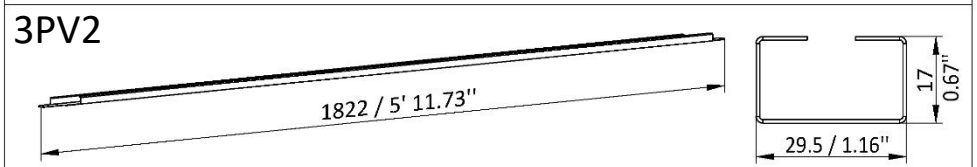
PR



3PV1



3PV2



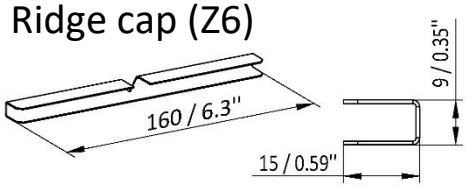
Remove the protective film

Metal parts are covered with a polymer film. The film must be removed, as it begins to deteriorate under the influence of UV rays. We recommend using rubberized work gloves to remove the protective film. The film is easily separated from the metal by sliding it from the edge of the part.

Fasteners

Screw 4,2x13 WURTH k.31314213 	Screw 4,2x19 DIN 7504 T 	Screw 4,2x25 DIN 968 	Screw 4,2x32 DIN 968 
Washer 20x4.3x1.25 DIN 522 	Washer 25x6.5x1.25 DIN 522 	Washer 15x5.3x1.2 DIN 522 	Washer plastic 22x8.4x2 DIN 9021 
Bolt M6x16 DIN 912 	Butterfly nut M6 DIN 315 	Screw M4x12 DIN 7046 	

Accessories

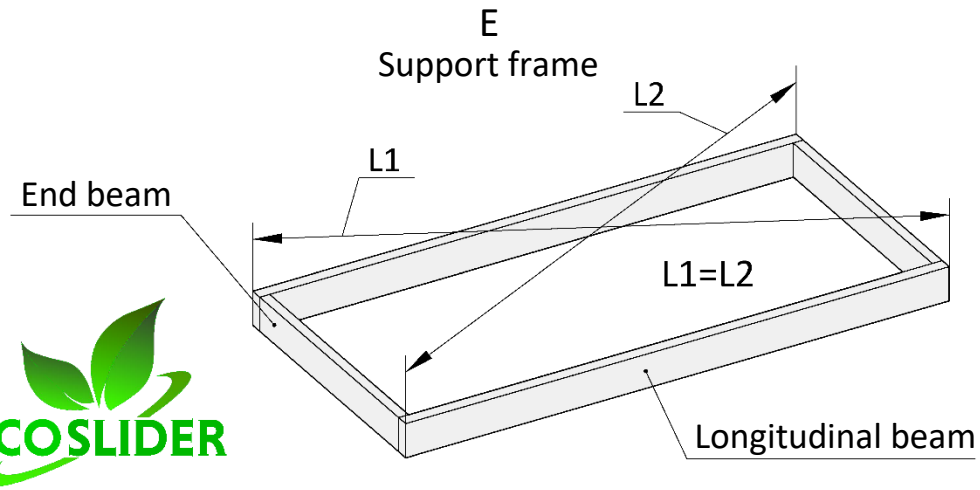
Magnet assembly (M) 	Protective Tape (PT) 
Ridge cap (Z6) 	Pressure profile 
Valve 	Ridge cap with tip can be ordered additionally 

ECOSLIDER HEIKKINEN

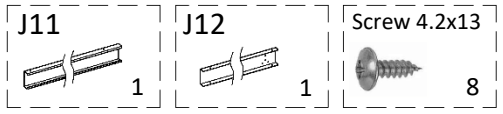
1. Support frame assembly

Assembly order:

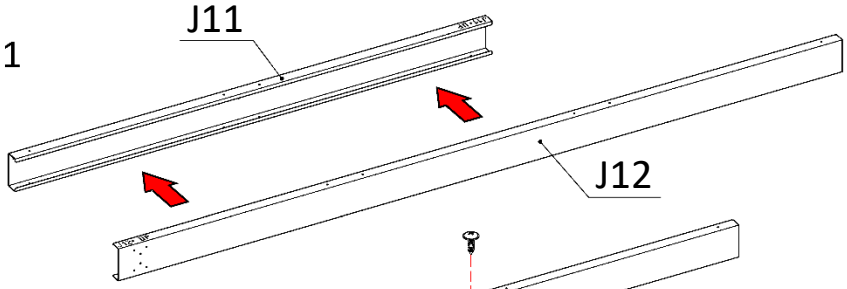
1. Find a flat surface to assemble the support frame and begin assembly.
2. Assemble the longitudinal and end parts of the support frame according to the specifications outlined in paragraphs 1.1, 1.2, 1.3, and 1.4.
3. Lay out the longitudinal and end parts of the support frame as shown in Figure A on page 12. Note the "UP" marking indicating the top of the beam (Fig. C).
4. Check the equality of the diagonals L1 and L2 of your support frame. L1 = L2 (Figure E).
5. Use a level to verify the horizontal alignment of the support frame. The deviation from the horizontal position should not exceed 2-3 mm over a 3 m length. This ensures proper installation of polycarbonate panels.
6. Connect the longitudinal parts of the support frame using self-tapping screws, as illustrated in Figure A.
7. Secure the longitudinal and end parts of the support frame using corner brackets (55x70) at four locations.
8. Install 40x90 brackets on the outer sides of the support frame. For secure fastening, insert the reinforcement into the hole in the 40x90 bracket and drive it into the ground at a 45-degree angle. The approximate locations of the brackets are shown in Figure A. If the installation is on a solid foundation (e.g., concrete), secure the 40x90 bracket on the inside using appropriate fasteners.
9. It is recommended to attach the support frame after the greenhouse is completely assembled.



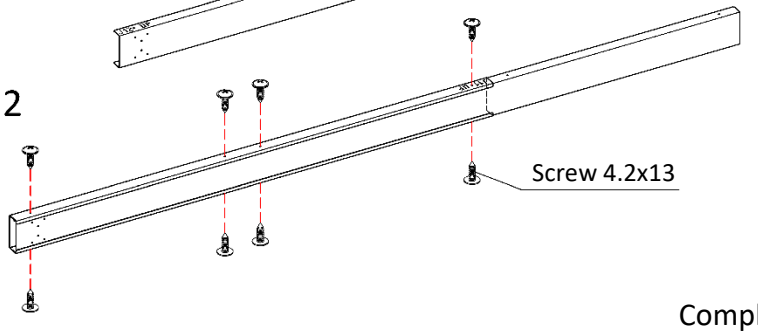
1.1 Longitudinal beam J11+J12



1.1.1



1.1.2



Complete set

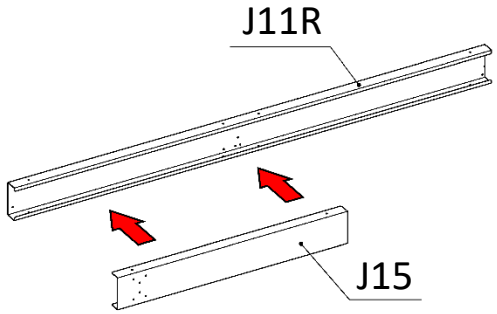
Support frame			EHL 3.0 / 9' 10.11'' greenhouse length range, m/ft						
			2.7	4.1	5.5	6.9	8.3	...	2.7+(1.4*N)
			8' 10.3''	13'5.42''	18' 0.54''	22' 7.65''	27' 2.77''		8' 10.3''+(4' 7.12''*N)
			(BASE)	Number of extensions in the greenhouse					
			0	1	2	3	4	...	N
Name	Qty (BASE)	Col. 1 extend	Quantity, pcs.						
C3	2	0	2	2	2	2	2		2
C4	2	0	2	2	2	2	2		2
C7	2	0	2	2	2	2	2		2
C8	2	0	2	2	2	2	2		2
J11	2	0	2	2	2	2	2		2
J11R	2	0	2	2	2	2	2		2
J12	2	0	2	2	2	2	2		2
J13	0	2	0	2	4	6	8		2N
J14	0	2	0	2	4	6	8		2N
E15	2	0	2	2	2	2	2		2
Bracket L_ 55x70	4	0	4	4	4	4	4		4
Bracket L_40x90	6	2	6	8	10	12	14		6+2N
Fastening fittings	6	2	6	8	10	12	14		6+2N
Screw 4.2x13 WURTH	102	16	102	118	134	150	166		102+16N
Screw 4.2x19 DIN 7504	48	16	48	64	80	96	112		48+16N

1. Support frame assembly

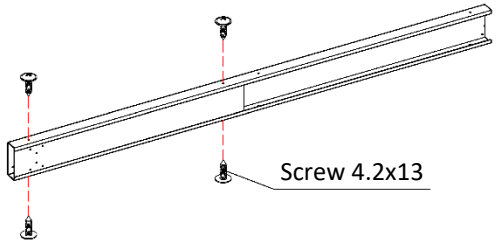
1.2 Longitudinal beam J11R+J15 x2

J11R	J15	Screw 4.2x13
1	1	4

1.2.1



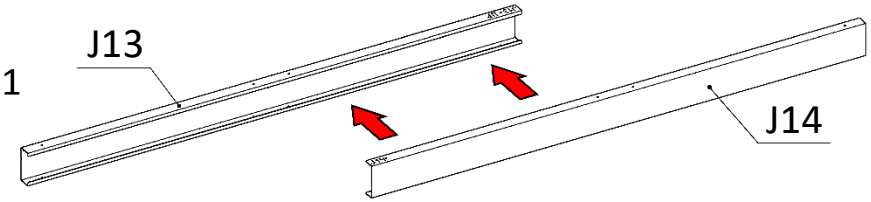
1.1.2



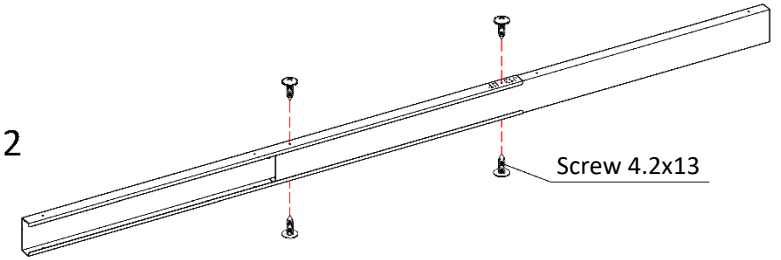
1.4 Extension J13+J14 x2

J13	J14	Screw 4.2x13
1	1	4

1.4.1

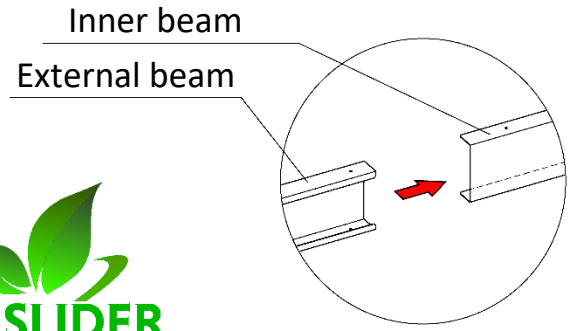


1.4.2

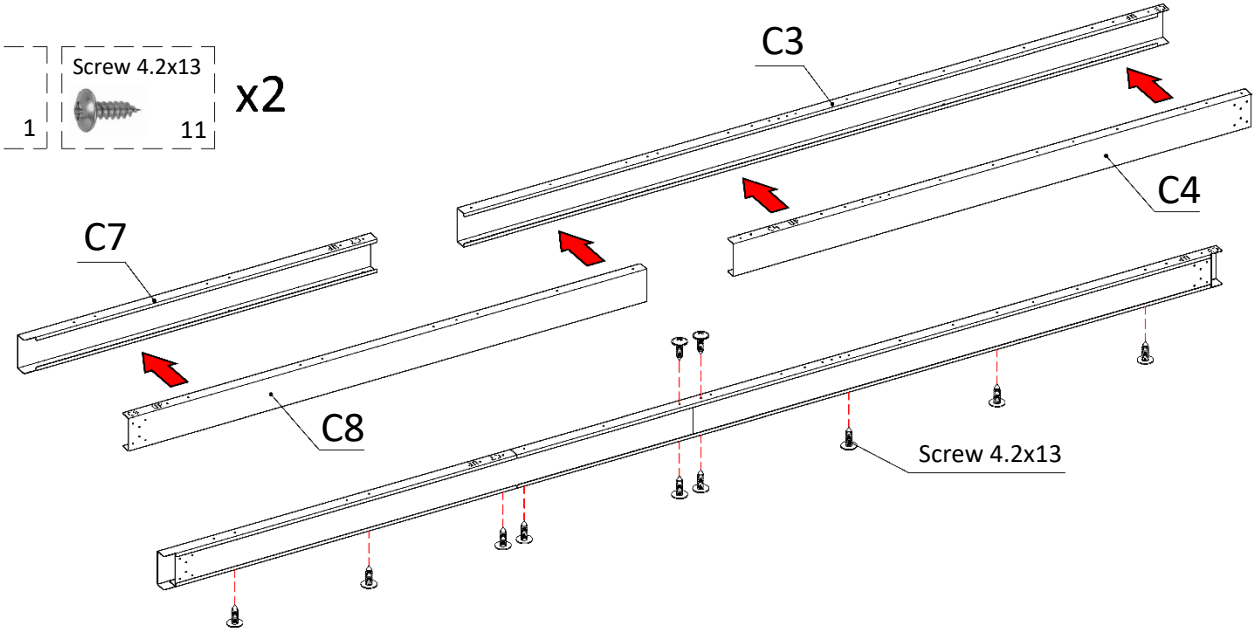


1.3 End beam C3+C4+C7+C8 x2

C3	C4	C7	C8	Screw 4.2x13
1	1	1	1	11



1.3.1



1.3.1

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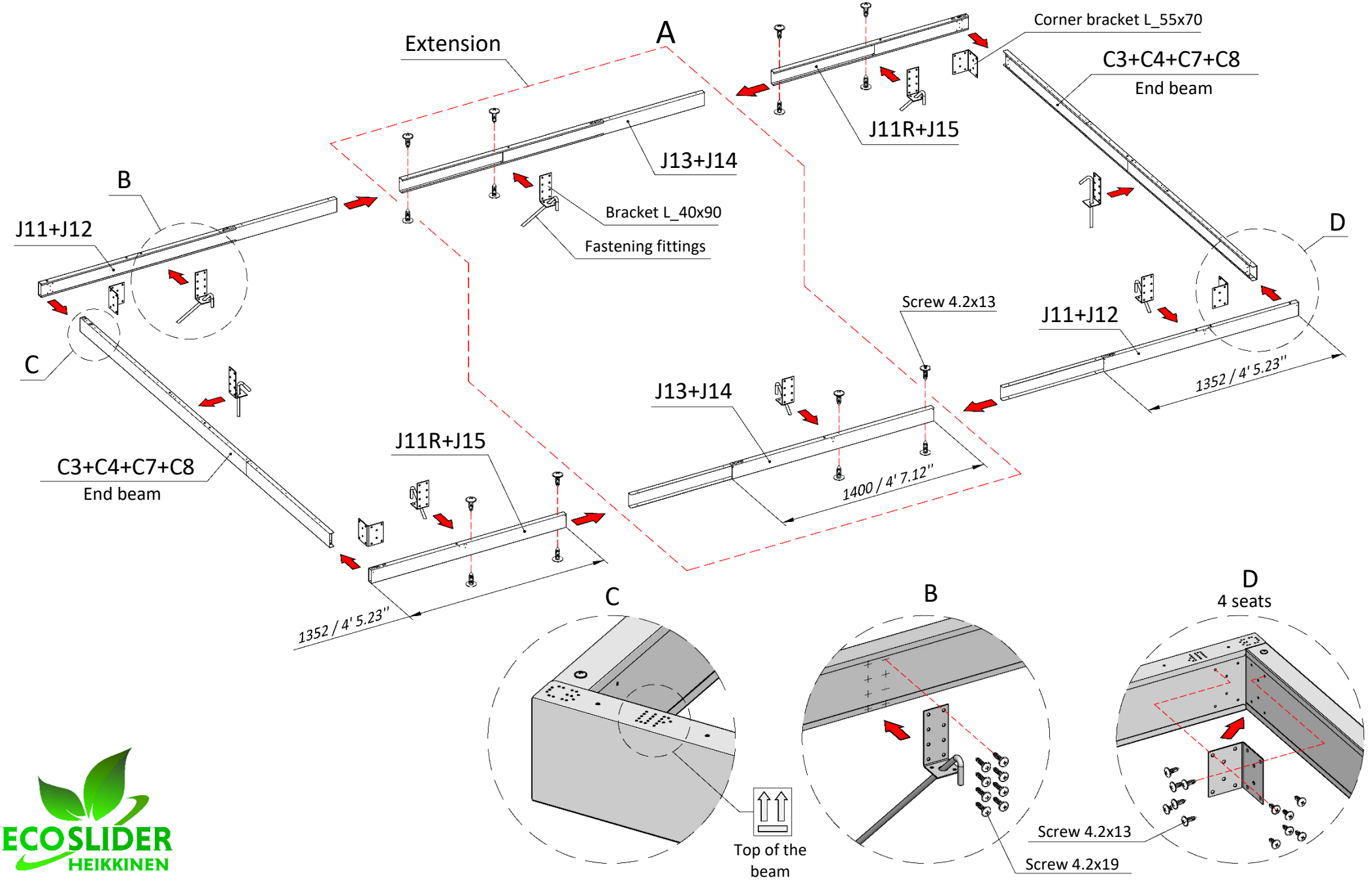
1. Support frame assembly

1.5

L_55x70	L_40x90	Fastening fittings	Screw 4.2x13	Screw 4.2x19
4	See table	See table	See table	See table



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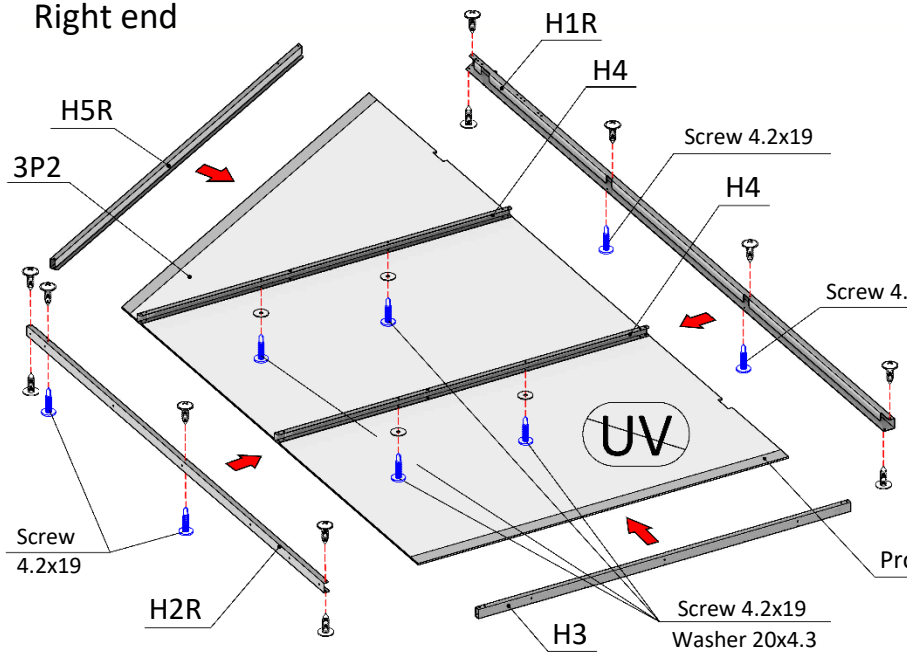
14

2. End Walls

2.1 Right end

H1R	H2R	H3	H4	H5R	3P2	Screw 4.2x13	Screw 4.2x19	Washer 20x4.3
1	1	1	2	1	1	12	8	4

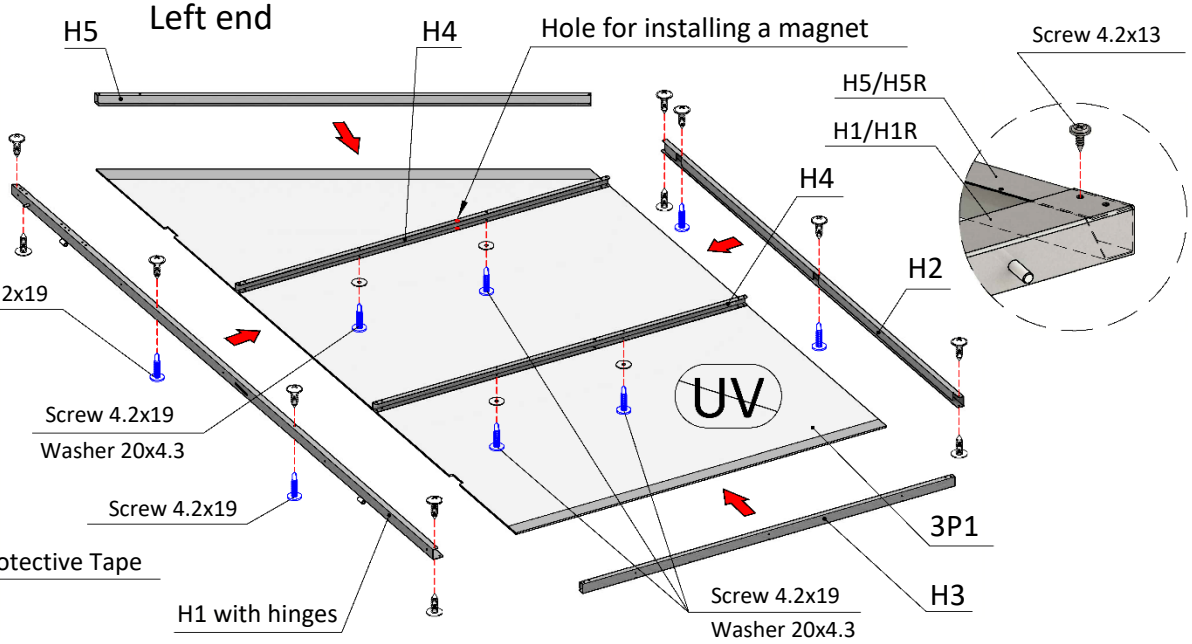
x2



2.2 Left end

H1 with hinges	H2	H3	H4	H5	3P1	Screw 4.2x13	Screw 4.2x19	Washer 20x4.3
1	1	1	2	1	1	12	8	4

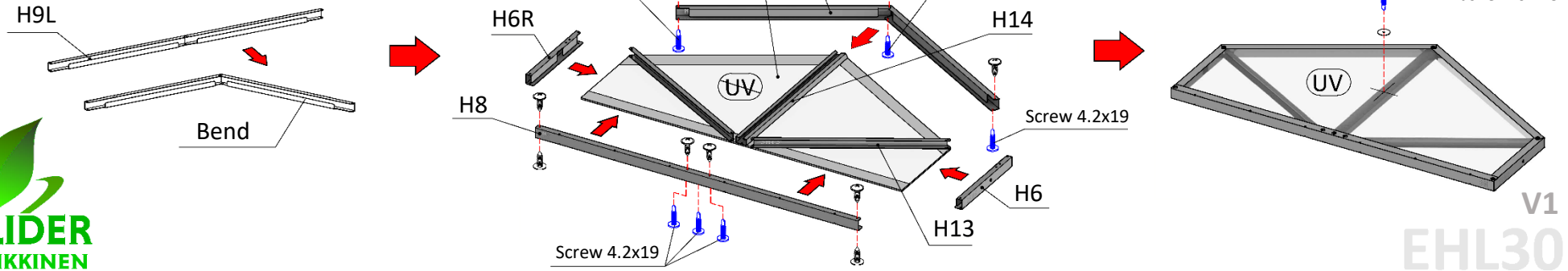
x2



2.3 Smartventor

H8	H9L	H6	H6R	H13	H14	3P3	Screw 4.2x13	Screw 4.2x19	Washer 20x4.3
1	1	1	1	2	1	1	9	7	1

x2



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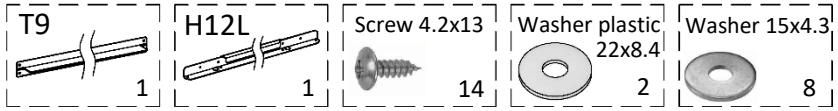
V1

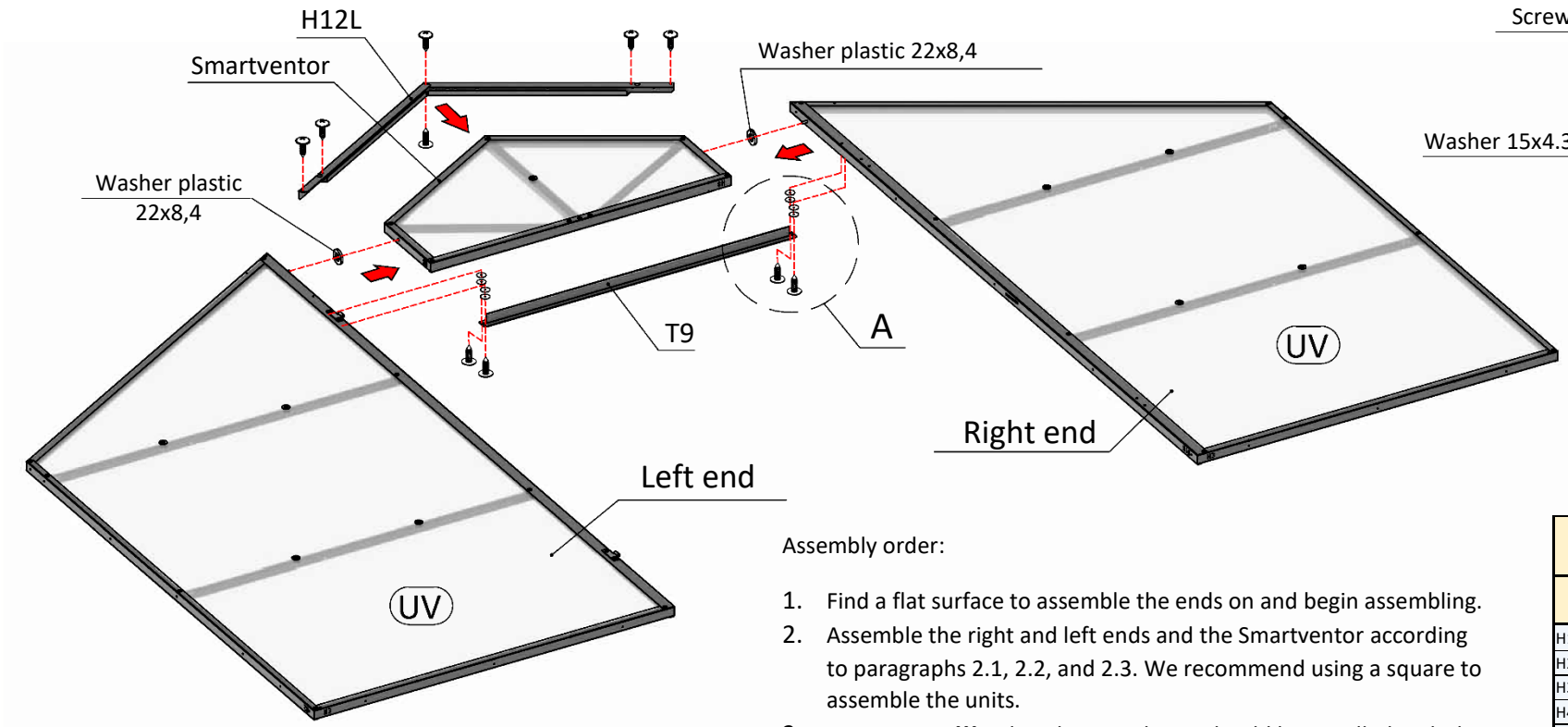
EHL30

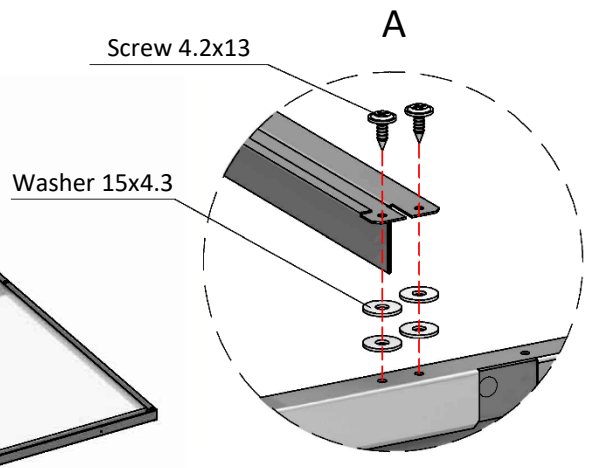
2. End walls assembly

2.5



x2





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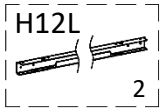

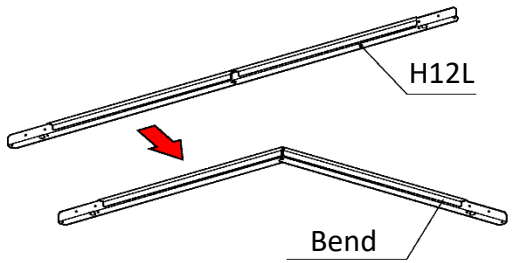

Assembly order:

1. Find a flat surface to assemble the ends on and begin assembling.
2. Assemble the right and left ends and the Smartventor according to paragraphs 2.1, 2.2, and 2.3. We recommend using a square to assemble the units.
3. **IMPORTANT!!!** Polycarbonate sheets should be installed with the **UV** protection side (covered with white film) facing out
4. Assemble the right and left ends with the Smartventor. To do this, place 22x8.4 plastic washers on the pins at the ends and align them with the holes in the Smartventor.
5. Install the T9 profile. Place two 15x5.3 washers under the strip in the place where the screws are installed (Fig. A).
6. Install the H12L profile. To do this, place the H12L profile on the ends, align the holes, and secure profile to the ends, as shown in the figure.
7. The Smartventor should rotate freely without jamming.
8. At this stage, it is recommended to install a Smartventor opening mechanism, manual or automatic, to avoid spontaneous opening during installation. For installation, refer to appendices below, page 26 or page 27.

Complete set

End walls assembly		
Name	**Qty (BASE)**	**Col. 1 extend**
H1 with hinges	2	0
H2	2	0
H3	4	0
H4	8	0
H5	2	0
H1R	2	0
H2R	2	0
H5R	2	0
H6	2	0
H6R	2	0
H8	2	0
H9	2	0
H12L	2	0
H13	4	0
H14	2	0
T9	2	0
Panel 3P1 (1050x2060)	2	0
Panel 3P2 (1050x2060)	2	0
Panel 3P3 (874x482)	2	0
Screw 4.2x13 WURTH	86	0
Screw 4.2x19 DIN 7504	46	0
Washer 20x4.3x1.25	18	0
Washer 15x5.3x1.2	16	0
Washer plastic 22x8.4x2	4	0

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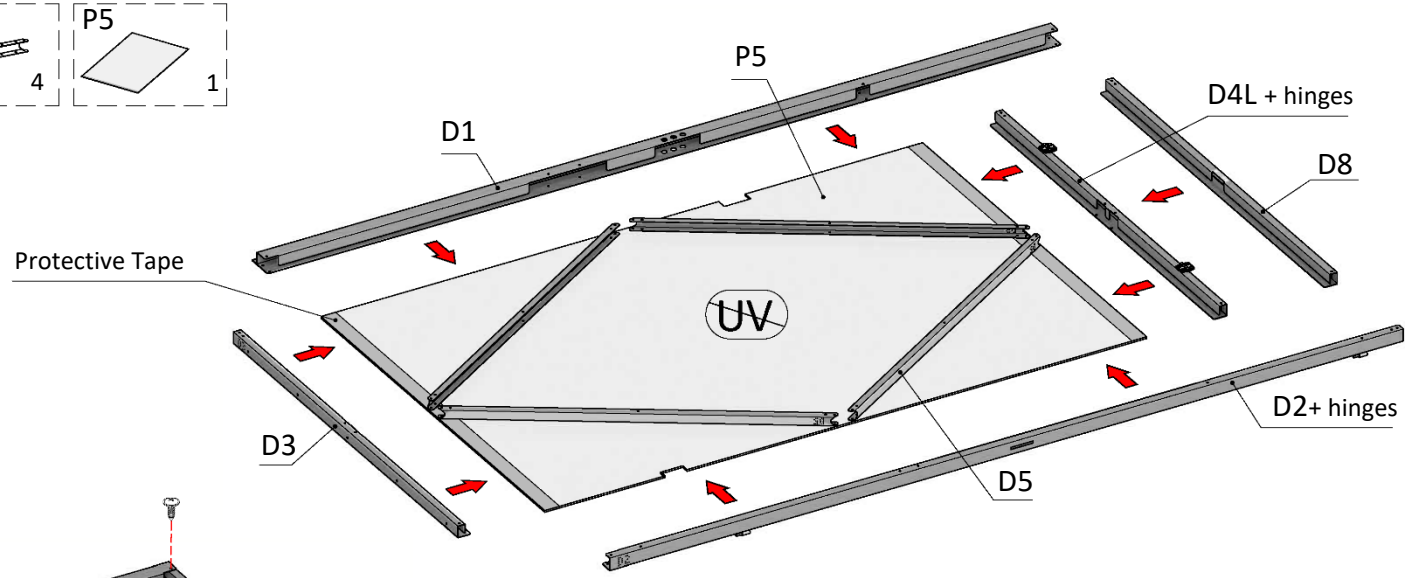
3. Door assembly

3.1.1 Door

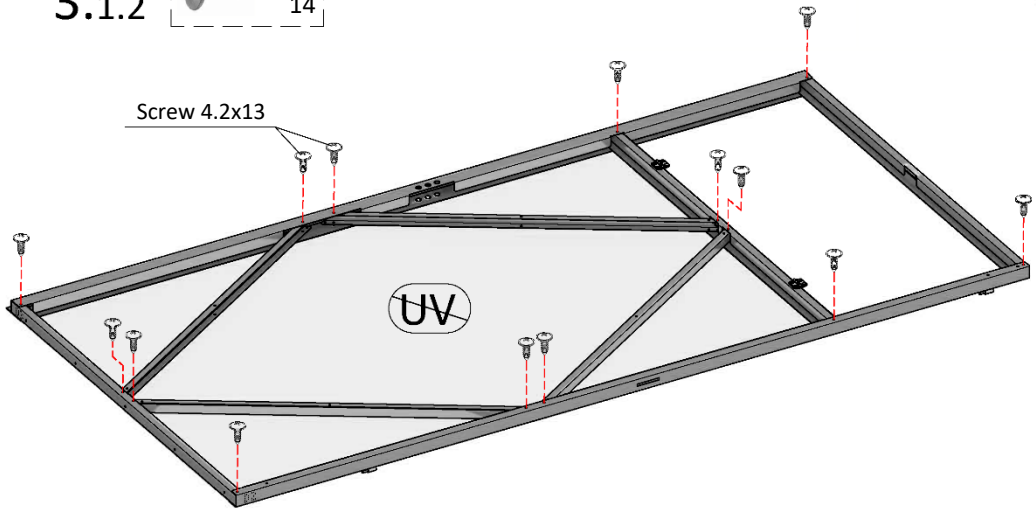
x2

D1	D2+ hinges	D3	D4L+ hinges	D8	D5	P5
1	1	1	1	1	4	1



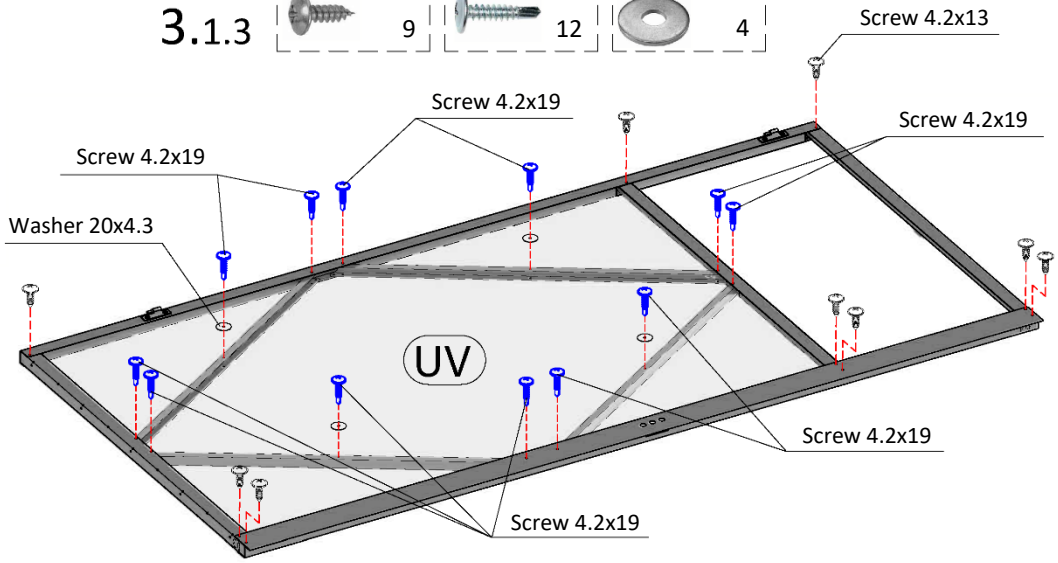
3.1.2

Screw 4.2x13
14



3.1.3

Screw 4.2x13	Screw 4.2x19	Washer 20x4.3
9	12	4



Assembly order:

1. Assemble the door according to paragraphs 3.1.1, 3.1.2, and 3.1.3. We recommend using a square to assemble the units.
2. **IMPORTANT!!!** Polycarbonate sheets should be installed with the **UV** protected side facing out.

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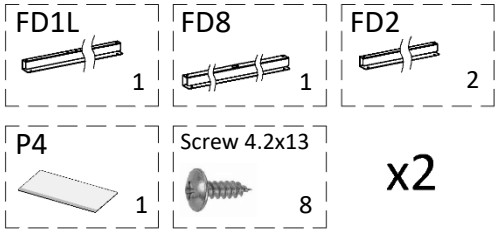
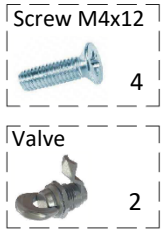
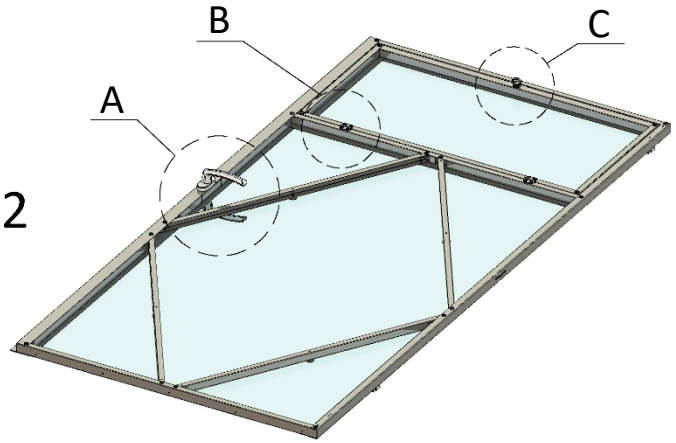
3. Door assembly

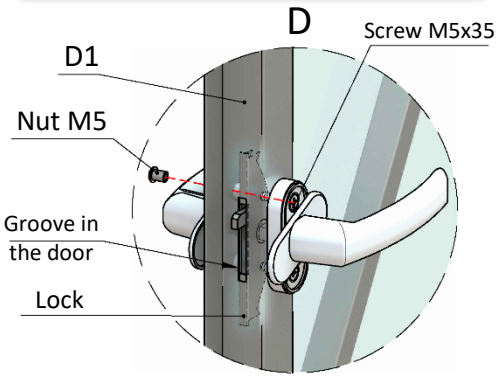
3.2 Door window

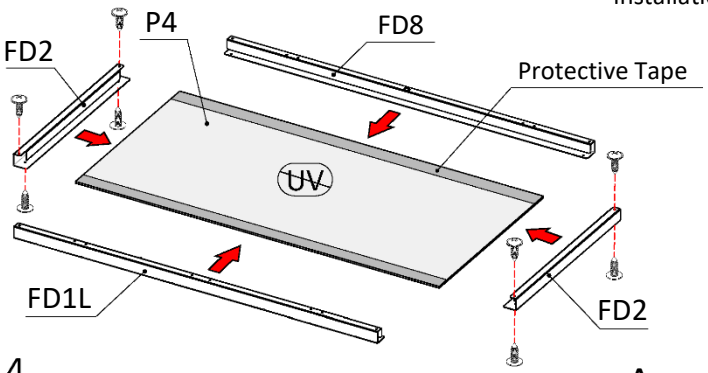


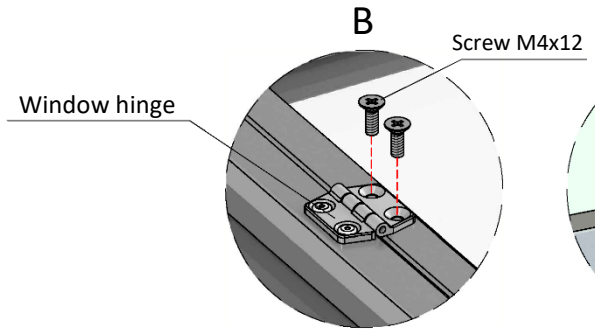
3.3 Door window installation

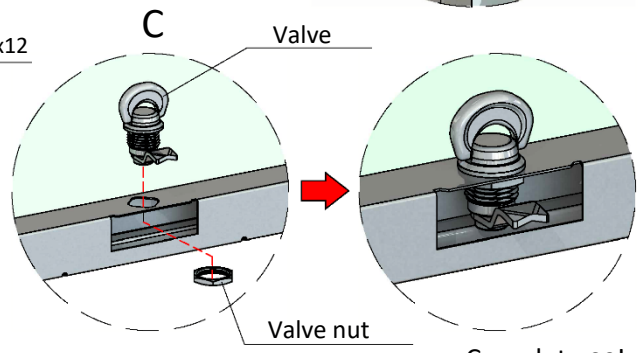












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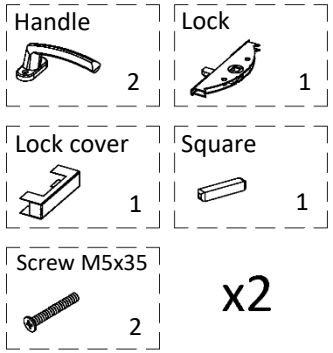
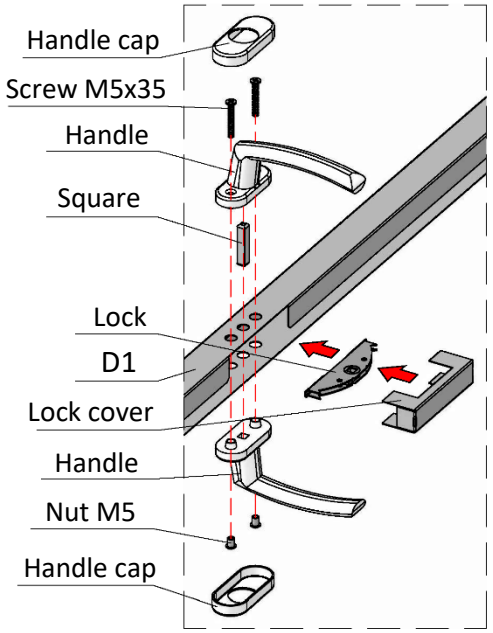


A Handles and the lock installation



Assembly order (continued):

4. Assemble the window according to paragraph 3.2. Install a valve on the door window (pic C). Connect the window to the door screw M4x12 according to Fig. B.
5. The window should open freely without jamming.
6. Install the door handle with lock as shown in Figure A.
7. Before installing the handle, drill 3 holes Ø10 mm in the polycarbonate panel P5, located in the door pillar D1, where the handles are installed.
8. To simplify installation, it is recommended to assemble the lock mechanism in the closed position (lock latch extended).
9. Open position - the handle is directed to the side, closed - the lock handle is directed downwards.
10. The handle should turn freely, without jamming. If necessary, adjust the position of the lock latch relative to the groove in the door pillar. To do this, loosen the M5 nuts (Fig. D) and turn the M5x35 lock screws (there is a threaded hole in the Lock). The lock mechanism will shift. After adjustment, fix the M5 nuts.

Complete set

Door assembly

Name	Qty (BASE)	Col. 1 extend
D1	2	0
D2 with hinges	2	0
D3	2	0
D4L with hinges	2	0
D5	8	0
D8	2	0
FD1L with M4 PEM	2	0
FD2	4	0
FD8	2	0
P4 (820x405)	2	0
P5 (880x1365)	2	0
Handle	4	0
lock	2	0
Lock cover	2	0
Square	2	0
Lock screw M5x35	4	0
Valve	2	0
Screw 4.2x13 WURTH	62	0
Screw 4.2x19DIN 7504	24	0
Screw M4x12 DIN 7046	8	0
Washer 20x4.3 DIN 522	8	0

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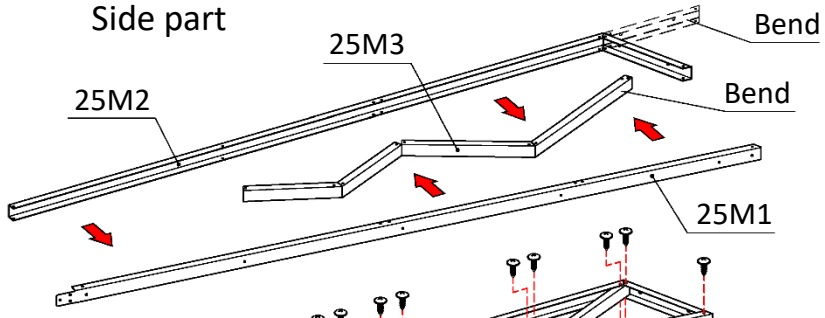
4. Assembly and installation of trusses

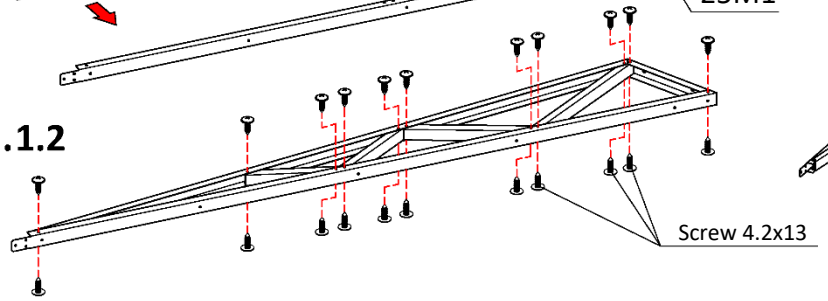
4.1.1

25M1	25M2	25M3	Screw 4.2x13
1	1	1	22

Side part



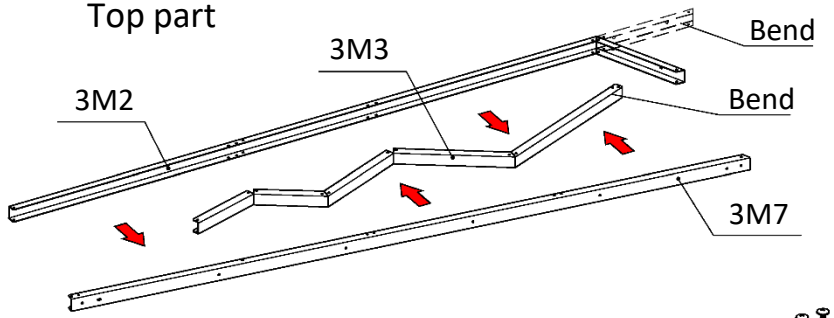
4.1.2



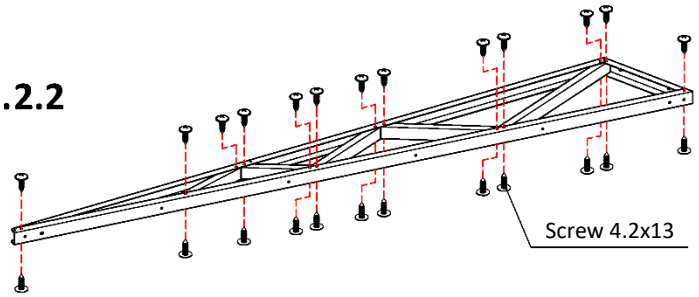
4.2.1

3M7	3M2	3M3	Screw 4.2x13
1	1	1	26

Top part

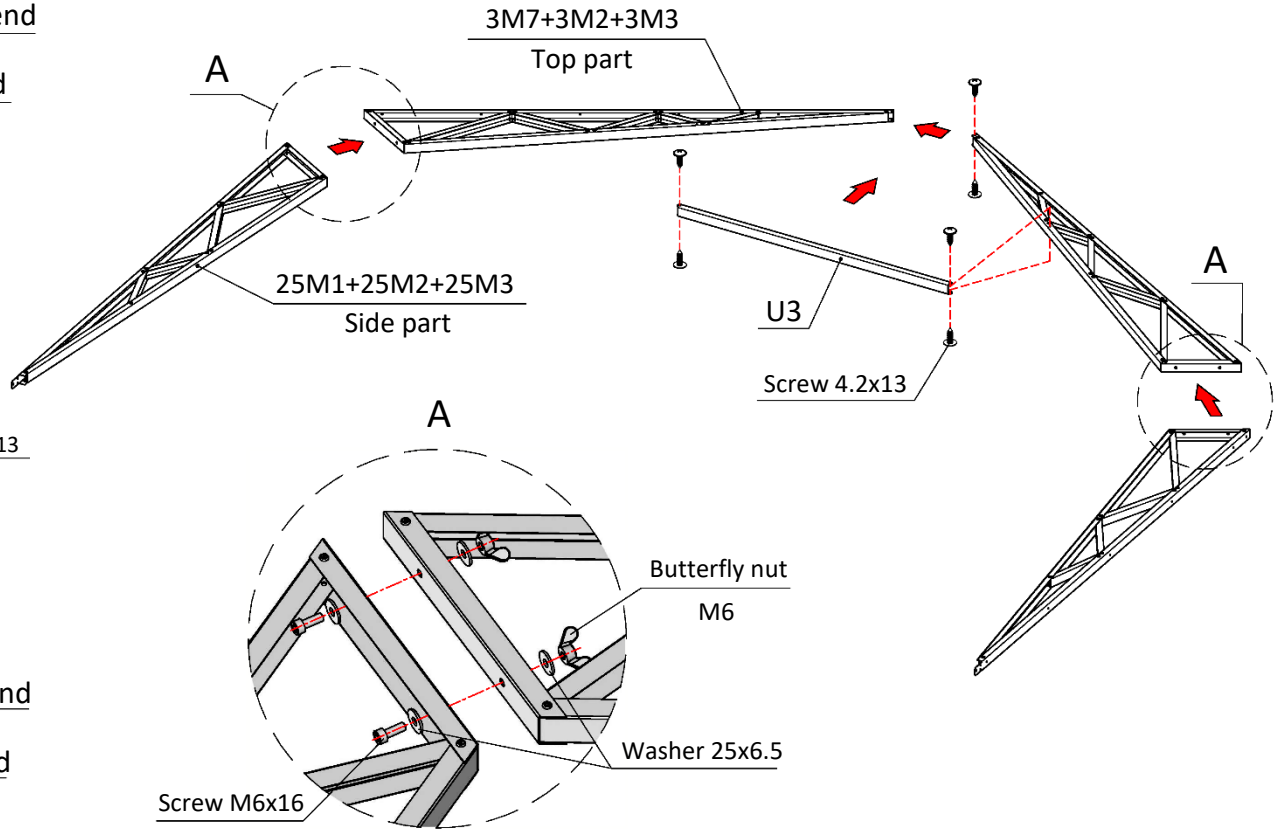


4.2.2



4.3

U3	Screw 4.2x13	Screw M6x16	Butterfly nut M6	Washer 25x6.5
See table	See table	See table	See table	See table



Assembly order:

1. Assemble the upper and side parts of the truss according to paragraphs 4.1-4.3.
2. Lay out the top and sides on a horizontal surface of sufficient size.
3. Using M6x16 bolts, 25x6.5 washers and M6 butterfly nuts, assemble the top and side parts together as shown in Figure A.
4. Using 4.2x13 self-tapping screws, connect the half-trusses together.
5. Place the U25 profile between the trusses, align the holes on the strip and the half-trusses, and secure the strip with self-tapping screws.

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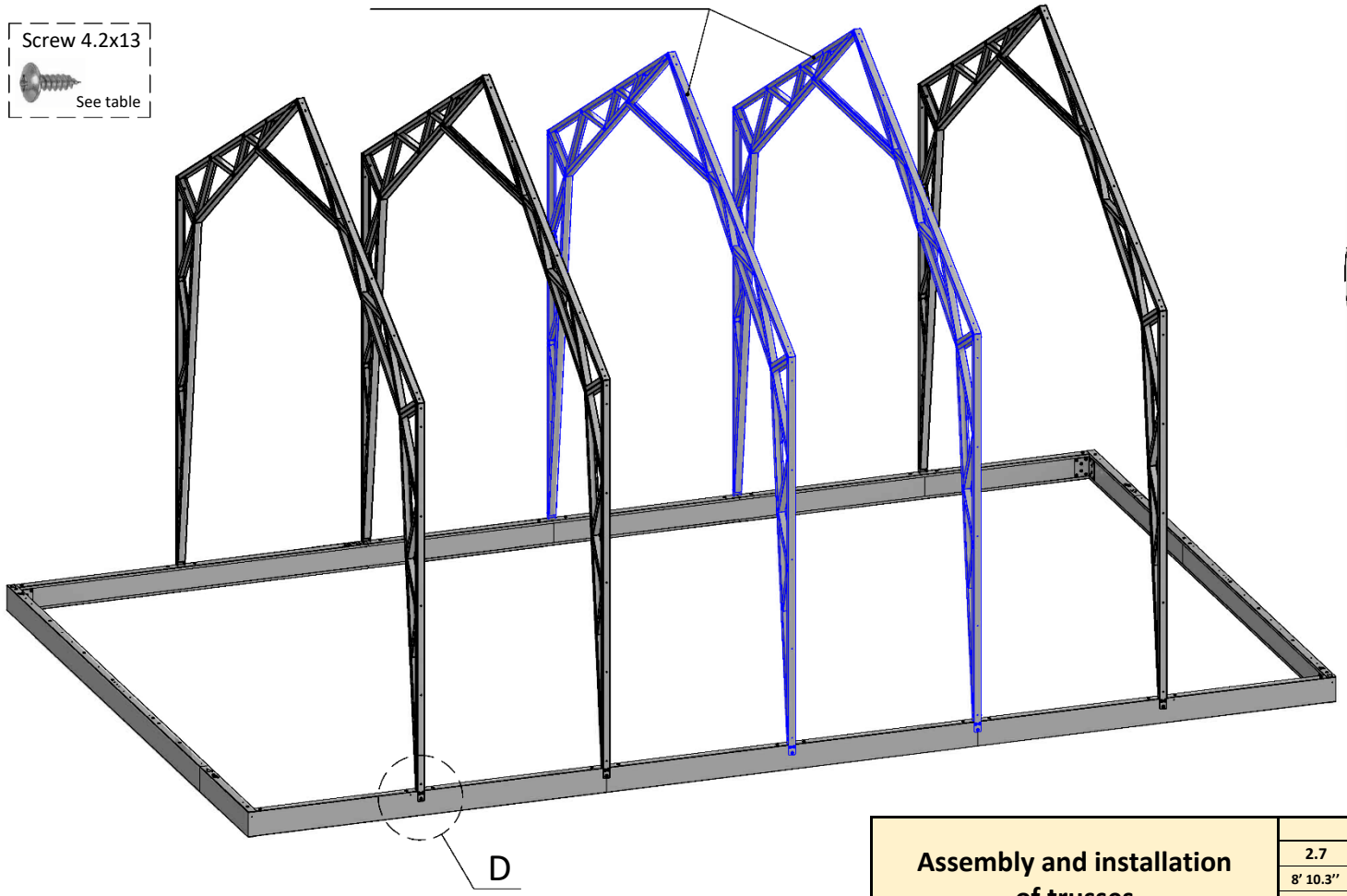
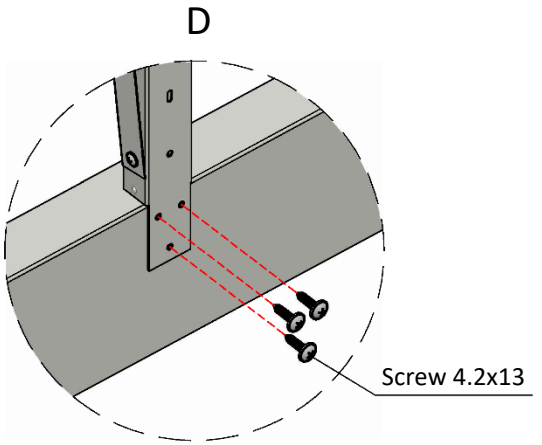
4. Assembly and installation of trusses

4.6

Screw 4.2x13

See table





Assembly order (continued):

6. Install the trusses onto the support frame. Align the holes in the truss with those in the frame, and secure the trusses to the frame using 4.2x13 self-tapping screws (Figure D).

Complete set

Assembly and installation of trusses			EHL 3.0 / 9' 10.11'' greenhouse length range, m/ft						
			2.7	4.1	5.5	6.9	8.3	...	2.7+(1.4*N)
			8' 10.3''	13'5.42''	18' 0.54''	22' 7.65''	27' 2.77''		8' 10.3''+(4' 7.12''*N)
			(BASE)	Number of extensions in the greenhouse					
			0	1	2	3	4	...	N
Name	Qty (BASE)	Col. In 1 extend	Quantity, pcs.						
25M1	6	4	6	10	14	18	22		6+4N
25M2	6	4	6	10	14	18	22		6+4N
25M3	6	4	6	10	14	18	22		6+4N
3M7	6	4	6	10	14	18	22		6+4N
3M2	6	4	6	10	14	18	22		6+4N
3M3	6	4	6	10	14	18	22		6+4N
U3	3	2	3	5	7	9	11		3+2N
Screw 4.2x13 WURTH	328	216	328	544	760	976	1192		328+216N
Bolt M6x16 DIN 912	12	8	12	20	28	36	44		12+8N
Nut M6 DIN 315	12	8	12	20	28	36	44		12+8N
Washer 25x8.5 DIN 522	24	16	24	40	56	72	88		24+16N

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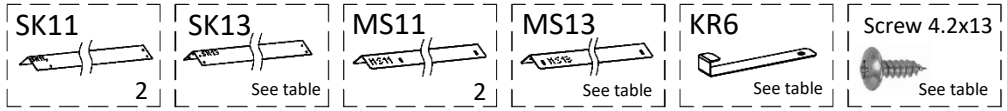
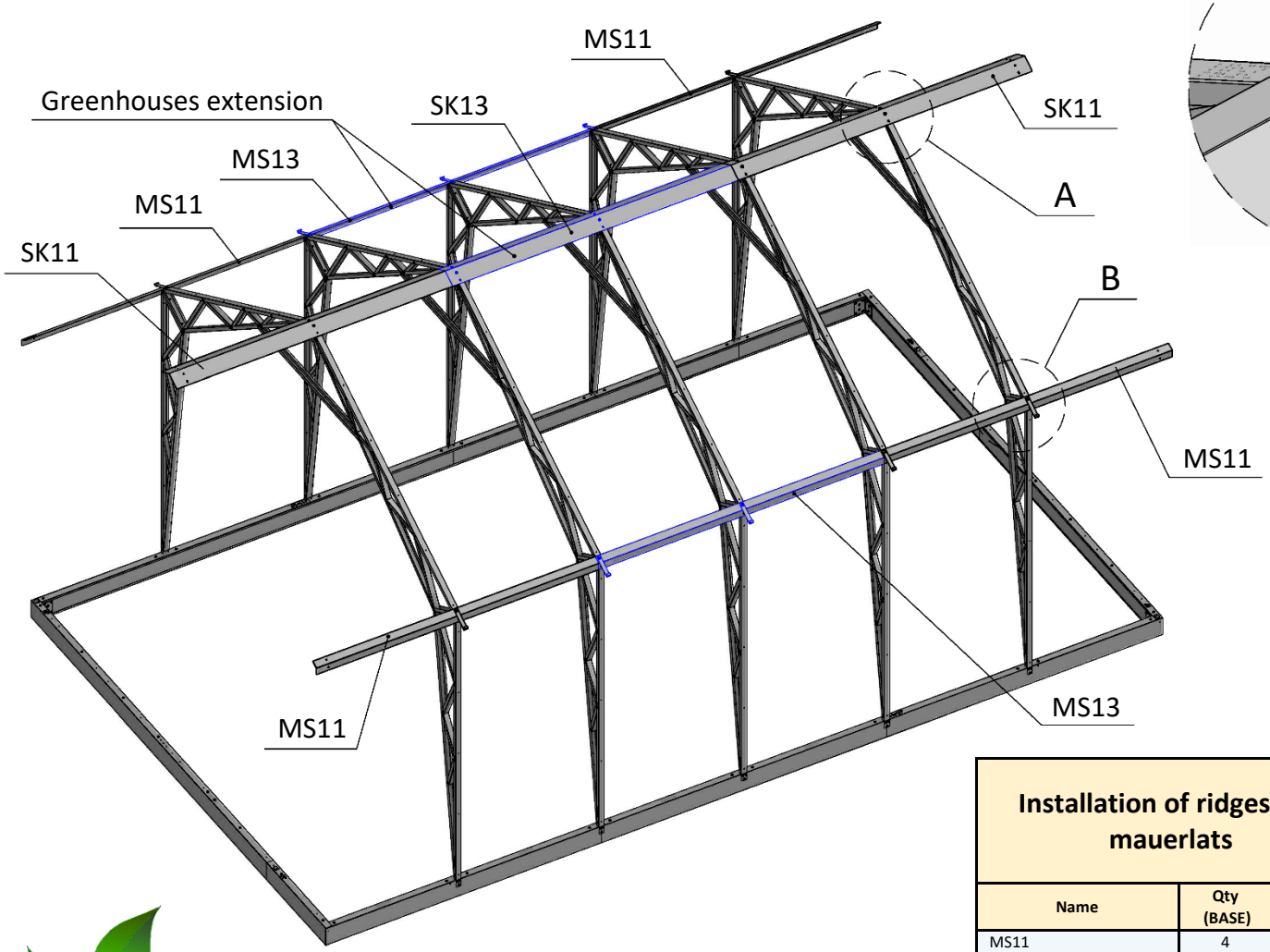
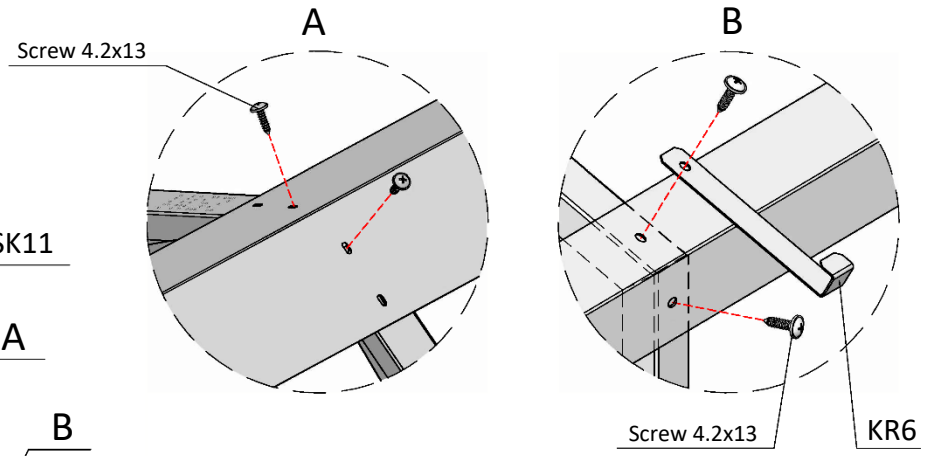
5. Installation of ridges and mauerlats

5.







Assembly Order:

1. Install the ridges and mauerlats (parts SK11, SK13, MS11, and MS13). Align the grooves in the trusses with those in the ridge profiles SK11, SK13, and the mauerlates MS11, MS13. Ensure that the trusses are positioned vertically (at 90° relative to the support frame).
2. Install the KR6 bracket on the mauerlat (Fig. B). Note: Final fixation should be completed after installing the polycarbonate side panels.

Complete set

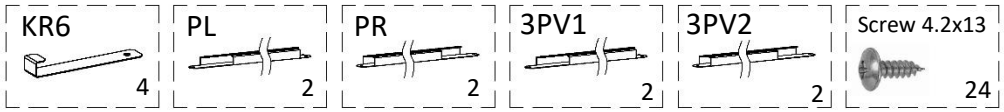
Installation of ridges and mauerlats			EHL 3.0 / 9' 10.11'' greenhouse length range, m/ft						
			2.7	4.1	5.5	6.9	8.3	...	2.7+(1.4*N)
			8' 10.3''	13'5.42''	18' 0.54''	22' 7.65''	27' 2.77''		8' 10.3''+(4' 7.12''*N)
			(BASE)	Number of extensions in the greenhouse					
			0	1	2	3	4	...	N
Name	Qty (BASE)	Col. 1 extend	Quantity, pcs.						
MS11	4	0	4	4	4	4	4		4
MS13	0	2	0	2	4	6	8		2N
SK11	2	0	2	2	2	2	2		2
SK13	0	1	0	1	2	3	4		N
KR6	6	4	6	10	14	18	22		6+4N
Screw 4.2x13 WURTH	18	12	18	30	42	54	66		18+12N

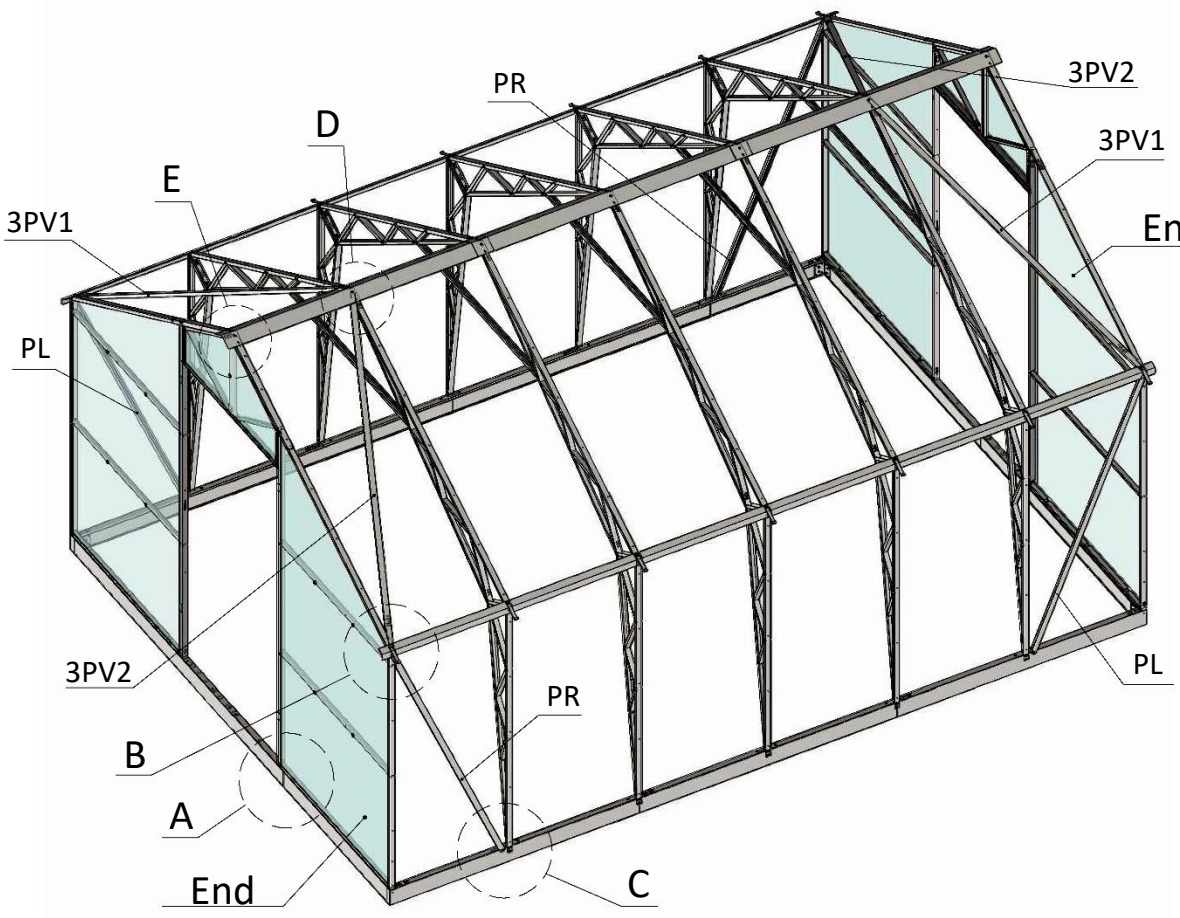
ECOSLIDER HEIKKINEN

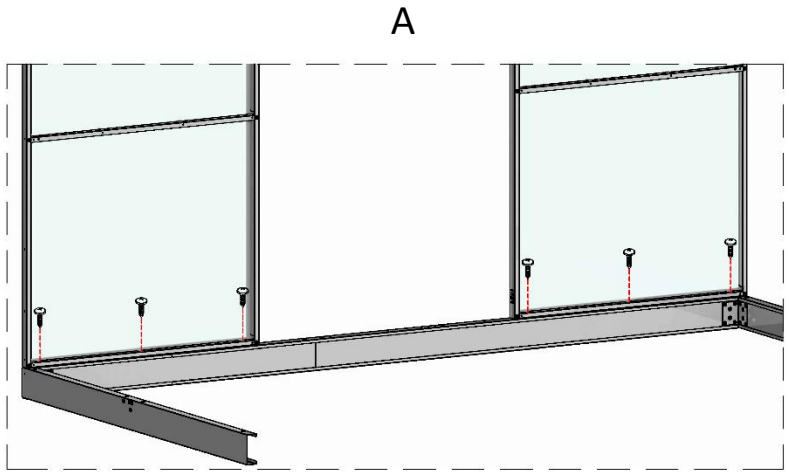
6. End walls installation

EHL30 V1

6.

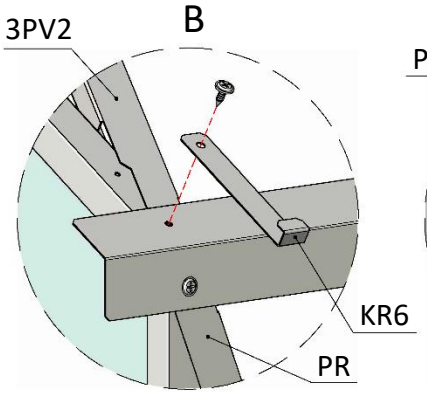


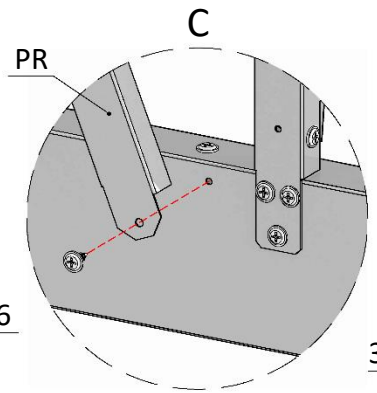


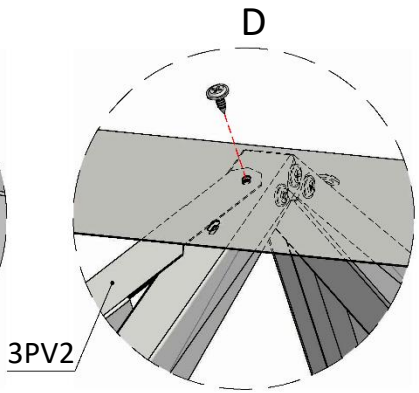


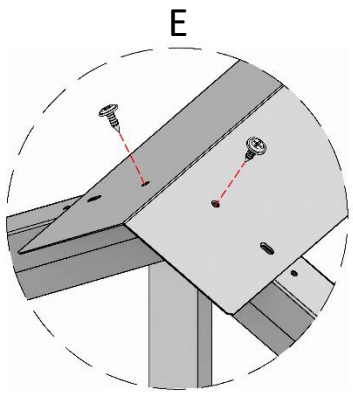
Assembly order:

1. Place the end walls on the support frame, aligning them with the frame's edge and ensuring alignment of the holes in the ends and the frame. Hold the end wall in a vertical position and secure it with screws, as shown in Fig. A.
2. Align the grooves in the SK11 skates with the holes in the ends and secure the skates with screws (Fig. E).
3. Install the PL and PR braces onto the support frame. Align the holes in the MS11 Mauerlat, the braces, and the holes in the ends, then secure the braces. Next, attach the braces to the support frame (Figure B and C).
4. Install the 3PV1 and 3PV2 according to the pictures B and D.
5. Install the KR6 brackets on the mauerlat and secure them with self-tapping screws (Fig. B). Do not delay; final fixation must be done after installation of the side panels.









Complete set

End walls installation

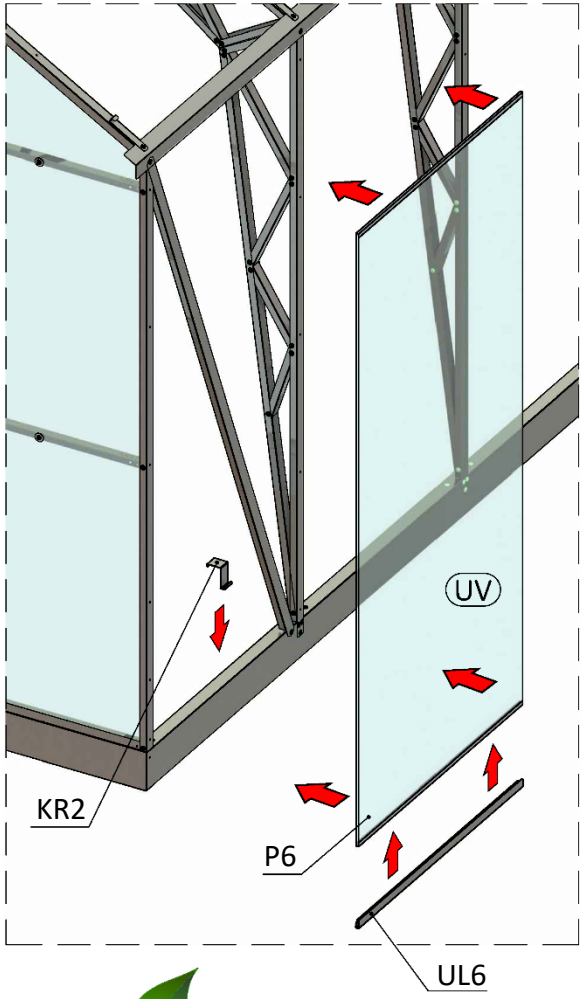
Name	Qty (BASE)	Col. 1 extend
KR6	4	0
PL	2	0
PR	2	0
3PV1	2	0
3PV2	2	0
Screw 4.2x13 WURTH	24	0

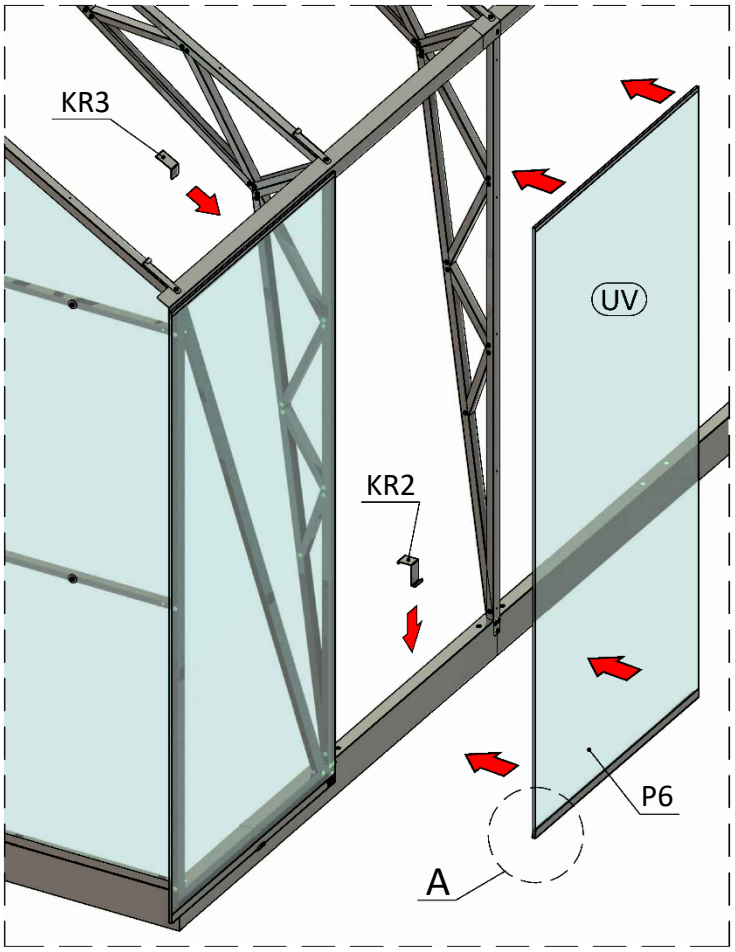
7. Installation of panels

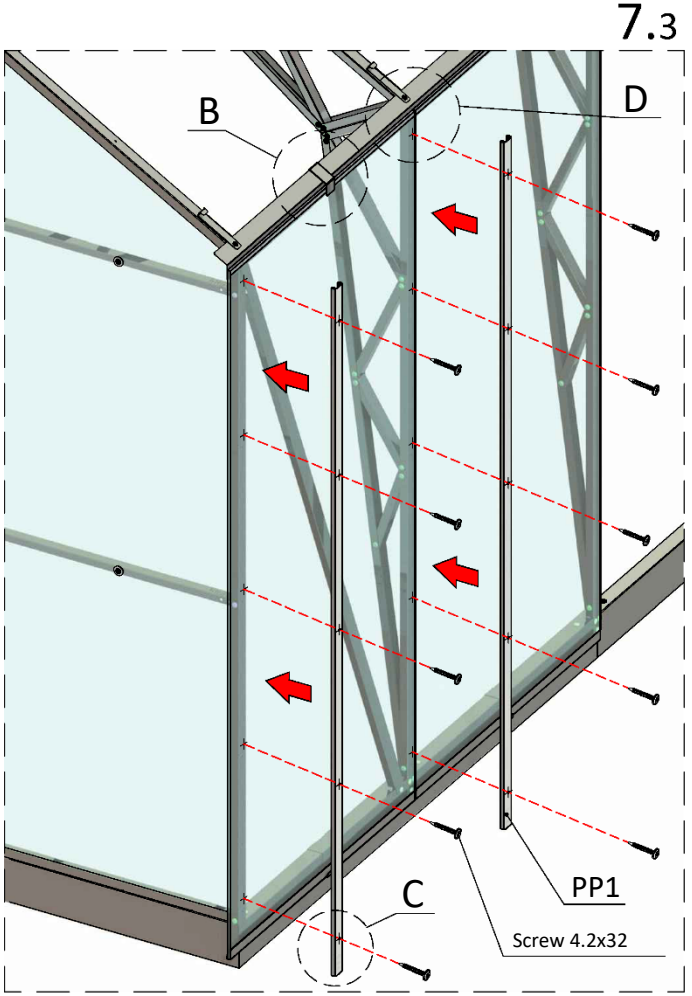
7. P6 See table | UL6 See table | PP1 (wall) See table | KR2 See table | KR3 See table

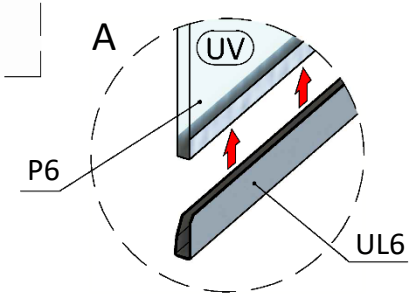
Screw 4.2x32 See table

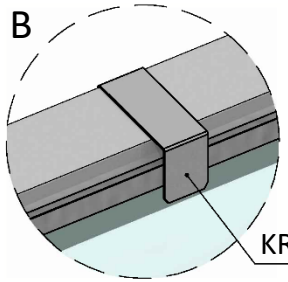
For assembly procedure see page 24

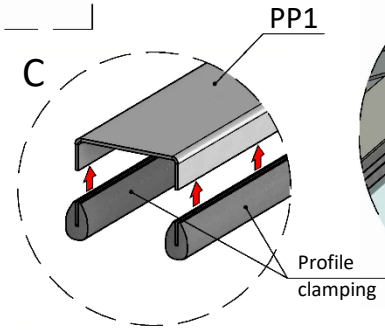


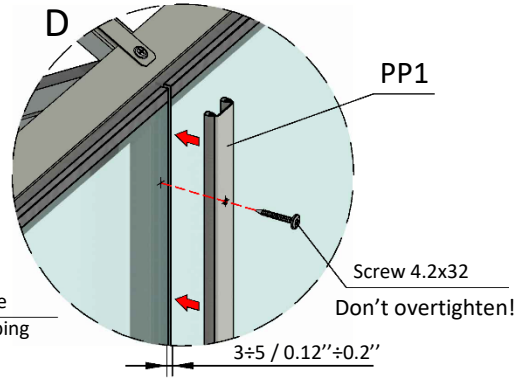










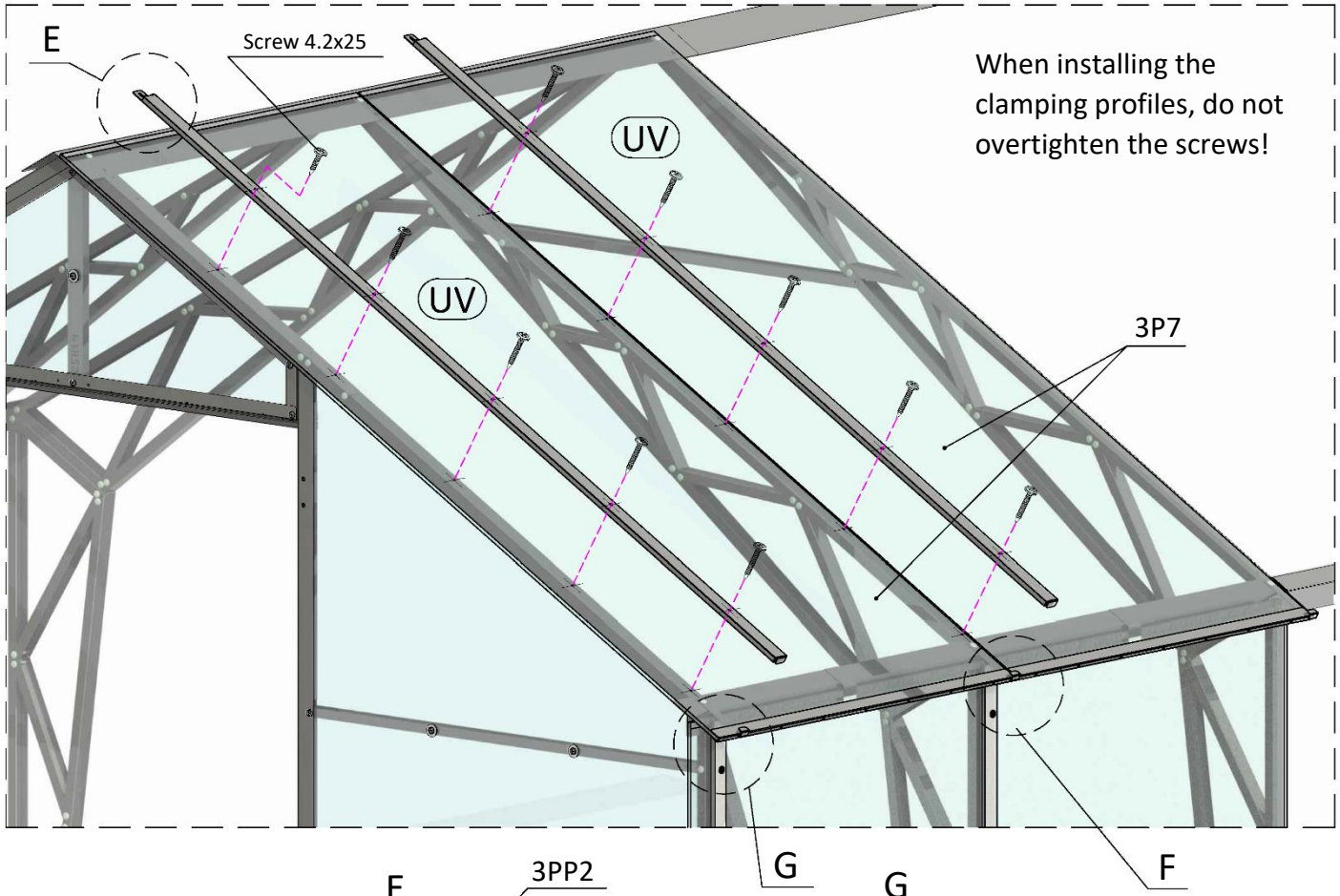


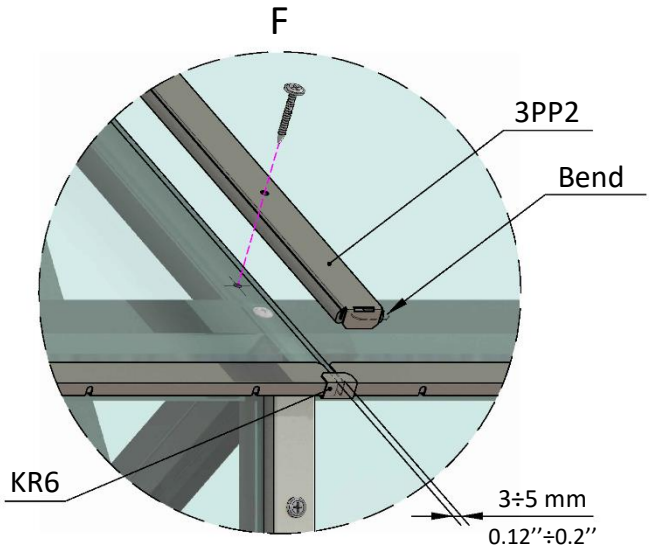
ECOSLIDER HEIKKINEN

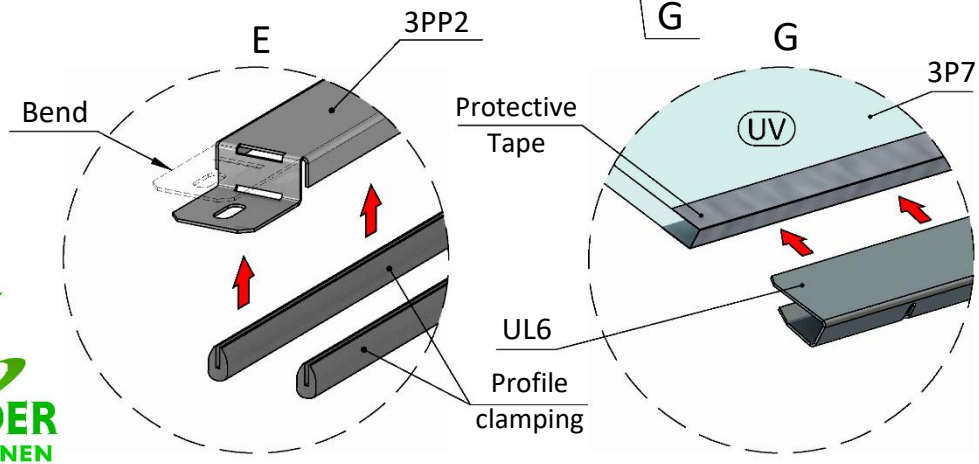
7. Installation of panels

7. 3P7 See table | 3PP2 (roof) See table | Screw 4.2x25 4 | Screw 4.2x32 See table

7.4





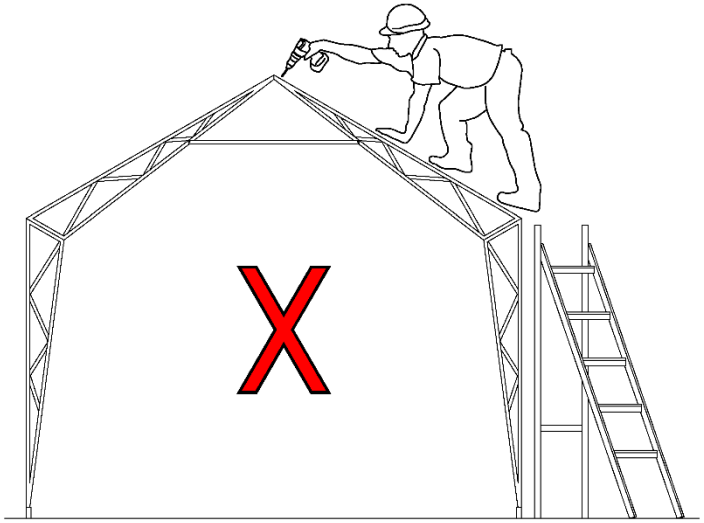


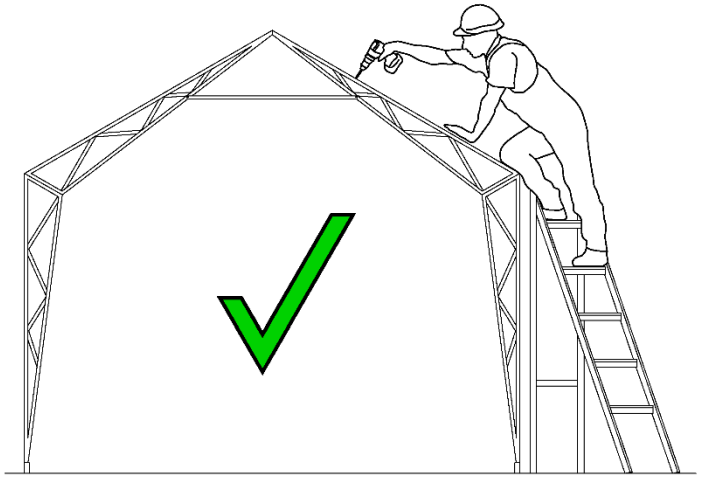
Complete set

Installation of panels			EHL 3.0 / 9' 10.11'' greenhouse length range, m/ft						
			2.7	4.1	5.5	6.9	8.3	...	2.7+(1.4*N)
			8' 10.3''	13'5.42''	18' 0.54''	22' 7.65''	27' 2.77''		8' 10.3''+(4' 7.12''*N)
			(BASE)	Number of extensions in the greenhouse					
			0	1	2	3	4	...	N
Name	Qty (BASE)	Col. 1 extend	Quantity, pcs.						
Panel P6 (696x1500)	8	4	8	12	16	20	24		8+4N
Panel 3P7 (696x1780)	8	4	8	12	16	20	24		8+4N
PP1	10	6	10	16	22	28	34		10+6N
3PP2	10	6	10	16	22	28	34		10+6N
UL6	16	8	16	24	32	40	48		16+8N
Screw 4.2x25 DIN 968	4	0	4	4	4	4	4		4
Screw 4.2x32 DIN 968	96	60	196	156	216	276	336		96+60N

ECOSLIDER HEIKKINEN

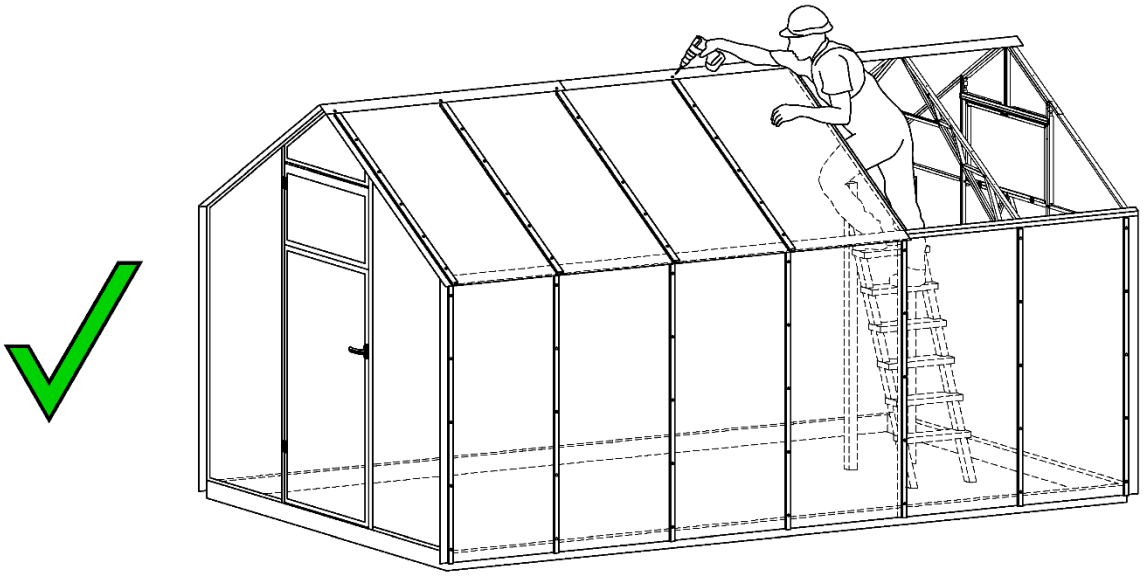
7. Installation of panels





Assembly order:

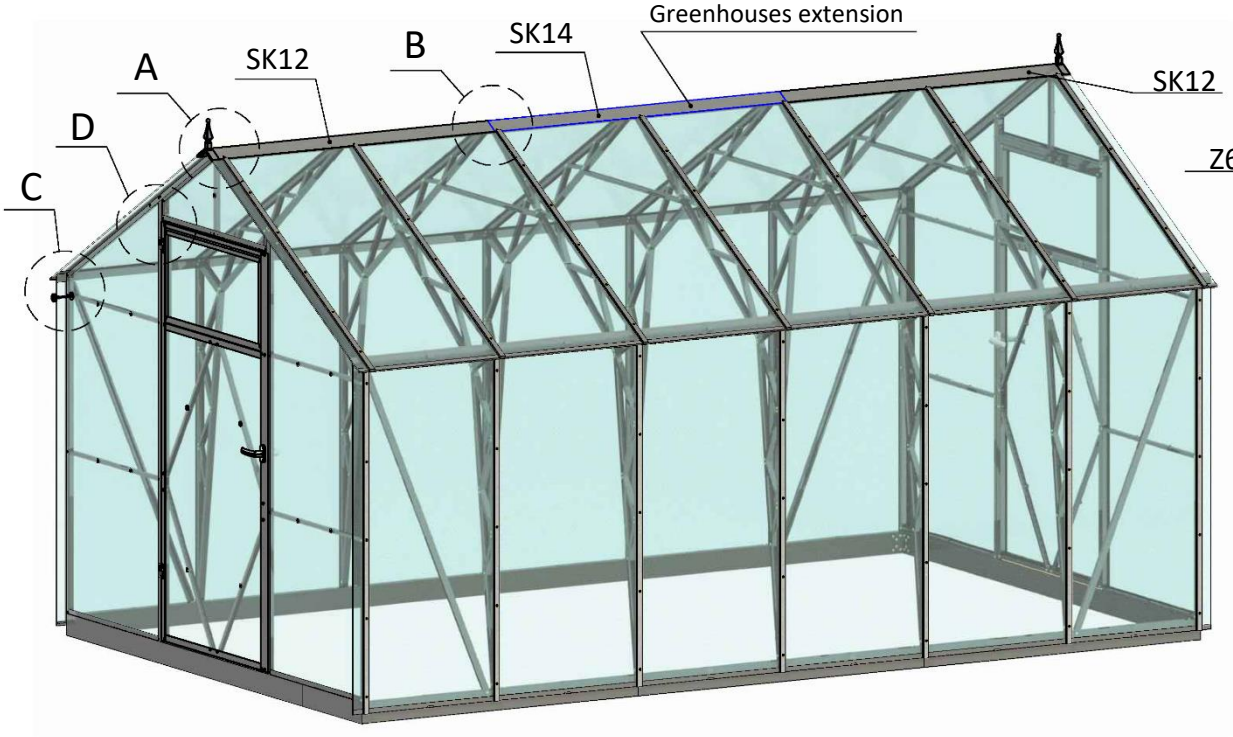
1. **IMPORTANT!** Before installing polycarbonate panels, check the diagonals of the greenhouse support frame and ensure horizontality. The accurate installation of the panels relies on this essential factor.
2. **IMPORTANT!** Polycarbonate sheets should be installed with the UV protected side facing out.
3. **IMPORTANT!** When attaching the planks with screws, do not apply excessive force to avoid denting the planks.
4. **IMPORTANT!** When installing polycarbonate top panels, do not step on the roof.
5. Place UL6 strips on the polycarbonate panels, as shown in fig. A, page 22.
6. Start installing the polycarbonate panels from the edge of the greenhouse, proceeding from left to right.
7. Place KR2 brackets on the support frame in the center between the trusses or the truss and the ends.
8. Install the P6 polycarbonate panel (see Fig. 7.1) onto the KR2 bracket. Place the KR3 bracket on the Mauerlat and secure the sheet with it.
9. Repeat with the next sheet, as shown in Fig. 7.2. Maintain a gap between sheets of 3÷5 mm. (Figure D, page 22). The sheets must be installed evenly, without distortions, parallel to the trusses. If you cannot do this, check the equality of the diagonals and the horizontal level of the support frame.
10. Install the PP1 clamping profile at the joint of the side panels, having previously placed the clamping profile on it (see Fig. C, page 21). The clamping strips are fixed with 4.2x32 self-tapping screws.
11. Install the top polycarbonate panels. Maintain the distance between adjacent panels 3÷5 mm. From below, the sheets rest on brackets KR6 (see Fig. F, p. 23). At the junction of the top panels, install the 3PP2 clamping strip, first bending it and placing the clamping profile on it (Fig. E, p. 23). Secure it with 4.2x32 self-tapping screws. When attaching the polycarbonate panel to the end at the location of the smartventor, fasten the 3PP2 clamping strip with 4.2x25 self-tapping screws. Make sure the smartventor opens freely.
12. **IMPORTANT!** Install the panels onto the roof in two 700mm sections and then attach the SK12 or SK14 top ridges to the roof. Secure them with 4.2x25 screws through the 3PP2 strips to the trusses (See Fig. B, page 25).
13. Install the remaining panels.

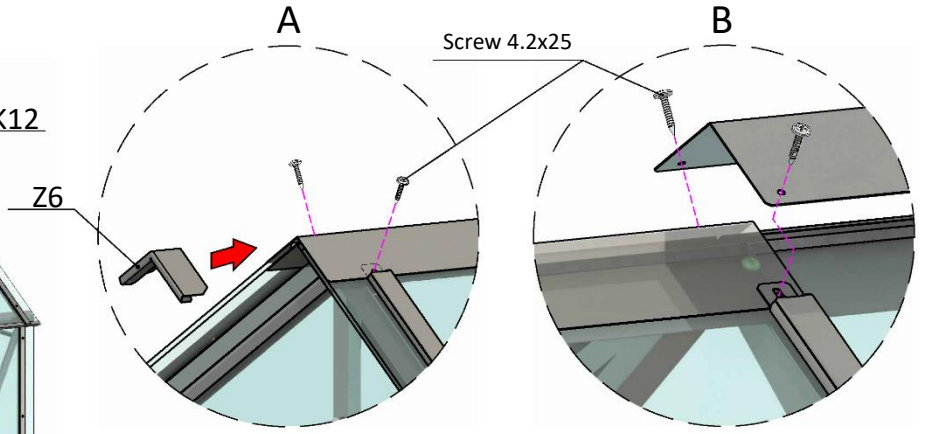


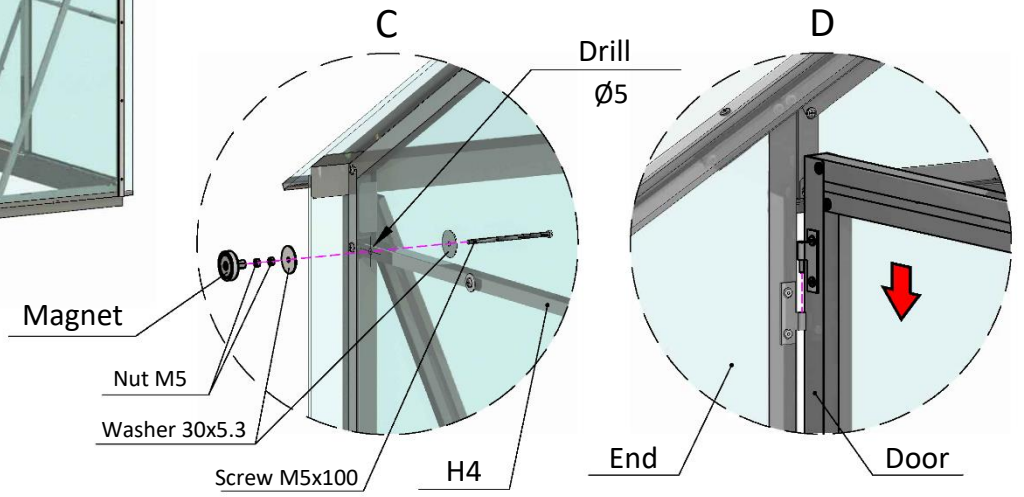
ECOSLIDER HEIKKINEN

8. Final installation

8. SK12 2 | SK14 See table | Z6 2 | M 2 | Screw 4.2x25 See table







Assembly order:

1. Installation of skates SK12, SK14 on the roof is carried out together with the top panels in two sections of 700 mm each. Secure the upper skates SK12 and SK14 with 4.2x25 self-tapping screws. Do not step on the roof.
2. Secure the greenhouse. Refer to point 8 on page 12 for instructions.
3. Hang the doors on their hinges, ensuring smooth opening and closing (Fig. D). If necessary, adjust the position of the lock latch relative to the groove in the door pillar.
4. Install the magnets to the 25H4 profiles on the end walls (see figure 2.2., page 14). Pre-drill a hole in the polycarbonate sheet opposite the hole in the profile, and install the magnet as shown in Figure C. Ensure that the magnets securely hold the doors in the open position. Bending the magnet pin, if necessary, is permissible.
5. Install the protective caps (Z6) on the ends of the skates. Ensure they are securely held in place (Figure A).

Complete set

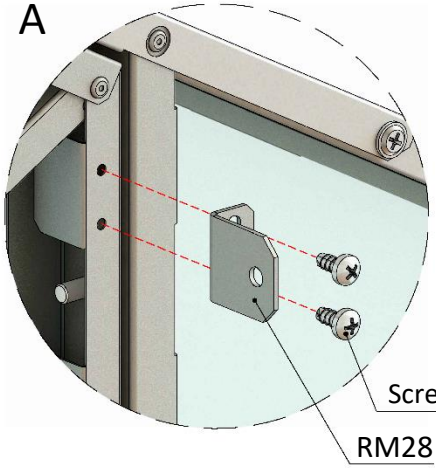
Final installation			EHL 3.0 / 9' 10.11'' greenhouse length range, m/ft						
			2.7	4.1	5.5	6.9	8.3	...	2.7+(1.4*N)
			8' 10.3''	13'5.42''	18' 0.54''	22' 7.65''	27' 2.77''		8' 10.3''+(4' 7.12''*N)
			(BASE)	Number of extensions in the greenhouse					
			0	1	2	3	4	...	N
Name	Qty (BASE)	Col. 1 extend	Quantity, pcs.						
SK12	2	0	2	2	2	2	2		2
SK14	0	1	0	1	2	3	4		N
Ridge cap (Z6)	2	0	2	2	2	2	2		2
Magnet assembly (M)	2	0	2	2	2	2	2		2
Screw 4.2x19 DIN 968	26	12	26	38	50	62	74		24+12N

ECOSLIDER HEIKKINEN

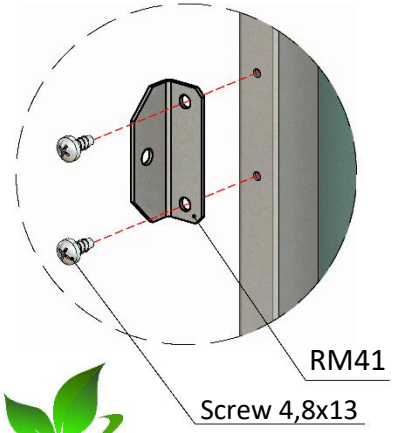
Addition 1 (V1)

Installation of manual smartventor opener

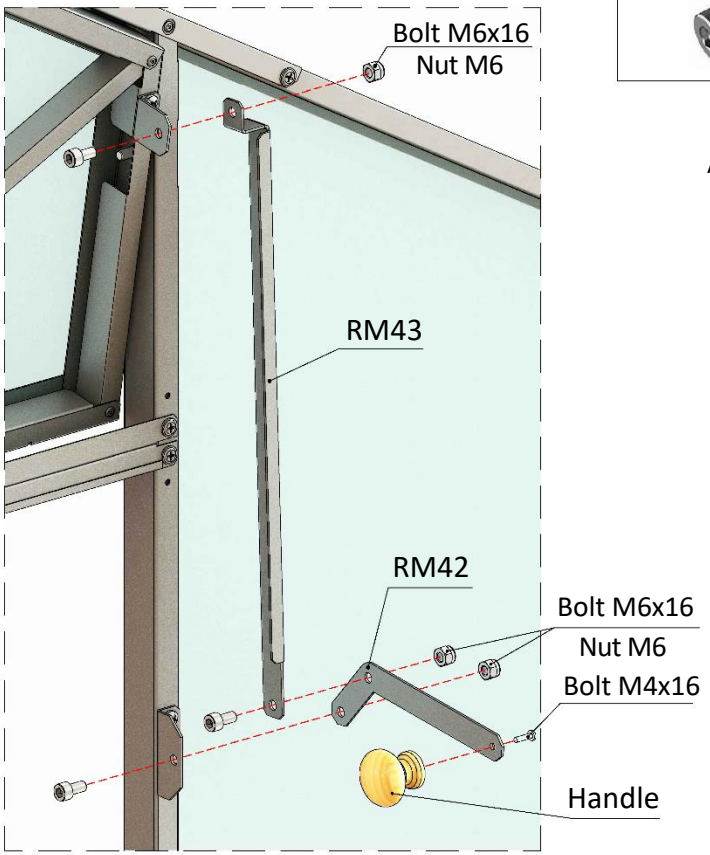
A



B



C



Content

Assembly order:

1. Install part RM28 on the smartventor and part RM41 on the end stand using 4.8x13 self-tapping screws (Fig. A, B).
2. Connect parts RM41 and RM42 with parts RM28 and RM43 using M6x16 bolts and M6 self-locking nuts. Do not tighten the nuts, the parts must turn freely (Fig. C).
3. Install the handle on the RM 42 part, secure it with an M4x16 screw (Fig. C).
4. The smartventor should rotate freely, without jamming.

Complete set

Detail (2 sets)	Qty in greenhouse
RM28	2
RM41	2
RM42	2
RM43	2
Handle	2
Bolt M6x16 DIN 912	6
Bolt M4x16 DIN 912	2
Self-locking nut M6 DIN 985	6
Screw 4.8x13 DIN 968	8

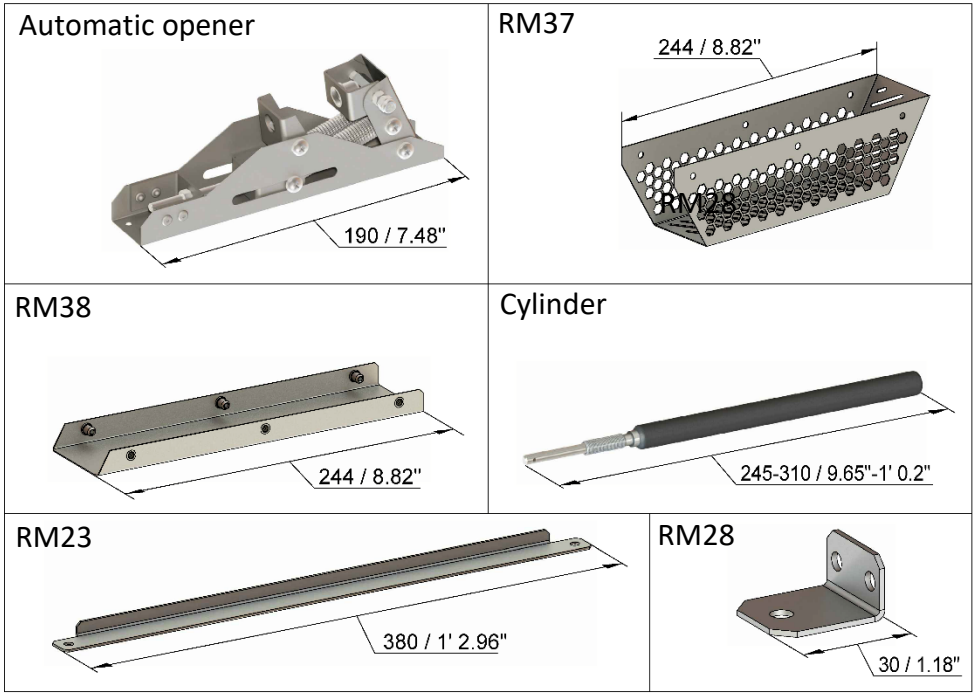
ECOSLIDER HEIKKINEN

Installation of manual smartventor opener

Content

Detail	Quantity in greenhouse (2 sets)
Automatic opener	2
Cylinder	2
RM23 (L=380 мм)	2
RM28	2
RM37	2
RM38	2
Bolt M6x16 DIN 912	2
Bolt M4x10 DIN 912	12
Nut M10x1 DIN 934	4
Self-lucking nut M6 DIN	2
Screw 4.8x13 DIN 968	8

Content



x2

Data of cylinder

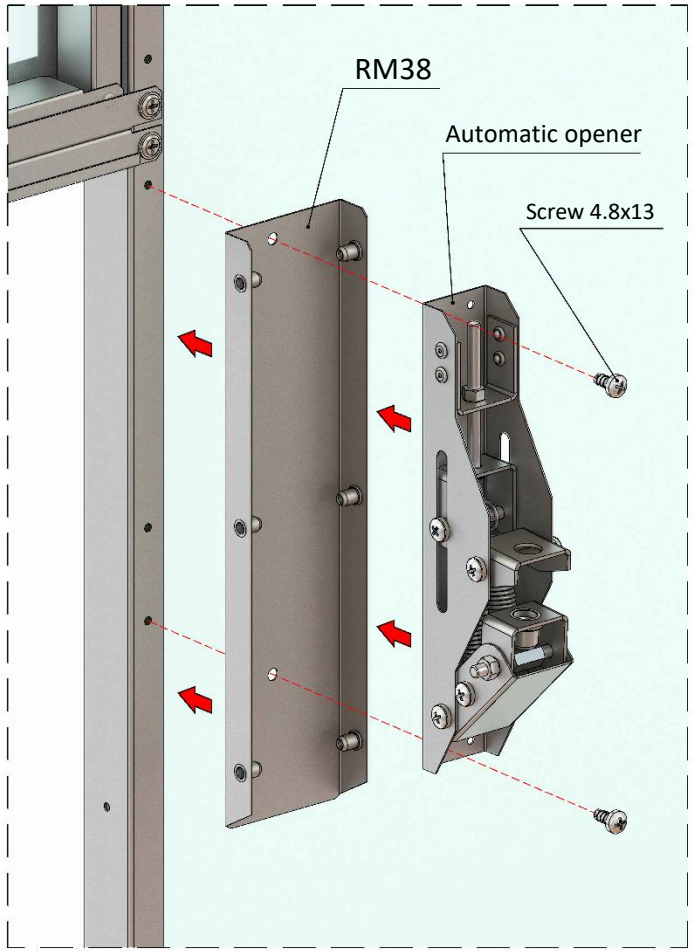
Push force	80 kg
No pull force	6 kg is need to push the piston pin back
Temperature, retracted	17 ^{0}C
Temperature, extended	33 ^{0}C
Stroke	65 mm

Fastener

ECOSLIDER HEIKKINEN

Installation of manual smartventor opener

1



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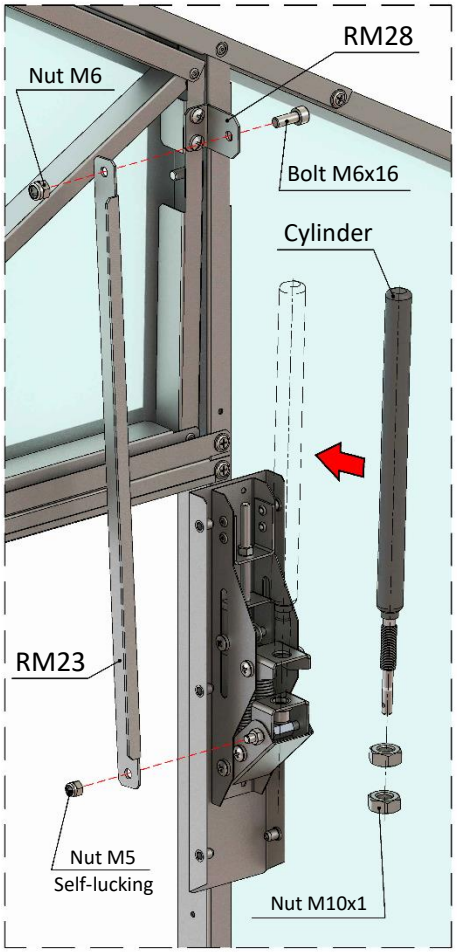

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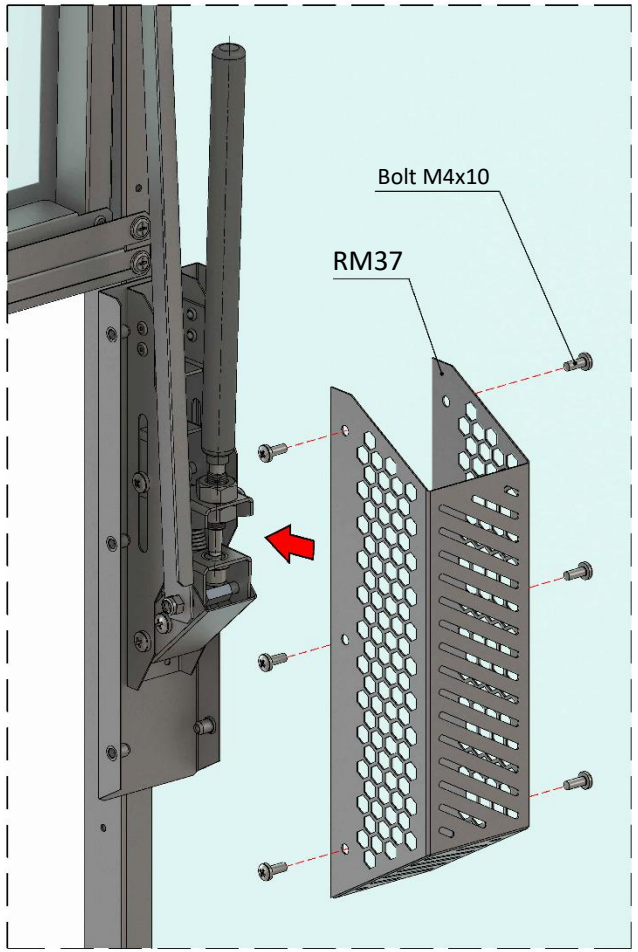
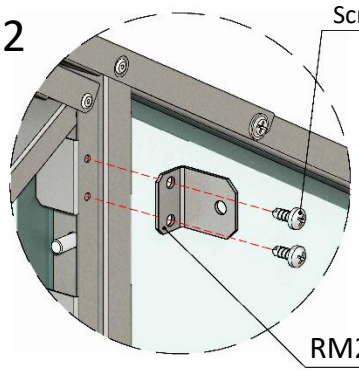


2



ECOSLIDER HEIKKINEN

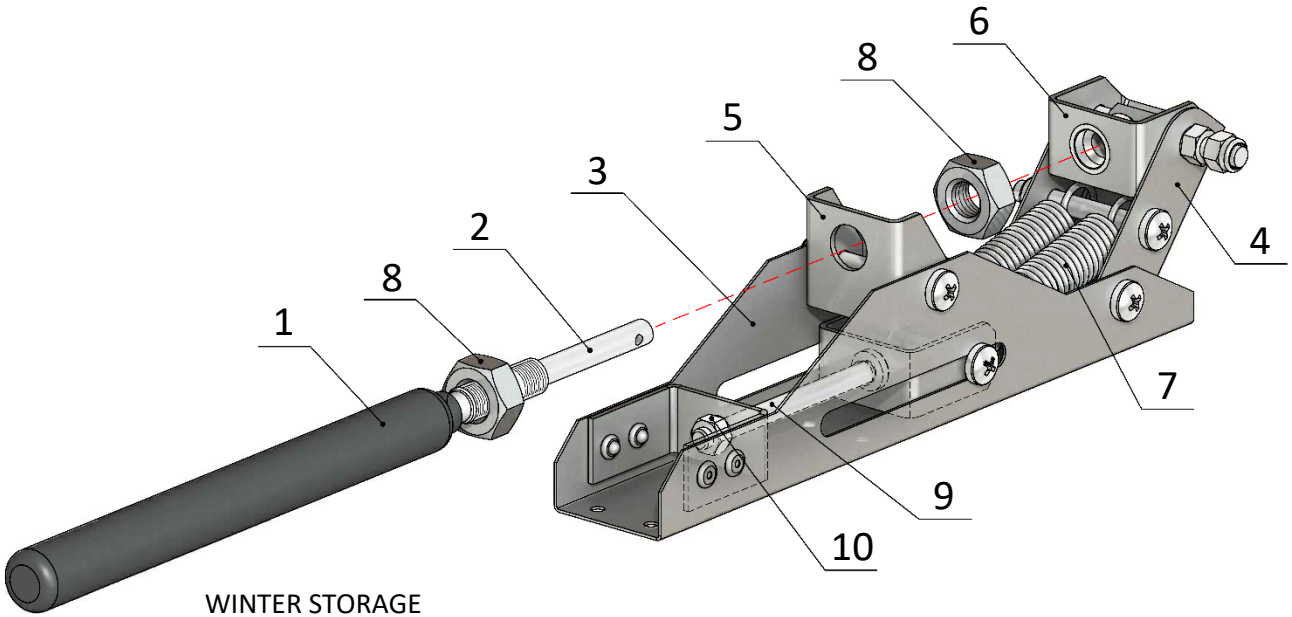
Assembly order:

1. Install the automatic opener and detail RM38 on the end post. Align the holes on the opener and the stand and secure with 4.8x13 self-tapping screws (Figure 2).
2. Install part RM28 on the smartventor using self-tapping screws 4.8x13 (Fig. 2).
3. Install the cylinder with M10 nuts into the automatic opener. For installation, it is recommended to cool the cylinder below 17 ^{0}C.
4. Connect part RM23 to part RM28 using an M6x16 bolt and an M6 nut. Next, secure part RM23 to the automatic opener with an M5 nut (included in the opener kit). See fig. 3.
5. Do not tighten the nuts. The smartventor should rotate freely, without jamming.
6. Install protective cover RM37 using screw M4x10 (Pic. 4)
7. Adjust the opener so that the smartventor is closed at temperatures below 17 ^{0}C. To make adjustments, rotate the cylinder in the opener.

Installation of manual smartventor opener

AUTOMATIC OPENER COMPONENTS:

1. Cylinder body
2. Cylinder rod
3. Opener body
4. Opener lever
5. Cylinder holder
6. Bushing
7. Spring
8. Nut M10x1
9. Screw M5x60
10. Nut M5



ADJUSTMENT

It is recommended to adjust the opening mechanism installed on the greenhouse at a temperature below 17 °C. The cylinder rod will be completely pressed into the cylinder body. Loosen the M10 nuts on the cylinder. Then, turning the cylinder clockwise, catch the moment when the cylinder begins to open the smartventor. Turn the cylinder back, counterclockwise by one turn and tighter the M10 nuts. This will be the working position of the mechanism.
It takes some time for the cylinder to respond to the temperature change. To change the temperature settings, you need to turn the cylinder:
- clockwise: the mechanism is triggered earlier, the window opens wider
- counterclockwise: the mechanism is triggered later, the smartventor opens narrower.

MAINTENANCE

All moving parts should be lubricated with a low viscosity oil after installation, early each spring and once or twice in the summer. Cylinder threads should be lubricated with grease or low-viscosity oil.

WINTER STORAGE

Store the dismantled cylinder in a dry place during the winter. In the spring, before installation, the moving parts must be lubricated, especially the piston rod and the threads of the cylinder. The cylinder rod must move smoothly back and forth.

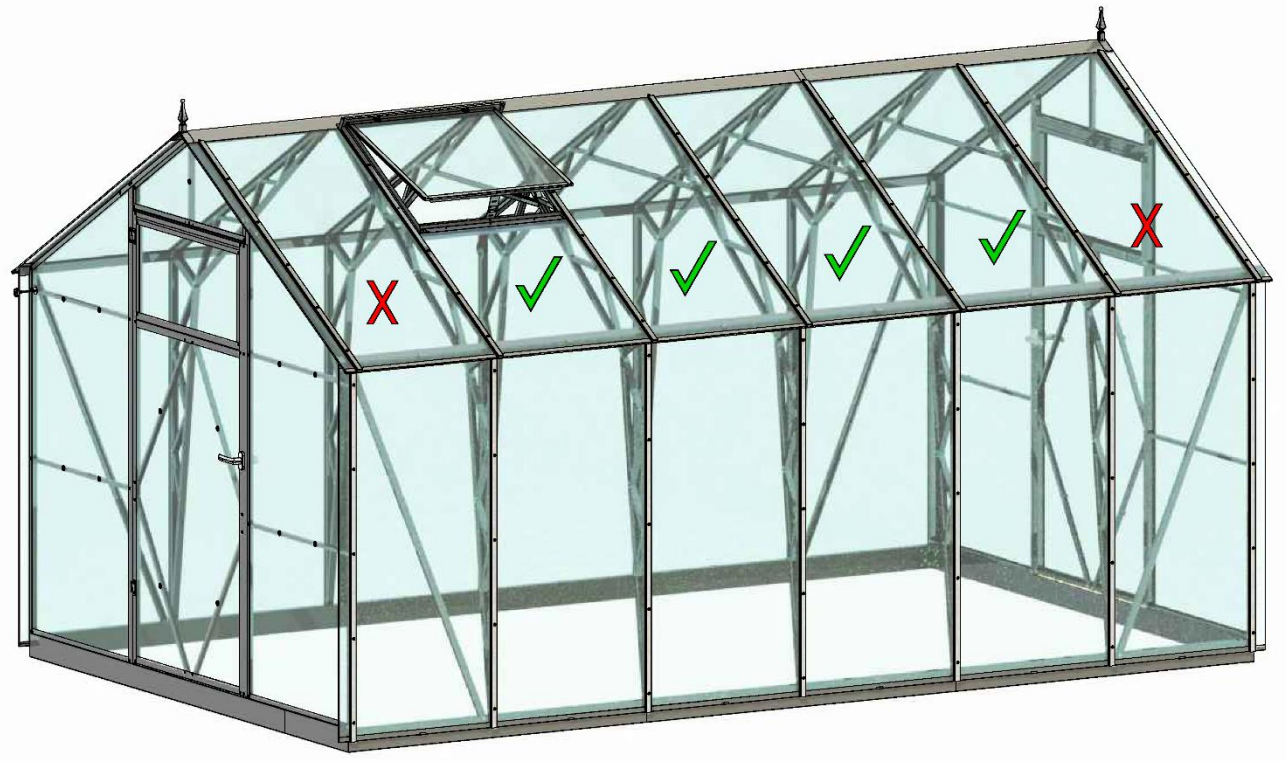
WARRANTY

A 1-year warranty is provided for the opening mechanism of the smartventor, if correctly installed, used and maintained in accordance with the instructions.

POSSIBLE MALFUNCTIONS

- Smartventor does not close:
a) Disconnect the opener from the smartventor, check if the smartventor opens.
b) Remove the cylinder from the opener, if the mechanism does not close, clean the mechanism from possible dirt, lubricate the moving parts of the mechanism with low-viscosity oil, loosen the nuts that secure the Opener Lever 4, Cylinder Holder 5, Bushing 6. Spring 7 should be as tight as possible with the M5 nut (10).
b) The cylinder is faulty: clean the cylinder rod, lubricate with low-viscosity oil, if the cylinder does not extend at operating temperature, replace the cylinder.
- Smartventor does not close: check the cylinder. If faulty, replace it.

Installation of the hatch



IMPORTANT! The installation of the hatch must be only in areas shown in the figure.

Complete set

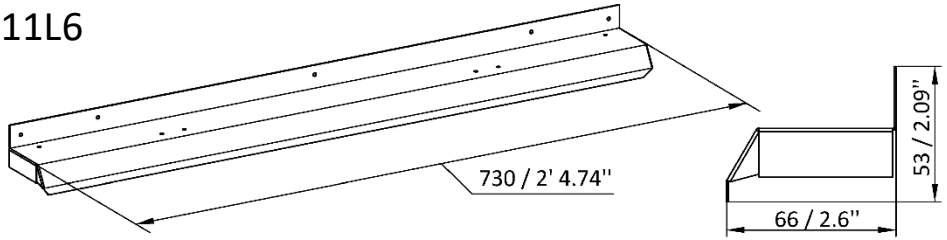
Detail	Qty in 1 hatch
11L6	1
12L	1
13L	1
13LR	1
14L6	1
15L6	1
16L6	2
17L	1
Fasteners	
Screw 4.2x25 DIN 7504	10
Screw M3x6 DIN 7985	10
Screw M3x12 DIN 7985	4
Self-lucking nut M3 DIN 985	14
Protective Tape (PT), m	3

Tools

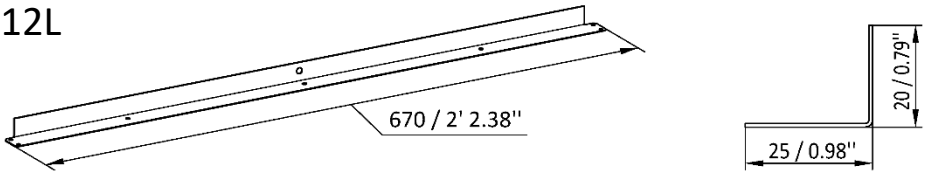
ECOSLIDER HEIKKINEN

Details

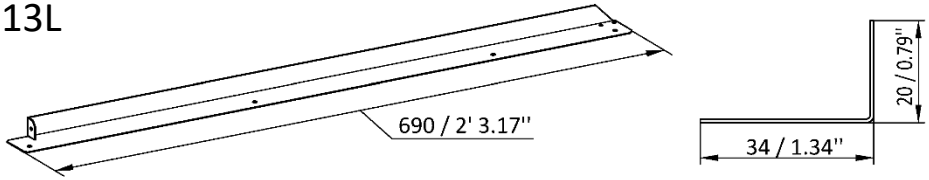
11L6



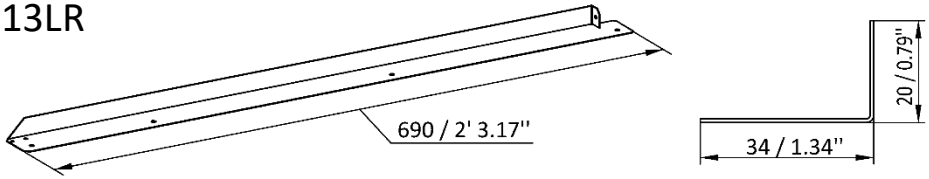
12L



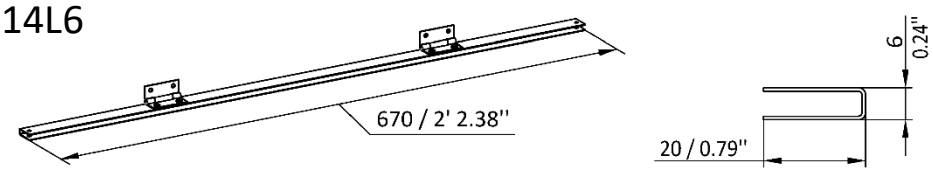
13L



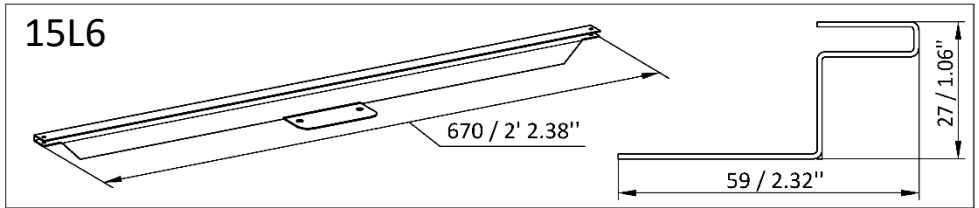
13LR



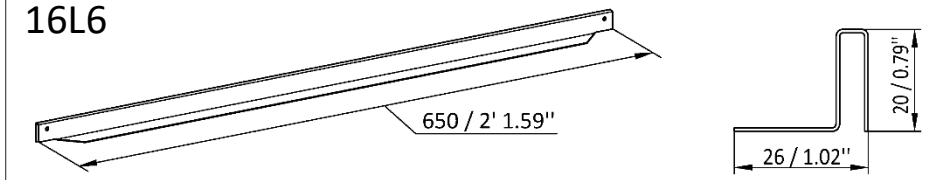
14L6



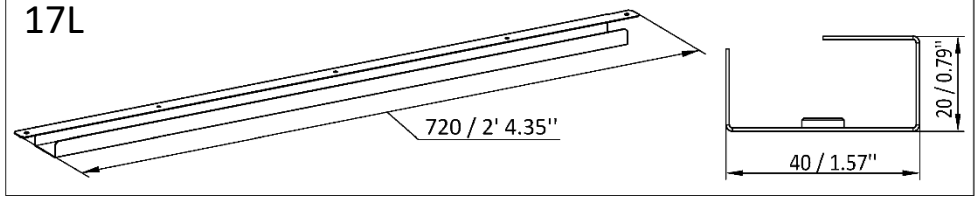
15L6



16L6

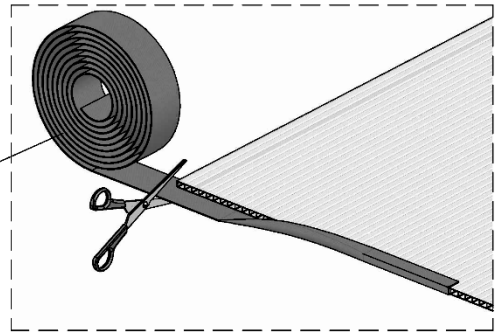


17L



Fastener

Screw 4.2x25 DIN 7504 	Bolt M3x6 DIN 7985 	Bolt M3x12 DIN 7985 	Self-locking nut M3 DIN 985 
Protective Tape 			



ECOSLIDER HEIKKINEN

UV

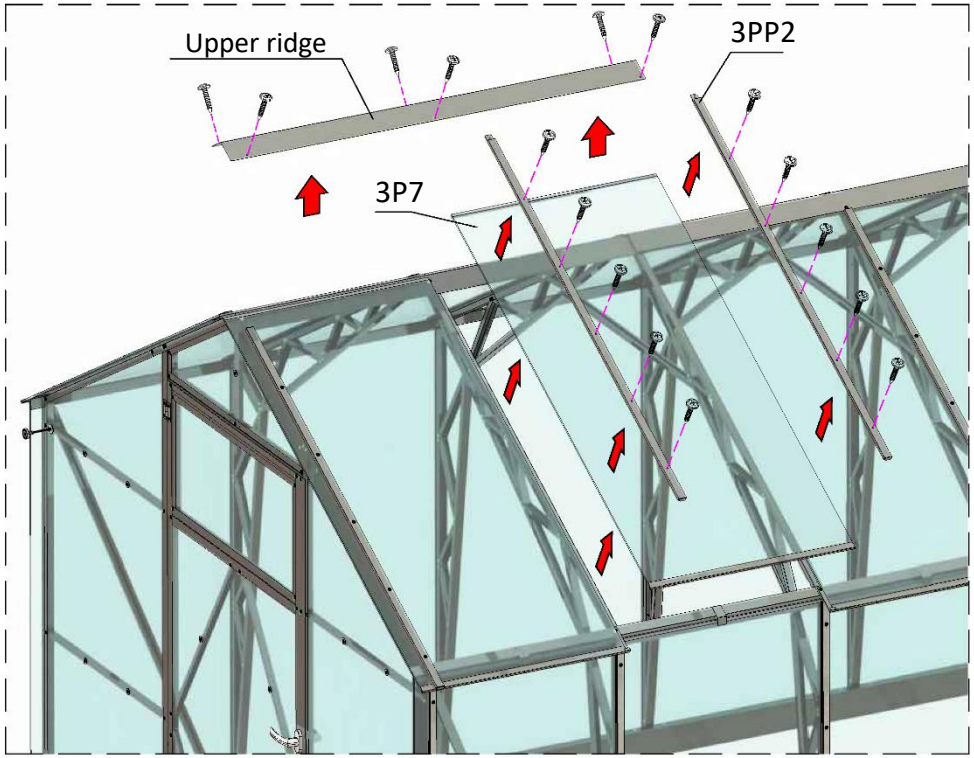
UV protected side (covered with white film) **facing outwards during installation**

UV

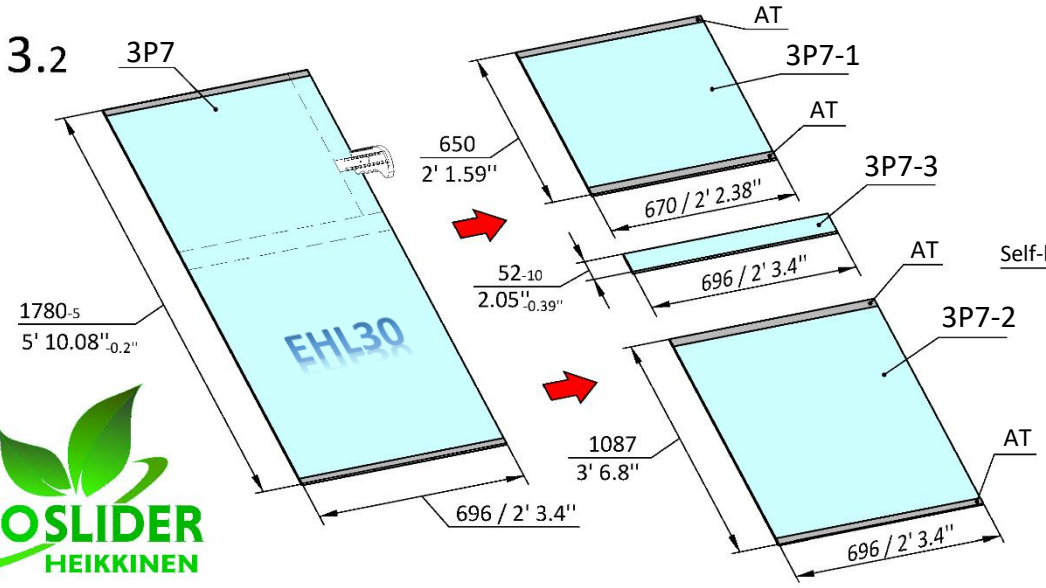
side without UV protection radiation

Addition 3 (V1)

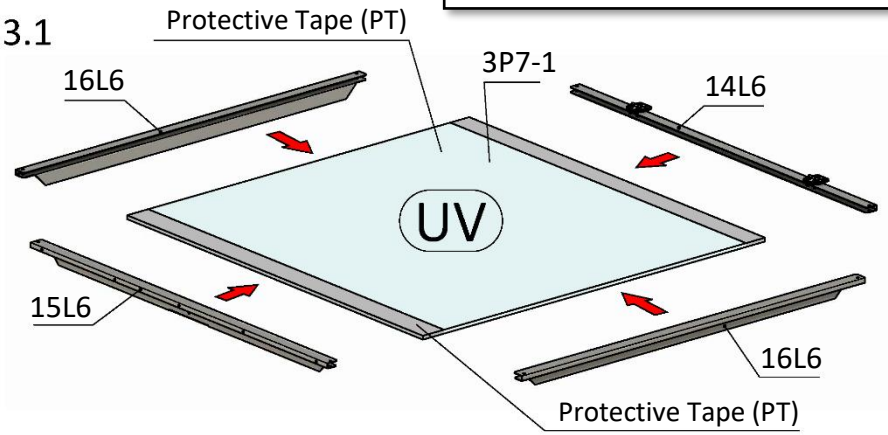
3.1



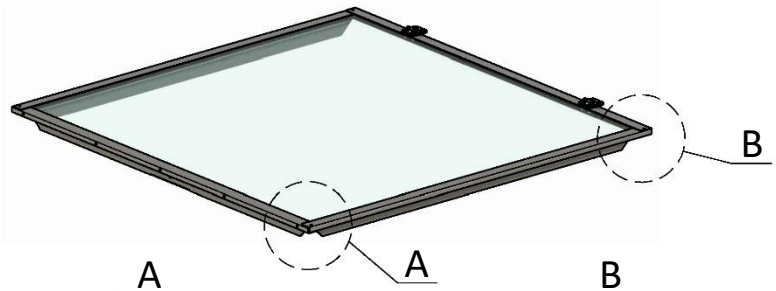
3.2

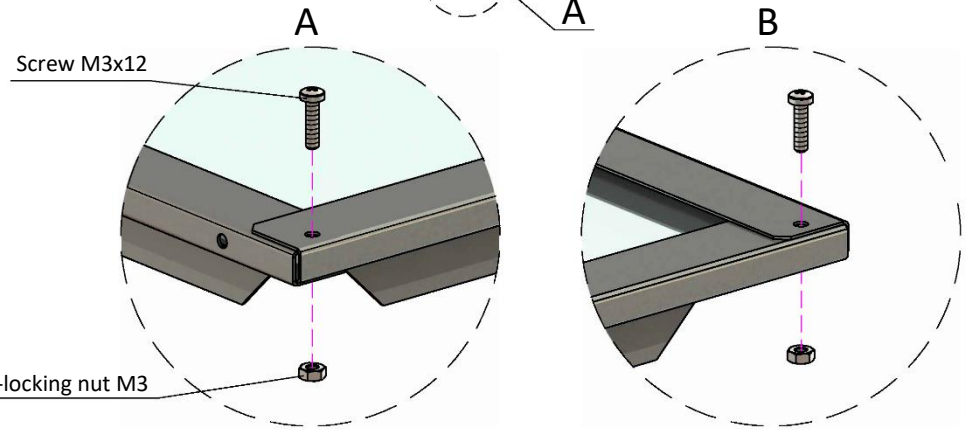


3.3.1



3.3.2





Assembly order:

1. Remove the top ridge of the greenhouse at the window installation site. Remove the 3PP2 clamping profiles from the roof and disassemble the 3P7 polycarbonate panel (Fig. 3.1).
2. Cut the panel into three parts: 3P7-1, 3P7-2, and 3P7-3, following Figure 3.2.
3. Assemble the window according to Figures 3.3.1 and 3.3.2.
   IMPORTANT! Ensure that the polycarbonate sheets are installed with the UV protection side facing out. When dismantling the panel, mark the UV side to ensure correct installation during reassembly.

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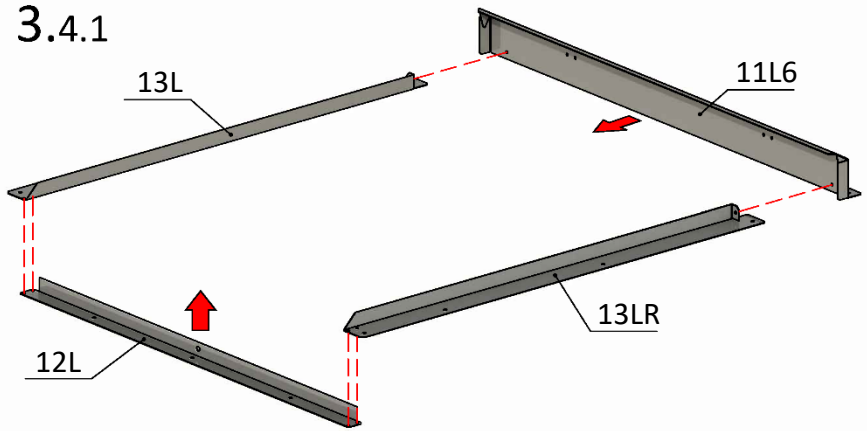
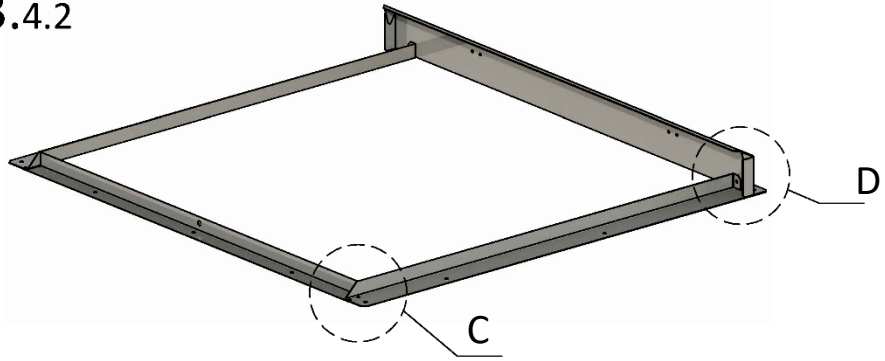
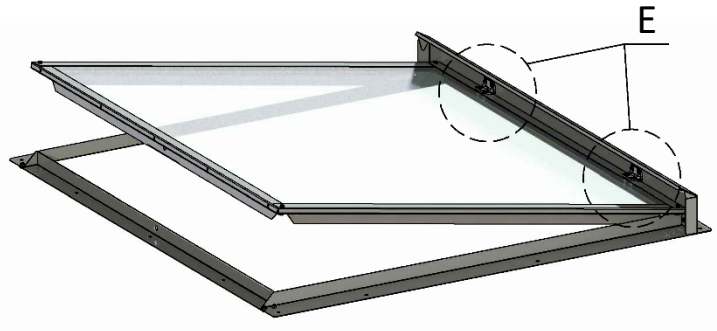
3.4.1



3.4.2



3.5



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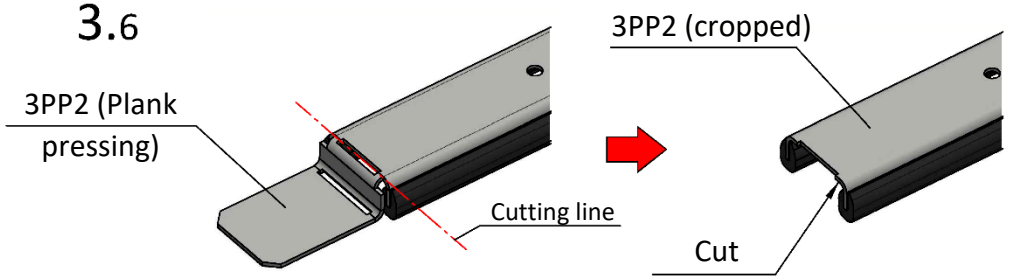

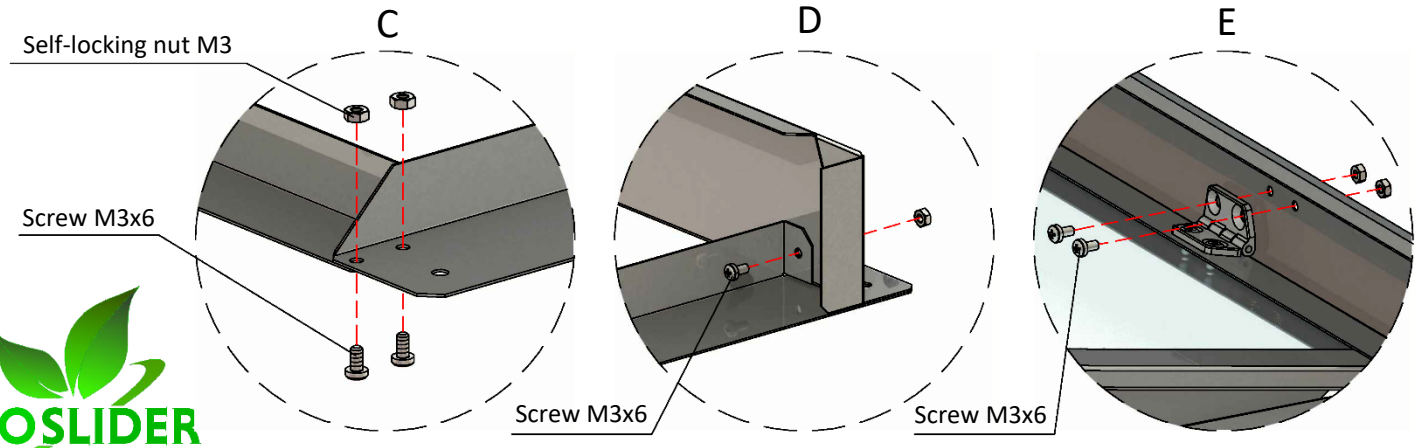

Assembly order:

(continuation)

4. Assemble the window frame as shown in Figures 3.4.1 and 3.4.2.
5. Assemble the window with the window frame (Fig. 3.5).
6. Cut the dismantled PP2 strips according to Figure 3.6.

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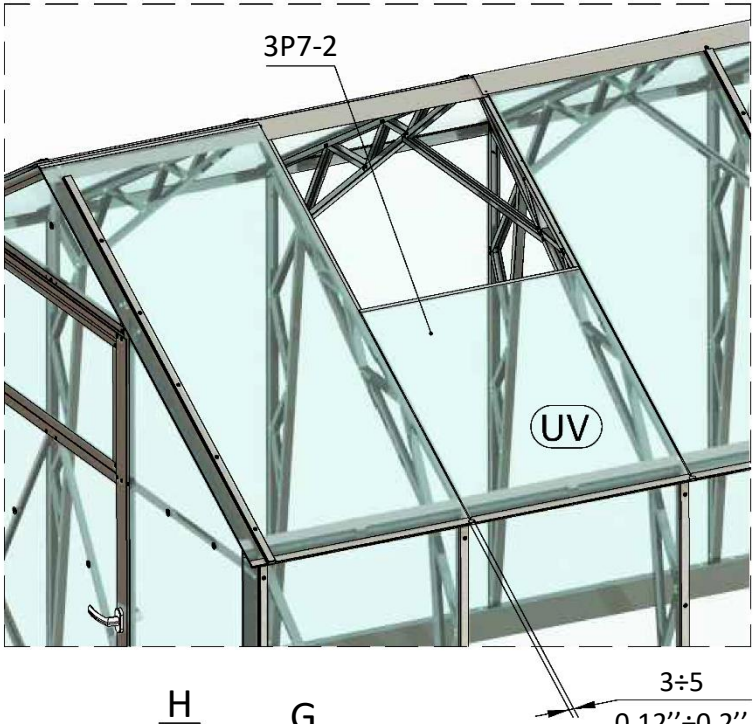
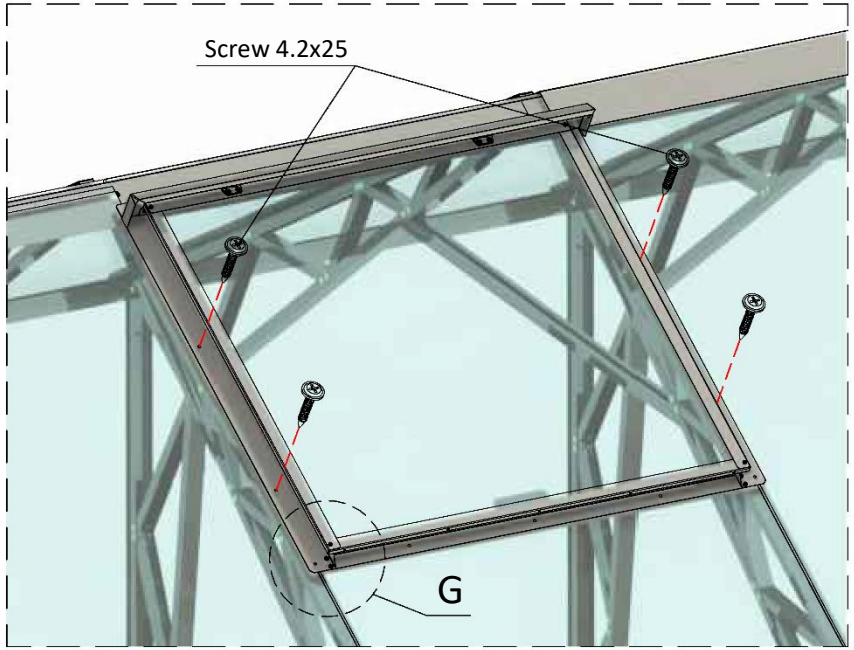
Installation of the hatch

3.6

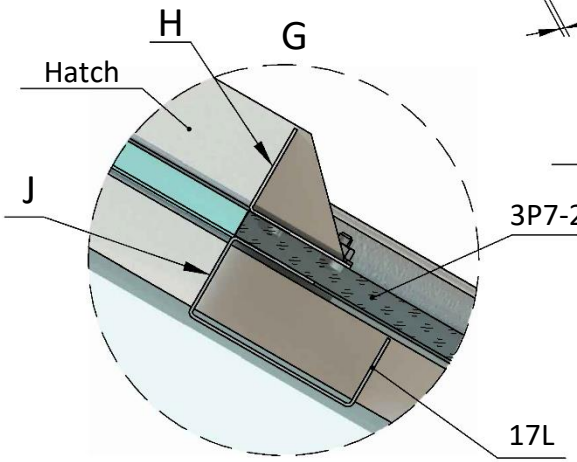


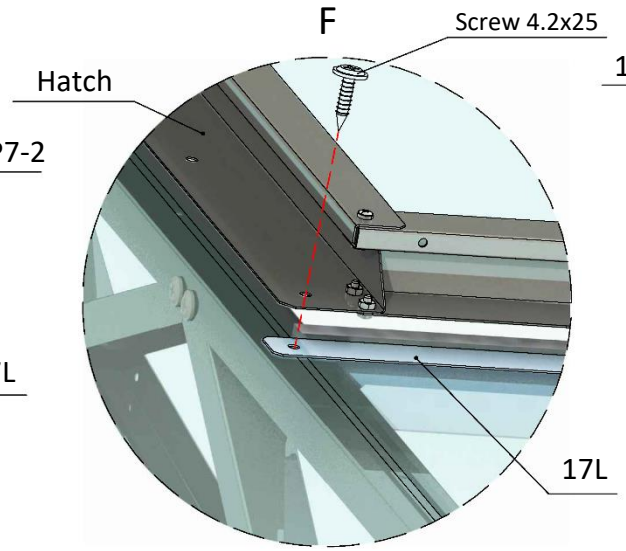
3.7



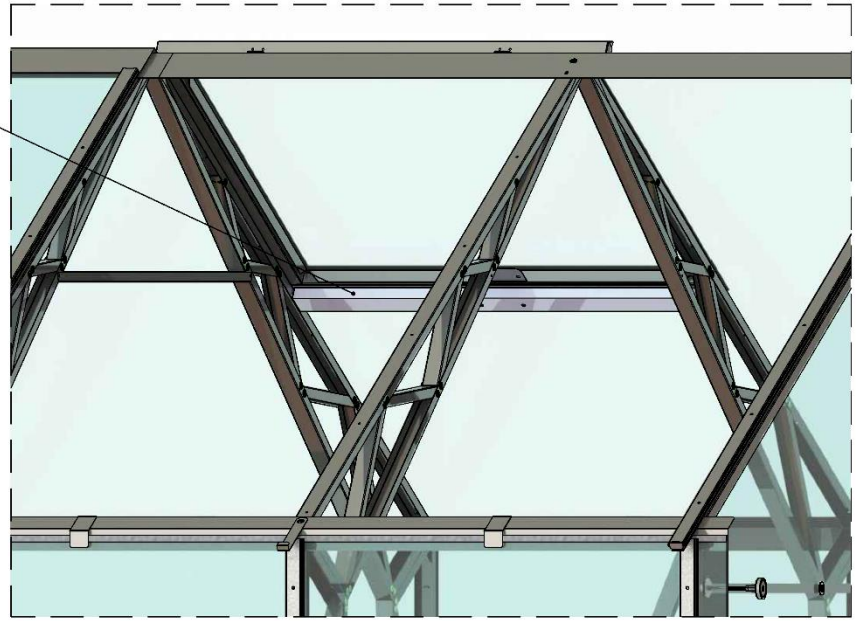
Assembly order:
(continuation)

7. Install the 3P7-2 polycarbonate panel in the location where the window is installed, as shown in Fig. 3.6.
8. Place the window on the roof opening. Align the holes in the window frame and the trusses (Fig. 3.7), secure them with 2.5x25 self-tapping screws.
9. Install part 17L from inside the greenhouse. Place it in between the trusses and the 3P7-2 polycarbonate panel.
10. Align the 17L strip so that the H plane (Fig. G) of the 12L vent piece and the J plane of the 17L strip coincide. Screw it to the trusses as shown in Figure F through the holes in the window frame and strip 17L.





3.8



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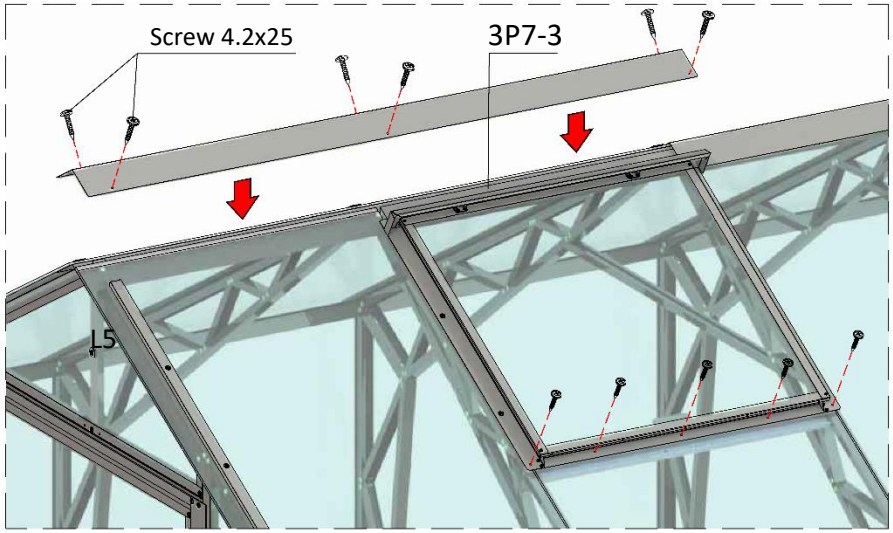
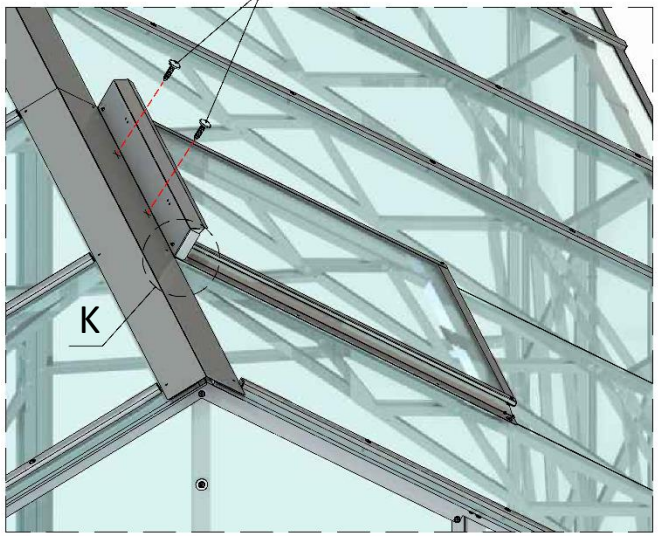
Addition 3 (V1)

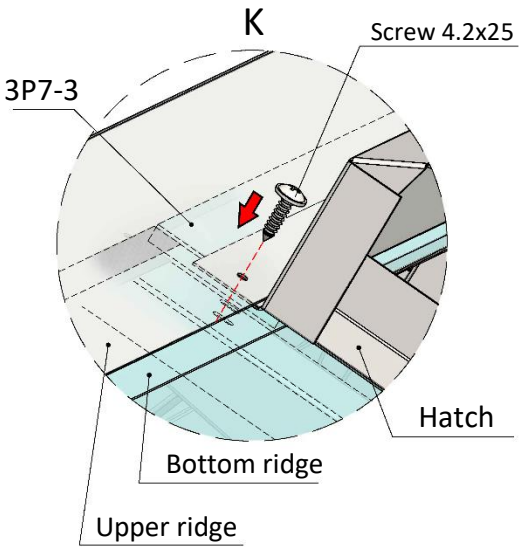
Installation of the hatch

3.9

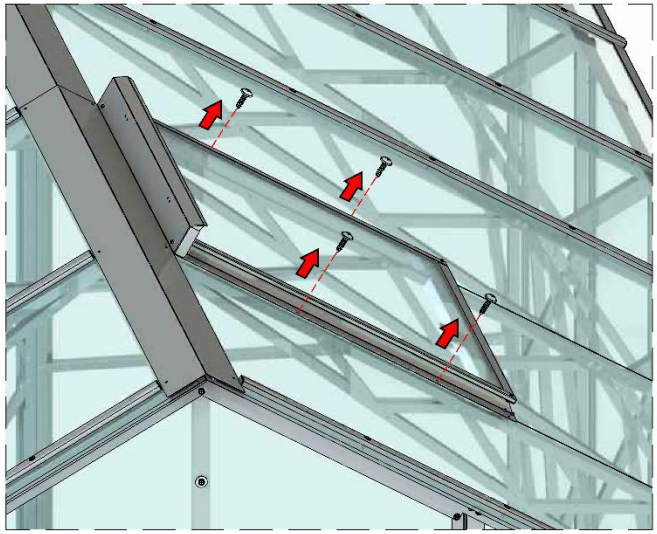


3.10

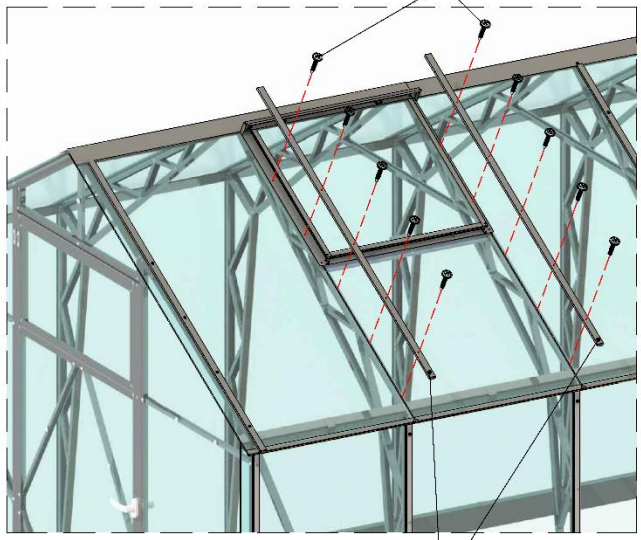




3.11



3.12



Assembly order:

(continuation)

11. Place 3P7-3 strip between the vent and the lower roof ridge (Fig. K). Reinstall the top ridge of the roof (see greenhouse assembly instructions).
12. Attach the window from below to the 17L strip and from above to the skates as shown in Figures 3.9 and 3.10. Ensure that the holes in the vent match the grooves in the lower and upper roof ridges.
13. Remove the 4.2x25 screws according to Fig. 3.11.
14. Install the cut 3PP2 profiles (cut) and screw them to the trusses using 4.2x32 screws in the corresponding holes.
15. Ensure that the window opens freely, without jamming.

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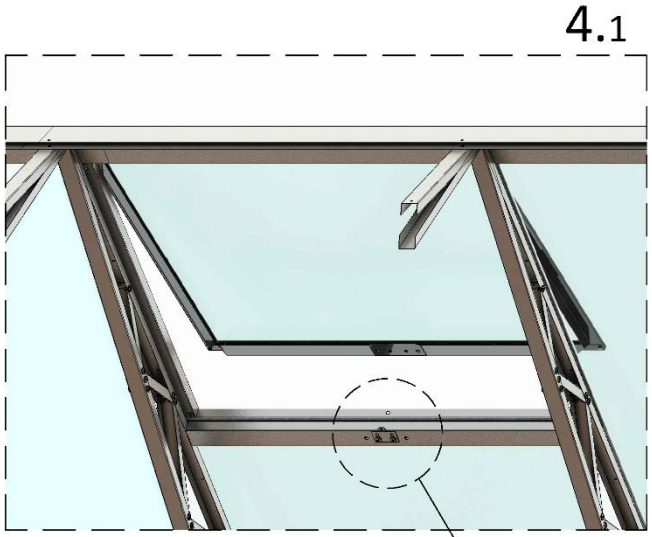
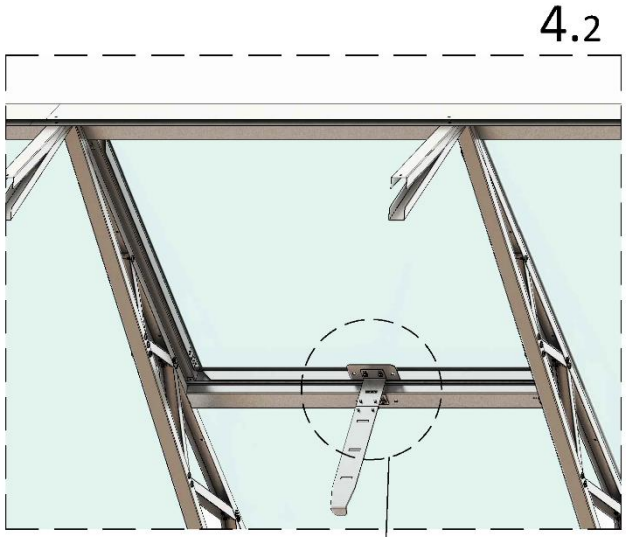
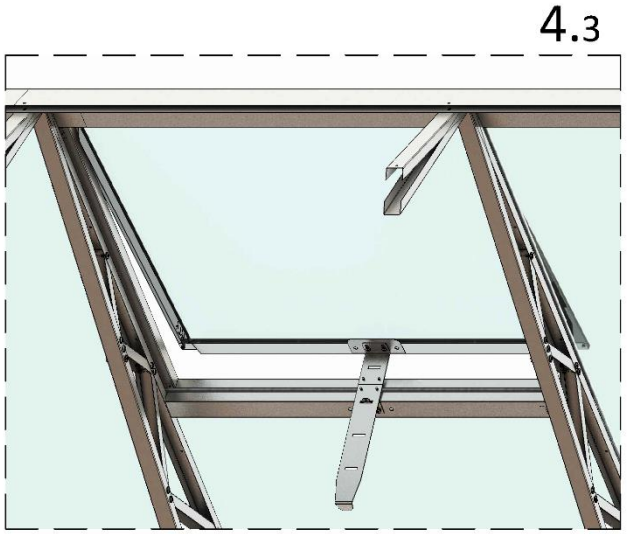
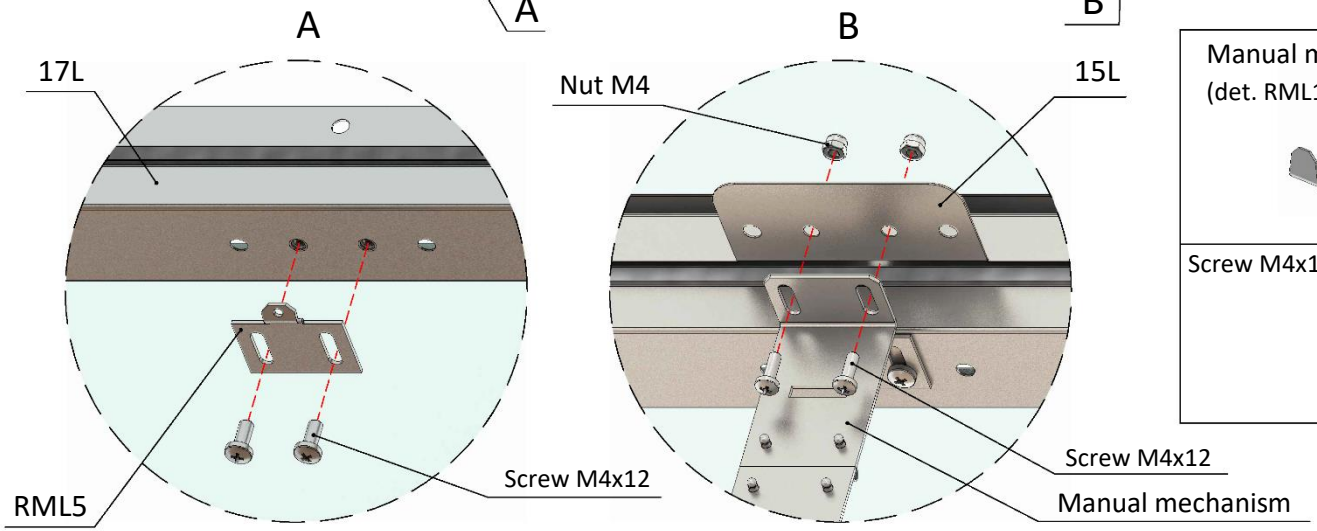
Addition 4 (V1)

Installation of manual window opener

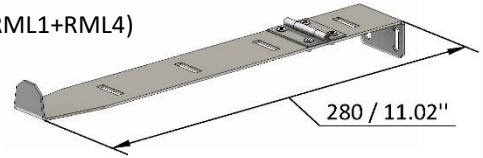
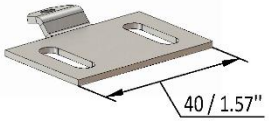








Content

Manual mechanism (det. RML1+RML4) 		RML5 
Screw M4x12 DIN 7985 	Self-locking nut M4 DIN 985 	

Assembly order:

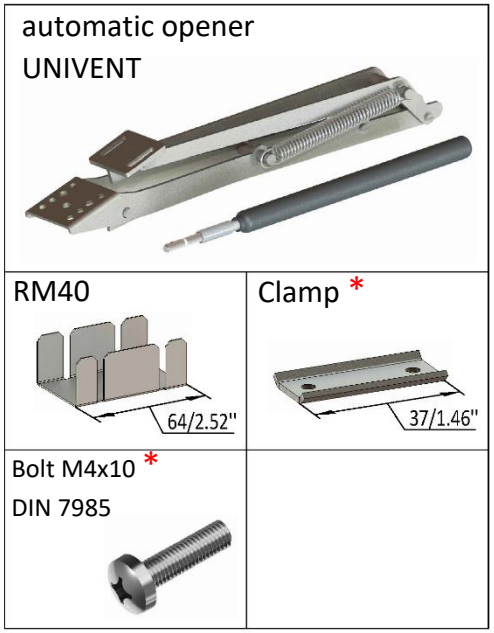
1. Install part RML5 on profile 17L, positioned inside the greenhouse under the window, using M4x12 screws, as depicted in Figure A.
2. Secure the manual opener to the bottom profile of the window 15L using M4x12 screws, as shown in Figure B.
3. Adjust the position of the manual opener using the screws so that the window opens freely and was fixed in a free position.

Complete set

Detail	Qty in 1 hatch
Manual mechanism	1
RML5	1
Screw M4x12 DIN 7985	4
Self-locking nut M4 DIN 985	2

Installation of automatic window opener

Content



Complete set

Detail	Qty in 1 hatch
Automatic opener	1
RM40	1
Clamp	1*
Bolt M4x10 DIN 7985	4 *

Assembly order:

1. Attach the automatic opener to the bottom strip of the vent window 15L and the support strip 17L, located on the inside of the greenhouse under the vent window, using M4x10 screws, as shown in Figure A.

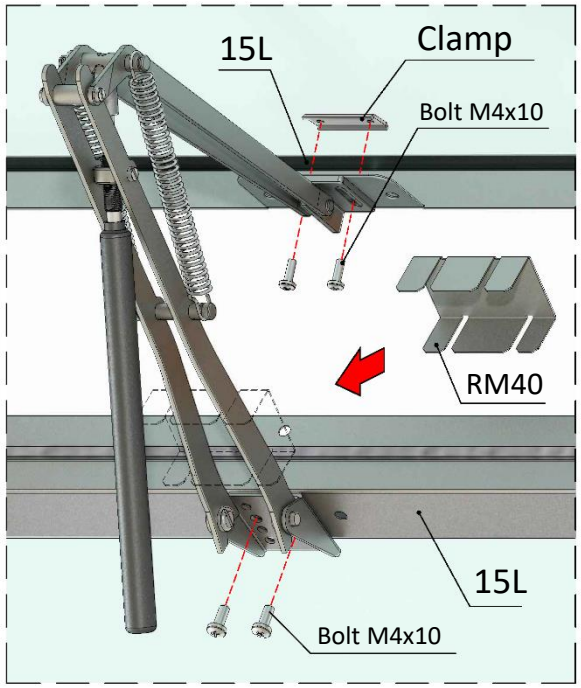
2. Adjust the position of the automatic mechanism using the screws so that the window opens freely.

3. Install the retainer (part RM40) onto the automatic opener as shown in Figure A.

4. For assembly and adjustment of the automatic opener, see the mechanism manufacturer Orbesen Teknik.

* Parts included with opener UNIVENT

A



Technical data

- Maximum window opening, approx. 45cm (17 23/32 in) - depending on adjustment and load
- Maximum opening at 30 °C(86°F)
- Start opening temperature 17 °C
- Can lift up a window weighing 14 kg

Warranty

The window opener comes with a 2year warranty when it has been fitted and used correctly. In the event that a correctly fitted and used window opener becomes defective and needs to be repaired (despite our meticulous testing and controls.

Components

1. Threaded cylinder (E)
2. Cylinder housing
3. Clutch
4. Arm K
5. Window bracket
6. Arm F
7. Sill bracket with "Easy clip"
8. Pullback spring
9. Hairpin split, see screw bag
10. Clamps x 2, see screw bag
11. Screws x 4, see screw bag

Mounting

1: Check that the greenhouse window is able to open freely and is not obstructed

2: Fit 1 x clamp (10) loosely onto the sill bracket (7). Choose the most suitable set of holes, so that the uppermost edge of the sill bracket is flush with the sill profile on the greenhouse. Then, fix 1 x clamp (10) loosely on the window bracket (5) (Fig. 2). Use the enclosed screws (11) in the bag.

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3: Push the cylinder with hole A into hole B on the clutch (3), connect hole A and hole B by means of the hairpin split (9). **It is important that hole B is used.** (Fig.1)
4: Clip clamp (10) in between the glass and the sill profile (no holes should be drilled). The sill bracket (7) will be sitting on the other side of profile, acting as a clamp. (Fig.2)
Make sure that the sill bracket is placed in the centre of the window. Then tighten the sill bracket securely.
5: Close the window, clip the clamp (10) in between the glass and the window profile (no holes should be drilled) the window bracket (5) will sit on the other side like a clamp. The window bracket (5) is placed in the centre of the window profile. Then tighten the window bracket (5).
6: Open the window just enough for the thread on the cylinder (E) to catch the cylinder housing (2). Now, screw the cylinder (1) in. There should be egual amounts of the thread showing on both sides of the housing (2) (fig. 3).
7: Check that the window is able to open sufficiently for the window opener to be fully open. If not, the opening width of the window opener should be reduced.

Reducing the width of window opening

The window opening can be reduced to a maximum opening of 32 cm (1219/32 in).
Set split (14) to the maximum opening in hole (D), then move the hairpin split (9) from hole A to hole C. **This is important as, otherwise, it can damage the cylinder.**

Adjustment of opening temperature

If a different temperature is required, the cylinder can be turned.

- Turn clockwise, if an earlier start/higher opening temperature is required.
- Turn anti-clockwise, if a later start/lower opening temperature is required.

One twist of the cylinder equates to approximately 5 °C. You should be aware that the temperature can vary somewhat within the same greenhouse.
If there are several windows, this can give varying openings.
It is best to adjust the opener when the temperature is constant - either in full sunlight or when the sky is completely overcast.

Using the winter protection or a source of heat in the greenhouse

When the temperature decreases and the window is no longer to be opened, or when a source of heat is used in the greenhouse:

1. Unscrew the cylinder (1) from the cylinder housing (2). The cylinder is now hanging in the hairpin split (9) and cannot open the window. The cylinder can be left hanging in this position over the winter.
2. Place the winter protection (13) around arm K (4) and arm L (6). The winter protection prevents the wind from blowing the window open.

In the spring

Remove the winter protection (13).
Lubricate all moveable parts with light oil.
Also, lubricate the thread (E) with grease or petroleum jelly (This will extend the life of the opener).
Screw the cylinder (1) into place in the cylinder housing (2).

Concluding remark

This window opener is not suitable for use in places where the temperature exceeds 50 °C (122°F)