
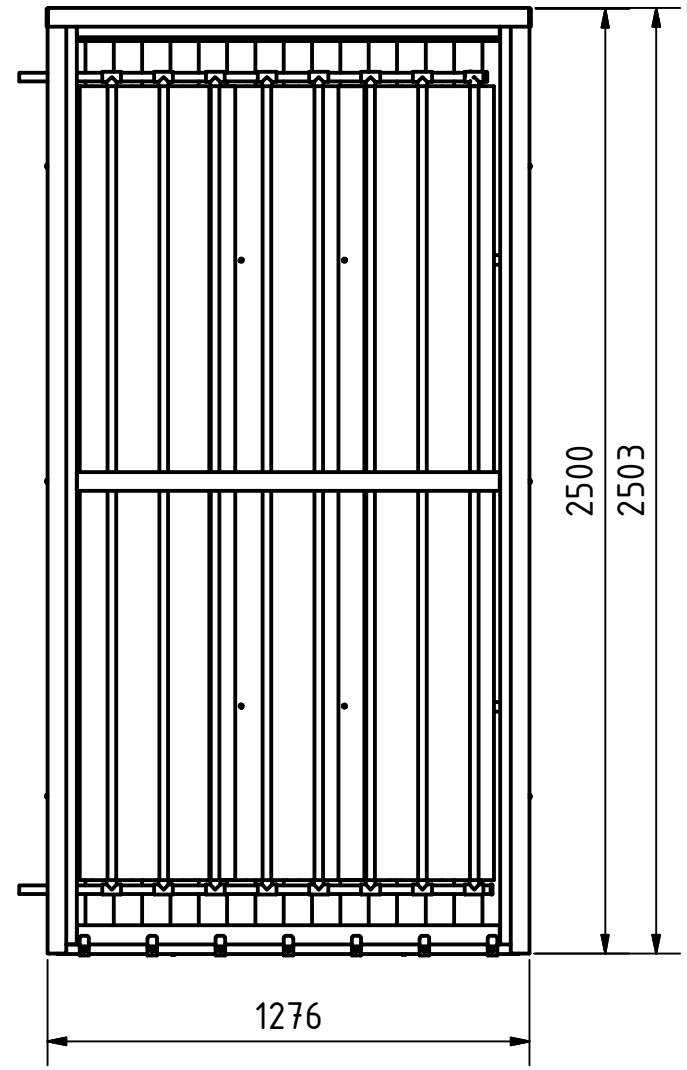
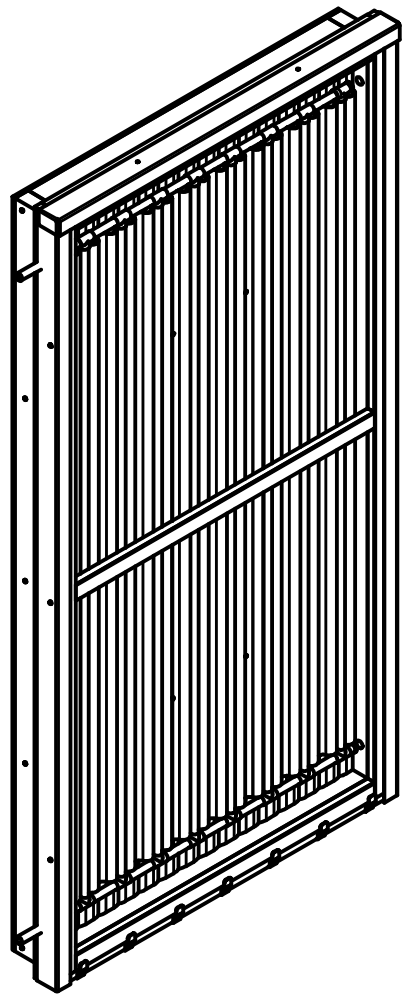


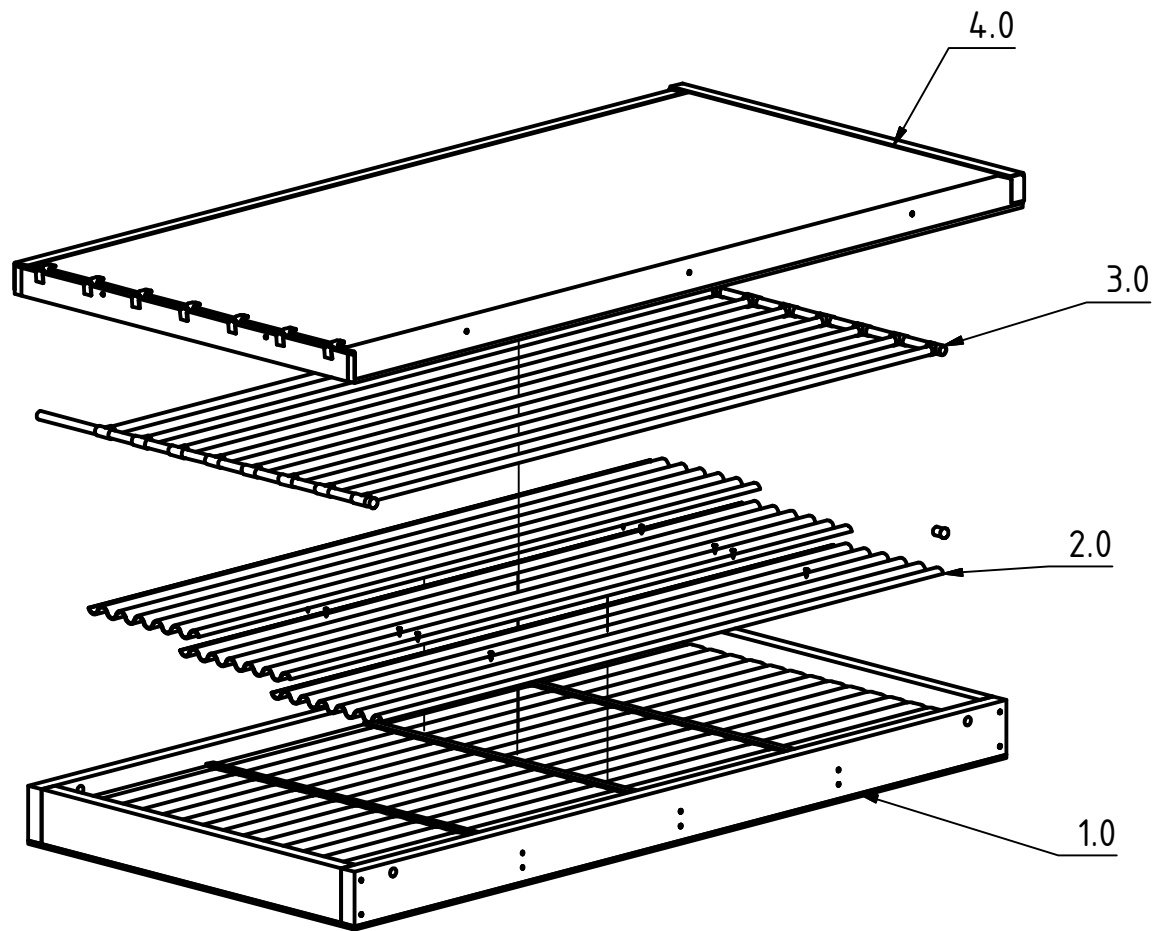
PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME 3D-Views	FILE NAME eg_swh_A1_solar-water-heater.iam			POS A1
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY  OSEG	DOC. TYPE Assembly	MATERIAL	QUANTITY 1
		LICENCE CC-BY-SA 4.0	SCALE 1:10	SHEET 1 /31



PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21	VERSION 1.0
PART NAME 3D Views			FILE NAME eg_swh_A1_solar-water-heater.iam				POS A1
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY OSEG		DOC. TYPE Assembly	MATERIAL		QUANTITY 1
				LICENCE CC-BY-SA 4.0	SCALE 1:20	SHEET 2 /31	




OPEN SOURCE ECOLOGY
GERMANY




PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME explode 3D Views	FILE NAME eg_swh_A1_solar-water-heater.ipn			POS A2
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY OSEG	DOC. TYPE Assembly	MATERIAL	QUANTITY 1
		LICENCE CC-BY-SA 4.0	SCALE 1:20	SHEET 3 /31

PART LIST							
POS	POS.OLD	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
A1		1	3D-Views	eg_swh_A1_solar-water-heater.iam			1
A1		1	3D Views	eg_swh_A1_solar-water-heater.iam			2
A2		1	explode 3D Views	eg_swh_A1_solar-water-heater.ipn			3
B1			Parts list	eg_swh_A1_solar-water-heater.xls			4
B2			PART LIST	eg_swh_A1_solar-water-heater.xls			5
C1			TECH NOTES				6
1.0		1	Box	eg_swh_box.iam			7
1.0		1	Box	eg_swh_box.ipn			8
1.1		1	Plywood sheet	eg_swh_plywood-sheet.ipt	Production	Plywood	9
1.2		2	Wood strip	eg_swh_wood-1150.ipt	Production	Wood	10
1.3		2	Wood long	eg_swh_wood-2440.ipt	Production	Wood	11
1.4		3	Wood Brace	eg_swh_wood-brace-1120.ipt	Production	Wood	12
1.5		4	Fiberglass	eg_swh_fiberglass.ipt	Production	Glass wool 350 degC	13
1.6		21	Woodscrew	eg_swh_woodscrew12.ipt	Standard	Woodscrew, Screw DIN 96 4x75	
1.7		1/2 Lb.	Nail	eg_swh_nail.ipt	Standard	Nail, D 4 x 32- Steel	
2.0		3	Corrugated sheet	eg_swh_corrugated-sheet.ipt	Production	Galvanized Steel	14
3.0		1	Manifold pipes	eg_swh_manifold-pipes.iam			15
3.0		1	Manifold pipes	eg_swh_manifold-pipes.ipn		soldadura autógena 50%Sn	16
3.1		8	Pipe 3/4	eg_swh_pipe-3-4plg.ipt	Production	DN=3/4 in. rigid tubing typeM, Copper	17
3.2		16	Tee	eg_swh_tee-3-4.ipt	Standard	Tee DN=3/4 in. rigid tubing, solder, Copper	
3.3		14	Niple 3/4	eg_swh_niple-3-4plg.ipt	Production	DN=3/4in. rigid tubing, solder, Copper	18
3.4		2	2do. niple3/4	eg_swh_2niple-3-4plg.ipt	Production	DN=3/4 in. rigid tubing, solder, Copper	19
3.5		2	Hose adapter	eg_swh_hose-adapter.ipt	Standard	Adapter DN=3/4 in.rigid tubing, solder, Copper	
4.0		1	Frame Glazing	eg_swh_frame-glazing.iam			20
4.0		1	Frame Glazing	eg_swh_frame-glazing.ipn			21
4.1		3	Wood strip	eg_swh_wood-1220x1.ipt	Production	Wood	22
4.2		2	Wood strip long	eg_swh_wood-2440x1.ipt	Production	Wood	23
4.3		2	Wood strip	eg_swh_wood-1220x3.ipt	Production	Wood	24

PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Parts list			FILE NAME eg_swh_A1_solar-water-heater.xls					POS B1	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY  OSEG			DOC. TYPE Parts list		MATERIAL LICENCE SCALE SHEET	
						CC-BY-SA 4.0		4 /31	


PART LIST

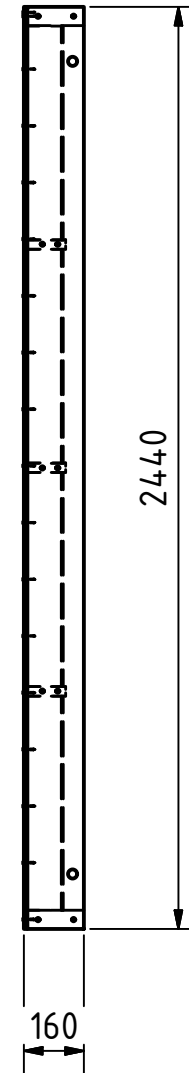
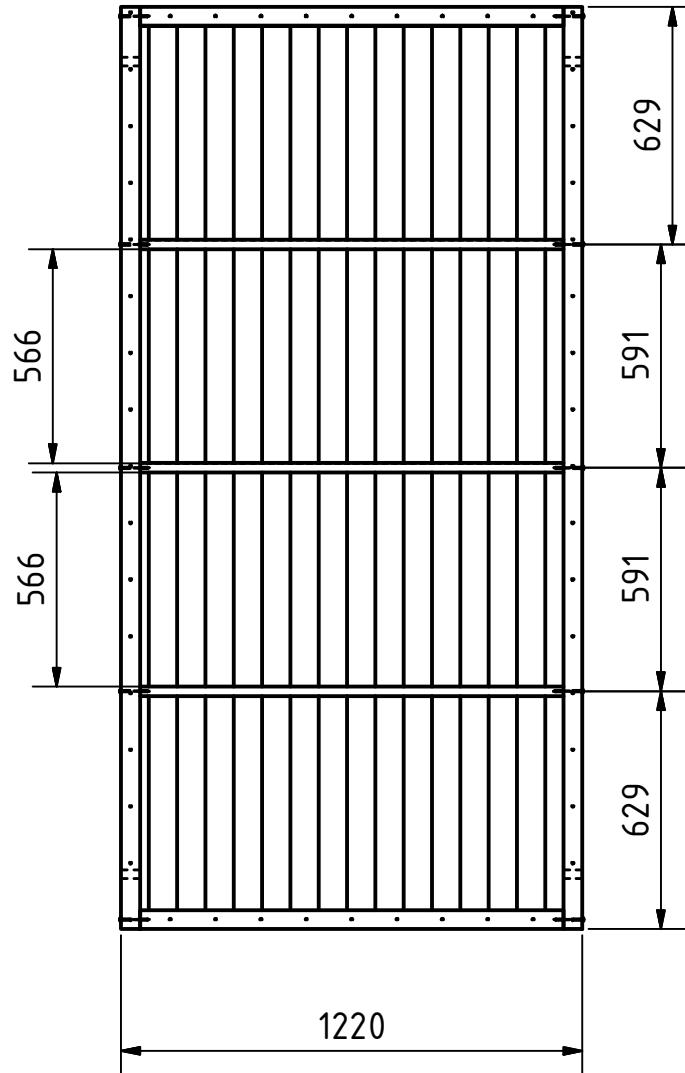
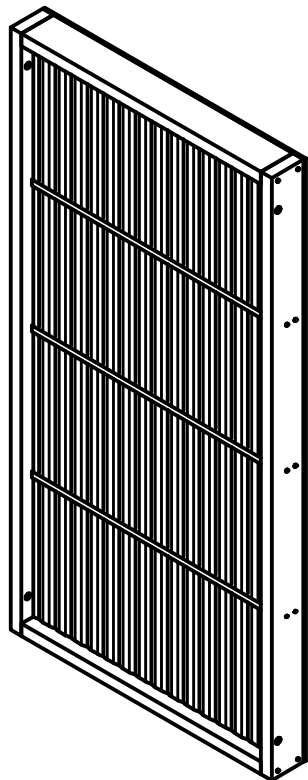
POS	POS.OLD	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
4.4		2	Wood strip long	eg_swh_wood-2450x3.ipt	Production	Wood	25
4.5		2	Neoprene gasket	eg_swh_neoprene-gasket.ipt	Production	Rubber	26
4.6		3	Neoprene gasket	eg_swh_neoprene-gasket2.ipt	Production	Rubber	27
4.7		1	Glasing sheet	eg_swh_glasing-sheet.ipt	Production	thicknes=5,0 , Glass	28
4.8		2	Angle lateral	eg_swh_angle2x3-2.ipt	Production	rolled angle 2x3 thickness=2,5, Steel A36	29
4.9		1	Angle short	eg_swh_angle2x3.ipt	Production	rolled angle 2x3 thinckess: 2,5, Steel A36	30
4.10		6	Mirror clip	eg_swh_mirror-clip.ipt	Production	Steel C45	31
4.11		12	Woodscrew12.ipt	eg_swh_woodscrew12.ipt	Standard	Woodscrew12.ipt, DIN 96 4x20	
	4.12	20	Woodscrew8	Woodscrew8.ipt	Standard	Woodscrew8, Screw DIN 96 4x20	


PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0		
PART NAME PART LIST				FILE NAME eg_swh_A1_solar-water-heater.xls				POS B2		
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY  OSEG			DOC. TYPE PART LIST		MATERIAL		QUANTITY
						LICENCE CC-BY-SA 4.0		SCALE	SHEET 5 /31	

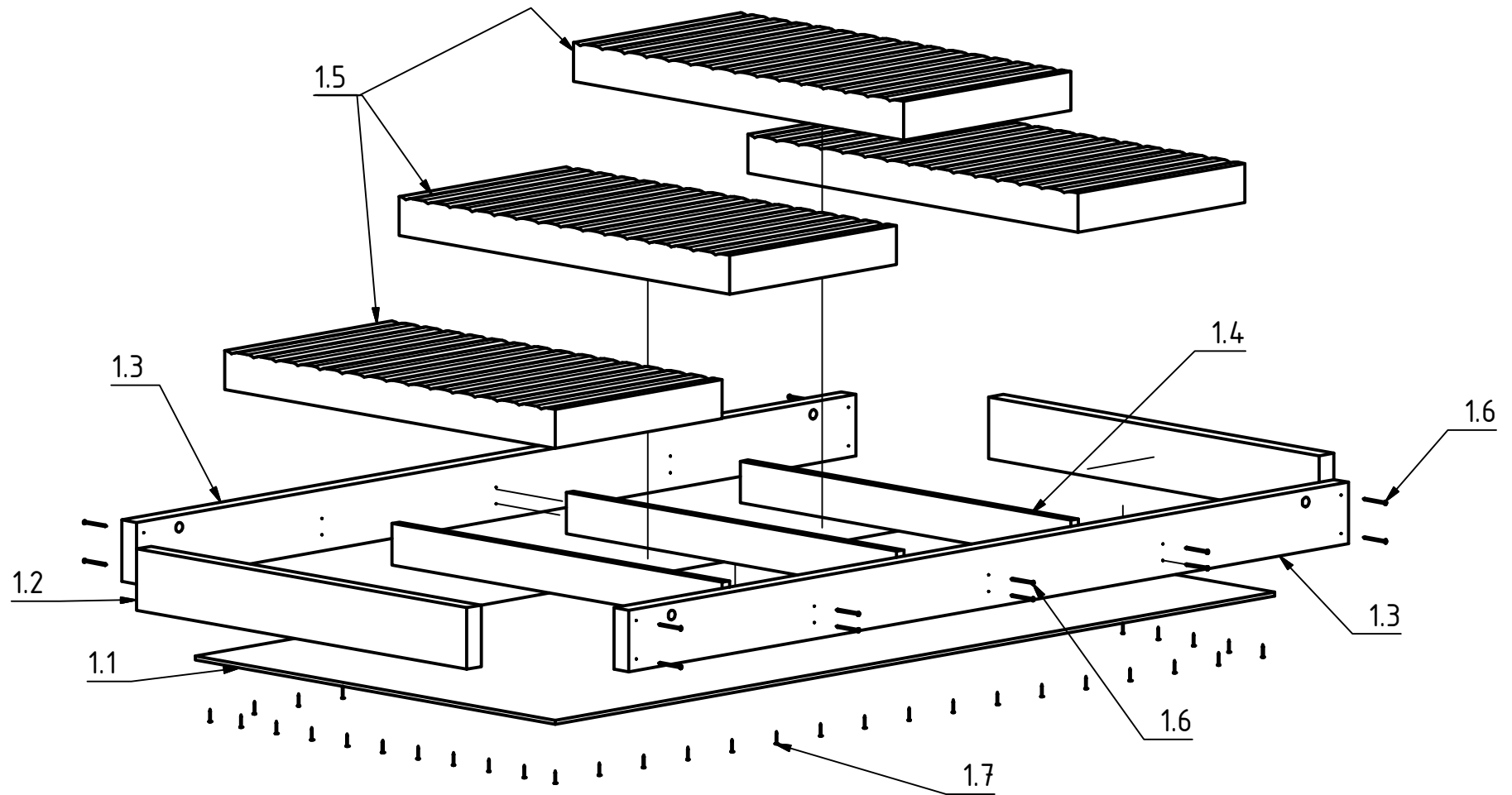
TECHNICAL NOTES


NOTES	CONTENT
GENERAL NOTES	
Metal structure treatment	Iron structures should be painted to prevent rust and improve equipment life. - Remove loose rust with a wire brush, sandpaper or chemical rust remover. - If applicable, sand areas where paint is chipping until surface is smooth. - Remove dust or oil with a degreaser or denatured alcohol. - Prime surface to protect against rust and corrosion
Wood treatment	- The wood must be treated with pesticides and kiln-dried to ensure adequate humidity. - Wood sealer should be applied for later use.
...	...
...	...

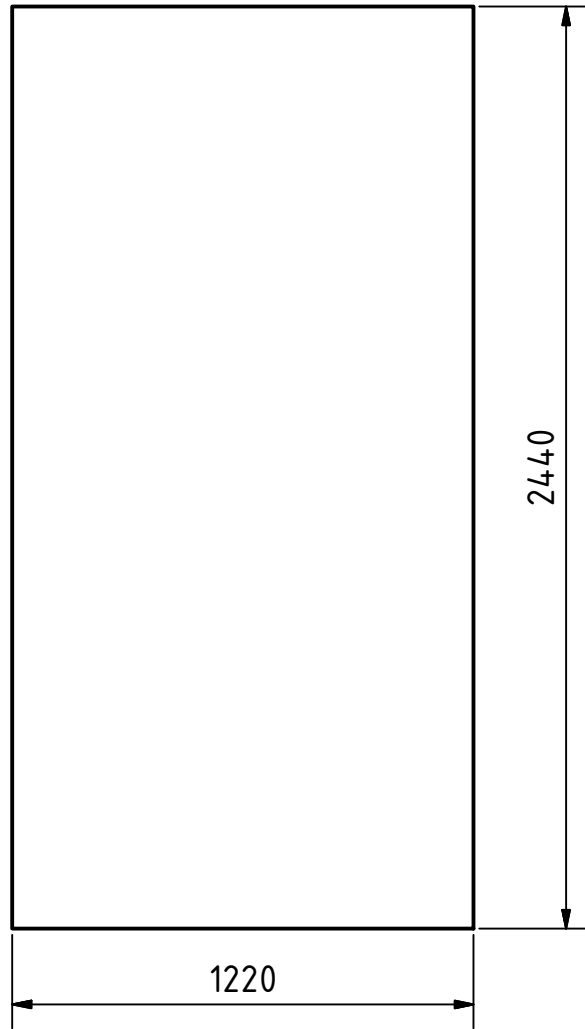
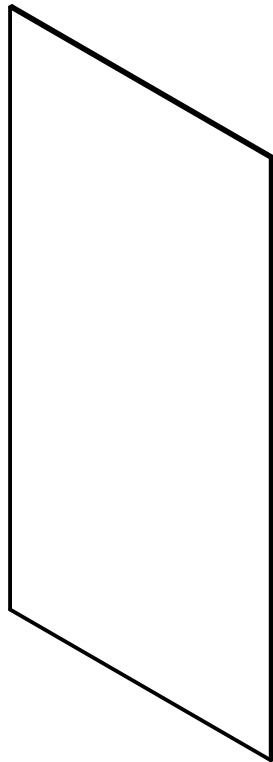
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME		FILE NAME			POS
TECH NOTES					C1
DEVELOPED BY		REDESIGNED BY		DOC. TYPE	MATERIAL
ECOTOPE GROUP		 OPEN SOURCE ECOLOGY GERMANY		TECH NOTES	
				LICENCE	SCALE
		OSEG		CC-BY-SA 4.0	6 /31



PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Box				FILE NAME eg_swh_box.iam				POS 1.0	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE Assembly		MATERIAL	
			 <small>OPEN SOURCE ECOLOGY GERMANY</small>			LICENCE CC-BY-SA 4.0		SCALE	
								SHEET 7 /31	



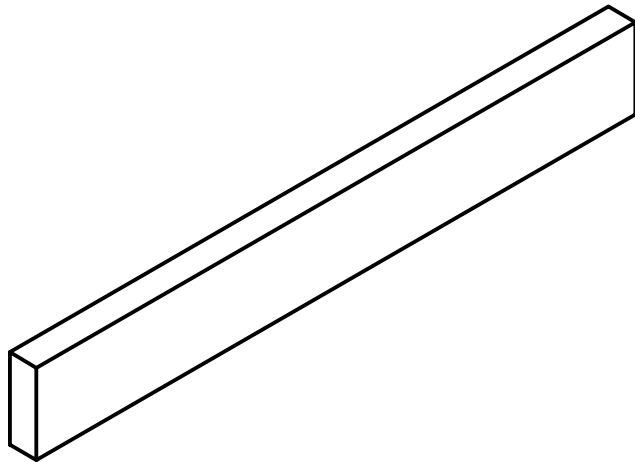
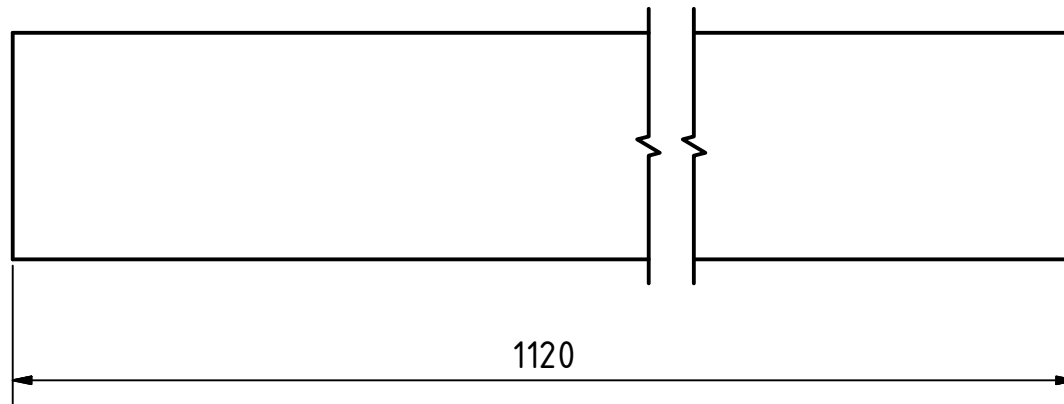
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Box				FILE NAME eg_swh_box.ipn				POS 1.0	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE ASSEMBLY		MATERIAL LICENCE	
			 <small>OPEN SOURCE ECOLOGY GERMANY</small>			SCALE 1:15		QUANTITY 1	
			CC-BY-SA 4.0					SHEET 8 /31	




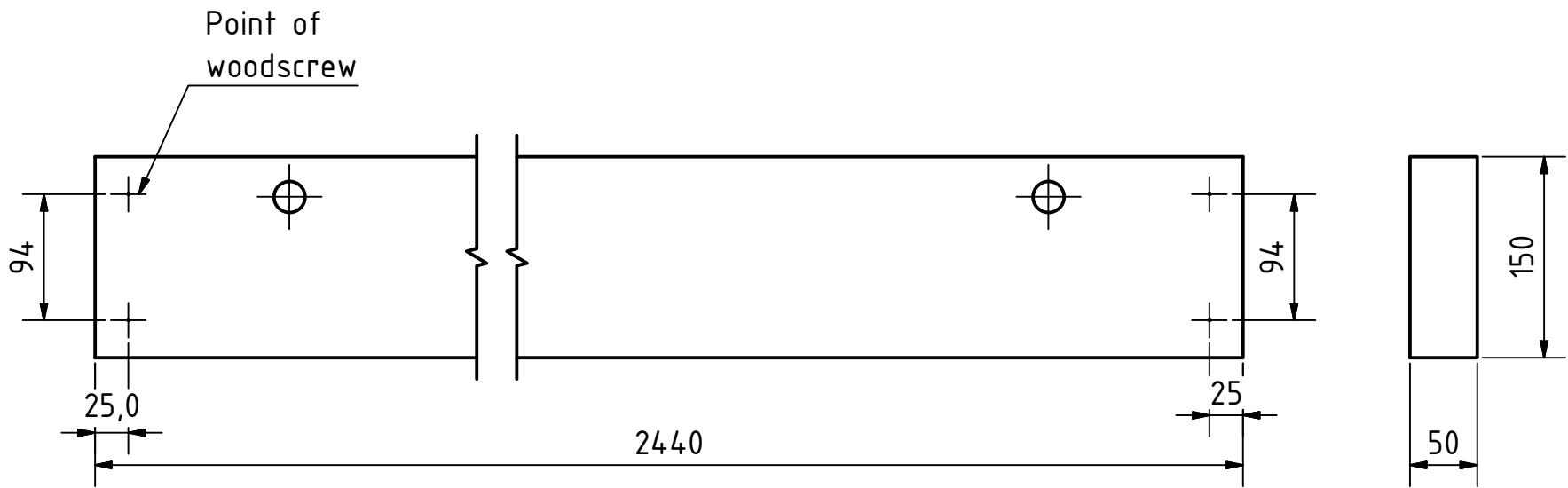
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21	VERSION 1.0
PART NAME Plywood sheet			FILE NAME eg_swh_plywood-sheet.ipt				POS 1.1
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY OSEG		DOC. TYPE PART	MATERIAL Plywood		QUANTITY 1
				LICENCE CC-BY-SA 4.0		SCALE 1:20	SHEET 9 /31



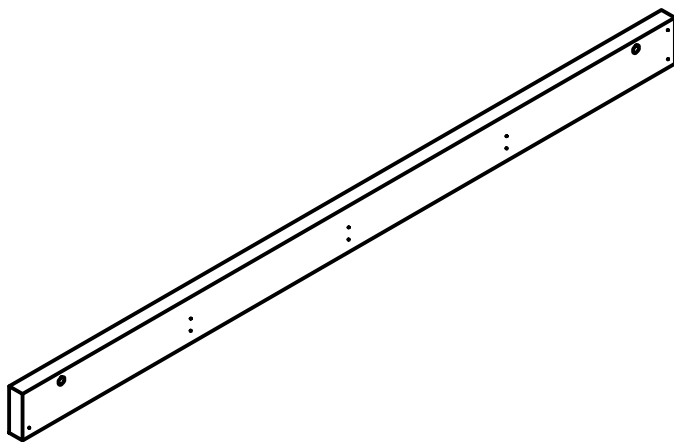
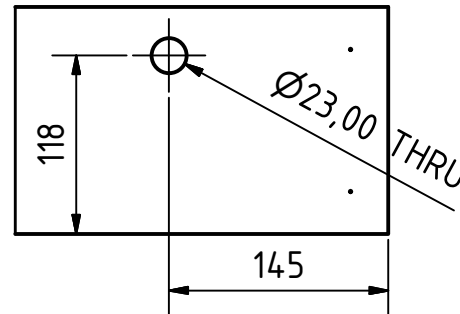
OPEN SOURCE ECOLOGY
GERMANY




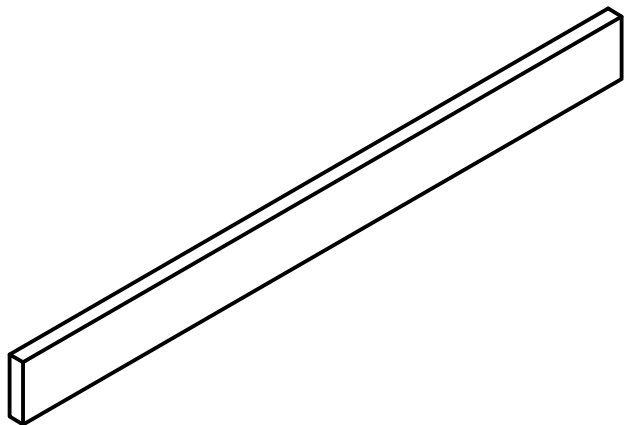
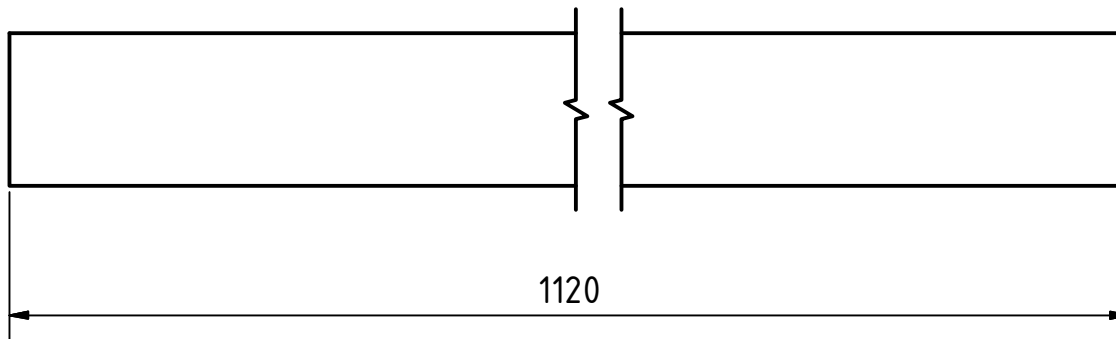
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21	VERSION 1.0
PART NAME Wood strip			FILE NAME eg_swh_wood-1150.ipt				POS 1.2
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY  <small>OPEN SOURCE ECOLOGY GERMANY</small> OSEG		DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Wood		QUANTITY 2
				SCALE 1:5	SHEET 10 /31		



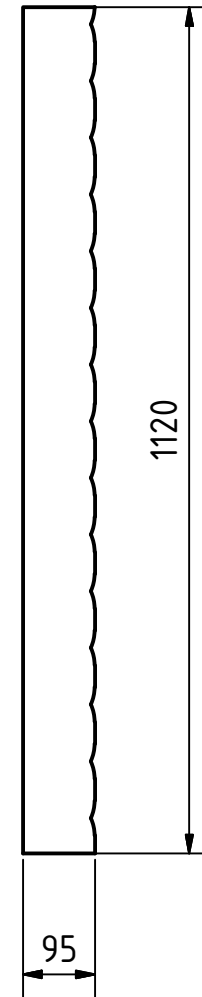
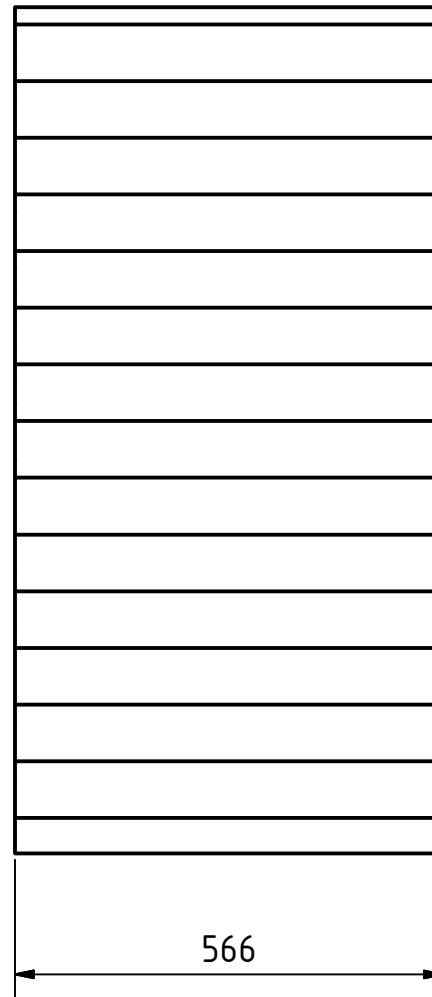
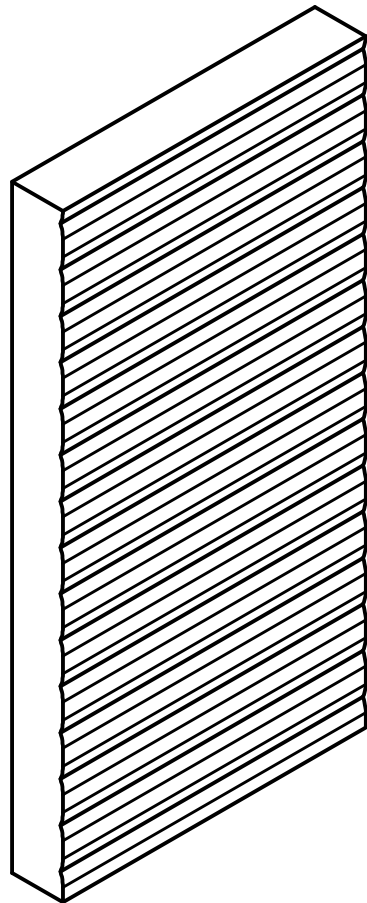
Hole
only strip left




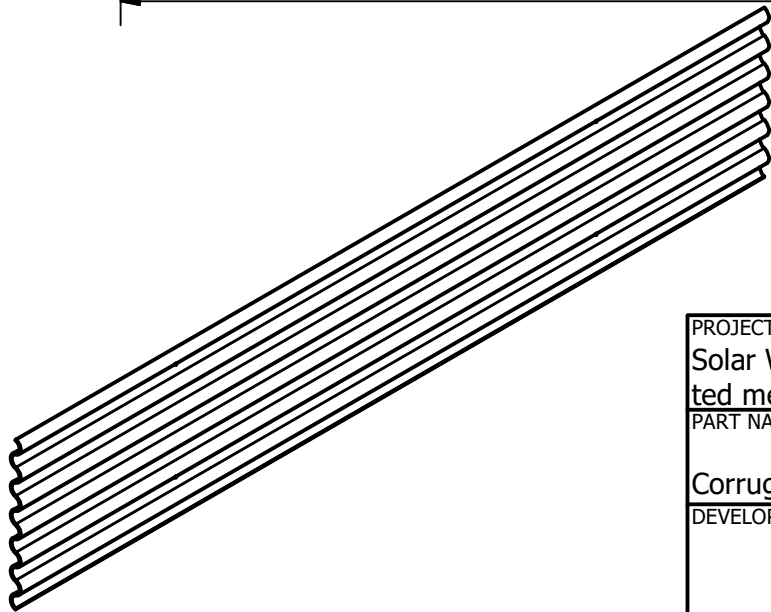
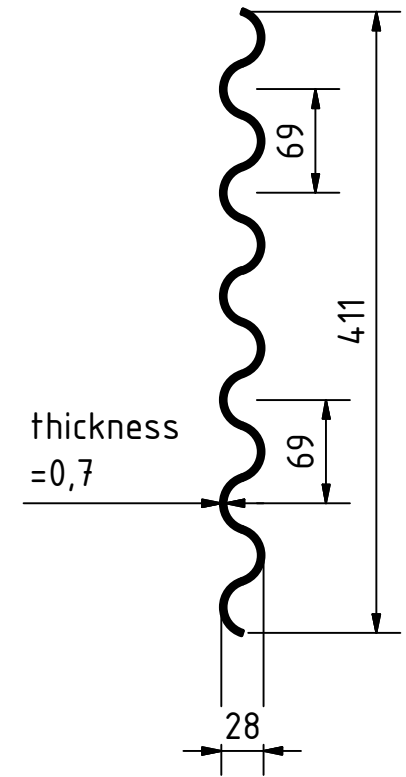
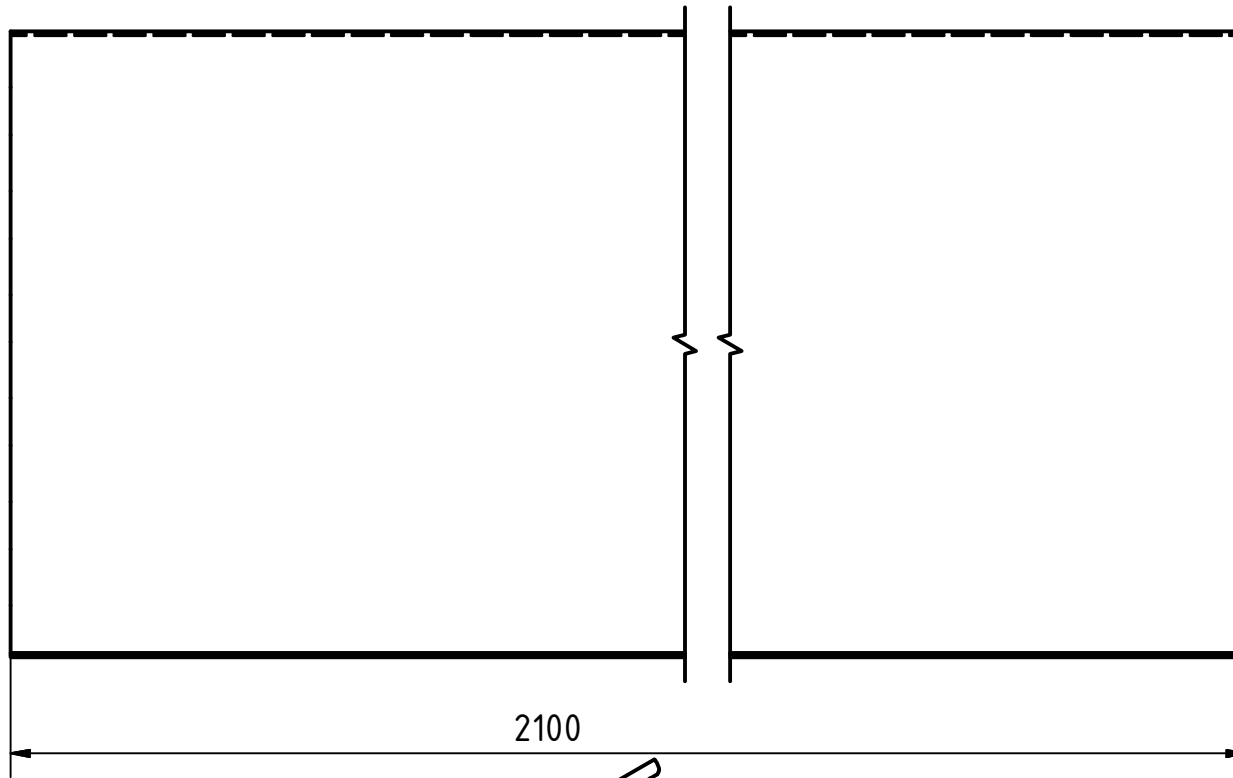
PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Wood long	FILE NAME eg_swh_wood-2440.ipt			POS 1.3
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY OSEG  OPEN SOURCE ECOLOGY GERMANY	DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Wood SCALE 1:5	QUANTITY 2 SHEET 11 /31



PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Wood Brace	FILE NAME eg_swh_wood-brace-1120.ipt			POS 1.4
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY OSEG	DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Wood SCALE 1:5	QUANTITY 3 SHEET 12 /31



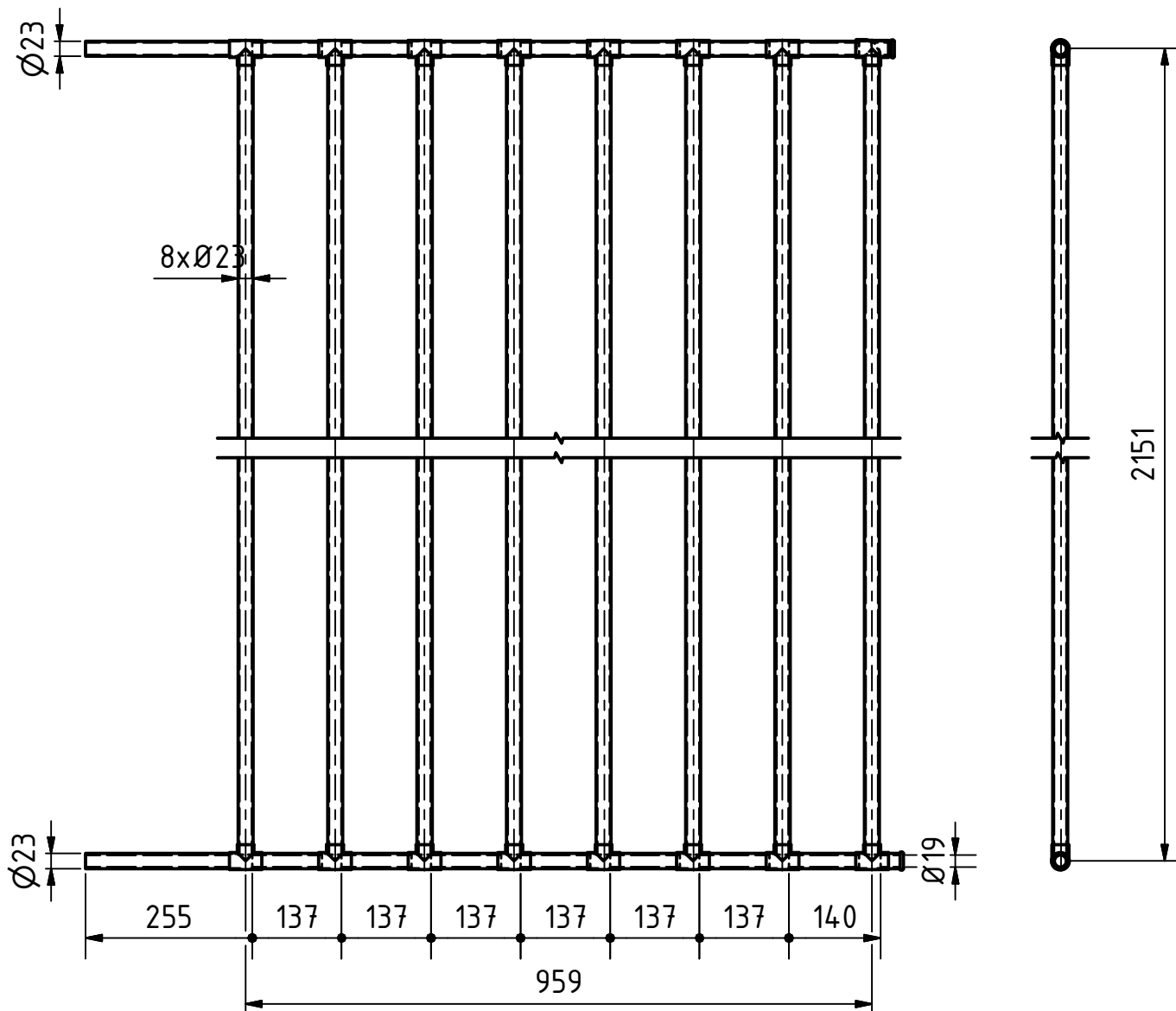
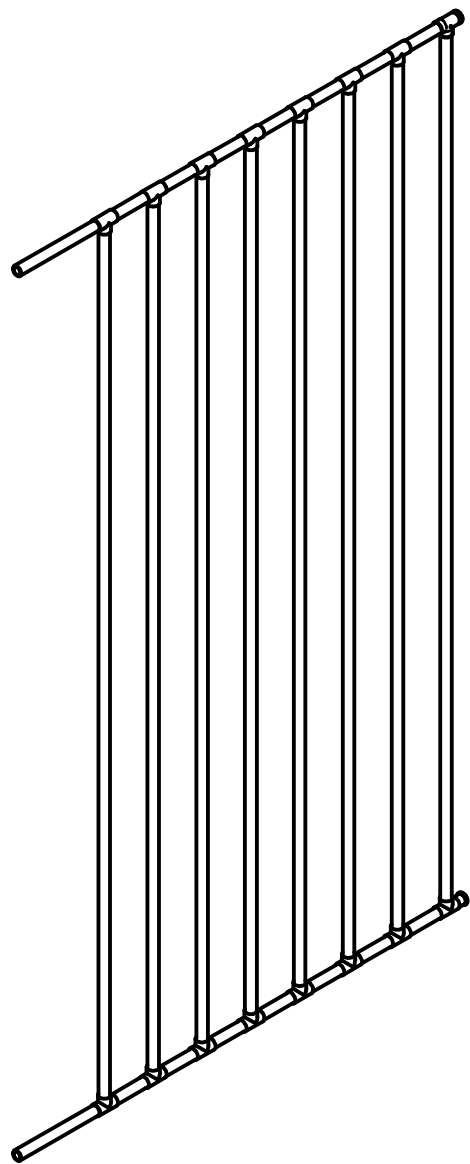
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21	VERSION 1.0	
PART NAME Fiberglass			FILE NAME eg_swh_fiberglass.ipt				POS 1.5	
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY  <small>OPEN SOURCE ECOLOGY GERMANY</small> OSEG		DOC. TYPE PART	MATERIAL Glass wool 350 degC		QUANTITY 4	
			LICENCE CC-BY-SA 4.0		SCALE 1:10		SHEET 13 /31	



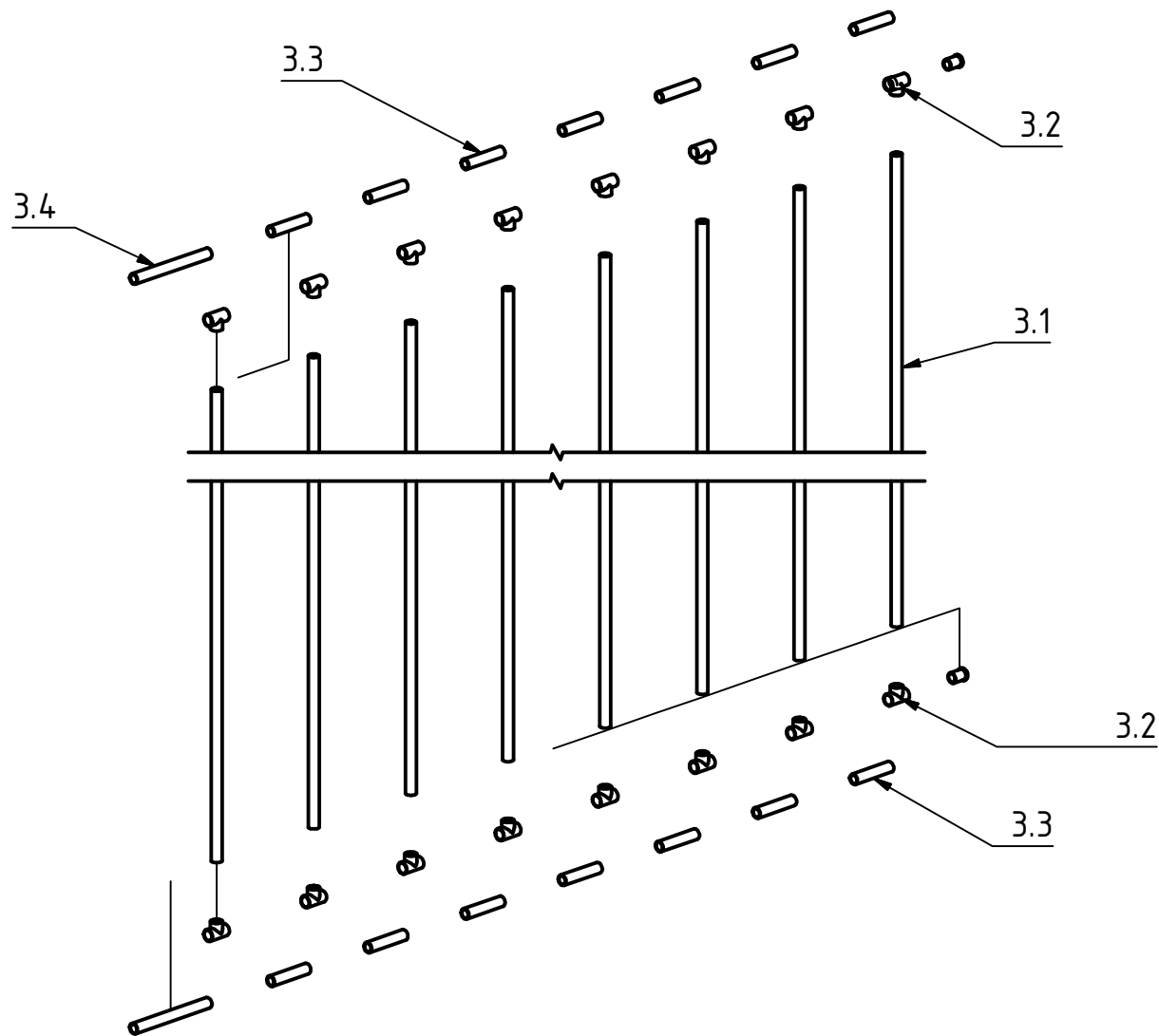
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Corrugated sheet			FILE NAME eg_swh_corrugated-sheet.ipt						POS 2.0
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE CC-BY-SA 4.0	MATERIAL Galvanized Steel		QUANTITY 3
						LICENCE SCALE		SHEET	
						1:20		14 /31	




OPEN SOURCE ECOLOGY
GERMANY

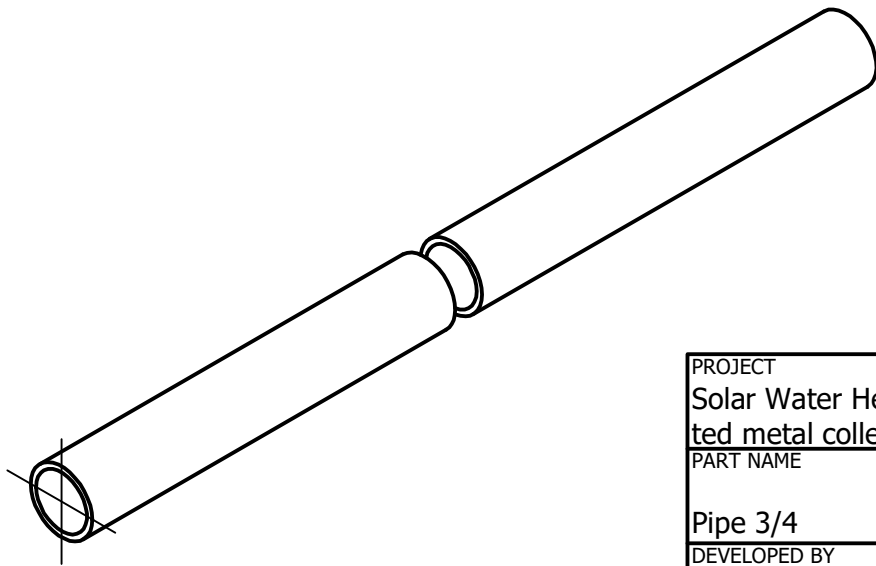
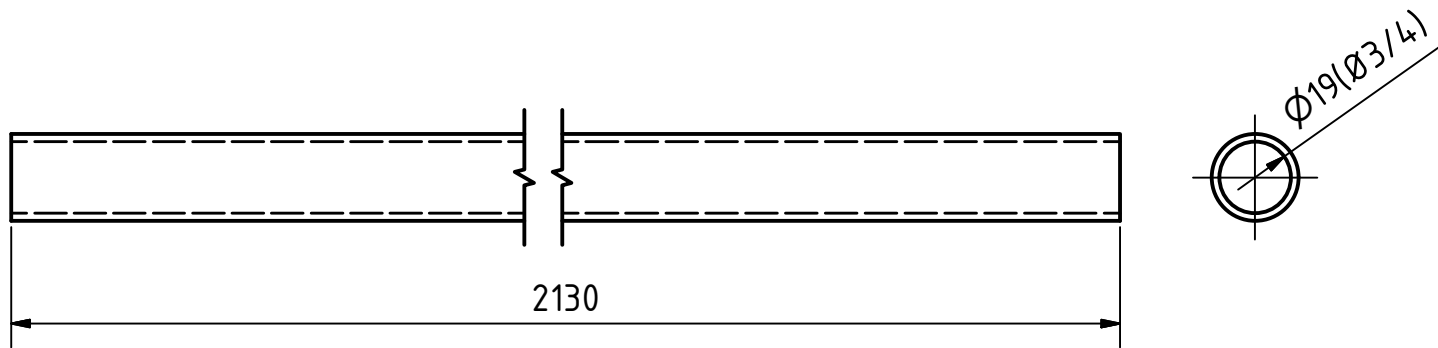


PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Manifold pipes				FILE NAME eg_swh_manifold-pipes.iam				POS 3.0	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE ASSEMBLY		MATERIAL LICENCE	
						SCALE 1:6		QUANTITY 1 SHEET	
						CC-BY-SA 4.0		15 /31	




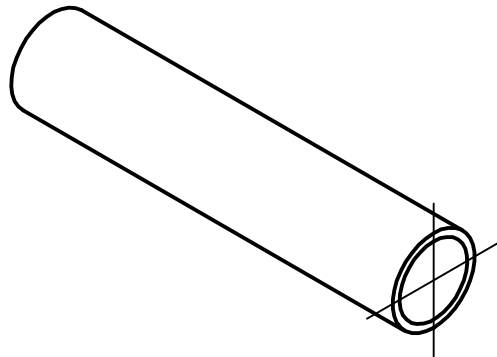
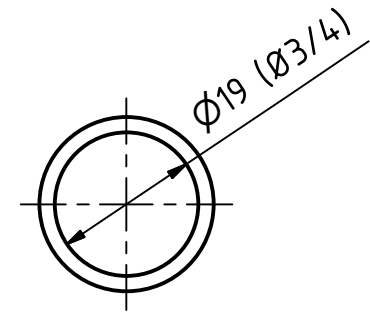
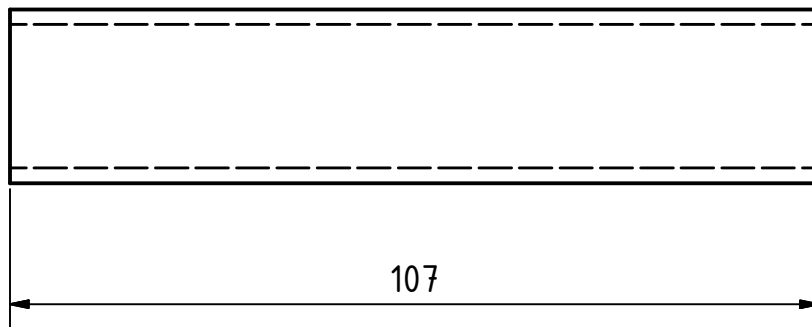
Autogenous solder 50% Sn

PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0		
PART NAME Manifold pipes				FILE NAME eg_swh_manifold-pipes.ipn				POS 3.0		
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY  OSEG			DOC. TYPE ASSEMBLY		MATERIAL LICENCE		QUANTITY 1
						SCALE 1:20		SHEET 16 /31		




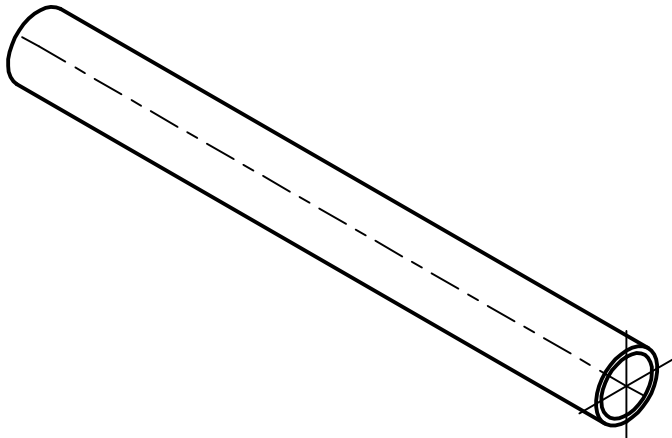
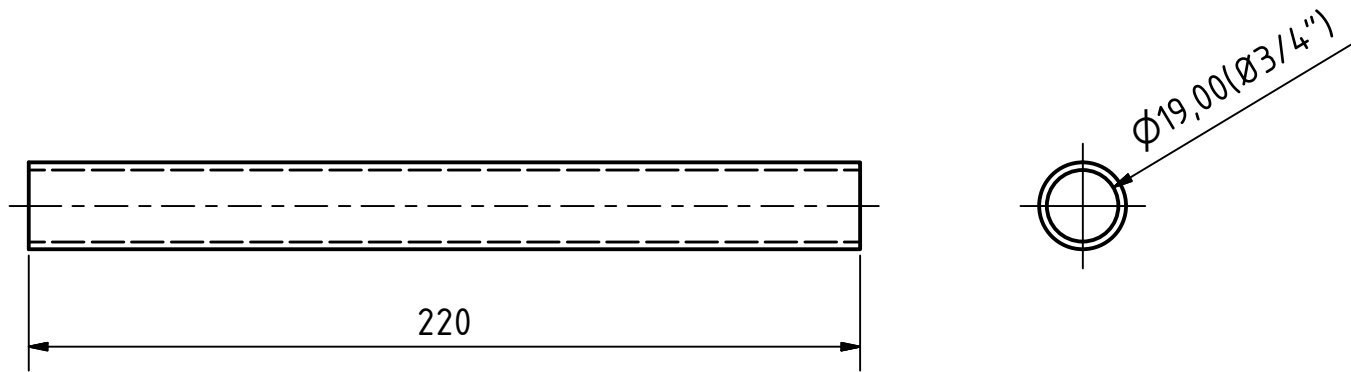
** Cut and ream
inside of all cuts


PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21	VERSION 1.0
PART NAME Pipe 3/4			FILE NAME eg_swh_pipe-3-4plg.ipt				POS 3.1
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY  <small>OPEN SOURCE ECOLOGY GERMANY</small> OSEG		DOC. TYPE PART	MATERIAL Copper		QUANTITY 8
			LICENCE CC-BY-SA 4.0		SCALE 1:2	SHEET 17 /31	

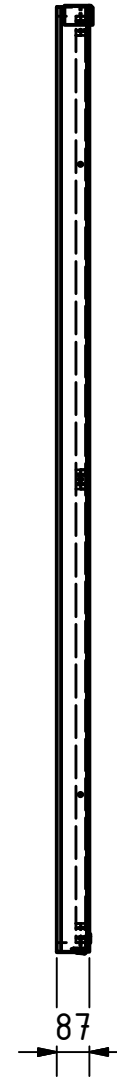
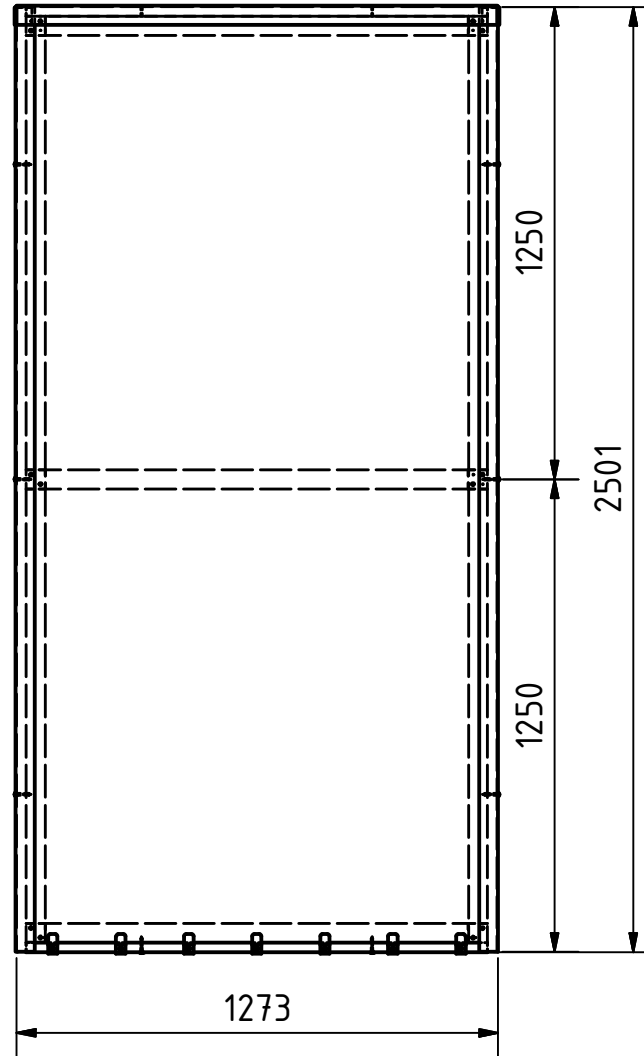
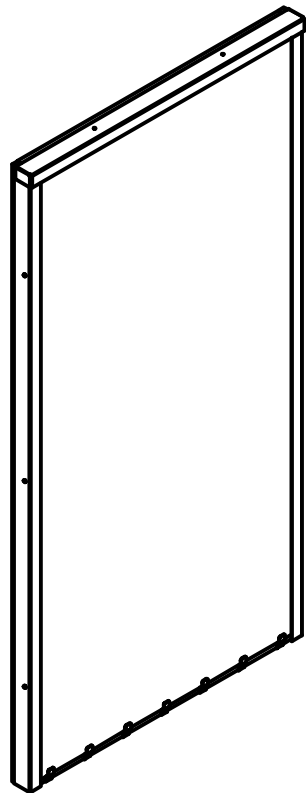


NOTE: Measure between tees to check nipple length. allowing for socket distance inside tees. cut, clean, ream and flux 3/4" nipples and fit into tees to form manifold.

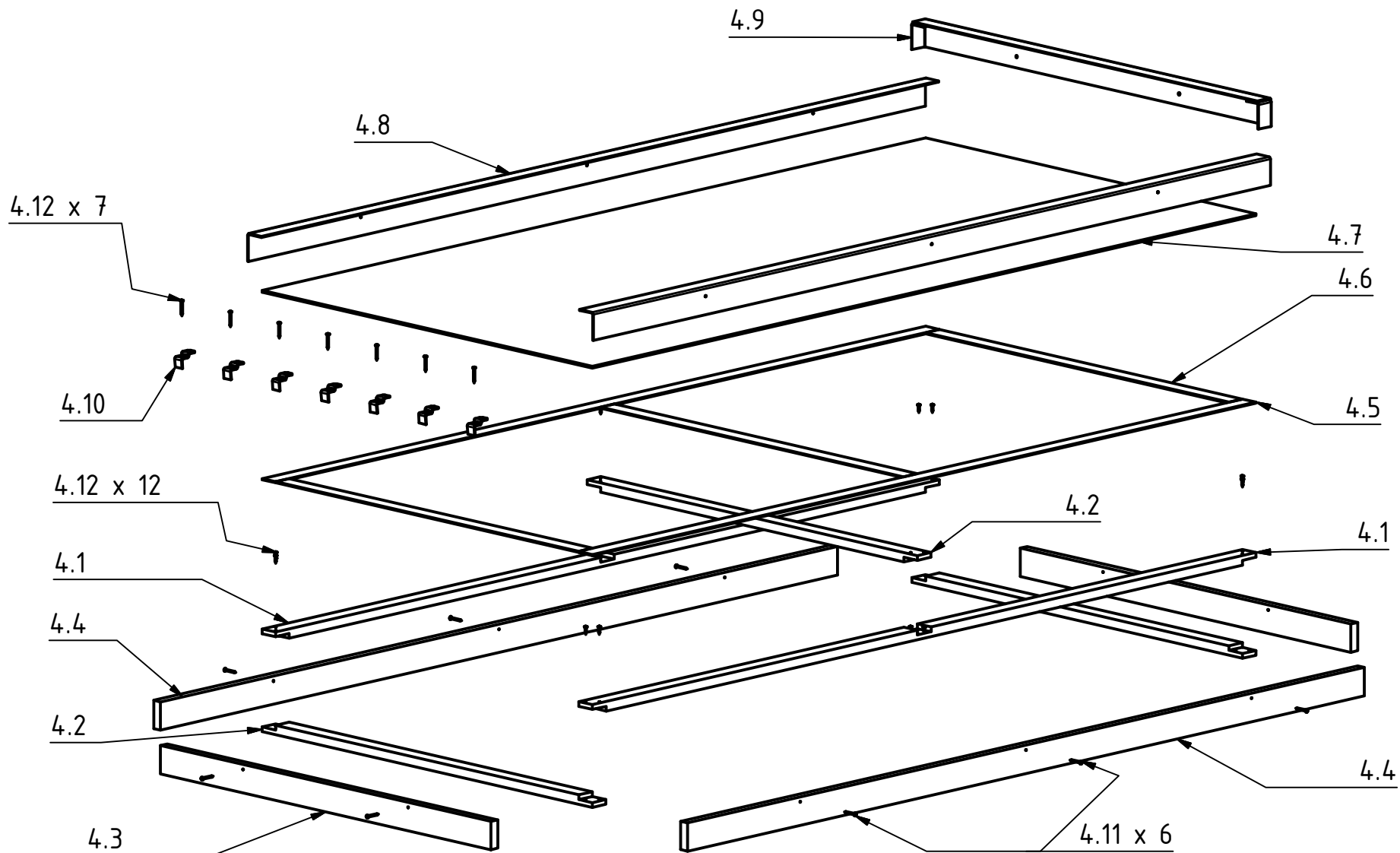
PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Niple 3/4	FILE NAME eg_swh_niple-3-4plg.ipt			POS 3.3
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY  <small>OPEN SOURCE ECOLOGY GERMANY</small> OSEG	DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Copper SCALE 1:1	QUANTITY 14 SHEET 18 /31




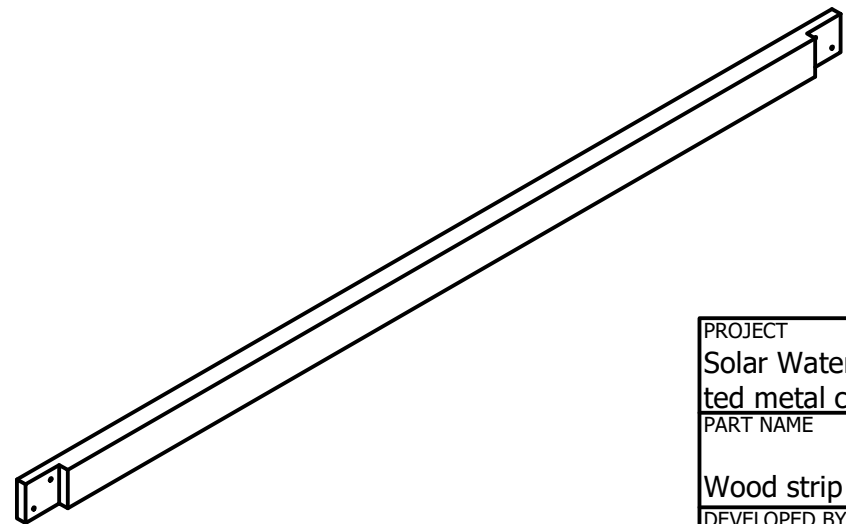
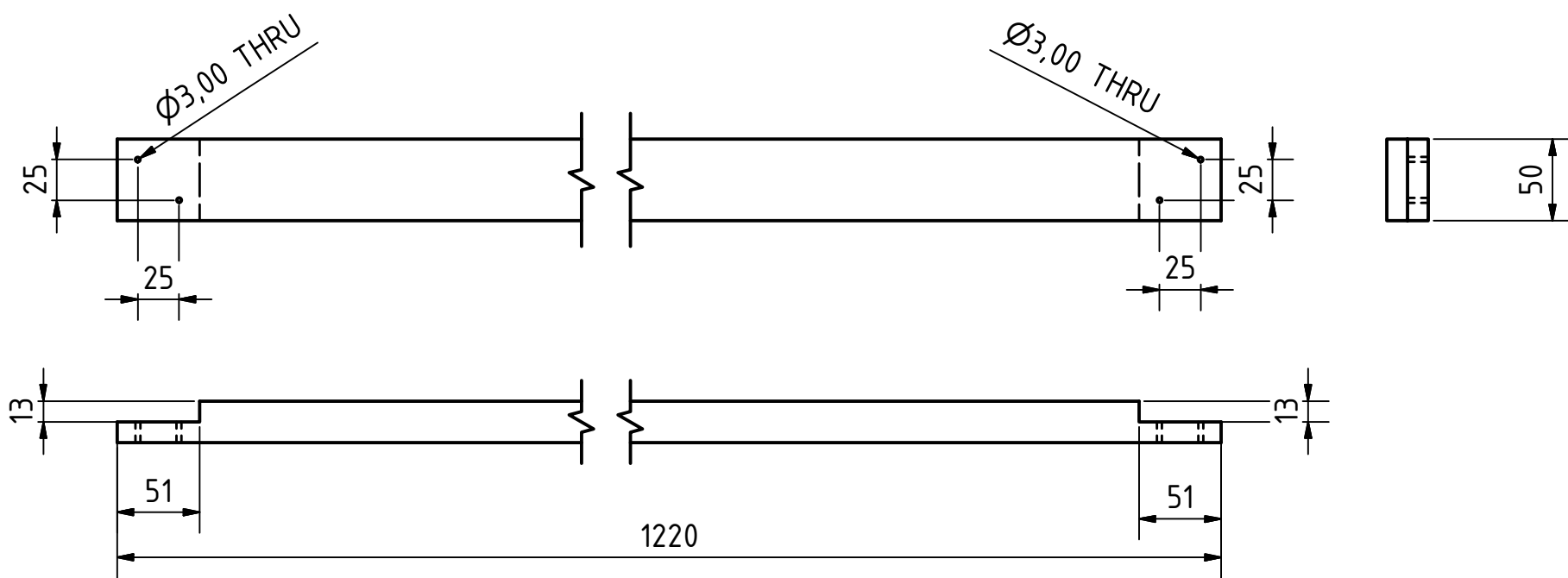
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME 2do niple 3/4			FILE NAME eg_swh_2niple-3-4plg.ipt			POS 3.4
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY  <small>OPEN SOURCE ECOLOGY GERMANY</small> OSEG		DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Copper SCALE 2:1	QUANTITY 2 SHEET 19 /31



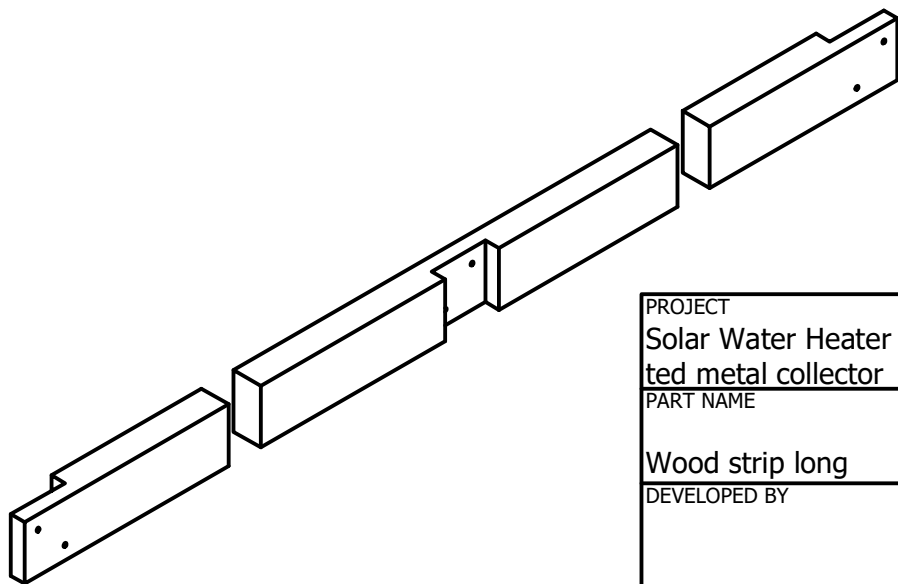
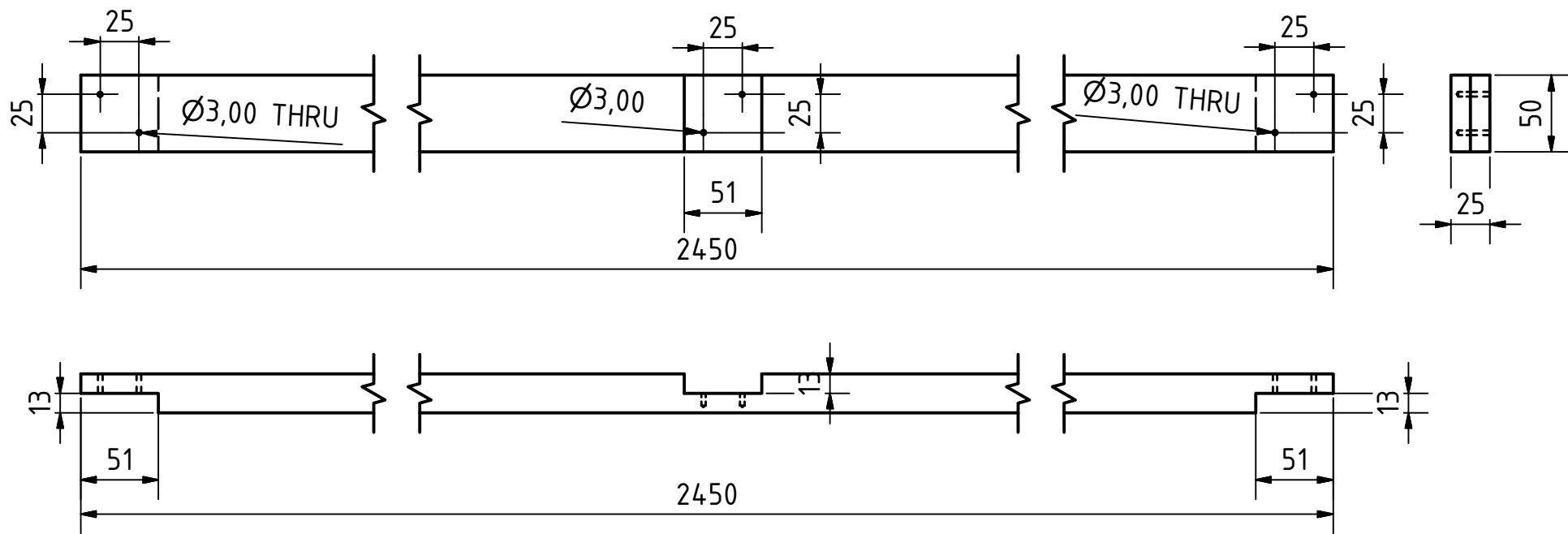
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21	VERSION 1.0
PART NAME Frame Glazing			FILE NAME eg_swh_frame-glazing.iam				POS 4.0
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY OSEG		DOC. TYPE ASSEMBLY	MATERIAL		QUANTITY 1
				LICENCE CC-BY-SA 4.0		SCALE 1:20	SHEET 20 /31



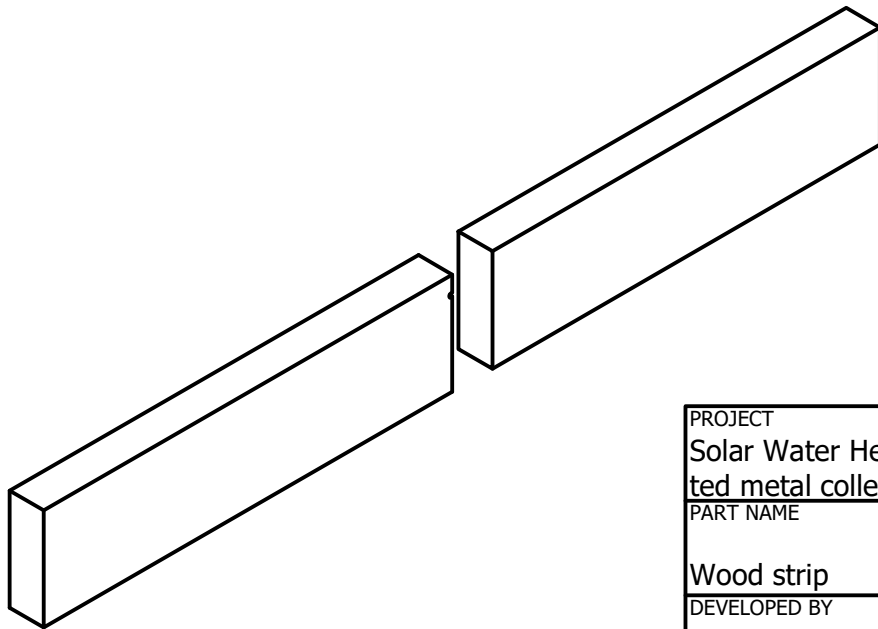
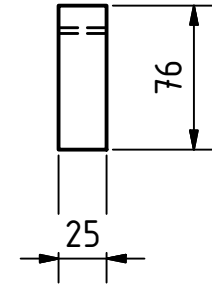
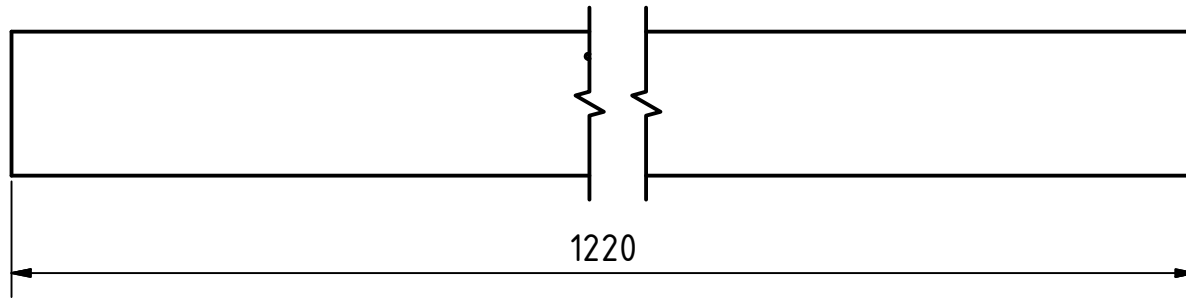
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Frame Glazing				FILE NAME eg_swh_frame-glazing.ipn				POS 4.0	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE ASSEMBLY		MATERIAL LICENCE	
			 <small>OPEN SOURCE ECOLOGY GERMANY</small>			SCALE 1:20		QUANTITY 1	
						SCALE 1:20		SHEET 21 /31	




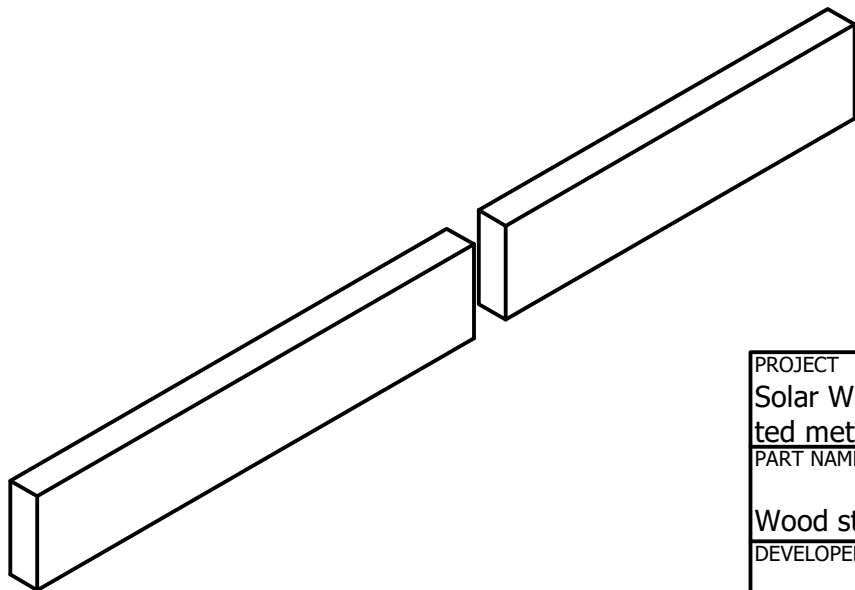
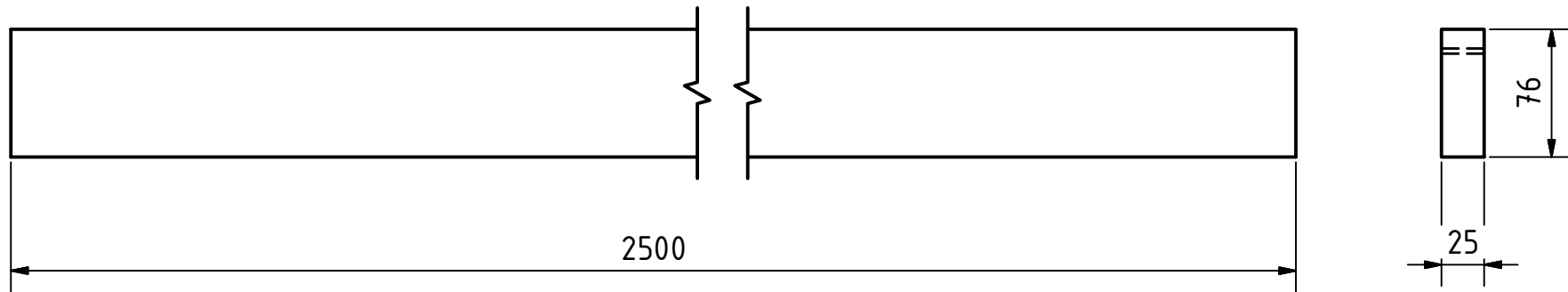
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Wood strip				FILE NAME eg_swh_wood-1220x1.ipt				POS 4.1	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE PART		MATERIAL Wood	
			LICENCE CC-BY-SA 4.0		SCALE 1:4		QUANTITY 3		
							SHEET 22 /31		



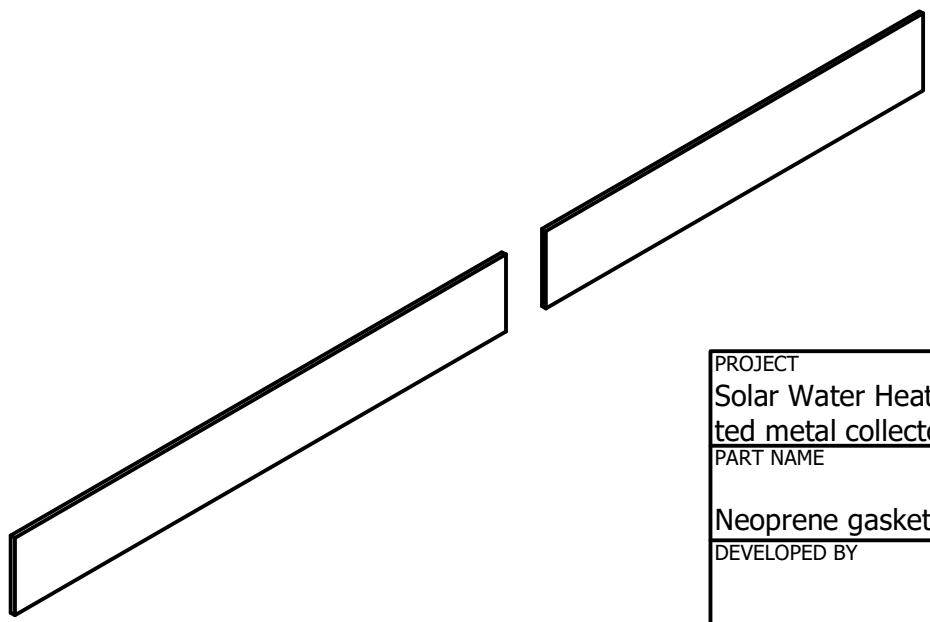
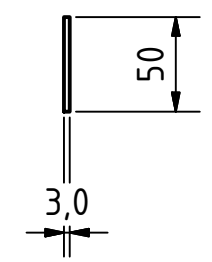
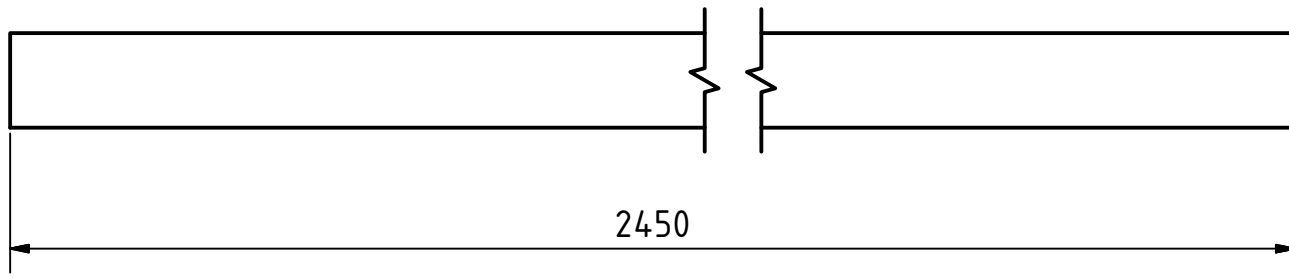
PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Wood strip long	FILE NAME eg_swh_wood-2440x1.ipt			POS 4.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE PART	MATERIAL Wood	QUANTITY 2
ECOTOPE GROUP	OSEG	LICENCE CC-BY-SA 4.0	SCALE 1:4	SHEET 23 /31



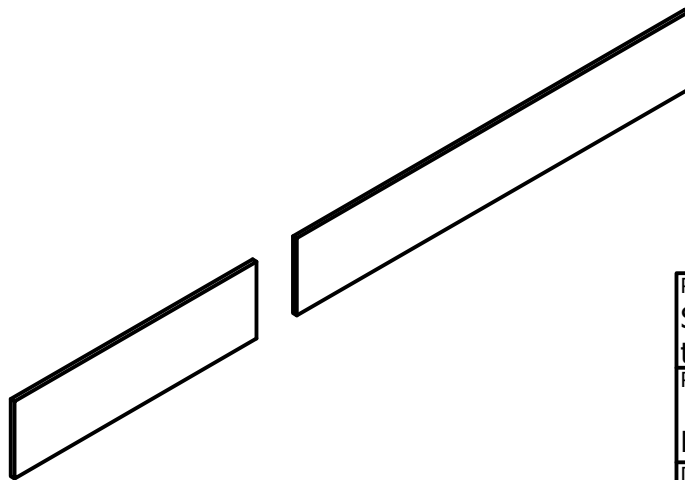
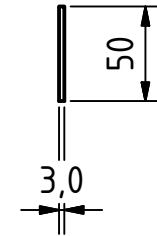
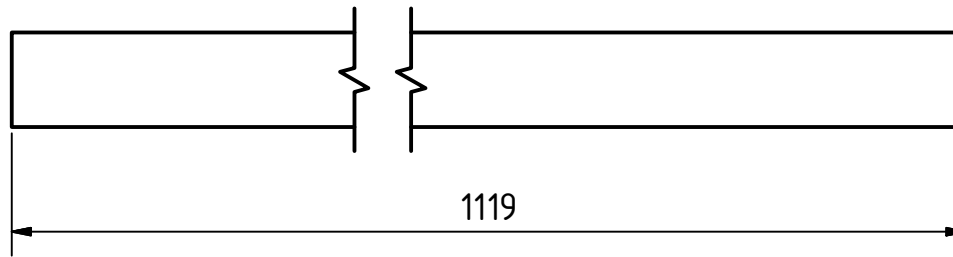
PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Wood strip	FILE NAME eg_swh_wood-1220x3.ipt			POS 4.3
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY  OSEG	DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Wood SCALE 1:4	QUANTITY 2 SHEET 24 /31




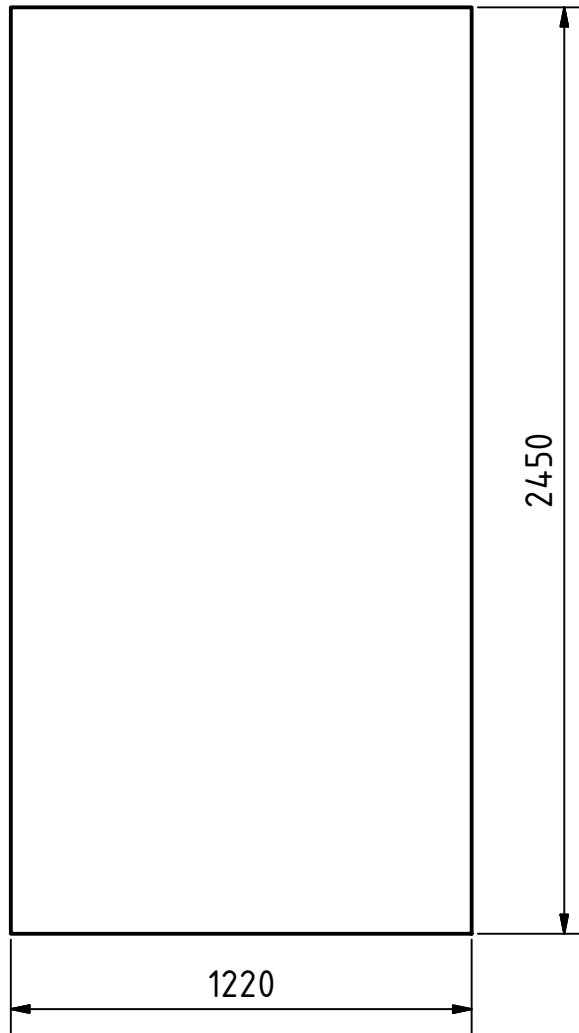
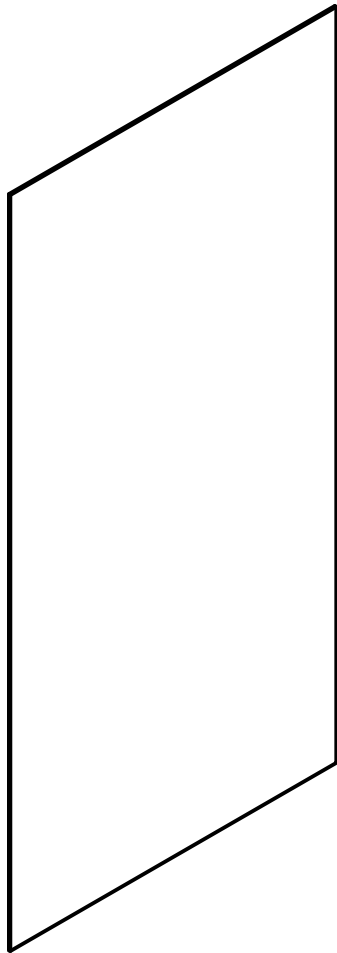
PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Wood strip long	FILE NAME eg_swh_wood-2450x3.ipt			POS 4.4
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY OSEG	DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Wood SCALE 1:4	QUANTITY 2 SHEET 25 /31




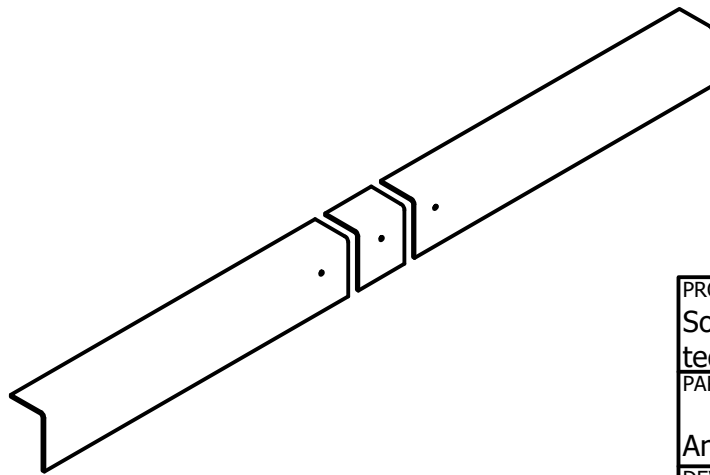
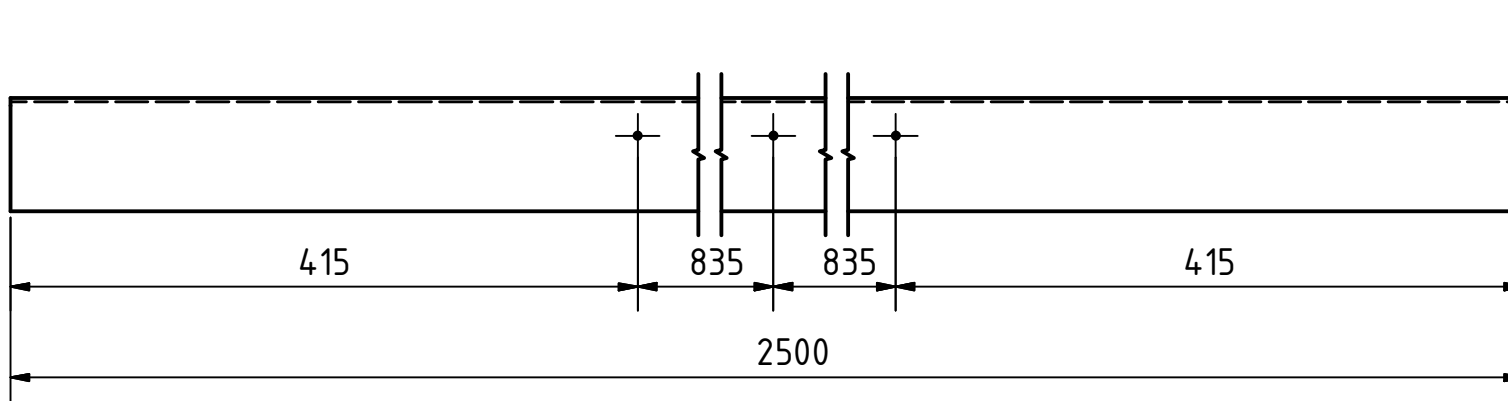
PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME Neoprene gasket				FILE NAME eg_swh_neoprene-gasket.ipt				POS 4.5	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE PART	MATERIAL Rubber		QUANTITY 2
						LICENCE CC-BY-SA 4.0		SCALE 1:4	SHEET 26 /31



PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0		
PART NAME Neoprene gasket short				FILE NAME eg_swh_neoprene-gasket2.ipt				POS 4.6		
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG			DOC. TYPE PART		MATERIAL Rubber		
			 <small>OPEN SOURCE ECOLOGY GERMANY</small>			LICENCE CC-BY-SA 4.0		SCALE 1:4		QUANTITY 3
										SHEET 27 /31

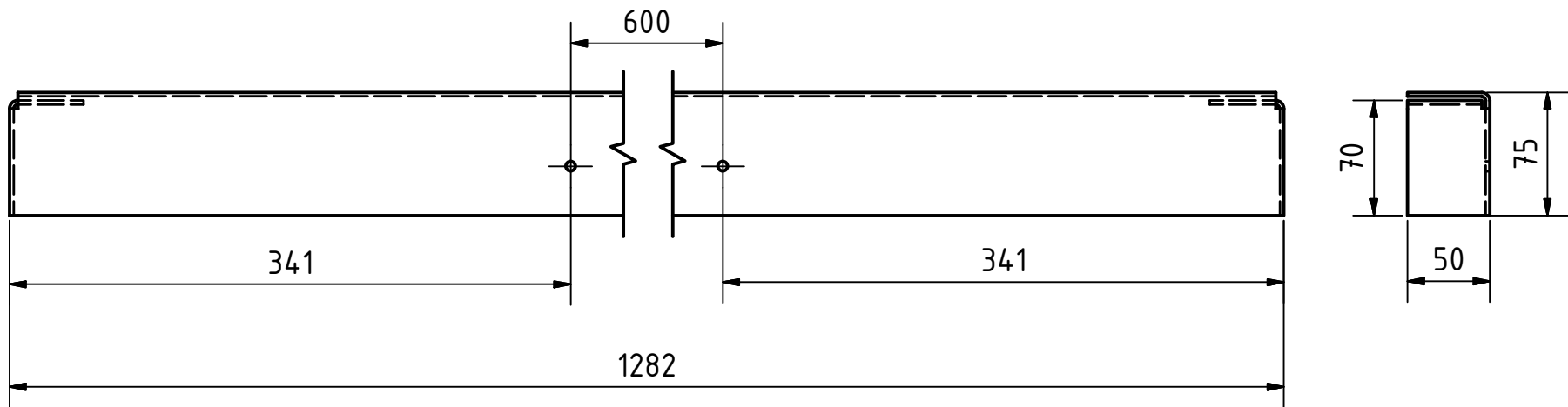


PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21	VERSION 1.0
PART NAME Glasing sheet			FILE NAME eg_swh_glasing-sheet.ipt				POS 4.7
DEVELOPED BY ECOTOPE GROUP		REDESIGNED BY  <small>OPEN SOURCE ECOLOGY GERMANY</small> OSEG		DOC. TYPE PART LICENCE CC-BY-SA 4.0	MATERIAL Glass		QUANTITY 1
				SCALE 1:20		SHEET 28 /31	

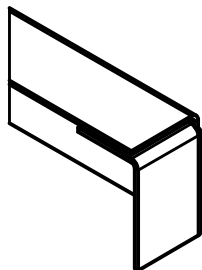


PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Angle lateral	FILE NAME eg_swh_angle2x3-2.ipt			POS 4.8
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY OSEG	DOC. TYPE PART	MATERIAL Steel A36	QUANTITY 2
		LICENCE CC-BY-SA 4.0	SCALE 1:4	SHEET 29 /31

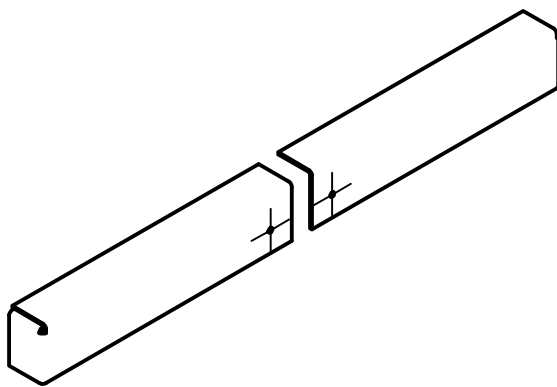
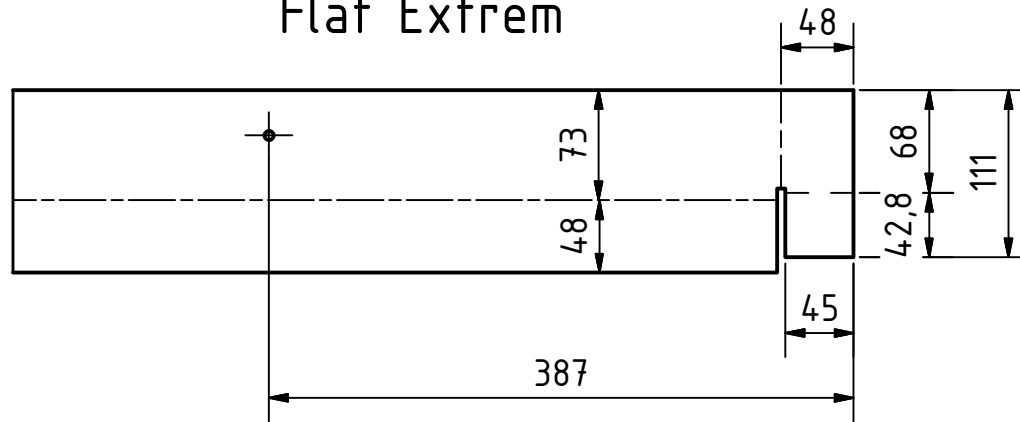




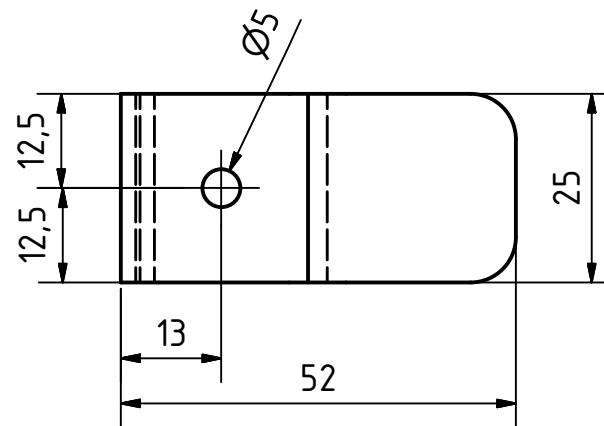
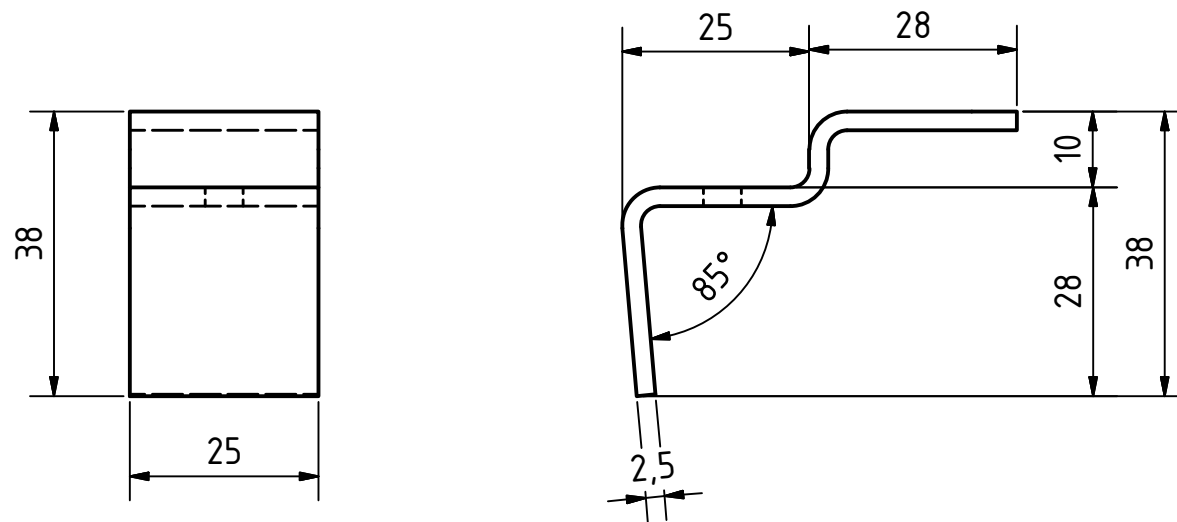
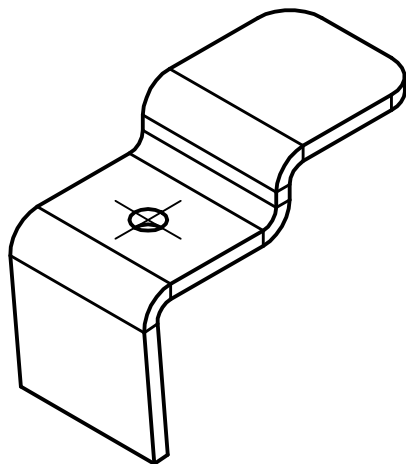
Det. Extr.




Flat Extrem



PROJECT Solar Water Heater with corrugated metal collector	CREATED BY D. MOSQUERA	APPROVED BY A. MORILLO	DATE 16-06-21	VERSION 1.0
PART NAME Angle short	FILE NAME eg_swh_angle2x3.ipt			POS 4.9
DEVELOPED BY ECOTOPE GROUP	REDESIGNED BY OSEG	DOC. TYPE PART	MATERIAL Steel A36	QUANTITY 1
		LICENCE CC-BY-SA 4.0	SCALE 1:4	SHEET 30 /31



PROJECT Solar Water Heater with corrugated metal collector		CREATED BY D. MOSQUERA		APPROVED BY A. MORILLO		DATE 16-06-21		VERSION 1.0	
PART NAME eg_swh_mirror-clip				FILE NAME eg_swh_mirror-clip.ipt				POS 4.10	
DEVELOPED BY ECOTOPE GROUP			REDESIGNED BY OSEG  OPEN SOURCE ECOLOGY GERMANY			DOC. TYPE PART		MATERIAL Steel C45	
						LICENCE CC-BY-SA 4.0		SCALE 1:1	
								QUANTITY 6	
								SHEET 31 /31	