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#### **ECO RAIN GUTTER SYSTEM**

ECO RAIN gutter system is a complete roof drainage system to be applied to any type of roof. Manufactured using the highest quality materials and with paying particular attention to details it will meet the needs of even the most demanding customers.

The materials used to manufacture the ECO RAIN gutter system provide an excellent compromise between endurance and appearance.

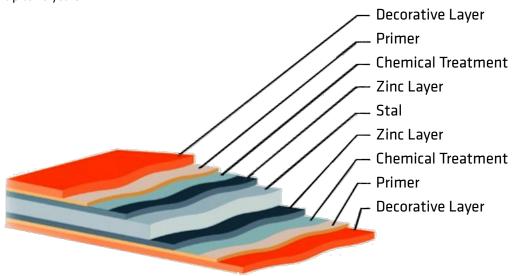
A wide selection of the offered system sizes and colours contributes to individual matching of the selected system to the roof surfaces and colours of the roof stretches.

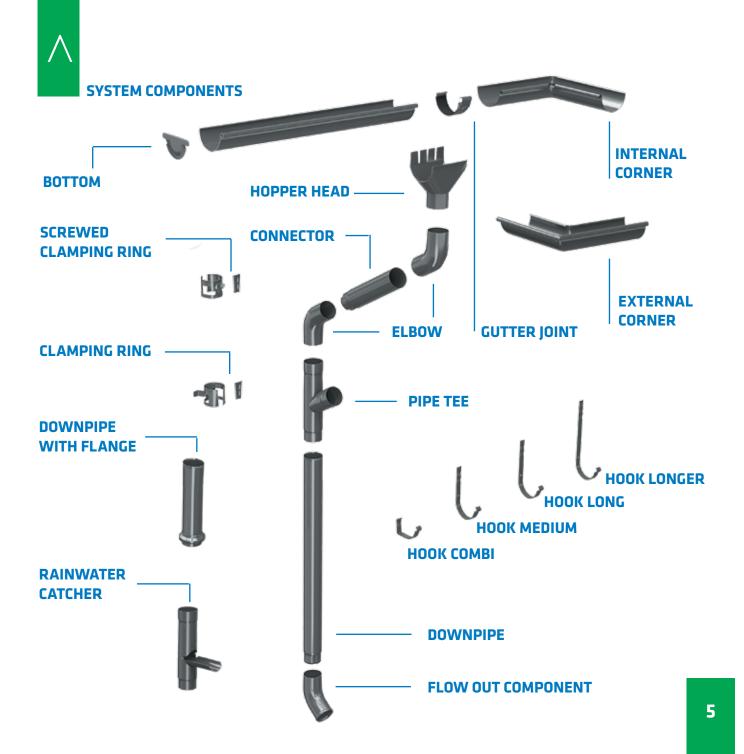


#### **RAW MATERIAL**

Manufacturing of ECO RAIN system's elements is based on up-to-date technology of cold pressing, they are made of top grade steel (thickness of 0.6 mm), covered by zinc layer (275 g/sqm) and coated with polyurethane layer on both sides. Material used for manufacturing of ECO RAIN system's elements is characterized by high resistance to corrosion and scratching and element fastness is extra distinguished by aesthetic appearance.

The ECO RAIN gutter system products are guaranteed against corrosion and to maintain all features of the layer appearance (on the exposed side) for up to 10 years.





	PARAMETER	VALUE	STANDARD
Α	APPLICATION	outdoors	-
В	COAT THICKNESS	35 ym / 35 ym	ISO 2808
С	ZINC COAT THICKNESS	Z275	ISO 2808
D	GLOSS (GARDNER 60°)	30 or 40	EN 13523
Е	SCRATCH RESISTANCE	≥2	EN 13523
F	COAT ADHESION	≤1	EN 13523
G	COAT FLEXIBILITY	≤2	EN 13523
Н	CORROSION RESISTANT (salt spray chamber tested)	500 h (ISO 7253) / RC4	EN 10169
-1	UV RESISTANCE	2000 h (ISO 4892 - 3) / RUV4	EN 10169
J	DEFORMABILITY	good	



#### **SIZES & CHOICE OF COLOURS**

The ECO RAIN gutter system is available in two sizes and 7 colours:



A wide choice of the offered system sizes and colours contribute to individual matching of the selected system to the roof surfaces and colours of the roof stretches.

**RED WINE** 



#### **MANUFACTURING PROCESS**

The ECO RAIN gutter system is made based on a state-of-the-art technology using sheet metal cold press forming operation. The production is carried out with a broad and continuously modernized machine stock operated by experienced staff. Highest care to perfectly match each detail and maintaining permanent high quality of production result in the system marketing success.



#### RELATIONS WITH CUSTOMERS

Your comments pertaining to application of the ECO RAIN gutter system are of great importance to us. This is why we would like you to use the company info line in order to obtain comprehensive answers to any of your concerns. We analyze all your observations very thoroughly, which allows us to determine new product development trends.



#### **ASSEMBLY INSTRUCTIONS**

Proper system assembly guarantees quick and complete water drainage from the whole roof slopes during the entire system service life and reduces maintenance operations to simply removing leaves from gutters. Therefore, in order to guarantee that you are fully satisfied with our product, below we attached assembly guidelines and hints. Please read them before you start assembling the ECO RAIN gutter system.

EFFICIENCY TABLE OF ECO RAIN GUTTER SYSTEM							
GUTTER SYSTEM ROOF AREA							
	1 DOWNPIPE 2 DOWNPIPES						
125/90	50 m2 - 100 m2	100 m2 - 150 m2					
150/100	100 m2 - 150 m2	150 m2 - 200 m2					



#### ASSEMBLY INFROMATION:

Make sure you have a sufficient quantity of all the necessary system components on hand.

Remember that the gutter should stick out beyond the roof slope edge at least by half of its diameter.

Bear in mind that the gutter should be fitted slightly below the roof slope extension line so that it does not support snow sliding down from the roof.

Keep the gutter drop toward the downpipe by approximately 3-5mm per running meter.

Remember that the gutter's inside edge should be 6-10mm higher than its outside edge.





## **INSTALLATION OF HOOKS:**

- Medium hooks (HKS), long hooks (HKD), and longer hooks (HKL) which are to be mounted onto rafters, laths, or boards should be bent in order to obtain the required gutter drop (3-5mm per running meter)
- Combi hooks (HKC) are used for direct mounting on fascia board, maintaining a suitable gutter drop (3-5mm per running metre)
- Hooks should be fitted every 60cm, end hooks should be mounted approximately 10 cm from the gutter ends.
- Remember to fit the hook on each side near the corner.
- Start mounting the hooks by fixing the end hooks, then pull a cord between them in order to show the fitting line for the other hooks.
- In case two downpipes are being used, start fixing the hooks from the middle point between them, providing a drop toward each of the downpipes.



#### **HOPPER HEAD INSTALLATION:**

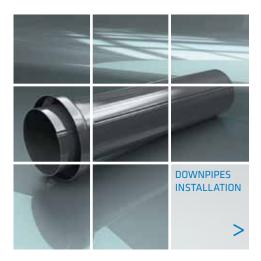
- Mark location on the gutter where the downpipe will be fitted, then cut a hole using a hack-saw (Note: do not use an angle grinder for this purpose).
- Turn up cut edges outwards to facilitate water flow into the hopper head. Mount the hopper head (SZT) into the gutter, placing its bent edge into
- the gutter hole. Then press the component to the gutter and fix it by bending the box holders to the inside gutter edge.





## GUTTERS, ELBOWS AND BOTTOMS INSTALLATION:

- Mount gutters (RYN) and corners (NAW,NAZ) starting from the gutter with the mounted hopper head, and connect the gutter inside part to the holder onto a hook, and then press the outside edge into the lock. Then mount all other gutters and corners.
- Using a gutter joint (ZLR), seal all the joints between gutters and corners. Make sure that the joints are at even distances between the hooks.
- Place a gutter joint onto the back part of both components, making sure that the seal is in the middle of the joint.
- Then place a clamp on the front part of both components, closing the joint and securing it by bending the plate.
- Gutters and corners should be fitted with 2-3mm spacing between them in order to compensate for thermal elongation.
- Before fitting the bottoms (DEN) at the gutter ends, apply a small amount of roofing sealant in their vaulted pits. Then put the bottom in place and press down the front lug at the gutter overlap, and bend the back lug behind the gutter.

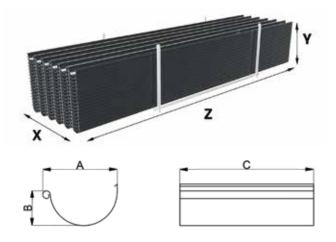


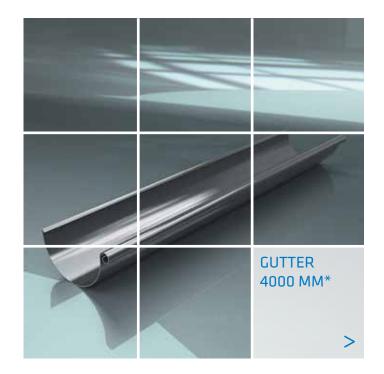
### 4 DOWNPIPES INSTALLATION:

- Mark a line on the wall, along which the downpipe will run. Next, mark the location of the gutter clamping ring (OBP) by placing it in there and prepare the fastening holes. Fix the clamping ring using strut pins. In the case of mounting onto a wall insulated with foamed polystyrene, use suitably long anchors (KTO) or pins (BDO).
- Mount the first clamping ring directly under the elbow and the last before the flow out component.
- Maximum distance between the clamping rings should not exceed 2mm. As soon as the pipes are fixed, put connectors onto the clamping rings using a wooden distance piece.
- Fix the flow out component (WYL) at the end of the downpipe. If the water is being discharged into the sewage system, use a flanged downpipe(RSK).

**NOTE:** Remember to remove all the cut out pieces of sheet and fillings from the inside of the gutter. These leftover pieces will corrode and discolour the sheet metal surface

# SYSTEM COMPONENTS





	COMPONE	NT SIZE (mm)		STAND	SIZE (mm)	QUANTITY
	125/90 150/100			125/90	150/100	125/90 150/100
А	125	150	X	790	790	5/200 5/150
В	66	74	Υ	790	790	WEIGHT (KG)
С	4000	4000	Z	4000	4000	4,26 4,88

\*Our offer includes also 2000mm long gutter sections. The gutters can be cut to section lengths according to customer specification









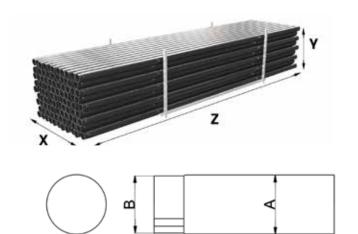


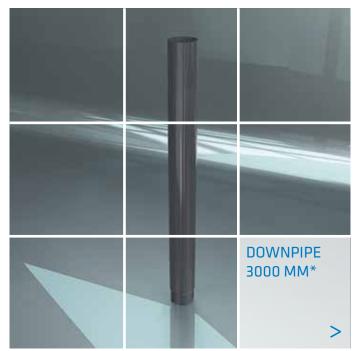




#### **ACCURATE PACKING**

С





	COMPONENT SIZE (mm)				SIZE (mm)	QUANTITY
	125/90 150/100			125/90	150/100	125/90 150/100
Α	87	99	X	790	790	2/44 2/34
В	85	96	Υ	790	790	WEIGHT (KG)
С	3000	3000	Z	3000	3000	3,9 4,41

\*Our offer includes also 1000 mm, 2000 mm and 4000 mm long gutter sections. The gutters can be cut to section lengths according to customer







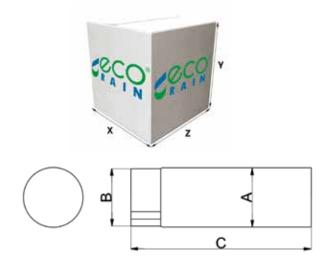


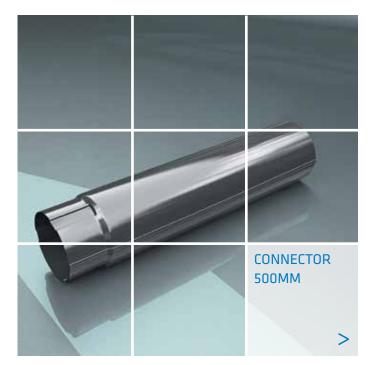






# SYSTEM COMPONENTS





	COMPONI	ENT SIZE (mm	1)	BOX S	SIZE (mm)	QUANTIT	Υ
	125/90 150/100			125/90	150/100	125/90 150	/100
Α	87	99	X	390	390	16 ·	13
В	85	96	Υ	550	550	WEIGHT (F	(G)
С	500	500	Z	390	390	0,65 0	,73







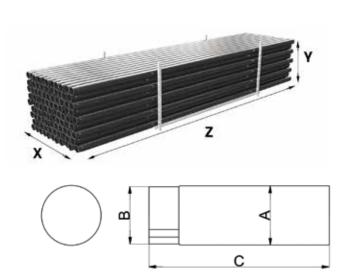


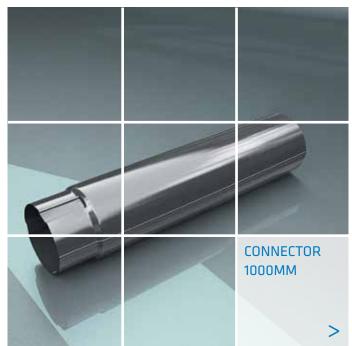






#### PERFECT FOR EACH ROOF





	COMPONENT SIZE (mm)				SIZE (mm)	QUAI	QUANTITY		
	125/90 150/100			125/90	150/100	125/90	150/100		
Α	87	99	X	790	790	150	120		
В	85	96	Υ	1000	1000	WEIGI	HT (KG)		
С	1000	1000	Z	2000	2000	1,30	1,47		









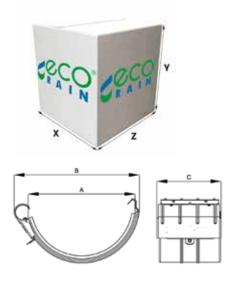








#### **SYSTEM COMPONENTS**





	COMPONE	1)	BOX S	SIZE (mm)	QUANTITY	
	125/90	150/100		125/90	150/100	125/90 150/100
А	125	150	X	390	390	50 50
В	145	175	Υ	140	140	WEIGHT (KG)
С	52	53	Z	390	390	0,12 0,185







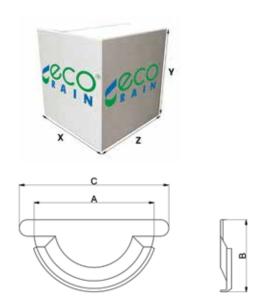








#### **INVOLVEMENT INTO PRODUCTION**





	COMPONI	ENT SIZE (mn	n)	BOX S	SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
А	125	150	X	390	390	100 100
В	69	79	Y	140	140	WEIGHT (KG)
С	165	192	Z	390	390	0,054 0,070







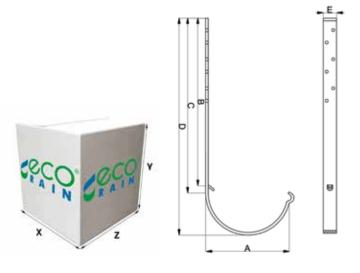














	COMPONE	m)	BOX S	ilZE (mm)	QUANTITY	
	125/90	150/100		125/90	150/100	125/90 150/100
Α	125	150	X	390	390	50 50
В	305	305	Υ	140	140	WEIGHT (KG)
С	325	325	Z	600	600	0,56 0,58
D	395	400				
Е	25	25				















#### **CLOSE COOPERATION WITH THE CLIENTS**





	COMPONENT SIZE (mm)				SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
А	125	150	X	390	390	50 50
В	190	190	Υ	140	140	WEIGHT (KG)
С	210	210	Z	390	390	0,430 0,467
D	285	285				
Е	25	25				





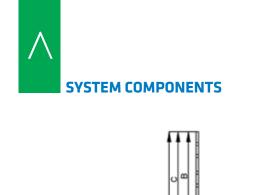














×	Z	)						>
	COMPONI	ENT SIZE (mm	1)	BOX S	IZE (mm)	QUA	NTITY	
	125/90	150/100		125/90	150/100	125/90	150/100	
А	125	150	X	390	390	50	50	
В	145	145	Υ	140	140	WEIG	HT (KG)	
С	175	175	Z	390	390	0,382	0,434	
D	240	240						

#### **AVAILABLE COLOURS**









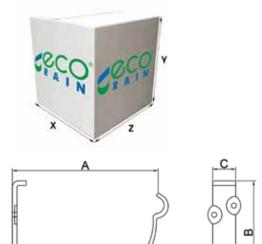






Ε

#### **MATCH ANY CLIMATE**





	COMPONENT SIZE (mm)				SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
Α	125	150	X	390	390	50 50
В	81	91	Υ	140	140	WEIGHT (KG)
С	25	25	Z	390	390	0,274 0,315









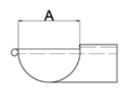


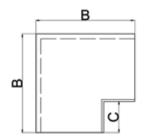




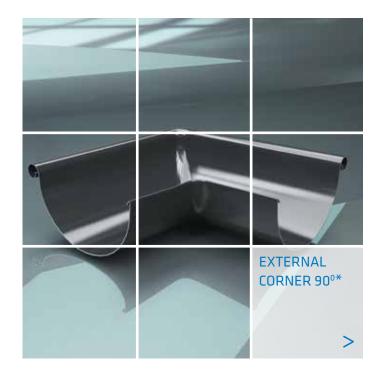


#### **SYSTEM COMPONENTS**









	COMPONENT SIZE (mm)			вох 9	SIZE (mm)	QUANTITY	
	125/90	150/100		125/90	150/100	125/90 150/100	
Α	125	150	Х	390	390	30 15	
В	245	270	Υ	410	410	WEIGHT (KG)	
С	111	100	Z	390	390	0,366 0,47	

\*We can fabricate welded gutter mitres in accordance with the customer specified angular dimensions, other than typical 90 and 135 degree gutter mitres.







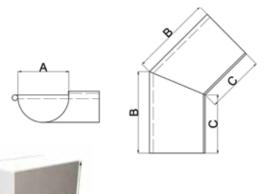


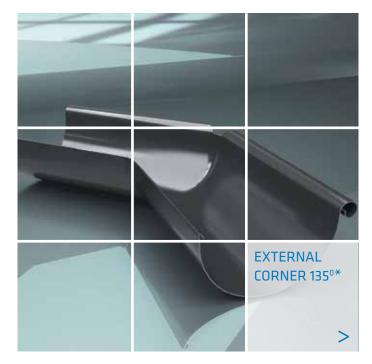






#### **EASY TO ASSEMBLE**





	COMPONENT SIZE (mm)			BOX S	SIZE (mm)	QUANTITY	
	125/90	150/100		125/90	150/100	125/90 150/100	
Α	125	150	X	390	390	15 5	
В	245	300	Υ	410	140	WEIGHT (KG)	
С	180	230	Z	390	600	0,478 0,90	

\*We can fabricate welded gutter mitres in accordance with the customer specified angular dimensions, other than typical 90 and 135 degree gutter mitres.







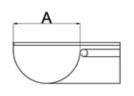


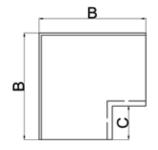




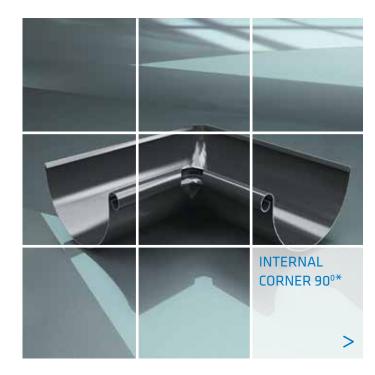


# SYSTEM COMPONENTS









	COMPONENT SIZE (mm)			вох 9	SIZE (mm)	QUANTITY	
	125/90	150/100		125/90	150/100	125/90 150/100	
Α	125	150	X	390	390	30 15	
В	230	325	Υ	410	410	WEIGHT (KG)	
С	100	165	Z	390	390	0,314 0,409	

\*We can fabricate welded gutter mitres in accordance with the customer specified angular dimensions, other than typical 90 and 135 degree gutter mitres.







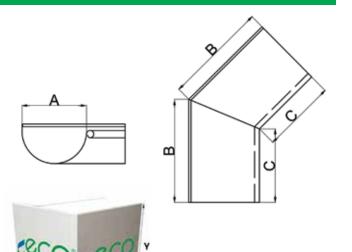








## HIGHEST QUALITY STEEL





	COMPONENT SIZE (mm)			BOX S	SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
А	125	150	X	390	390	15 5
В	240	305	Υ	410	140	WEIGHT (KG)
С	185	245	Z	390	600	0,314 0,85

\*We can fabricate welded gutter mitres in accordance with the customer specified angular dimensions, other than typical 90 and 135 degree gutter mitres.









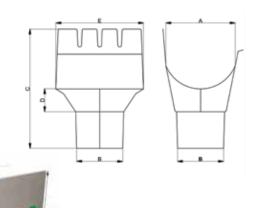








#### **SYSTEM COMPONENTS**





	COMPONENT SIZE (mm)			BOX S	SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
А	125	150	X	390	390	30 16
В	86	97	Υ	410	410	WEIGHT (KG)
С	220	250	Z	390	390	0,29 0,4
D	60	60				
Е	150	180				







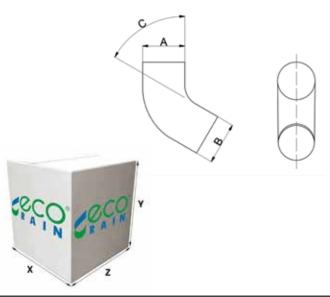


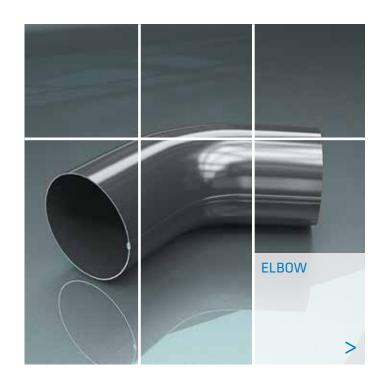






#### **LONG-TERM DURABILITY**





	COMPONENT SIZE (mm)			BOX S	SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
Α	125	150	X	390	390	20 16
В	240	305	Υ	410	410	WEIGHT (KG)
С	60°	60°	Z	390	390	0,285 0,33







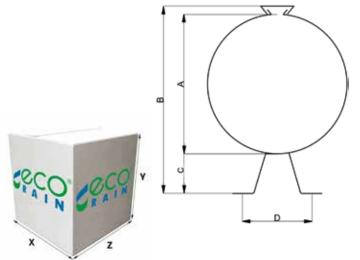


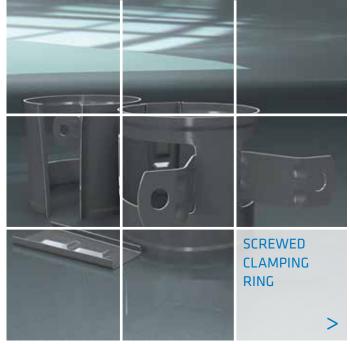












	COMPONENT SIZE (mm)			BOX S	IZE (mm)	AUQ	QUANTITY	
	125/90	150/100		125/90	150/100	125/90	150/100	
Α	88	99	X	390	390	100	100	
В	125	140	Υ	140	140	WEIG	HT (KG)	
С	35	35	Z	390	390	0,095	0,108	
D	87,6	87,6						







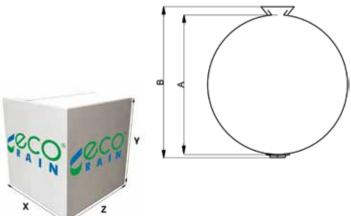


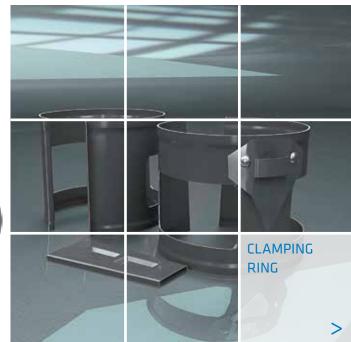






#### PERFECT FOR EACH ROOF





	COMPONENT SIZE (mm)			BOX S	SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
А	125	150	X	390	390	100 100
В	240	305	Υ	140	140	WEIGHT (KG)
			Z	390	390	0,097 0,111







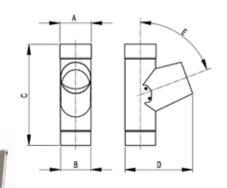


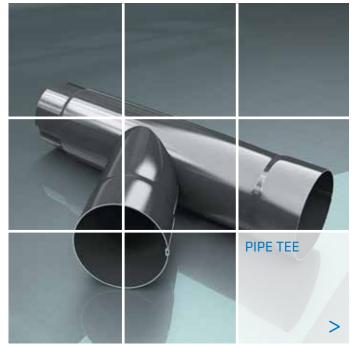












	COMPONE	ENT SIZE (mm	)	BOX S	IZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
Α	89	100	X	390	390	10 8
В	85	96	Υ	410	410	WEIGHT (KG)
С	370	380	Z	390	390	0,65 0,768
D	220	230				
Е	65°	65°				







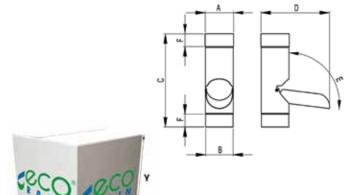








#### **COMPLETE DRAINAGE SYSTEM**





	COMPONE	m)	BOX S	IZE (mm)	QUANTITY	
	125/90	150/100		125/90	150/100	125/90 150/100
Α	89	101	X	390	390	10 8
В	86	97	Υ	410	410	WEIGHT (KG)
С	330	330	Z	390	390	0,64 0,56
D	120	121				
Е	100°	100°				







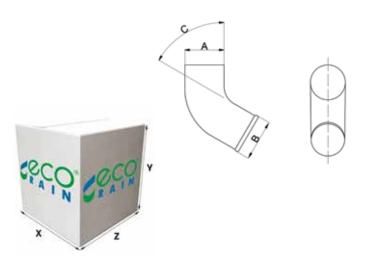


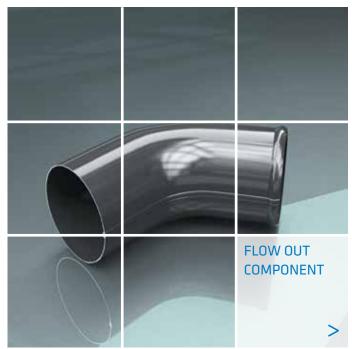












	COMPONENT SIZE (mm)			BOX S	SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
Α	87	101	X	390	390	20 16
В	88,5	99,5	Υ	410	410	WEIGHT (KG)
С	60°	60°	Z	390	390	0,285 0,33







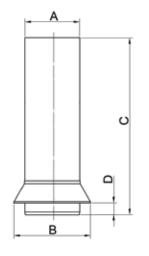


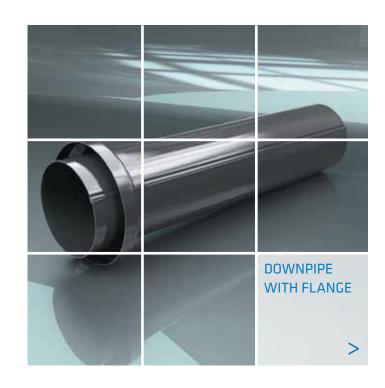






#### **VARIETY OF COLOURS**





COMPONENT SIZE (mm)				BOX S	SIZE (mm)	QUANTITY
	125/90	150/100		125/90	150/100	125/90 150/100
Α	87	99	X	390	390	12 9
В	115	125	Υ	410	410	WEIGHT (KG)
С	400	400	Z	390	390	0,64 0,635
D	30	30				



















# QUANTITY AND WEIGHT OF THE ECO RAIN GUTTER SYSTEM COMPONENTS IN COLLECTIVE PACKAGING

	PRODUCT NAME	SIZE	125/90		150	150/100	
			Q-TY IN PCS	WEIGHT IN KG	Q-TY IN PCS	WEIGHT IN KG	
А	GUTTER	L = 2 m L = 4 m	5 <sup>1</sup> /200 <sup>2</sup> 5 <sup>1</sup> /200 <sup>2</sup>	5,65/426 11,3/852	5 <sup>1/</sup> 150 <sup>2</sup> 5 <sup>1/</sup> 150 <sup>2</sup>	12,2/366 24,4/732	
В	CORNER	external internal	30³/900⁵ 30³/900⁵	9,42/283 11/330	15³/450⁵ 15³/360⁵	6,2/184 7,05/211,5	
С	воттом	uniwersal	50 <sup>4</sup> /6000 <sup>6</sup>	5,4/324	50 <sup>4</sup> /6000 <sup>6</sup>	7,0/420	
D	GUTTER JOINT		50 <sup>4</sup> /3000 <sup>6</sup>	6/360	50 <sup>4</sup> /3000 <sup>6</sup>	9,25/555	
E	ноок	combi medium long longer	50 <sup>4</sup> /1800 <sup>6</sup> 50 <sup>4</sup> /1800 <sup>6</sup> 50 <sup>4</sup> /1800 <sup>6</sup> 50 <sup>4</sup> /1200 <sup>6</sup>	13,7/493 19,1/687,5 21,5/774 28/672	50 <sup>4</sup> /1800 <sup>6</sup> 50 <sup>4</sup> /1800 <sup>6</sup> 50 <sup>4</sup> /1200 <sup>6</sup>	15,8/567 21,7/781 23,4/840 29/696	
F	HOPPER HEAD		30³/900⁵	8,7/261	16³/480⁵	6,4/192	

<sup>&</sup>lt;sup>1</sup>fail sleeve

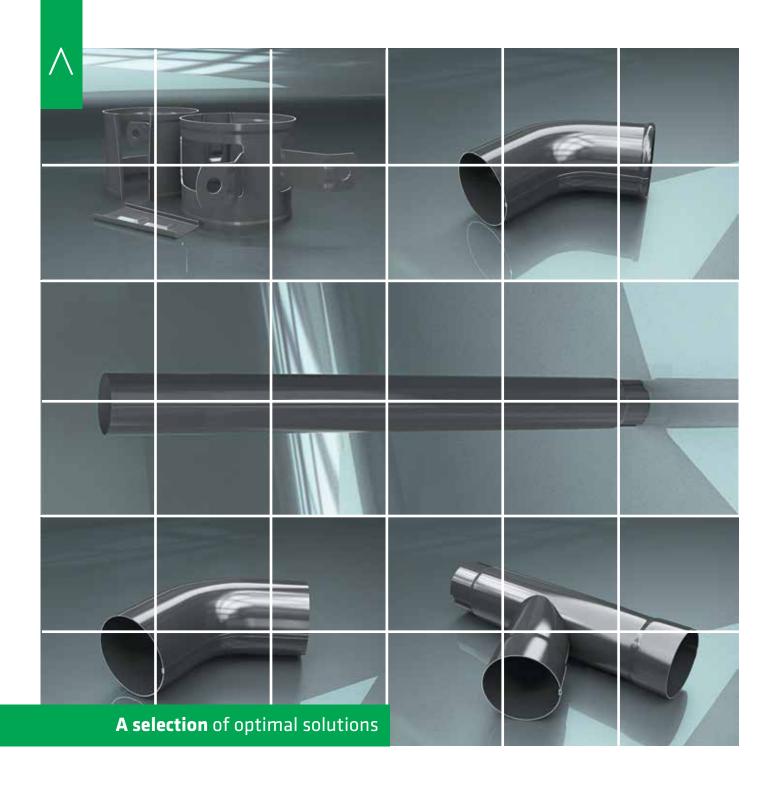
<sup>&</sup>lt;sup>2</sup> metal stand 80 cm/ element length/ 80 cm

<sup>&</sup>lt;sup>3</sup> carton 40 cm / 40 cm / 40 cm

<sup>&</sup>lt;sup>4</sup>carton 40 cm / 40 cm / 16 cm

<sup>&</sup>lt;sup>5</sup>EURO pallet 80 cm / 120 cm / 200 cm

<sup>&</sup>lt;sup>6</sup> EURO pallet 80 cm / 120 cm / 84 cm





# QUANTITY AND WEIGHT OF THE ECO RAIN GUTTER SYSTEM COMPONENTS IN COLLECTIVE PACKAGING

PRODUCT NAME		SIZE	12!	125/90		150/100	
			Q-TY IN PCS	WEIGHT IN KG	Q-TY IN PCS	WEIGHT IN KG	
Α	ELBOW	ANGLE = 60°	20³/600⁵	5,7/171	16³/480 <sup>5</sup>	5,28/158,4	
В	CONNECTOR	0,5 m 1,0 m	16³/384⁵ 2³/150⁵	10,4/249,6 2,6/195	13 <sup>3/</sup> 312 <sup>5</sup> 2 <sup>3/</sup> 120 <sup>5</sup>	9,5/228 2,94/176,5	
C	DOWNPIPE	L = 1 m L = 3 m L = 4 m	2 <sup>3/</sup> 150 <sup>5</sup> 2 <sup>1</sup> /44 <sup>2</sup> 2 <sup>1</sup> /44 <sup>2</sup>	2,6/195 7,8/171,6 10,4/228,8	2 <sup>3/</sup> 120 <sup>5</sup> 2 <sup>1</sup> /34 <sup>2</sup> 2 <sup>1</sup> /34 <sup>2</sup>	2,94/176,5 8,82/150 11,76/200	
D	PIPE TEE		10³/300⁵	6,5/195	8 <sup>3/</sup> 240 <sup>5</sup>	6,15/184,3	
Е	SCREWED / CLAMPING RING		100 <sup>4</sup> /6000 <sup>6</sup>	9,7/582	100 <sup>4</sup> /6000 <sup>6</sup>	11,1/666	
F	ANCHOR (2-PIECE SET)					-	
G	COTTER PIN				50	8	
н	FLOW OUT COMPONENT	ANGLE = 60°	20³/600 <sup>5</sup>	7/168	16³/384⁵	7/168	
1	DOWNPIPE WITH FLANGE		12³/360⁵	7,68/230,5	16³/480⁵	5,28/158,4	
J	RAINWATER CATCHER		10³/300⁵	5,7/171	16³/480⁵	5,28/158,4	

<sup>&</sup>lt;sup>1</sup>fail sleeve

<sup>&</sup>lt;sup>2</sup> metal stand 80 cm/ element length/ 80 cm

<sup>&</sup>lt;sup>3</sup> carton 40 cm / 40 cm / 40 cm

<sup>&</sup>lt;sup>4</sup>carton 40 cm / 40 cm / 16 cm

<sup>&</sup>lt;sup>5</sup>EURO pallet 80 cm / 120 cm / 200 cm

<sup>&</sup>lt;sup>6</sup> EURO pallet 80 cm / 120 cm / 84 cm







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