

KEHA3



Keha3 was founded to make the world better and more interesting place. With ambition, courage and experience to accomplish great things – to bring our and your dreams, wishes and needs into reality. All products are made with the belief that we are doing the right thing!

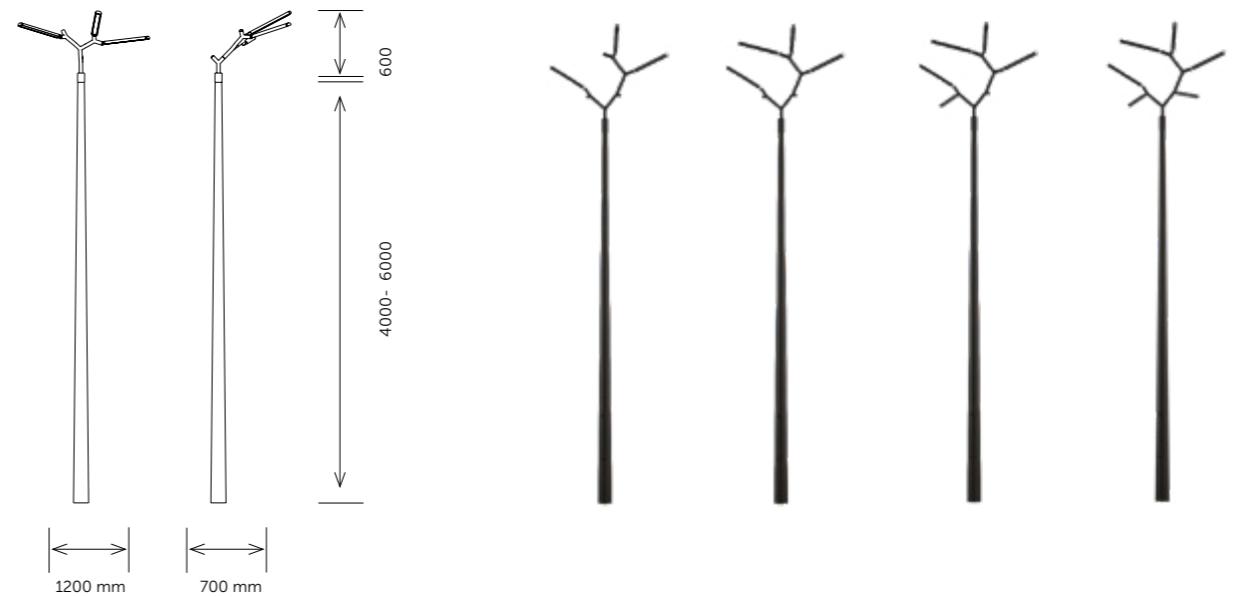
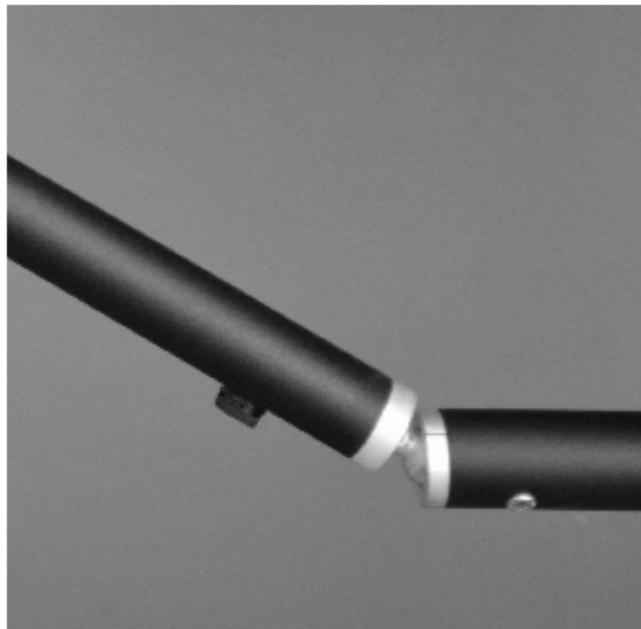
Our goal is to produce functional and durable products that support, create and assert the local identity. If we succeed, these products have to be able to carry on emotions through generations, and create a bridge of memories between different generations by cementing a feeling of belonging in this fast-paced, superficial, increasingly plain and rushing world.

Keha3 is dedicated to bringing high quality street furniture and both indoor as well as outdoor lighting to our global clients with the objective of creating a more interesting and enjoyable environment. the products range from street lighting and service pedestals to urban furniture and bike racks – everything necessary for creating functional public spaces with a unique character and style.

The brand was established by one of the most prolific and talented industrial designers of Estonia, Margus Triibmann, and the collection features many of his most successful works developed in his company Keha3. Design inspiration is drawn from a wide range of subject matter, often featuring elements familiar from the natural or industrial landscape. The design of products emphasizes durability and functionality. The products are designed to withstand four seasons of varying and harsh Nordic weather. The design principles and materials have proven themselves in multiple installations across the region including several harbor areas. Products are all designed, developed and produced in EU.

BRANCH





Branch street light is designed to lighten traffic areas and parks. The shape of Branch was inspired by the crown of a pine tree. The elements of the lighting fitting can be freely directed with a joint - this enables to light the road, the surrounding buildings as well as different objects at the same time. The number of LED profiles in the crown of Branch can vary according to the design and goals of the lighting solution.

Branch street light features Keha3's own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. The head is made from powder painted aluminium in RAL 9011, either mat or glossy. Branch street light comes standard with a conical pole between 4 and 6 meters. The LED driver is located inside the pole for easy access and maintenance.

Product code	LO-BR-03	LO-BR-04	LO-BR-05	LO-BR-06
Light source	LED	LED	LED	LED
Nr of lighting ele-	3	4	5	6
Max light output	6150	8200	10250	12300
Power consumption (W)	60	80	99	119
IP rating	66	66	66	66
IK rating	8	8	8	8
Weight (without pole, kg)	5	7	8	10

* customization available upon request



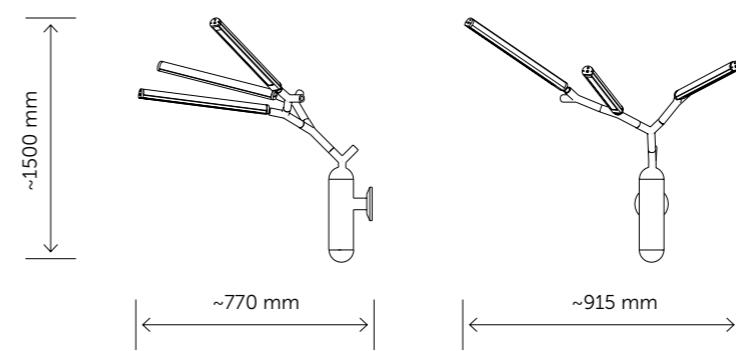
An apartment area in Tallinn



Estonian Open Air Museum

BRANCH
TROPHY





Branch Trophy is a wall lighting with standard versions of 3-5 LED profiles. The construction of Branch Trophy consists of Y-shaped modules which allow the creation of a number of different shapes and combinations when placed on top of each other or fixed under a free angle. The lighting is fixed to the wall with mounting screws.

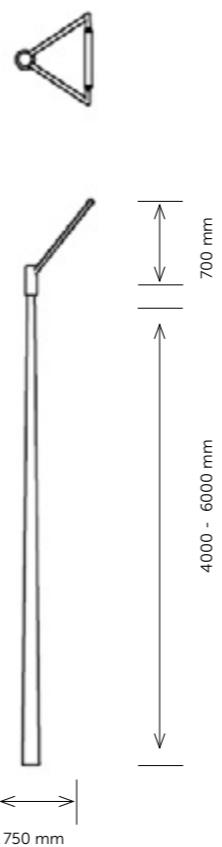
Branch Trophy features our own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. Branch Trophy is made from powder painted aluminium in RAL 9011, either mat or glossy. The LED driver is located inside the knapsack which can be opened from the bottom

Product code	LO-TH-03	LO-TH-04	LO-TH-05
Light source	LED	LED	LED
Nr of lighting ele-	3	4	5
Max light output	6150	8200	10250
Power consumption (W)	60	80	99
IP rating	66	66	66
IK rating	8	8	8
Weight (without pole, kg)	6	8	9

* customization available upon request

TRIANGLE





Triangle is specifically designed for use in walkways and low traffic roadways. This design is Keha3's alternative to the "shovel style" street light often seen illuminating our streets.

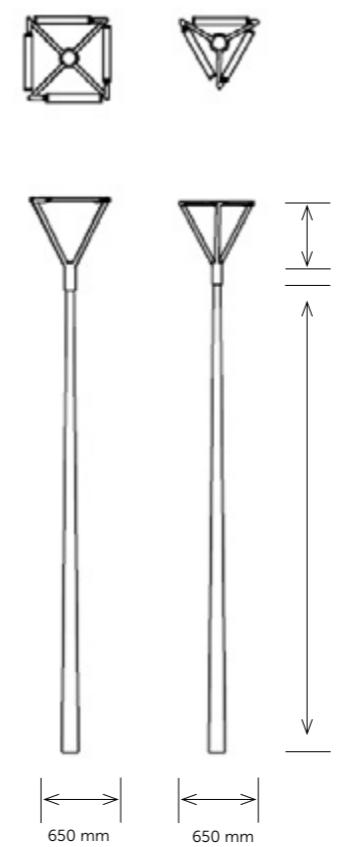
Triangle features our own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. The head is made from powder painted aluminium in RAL 9011, either mat or glossy. Triangle comes standard with a conical pole between 4 and 6 meters. The LED driver is located inside the pole for easy access and maintenance.

Product code	LO-TR-45
Light source	LED
Profile length (mm)	450
Max light output (lm)	2500
Power consumption (W)	22
IP rating	66
IK rating	8
Weight (without pole, kg)	5

* customization available upon request

CITY





City streetlight is modernized and minimal version of a traditional 18th and 19th centuries gas lamp. With its minimal look, City Lamps are suitable in environments where preservation of the past and heritage is important and today's highly technological and contemporary street lightings would come across too intense. City Lamp is available in configurations with 3 or 4 LED profiles, creating either a triangle or a square with the profiles.

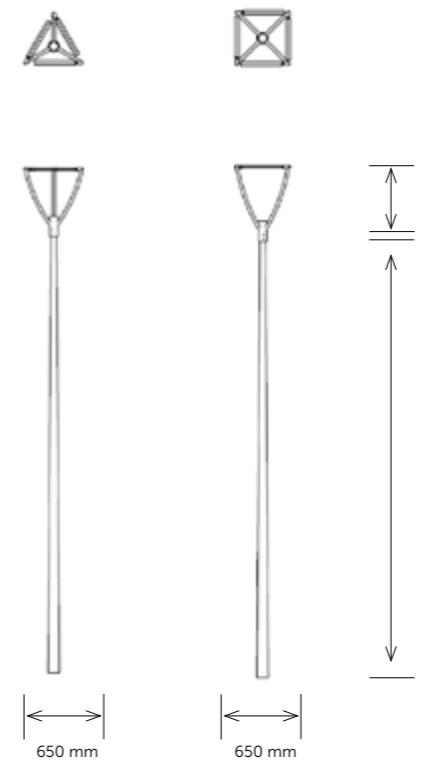
City light features our own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. The head is made from powder painted aluminium in RAL 9011, either mat or glossy. City light comes standard with a conical pole between 4 and 6 meters. The LED driver is located inside the pole for easy access and maintenance.

Product code	LO-CL-03	LO-CL-04
Light source	LED	LED
Nr of lighting elements	3	4
Max light output (lm)	6150	8200
Power consumption (W)	63	83
IP rating	66	66
IK rating	8	8
Weight (without pole, kg)	5	7

* customization available upon request

HISTORIC





Historic streetlight is a modernized version of a traditional 18th and 19th century gas lamp. Carrying on the historical look with its curves, Historic luminaires are suitable in environments where preservation of the past and heritage is important and today's highly technological and contemporary street lightings would come across too intense. Historic is available in configurations with 3 or 4 LED profiles, creating either a triangle or a square with the Wannabes. The number of profiles can be changed depending on the light requirement.

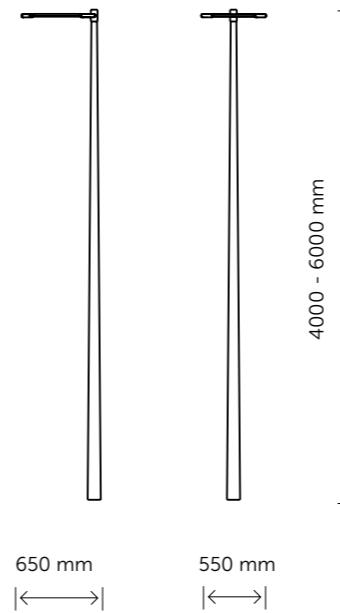
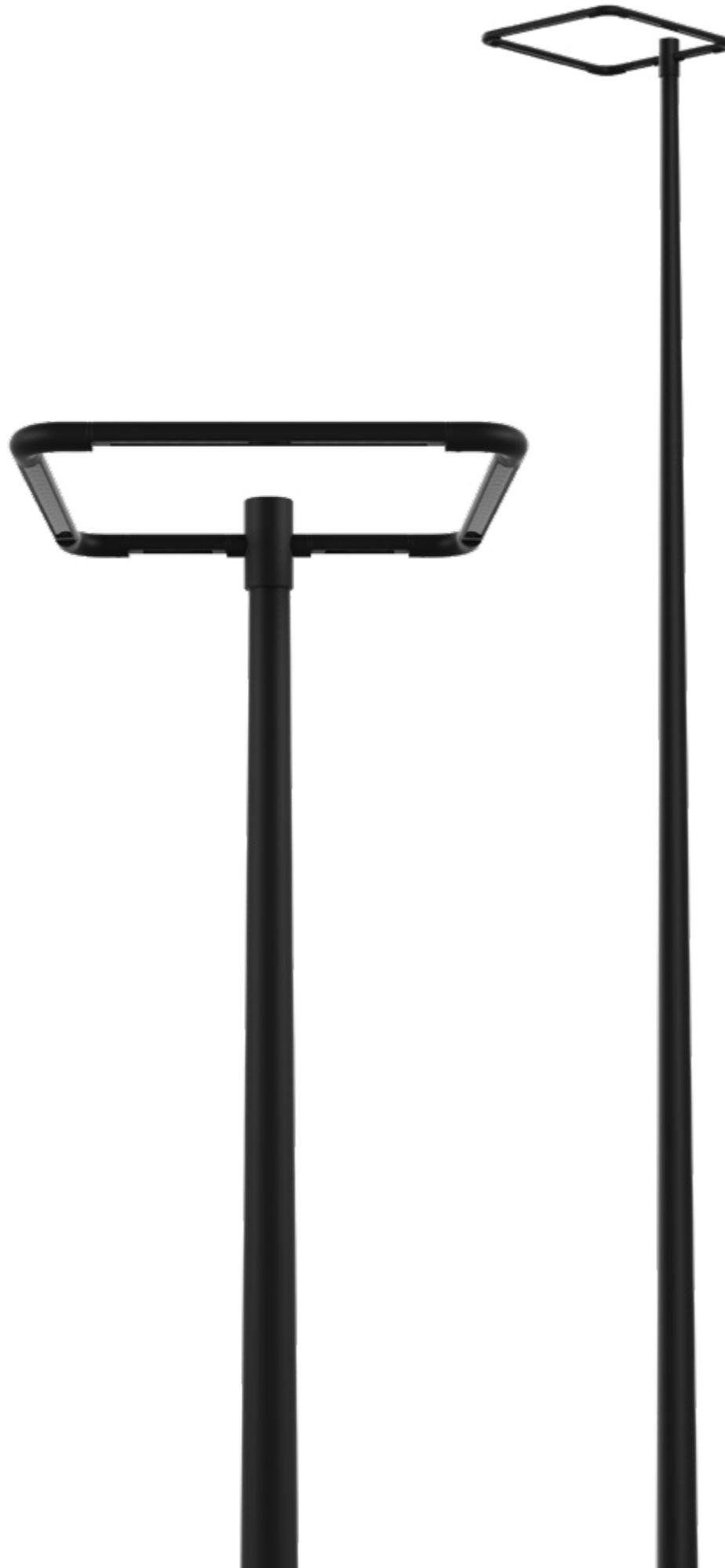
Historic features our own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. The head is made from powder painted aluminium in RAL 9011, either mat or glossy. Historic comes standard with a conical pole between 4 and 6 meters. The LED driver is located inside the pole for easy access and maintenance.

Product code	LO-HL-03	LO-HL-04
Light source	LED	LED
Nr of lighting elements	3	4
Max light output (lm)	6150	8200
Power consumption (W)	63	83
IP rating	66	66
IK rating	8	8
Weight (without pole, kg)	5	7

* customization available upon request

FRAME





Frame streetlight follows the classical and familiar street lightings' designs. The lamp is simplistic and appears to be like a sketch, which has been drawn into the air. The two side edges of Frame light are LED profiles.

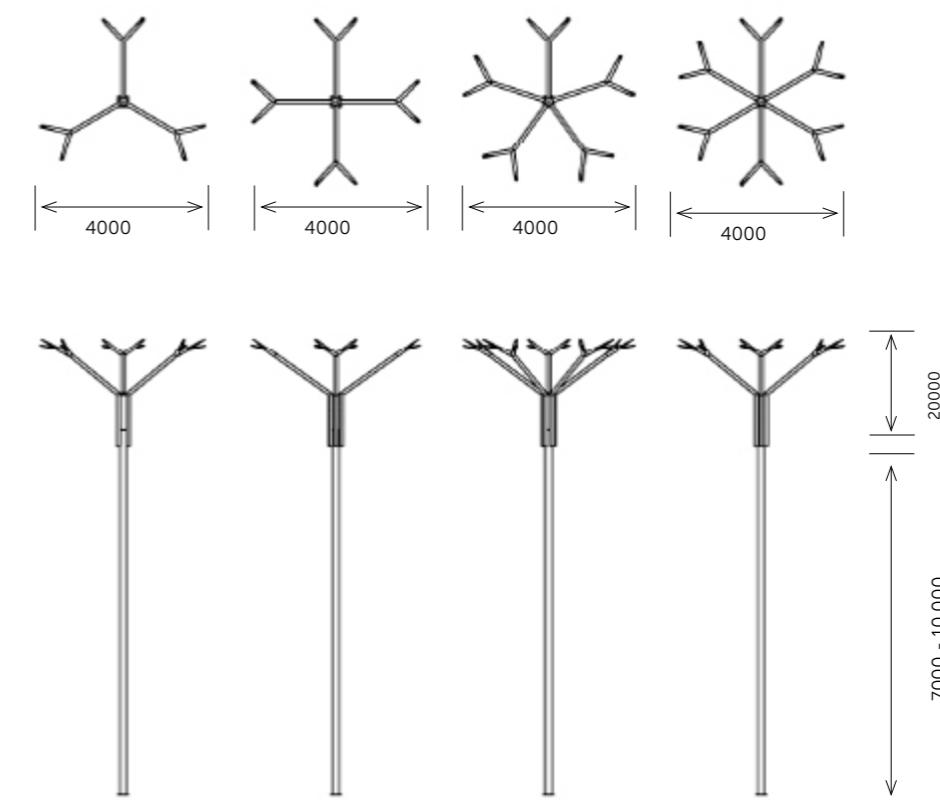
Frame light features our own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. The head is made from powder painted aluminium in RAL 9011, either mat or glossy. Frame light comes standard with a conical pole between 4 and 6 meters. The LED driver is located inside the pole for easy access and maintainence.

Product code	LO-FR-02
Light source	LED
Number of lighting elements	2
Max light output (lm)	4100
Power consumption (W)	40
IP rating	66
IK rating	8
Weight (without pole, kg)	3

* customization available upon request

CORNFLOWER





Cornflower is designed to illuminate large squares, wide streets and extensive promenades. The inspiration for the lighting came from, as the name indicates, the traditional Estonian flower. This street lighting has a symbolical national-romantic meaning. Depending on a situation and the need, Cornflower street lighting can be expanded in height, the diameter of the inflorescence can be widened and the number of LED profiles used can be increased.

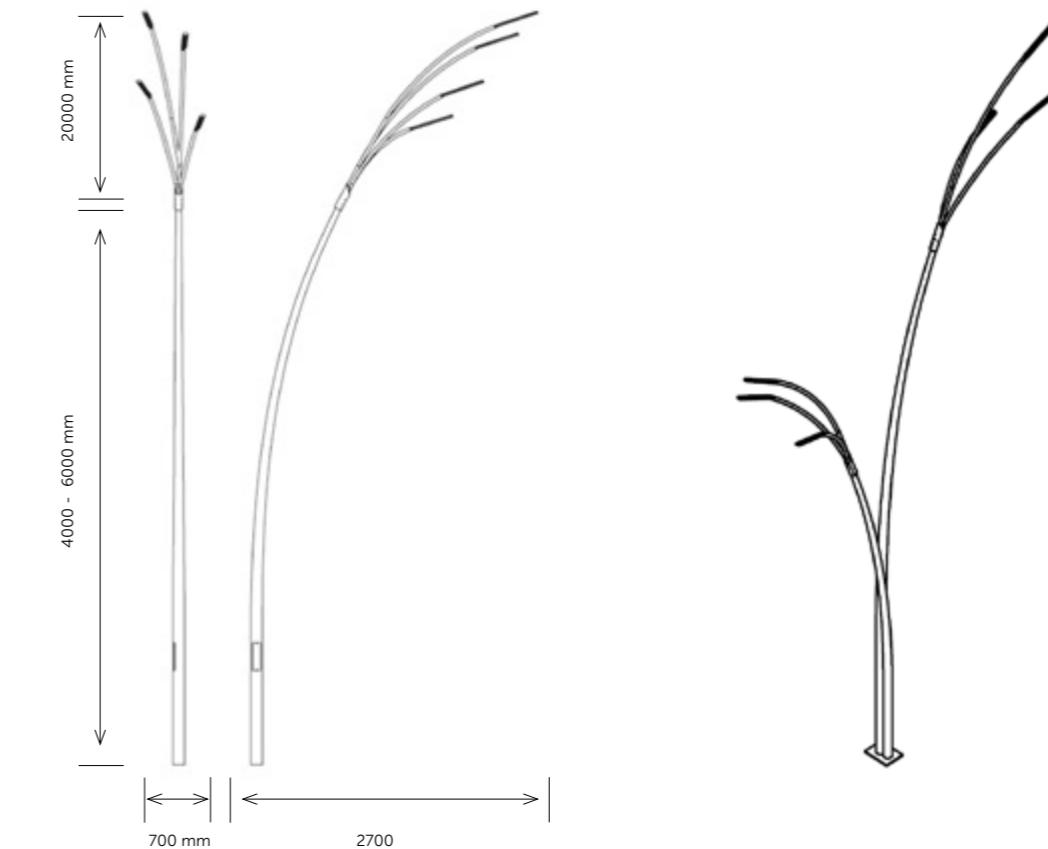
Cornflower light features our own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. The head is made from powder painted aluminium in RAL 9011, either mat or glossy. Cornflower light comes standard with a straight pole between 7 and 10 meters. The LED driver is located inside the pole for easy access and maintenance.

Product code	LO-CF-06	LO-CF-08	LO-CF-10	LO-CF-12
Light source	LED	LED	LED	LED
Nr of lighting ele-	6	8	10	12
Max light output	12300	16400	20500	24600
Power consumption (W)	119	159	198	238
IP rating	66	66	66	66
IK rating	8	8	8	8

* customization available upon request

REED





Reed

Reed streetlight is inspired by reed plants. This shape is especially suitable for installations in harbors and parks near the coast but will not look out of place inland. The number of LED profiles on Reed can vary according to the design and goals of the lighting solution.

Reed light features our own aluminium profile with LED lighting called Wannabe. Wannabe has a ball joint which connects the profile to the head. This ball joint allows the profile to be adjusted freely, which means that its light can be directed in any desired direction. The head is made from powder painted aluminium in RAL 9011, either mat or glossy. Reed light comes standard with a curved conical pole of 4 to 6 meters. The LED driver is located inside the pole for easy access and maintenance.

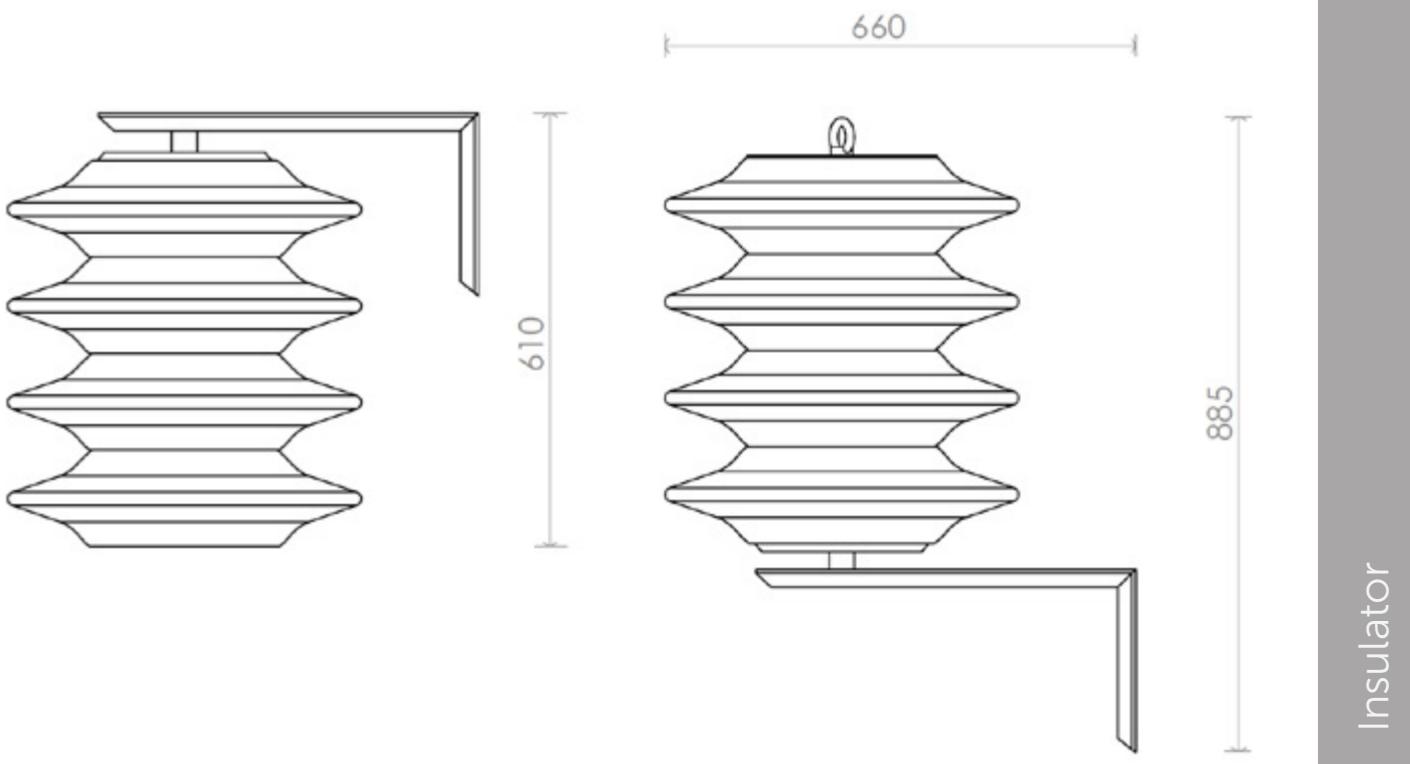
A two-headed version of Reed is also available with two different height poles coming from a single mounting point. Both are curved conical poles, standard between 4 to 6 meters.

Product code	LO-RE-03	LO-RE-04	LO-RE-05
Light source	LED	LED	LED
Nr of lighting ele-	3	4	5
Max light output	6150	8200	10250
Power consumption (W)	60	80	99
IP rating	66	66	66
IK rating	8	8	8
Weight (without pole, kg)	6	8	8

* customization available upon request



INSULATOR



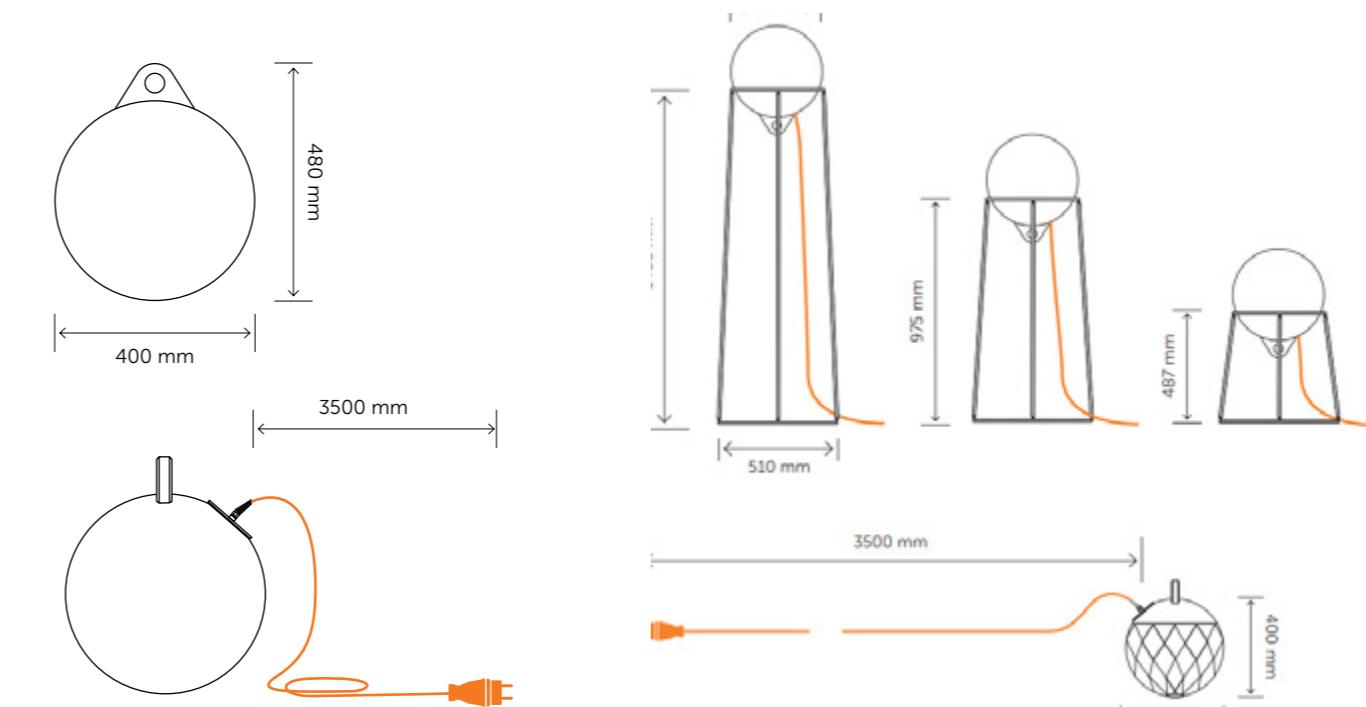
The solution of the lighting is inspired by a known object commonly used in electric power stations but also present in other electricity-related fields – the insulator. The function of the power station was the main source of inspiration when creating Insulator lightings, therefore the lamps are designed with a clear reference to the purpose of the former thermal electric power station in Tallinn. Insulator lightings have characteristic outward appearance and form which is accomplished by using white PE material in rotational casting technology. Insulator lightings are perfect to be street or park lightings but they can also be used as interior or terrace lamps.

Product code	LO-IN-01	LO-IN-02
Socket	E27	E27
IP rating	44	44
IK rating	8	8
Wall mount*	Bottom	Top
Weight (without pole, kg)	12	12

* customization available upon request

BUOY





Buoy

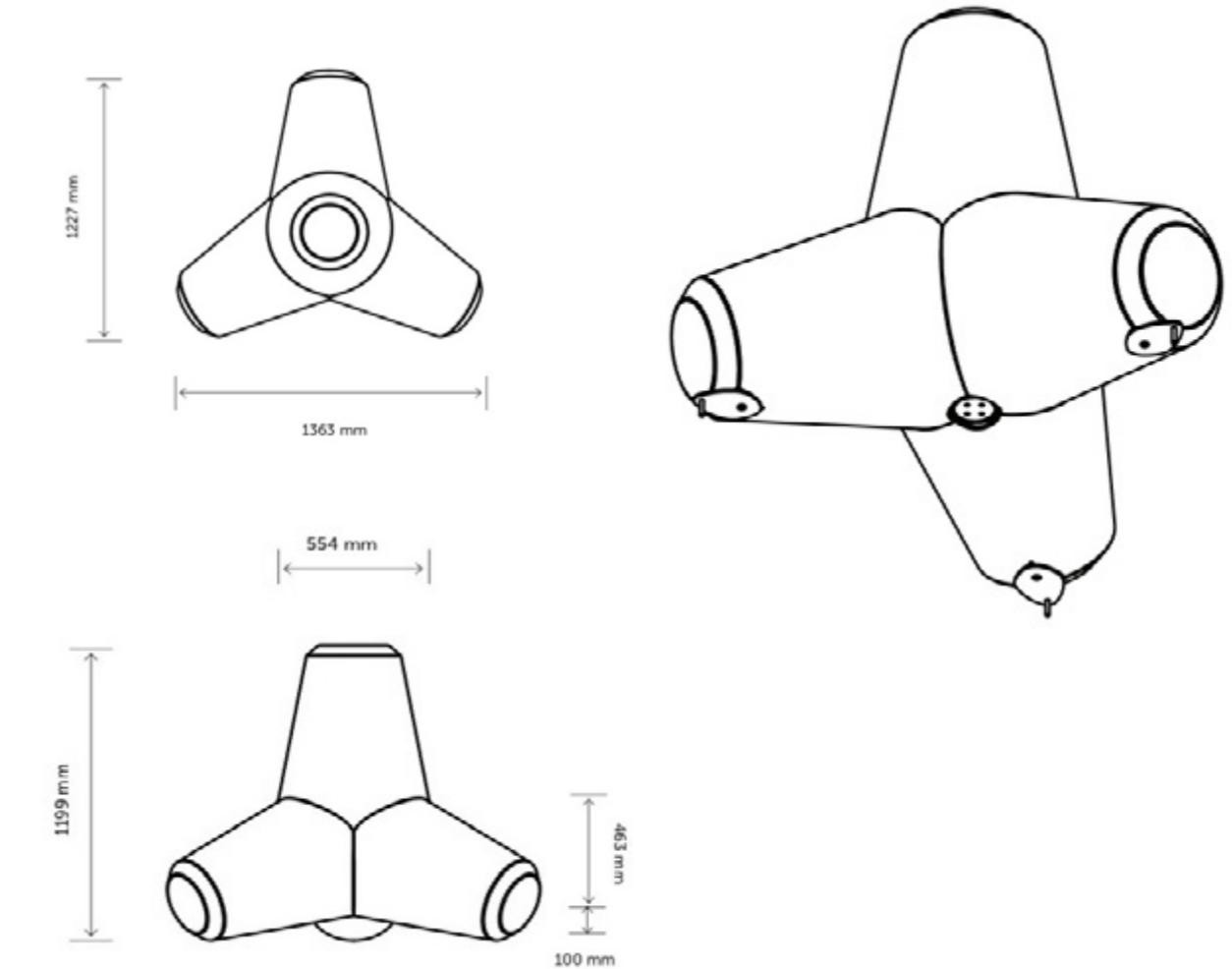
Buoy was designed with a wish to create a portable and durable outdoor luminaire, which at the same time would look attractive indoors. Buoy can be hung to the walls of the buildings, placed to the corner of the garden, put on the quay or fixed to the pole – the luminaire is designed to resist different conditions of use. Buoy has a switch on it, which means it is extremely easy to put the light on and off from the luminaire itself. Also, it is possible to 'dress' up Buoy in handmade net, giving the lighting even more of a marine look. To have the Buoy lighting off from the ground, we have made available a stand version with three adjustable heights.

Product code	LO-BO-01	LO-BO-02	LO-BO-03	LO-BO-04
Socket	E27	E27	E27	E27
IP rating*	66	66	66	66
Plug type	Schuko	Schuko	Schuko	Schuko
Net	No	Yes	No	Yes
Stand	No	No	Yes	Yes
Weight (kg)	3	4	4.5	5

* Buoy luminaire has a Schuko plug which is IP44



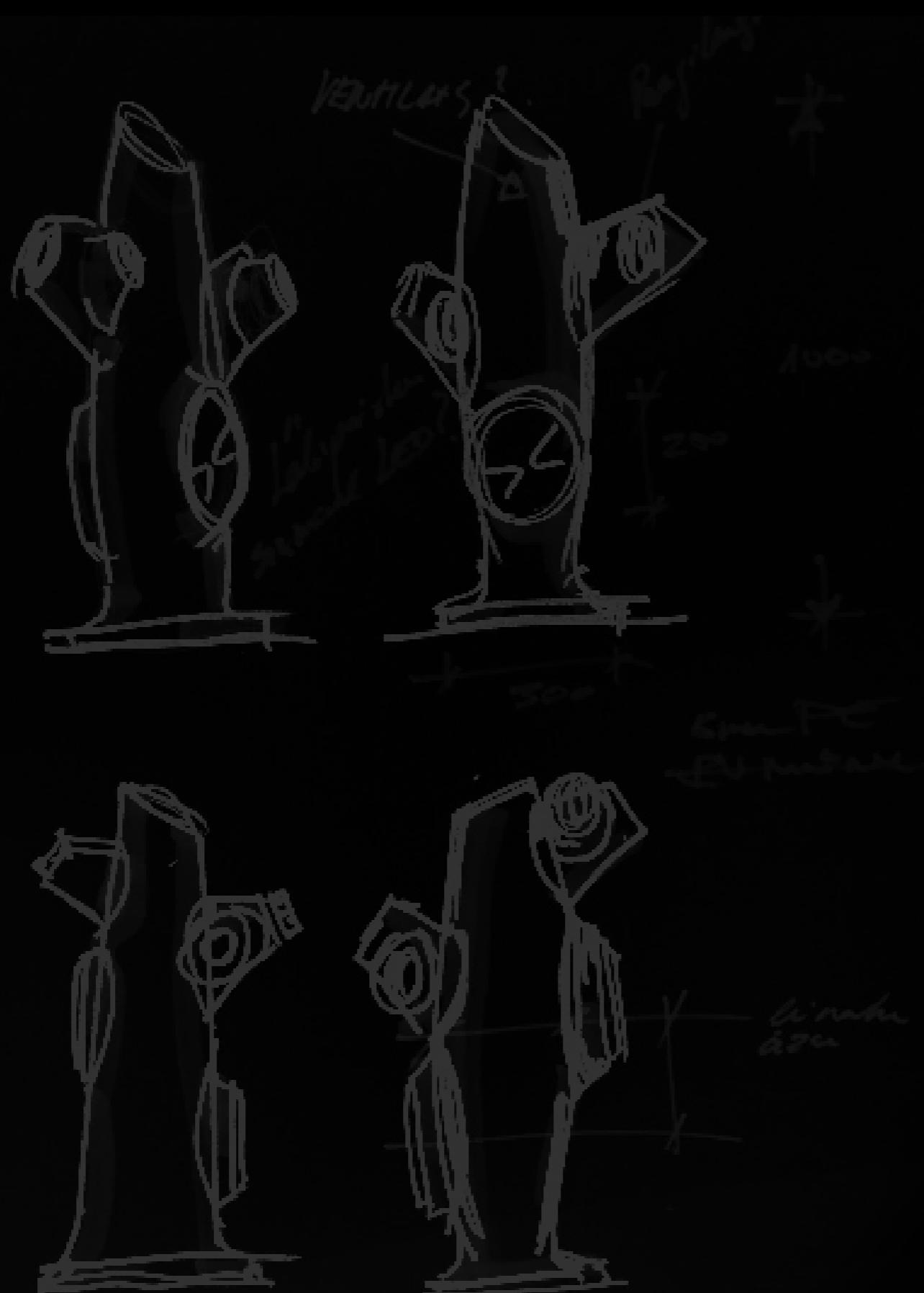
TETRAPOD



Tetrapod

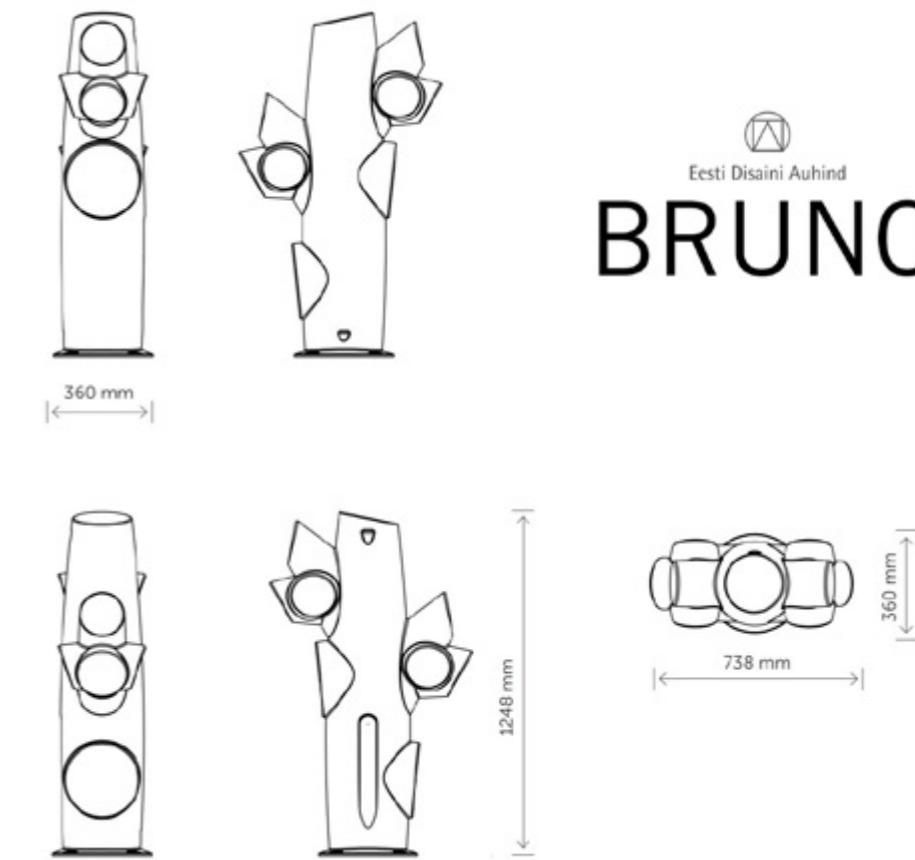
Tetrapod is an urban space element inspired by the concrete tetra shaped elements used in waterworks to build wavebreakers. Tetrapod can be used as a room divider, as a light object, or simply as a decorative object. The light element is mounted in the center of the polyetheretherketone body of the Tetrapod and has a E27 socket. The recommended light source is a LED bulb. The combination of the PE shell, the metal housing used for the socket, the cable and plug ensures that the design is IP66.

Product code	LO-TE-01	LO-TE-02
Socket	N.A.	E27
IP rating	N.A.	44
IK rating	8	8
Weight (kg)	40	42



CORAL







 Eesti Disaini Auhind
BRUNO

Coral

The inspiration for our captivating harbor service pedestal comes from peculiar marine invertebrates, corals. The unusual form allows us to create many different configurations. Multiple service hatches and power outlets can be mounted – depending on the requirements. The body of the service pedestal is made from durable polyethylene plastic and is semi transparent to light. The latter allows us to turn this piece of functional hardware into a lighting fixture that adds aesthetic and sculptural value to the environment. The branches of the coral are used as mounting points for power outlets, hatches and water taps. Up to six different power outlets can be mounted on a single service pedestal. The body and the electronic components are mounted on a central aluminum frame and the hatches allow for a quick access – in order to service electronic components or change the LED bulbs. The water supply system is separated from the electronics through autonomous enclosed space, which ensures intactness and safeness in case of water leakages.

On 14th of September 2018, the same product Coral – power pedestal for harbors – won the most prestigious Estonian Design Award (called BRUNO) competition in the category of the Best Engineering Product. Moreover, in connection with the same competition, Coral got a third place as public's favorite design.

Item code	Outlets	Water	Optional	
SP-CO-01	4x16A	✓	LoRaWan*	WIFI
SP-CO-02	2x16A, 3x32A	✓	LoRaWan	WIFI
SP-CO-03	2x16A, 4x32A	✓	LoRaWan	WIFI
SP-CO-04	2x16A, 2x63A	✓	LoRaWan	WIFI
SP-CO-05	1x16A, 1x125A	✓	LoRaWan	WIFI
SP-CO-06	2x16A, 1x32A, 1x63A	✓	LoRaWan	WIFI
SP-CO-07	1x16A, 2x32A, 1x63A	✓	LoRaWan	WIFI
SP-CO-08	—	—	LoRaWan	WIFI

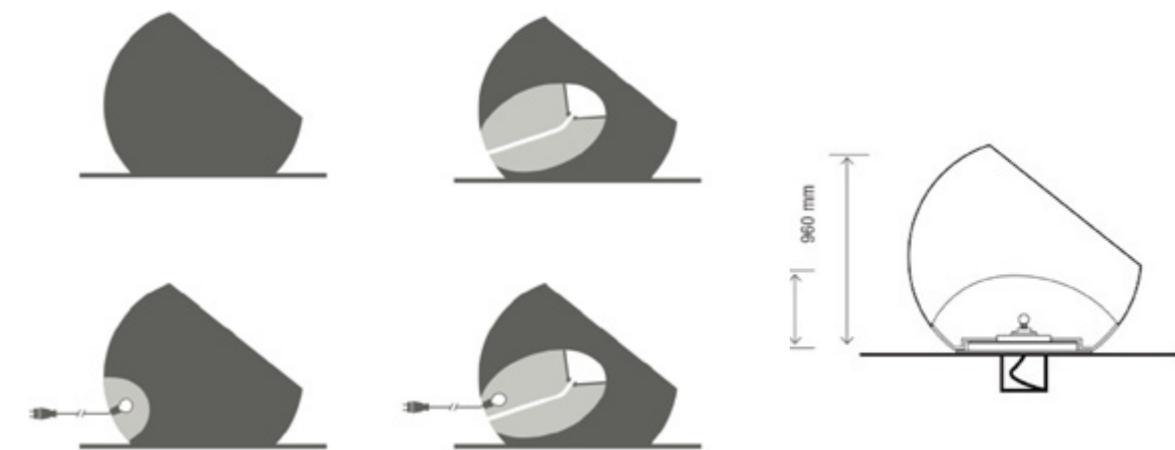
LoRaWan - wireless system for controlling and monitoring power and water usage



OUTDOOR
FURNITURE



CRANBERRY



- Can be used as a chair and/or a light
- Possibility to have a rotating system
- Vandal-proof
- Weatherproof
- Unsinkable

The Cranberry chair-luminaire is a street furniture element which has the possibility to add an internal lighting. It is suitable for both indoor and outdoor usage. The materials and technologies used make it ideal for public spaces where vandal resistance is a concern. Cranberry can be mounted directly to a foundation surface or alternatively on a rotational mount. This mount will enable the chair to rotate 360 degrees. Illumination is provided by internal LED lamps or floodlighting installed into the foundation. The chair can also be equipped with a drainage system to avoid puddles from wash and rain water forming in the seating area. The chair can be mounted on a hard surface or installed with threaded anchors and bolts onto a foundation. When installed on slide bearings, an independent intrasoil light source lights the rotating chair. When used as a terrace light, the cable connected to the light source is built in to the casing of the chair. The non-illuminated, non-drainage version, can be filled with sand or gravel in order to prevent displacement. Cranberry in darker colors (gray, black, etc.) cannot be ordered with an internal light.

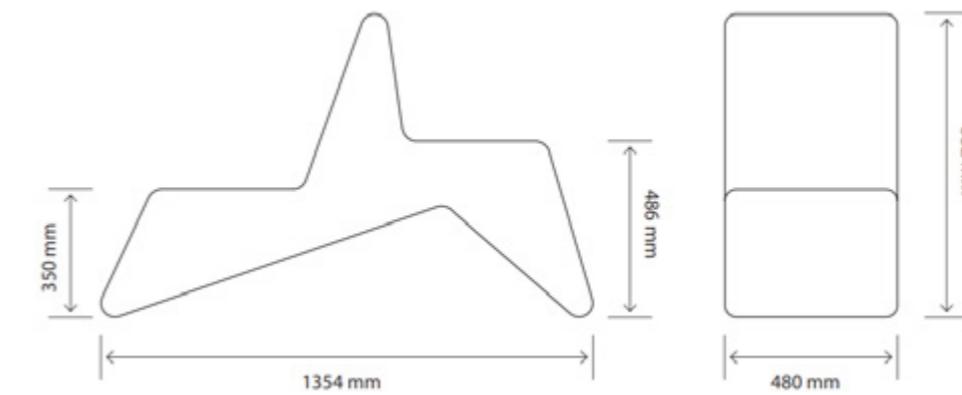
Product code	FO-CR-01	FO-CR-02	FO-CR-03	FO-CR-04	FO-CR-05	FO-CR-06
Socket	N.A.	E27	N.A.	E27	N.A.	E27
IP rating*	66	66	66	66	66	66
Plug type	N.A.	Schuko	N.A.	Schuko	N.A.	N.A.
Light	no	yes	no	yes	no	yes
Water drainage	no	no	yes	yes	yes	yes
360 ° rotation	no	no	no	no	yes	yes
Weight (kg)	21	23	22	23	40	42
Colour**	    	  	    	  	    	  

* The Schuko plug is IP44 in the plug-version of Cran

** Customization available upon request

PEATAKANA





Stability of the housing is ensured with ~ 40kg of sand/gravel

- Can be used as a chair, table and/or a light
- Different sitting positions
- Vandal-proof
- Weatherproof
- Mobile

For public areas to prevent theft, ~ 150kg of sand/gravel is recommended

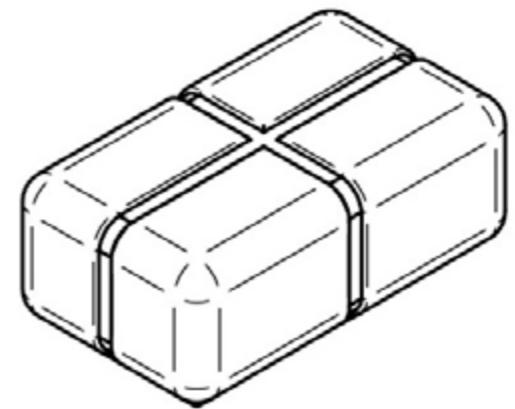
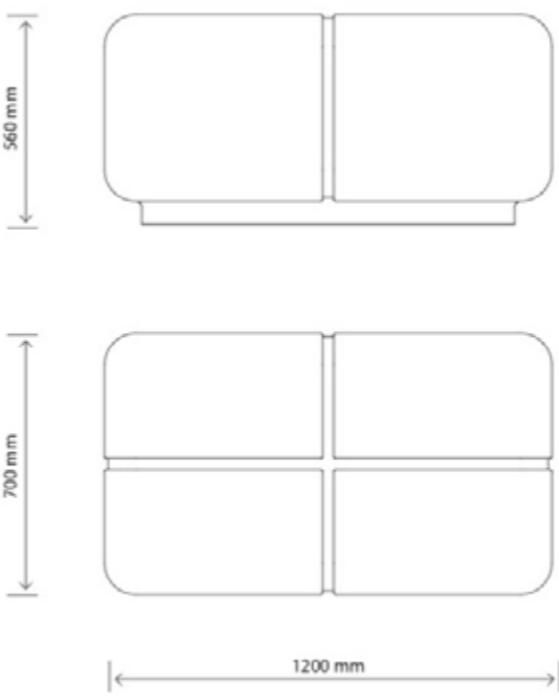
Peatakana ('headless chicken' in Estonian) is a multifunctional and durable plastic bench. It's suitable for large variety of environments: parks, city centers, patios, pool areas and even public beaches. The bench was inspired by windy Tallinn and can be placed in 3 different ways. It can also be equipped with an internal light. Peatakana is made from durable plastic and is vandal resistant. The internal space can be filled with sand or gravel against theft.

Product code	FO-PE-01	FO-PE-02
Socket	N.A.	E27
IP rating	65	65
Plug type	N.A.	Schuko
Material	PE	PE
Weight (kg)	22	23
Colour*		

* customization available upon request



BALE



- Weatherproof
- UV-resistant
- Shock and deformation resistant
- Acid, chemical and corrosion resistant
- Temperature resistance of -30 to +80° C
- Maintenance-free

Bale

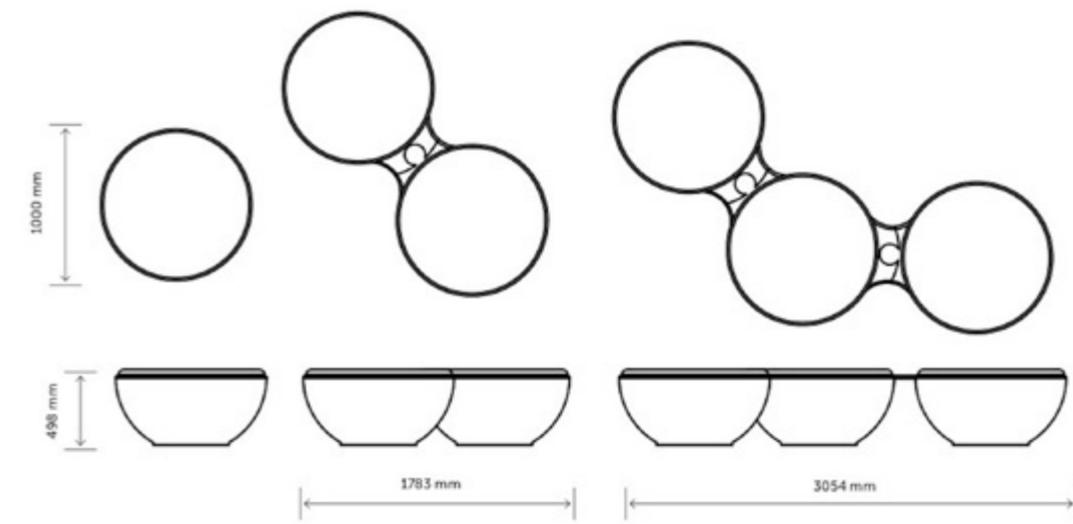
Bale is a playful city furniture element that is meant to give a special touch to urban areas. It can also be used in private yards or bigger interior spaces. Thanks to the durable and translucent corpus material, Bale lightings can be lit up during evening and night time. And can function as beacons, showing route to the pedestrians. Air pollution waste, road dust and malevolently made graffiti is easily removable with a pressure washer and cleaning liquids.

Product code	FO-BA-01	FO-BA-02
Socket	N.A.	E27
IP rating	44	44
Material	PE, stainless	PE, stainless
Weight (kg)	22	23
Colour*		

* customization available upon request



TIMPAN



Timpan

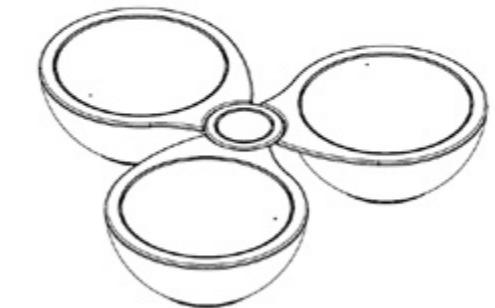
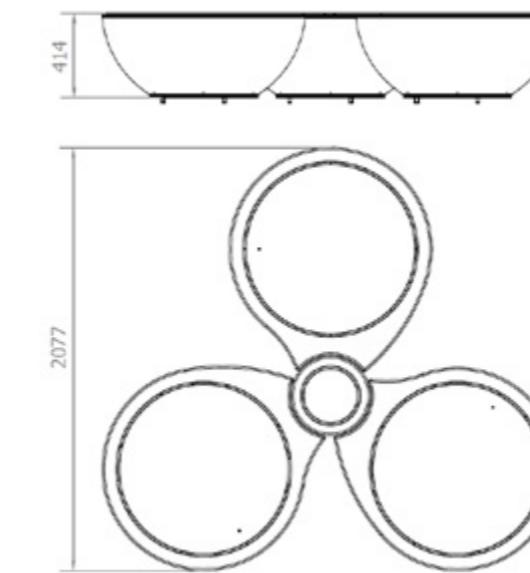
The design of the Timpan bench-luminaire is inspired by the percussion instrument with the same name. The design is modular and it is possible to combine up to 3 Timpans or set them up individually. The housing of the bench-luminaire is made from durable PE plastic. The seat is made from water-resistant plywood and covered with synthetic teak. The bench-luminaire enhances the surrounding area with its warm glow and creates a cozy environment.

Product code	FO-TI-01-100	FO-TI-01-200	FO-TI-02-100	FO-TI-02-200	FO-TI-03-100	FO-
Socket	N.A.	E27	N.A.	E27	N.A.	E27
IP rating	44	44	44	44	44	44
Material	PE, synthetic teak					
Weight (kg)	25	25	50	50	75	75
Colour*	□ ■ ■ ■ ■	□ ■ ■ ■ ■	□ ■ ■ ■ ■	□ ■ ■ ■ ■	□ ■ ■ ■ ■	□ ■ ■ ■ ■

* customization available upon request



VINT



Vint

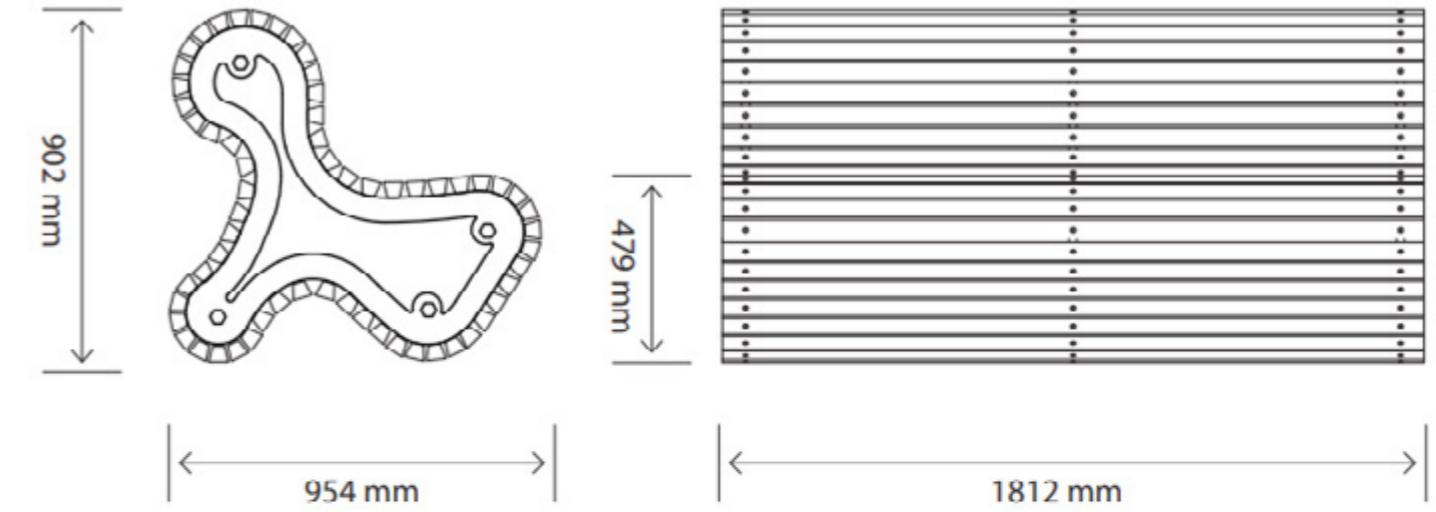
Vint is a modification of the Timpan bench luminaire. This product is designed to resemble the propulsion propeller of a ship. Similar to the Timpan bench luminaire, the main body is made from durable PE plastic and the seating is made from synthetic teak, which is also often used in ship building. Vint is illuminated by internal LED lamps.

Product code	FO-VI-03-100	FO-VI-03-200
Socket	N.A.	E27
IP rating	44	44
Supply voltage (V)	N.A.	230
Material	PE, synthetic	PE, synthetic
Weight (kg)	75	75
Colour*		

* customization available upon request



KLIMP



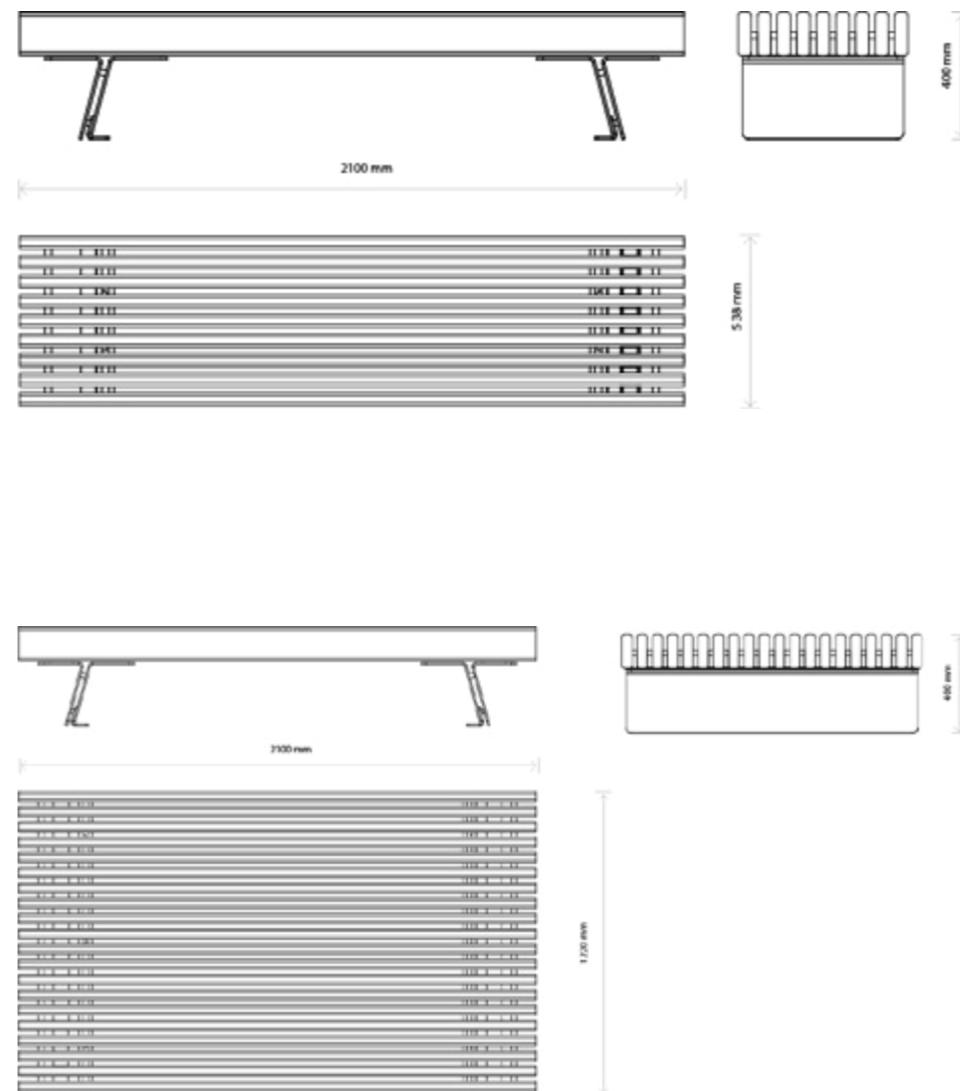
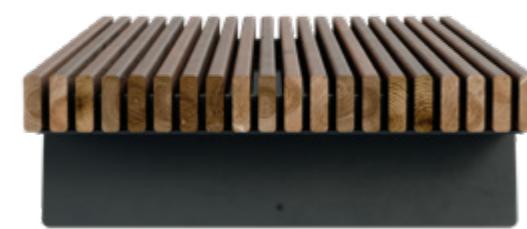
Klimp is a fun, dynamic and versatile furniture element. This bench can be used in 3 different configurations that each unlock new and interesting benefits. Klimp is weather and vandal proof. New forms emerge when turning the bench and all positions can be used for sitting or leaning. In its main position it resembles a traditional park bench or sofa at home. The supporting structures are made of polyethylene plates which are held together by galvanized metal pipes. The bench's rigid yet airy structure is made from recycled plastic planks or a combination of recycled plastic and oiled larch wood planks. In the latter configuration the plastic elements are used where direct contact with the

Product code	FO-KL-01	FO-KL-02
Material	Recycled plastic, PE, galvanized metal	Recycled plastic, oiled oak, PE, galvanized metal
Weight (kg)	110	125
Colour		

LATT LAUD

FLAT





Lattlaud refers to the defining characteristic of this family of benches: the wooden planks which are the main component. The designs are clean and recognizable with minimalist metalwork which accentuates the shape of the wood.

Lattlaud Flat comes in two sizes, a narrower version which is also suited for indoor use and a wider version which accommodates seating on opposite sides of the bench.

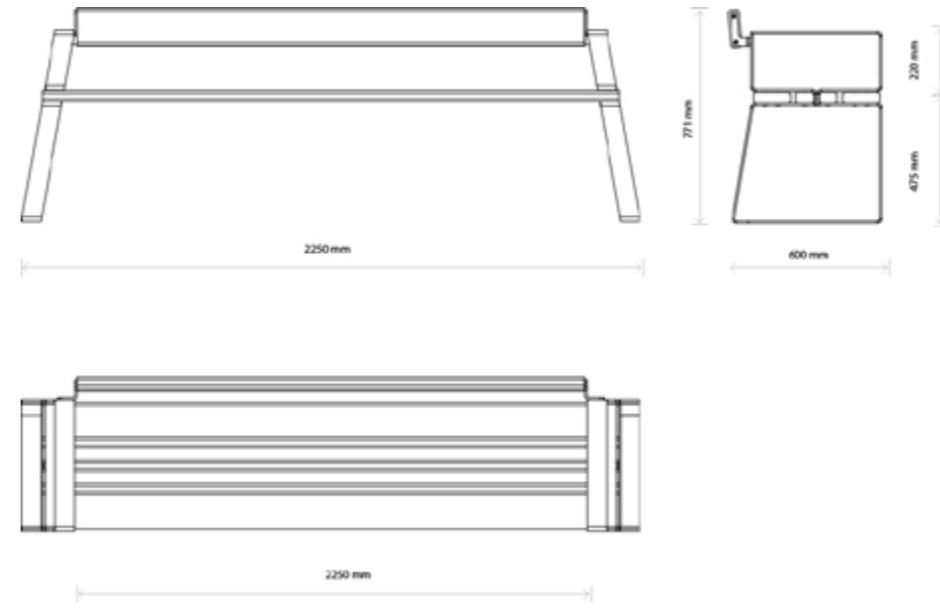
The construction and the materials of the bench emphasize durability and longevity of the product. The wooden parts are made from thermally treated ash wood that is resistant to rot and mold. The metal frame parts are made from galvanized and powder painted steel. The fixing elements are made from stainless steel.

Product code	FO-LF-01	FO-LF-02
Material	Galvanized metal, oiled thermal ash	Galvanized metal, oiled thermal ash
Weight (kg)	20	20
Steel colour*	RAL 7016	RAL 7016

* customization available upon request

LATT LAUD LIGHT





Lattlaud refers to the defining characteristic of this family of benches: the wooden planks which are the main component. The designs are clean and recognizable with minimalist metalwork which accentuates the shape of the wood.

Lattlaud Light has the most design features of the family with variation in the sizes of the wood and a cleverly designed frame which gives the bench a very light and open feel.

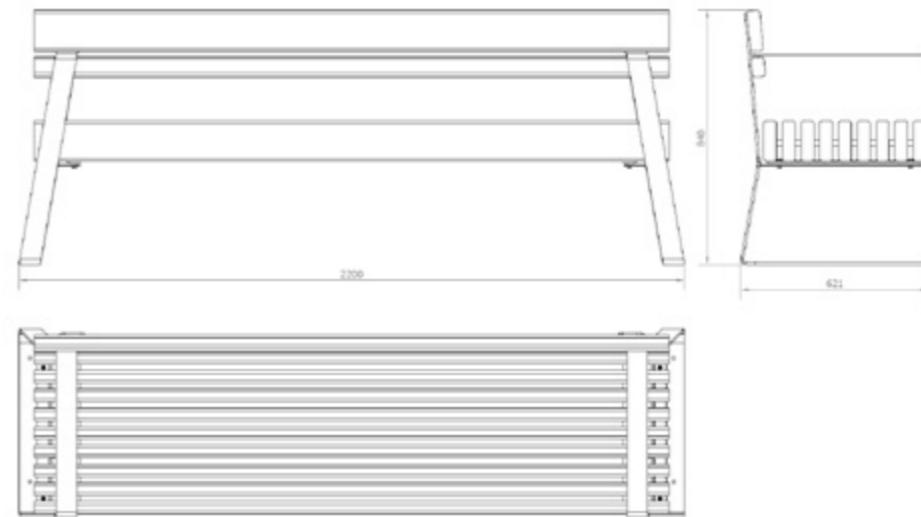
The construction and the materials of the bench emphasize durability and longevity of the product. The wooden parts are made from thermally treated ash wood that is resistant to rot and mold. The metal frame parts are made from galvanized and powder painted steel. The fixing elements are made from stainless steel.

Product code	FO-LL
Material	Galvanized metal, oiled thermal ash
Weight (kg)	20
Steel colour*	RAL 7016

* customization available upon request

LATT LAUD
ROBUST





Lattlaud refers to the defining characteristic of this family of benches: the wooden planks which are the main component. The designs are clean and recognizable with minimalist metalwork which accentuates the shape of the wood.

Lattlaud Robust has a seating area as Lattlaud Flat, but in addition it has backrest and metal armrests. This creates a bench with strong, robust features.

The construction and the materials of the bench emphasize durability and longevity of the product. The wooden parts are made from thermally treated ash wood that is resistant to rot and mold. The metal frame parts are made from galvanized and powder painted steel. The fixing elements are made from stainless steel.

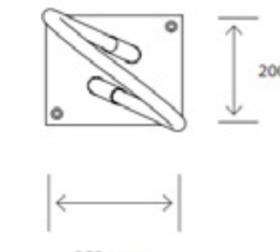
Product code	FO-LR
Material	Galvanized metal, oiled thermal ash
Weight (kg)	20
Steel colour*	RAL 7016

* customization available upon request

BIKE RACKS



TULIP



Tulip Fan Fan

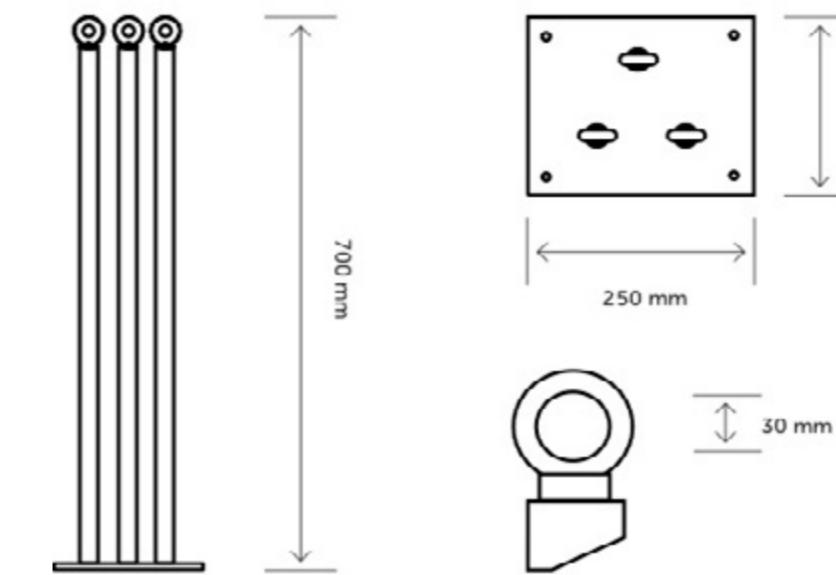
Tulip Fan Fan-2 is an elastic and safe bike rack which resembles a loop. It provides the freedom to choose the way of putting bikes in the rack. The fixing place for the bike is not set and therefore it is suitable for fixing bikes with different heights and different types of frame. When placing the Tulip Fan Fan bike racks side by side, it is possible to create partitions, or artificial barriers, to spaces. The upper part of the bike rack is flexible, so it can even hold bikes with bigger than average wheels. Thanks to a spatial and constructive solution it achieves better stability while placing the bike sideways or with the front wheel in the rack. It is possible to change the tubes, allowing for a change of color or to give the rack a fresh look. There are two ways for fixing the rack: either with bolted connections/wedge anchors into the ground or casted into concrete.

Product code	FO-TU-01
Material	Galvanized and powder coated steel, SPR or EPDM tube
Weight (kg)	7
Steel colour*	RAL 7016
Loop colour*	

* customization available upon request

GRAZZ





Grazz

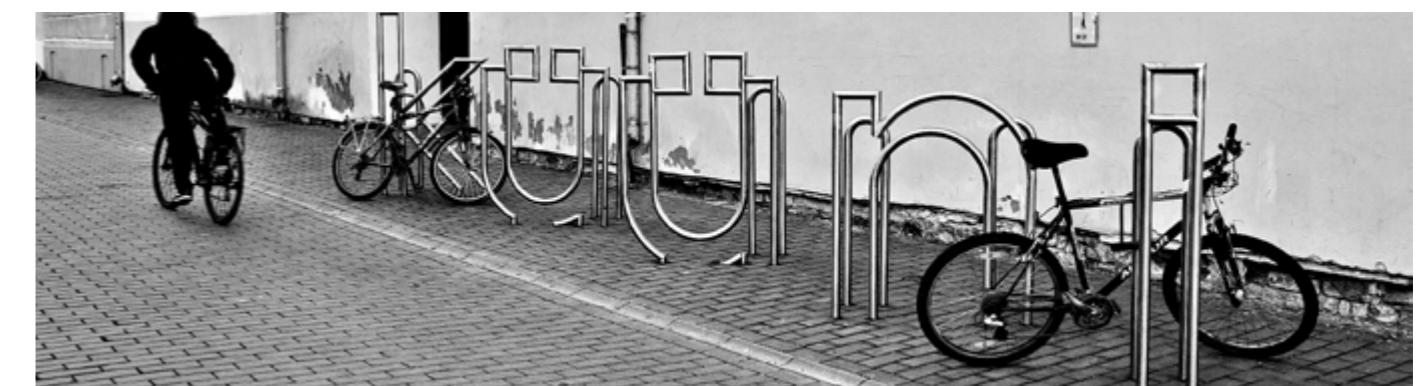
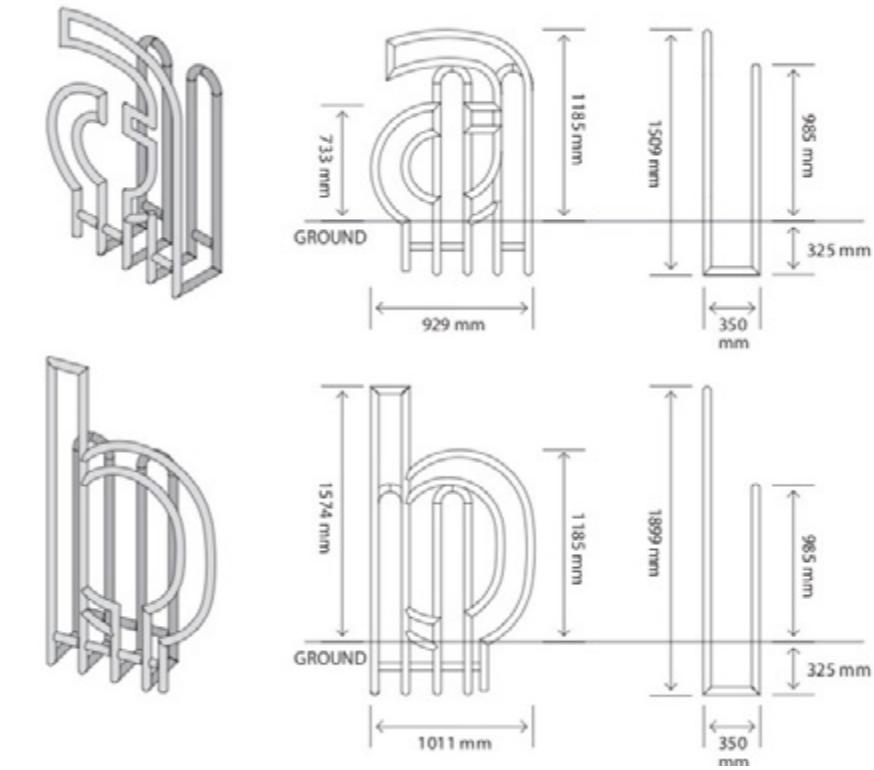
Grazz is a unique bike rack that can be used for securing bikes, but can also act as an artificial barrier in spaces when used in rows. The construction of Grazz consists of plastic covered metal cables with metal loops at their ends for fixing bike locks. The plastic sleeve and elastic structure protect bikes from scratches. In bigger quantities the product is available in a wide range of colors. The plastic sleeves can be easily replaced when needed. There are two ways for installing the rack: either with bolted connections/wedge anchors into the ground or by casting the mounting plate into concrete.

Product code	FO-GR-01
Material	Galvanized and powder coated steel, PE tubes
Weight (kg)	7
Steel colour*	RAL 7011
Tube colour*	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

* customization available upon request

TYPO





Typo combines its function as a bike rack with that of a sign. Its letters can be used for advertisements, names or other expressions in public spaces. Typo can be used as an artificial barrier showing for example a company name or act as a border for towns and cities indicating the place name. The letters are available in Arabic alphabet and can be fixed by being casted into concrete.

Product code	FO-TY-01	FO-TY-02	FO-TY-03
Material	Stainless steel	Galvanized steel	Galvanized and painted steel
Steel colour	N.A.	N.A.	Any RAL-colour
Weight (kg)	Depends on the word	Depends on the word	Depends on the word



Margus Triibmann (1966-2018)
KEHA3 designer and CEO

Graduated from Tallinn Technical University with a master's degree in Civil Engineering. He has previous professional experience as a CTO in the manufacturing of bronze and stone sculptures with ARS Monumentaal; as the creative director in graphic design company Rakman and as a development designer in Roller Inventions, which had their main emphasis on urban furniture & lighting design and production. From 2009 until his death in 2018, Margus created the designs for Keha3.

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