



CARPAL

POLES FOR STREET LIGHTING



1994 - 2019

**CATALOG
LIST
2018-2019**



It is the spring of 1994 when Alberto Cardone and Bruno Palumbo planted the seed of what would become a leading company in the lighting industry.

Carpal srl is born.

Located first in Pomigliano D'arco, in the province of Naples, the small company begins to take the first steps characterizing itself for its handicraft connotation.

Since then the growth is incessant.

Several and numerous achievements: moving the company headquarters to a new site located in the industrial area of San Marco Evangelista, in the province of Caserta, point strategic as it is close to the main road communication arteries, certification ISO 9001: 2008, CE marking of lighting poles according to EN40 standard.

The range of products offered extends to include elements of equipment such as lighting bodies and decorative accessories.

Over the years, the sons of the members also join the company (Fortunato and Lucia Cardone, emanuele, Marco and Luca Palumbo) that provide new stimuli for new challenges.

A nationwide commercial network is beginning to emerge which guarantees and consolidates the position on the market and reinforces the recognition of products.

The result of the experience gained is also the placing on the market of a new line of poles designed for urban furniture, innovative solutions that open the doors to new markets and provide new business prospects.



OUR HISTORY	pag.	3
INDEX	pag.	4
CERTIFICATIONS	pag.	6
ACHIEVEMENTS	pag.	8
CHOICE OF THE POLE	pag.	14
HOT DIP GALVANIZING	pag.	16
PAINTING	pag.	18
STRAIGHT TAPERED POLES	pag.	24
TAPERED POLES FOR AIRLINE	pag.	30
TAPERED POLES FOR TRAFFIC LIGHT SYSTEM AND ACCESSORIES	pag.	32
TAPERED POLES FOR VIDEO SURVEILLANCE SYSTEM AND ACCESSORIES	pag.	36
POLES AND PHOTOVOLTAIC SYSTEM	pag.	40
POLES FOR MINIWIND SYSTEM	pag.	49
POLES FOR SPORTS FACILITIES AND ACCESSORIES	pag.	50
CONICAL STRAIGHT POLES	pag.	54
CONICAL CURVED POLES	pag.	58
TAPERED STRAIGHT POLES HOT ROLLED IN HSP	pag.	62
CONICAL STRAIGHT POLES HOT ROLLED IN HSP	pag.	64
CONICAL CURVED POLES HOT ROLLED IN HSP	pag.	66
CYLINDRICAL POLES	pag.	68
POLES FOR FLAG-RAISING AND POLES FOR BANNER HOLDER	pag.	70
POLES FOR CANTILEVER SHADING ROOF AND ACCESSORIES	pag.	72
POLYGONAL POLES	pag.	76
LIGHTING TOWERS	pag.	78
CURVED CYLINDRICAL OUTREACHES	pag.	82
MULTIPLE JUNCTIONS - STRAIGHT REDUCERS	pag.	85
SQUARE OUTREACHES	pag.	86
WALL ACCESSORIES	pag.	87
PIPETTE SLEEVES	pag.	88
PROJECTORS BRACKETS	pag.	89
STANDARD PROCESSING ON THE BASE OF THE POLE	pag.	90
SPECIAL PROCESSING ON THE BASE OF THE POLE	pag.	91
CANNON FOR FIXING THE POLE	pag.	93
PREFABRICATED PLINTHS	pag.	94
HATCHES - CAPS - TERMINAL	pag.	98
GROUNDING SYSTEM	pag.	99

STREET FURNITURE	pag.	100
• ABU-DHABI	pag.	110
• ALGERI	pag.	114
• AMSTERDAM	pag.	118
• ANKARA	pag.	122
• BEIRUT	pag.	126
• BOGOTA'	pag.	130
• BRASILIA	pag.	134
• CANBERRA	pag.	138
• DOHA	pag.	142
• INDIANAPOLIS	pag.	146
• KIEV	pag.	150
• LONDRA	pag.	154
• MANHATTAN	pag.	158
• MANILA	pag.	162
• MIAMI	pag.	166
• MONTECARLO	pag.	170
• NAIROBI	pag.	174
• NAPOLI	pag.	178
• NEW YORK	pag.	182
• PARIGI	pag.	186
• RABAT	pag.	190
• ROMA	pag.	194
• SOFIA	pag.	198
• TAIPEI	pag.	202
• TIRANA	pag.	206
• VIENNA	pag.	210
• VILNIUS	pag.	214
DECORATIVE BASES	pag.	218
COUPLERS POLE/OUTREACH	pag.	219
DECORATIVE TIPS	pag.	220
DECORATIVE LED TIPS	pag.	221
DECORATIVE TERMINALS	pag.	222
ALPHABETICAL INDEX	pag.	223
ACKNOWLEDGMENTS	pag.	226

Thanks to a constant search for the quality, we have reached two important goals.

The first is management, with the achievement of ISO 9001 certification.

This achievement has allowed us to set up an efficient strategic planning aimed at the creation of management models for the improvement of the business processes.

The second goal is of a technical nature, thanks to the achievement of the CE marking of the product in compliance with the European standard EN 40 "Poles for public lighting".

Entry into force in 2005 in all EU countries also in Italy the standard introduces specific rules for the design and construction of supports.

The CE marking offers the customer high guarantees both in terms of duration and safety.



QS
QUALITY SERVICE

CERTIFICATO

Certificato n. 2238

CARPAL S.r.l.
S.S. 265 - Km 26,200
81020 San Marco Evangelista (CE)
p.iva: 02839961212

QS Zürich AG certifica con il presente che il Sistema di Gestione dell'Impresa suocitata è stato valutato e soddisfa i requisiti definiti nelle norme riportate di seguito:

UNI EN ISO 9001: 2008

Il Sistema di Gestione comprende:

**PRODUZIONE DI PALI RASTREMATI ED ACCESSORI,
COMMERCIALIZZAZIONE DI PALI TRONCO-CONICI IN
ACCIAIO PER PUBBLICA ILLUMINAZIONE,
CORPI ILLUMINANTI ED ALTRI ACCESSORI**

Settore EA 17, 29

Nel corso della validità del presente certificato il Sistema di Gestione dell'Impresa deve permanentemente soddisfare i requisiti delle norme internazionali e tale adempimento sarà regolarmente controllato da QS Zürich AG.

Per informazioni puntuali ed aggiornate circa eventuali variazioni intervenute nello stato della certificazione di cui al presente certificato, si prega di contattare admin@qs-zuerich.ch

Data della prima certificazione: 17.02.2007
Emissione: 17.02.2016
Data scadenza certificazione: 14.09.2018

QS Zürich AG
P.O. Box 6335
CH-8050 Zürich
qs-zuerich@quality-service.ch

Direzione

QS
QUALITY SERVICE

CERTIFICATE

Certificate no. 2238

CARPAL S.r.l.
S.S. 265 - Km 26,200
81020 San Marco Evangelista (CE)
p.iva: 02839961212

QS Zürich AG certifies that the management system of the above mentioned company has been assessed and meets the requirements established by the following rules:

UNI EN ISO 9001: 2008

The management system includes:

**PRODUCTION OF TAPERED POLES AND ACCESSORIES,
COMMERCIALIZATION OF STEEL CYLINDRICAL POLES FOR
PUBLIC LIGHTING, LIGHTING SYSTEMS AND
OTHER ACCESSORIES**

EA Sector 17, 29

In the course of the validity of the present certificate the enterprise management system must permanently satisfy the requirements of the international regulations. The fulfilment of these regulations will be regularly controlled by QS Zürich AG.

For precise and updated information concerning possible changes occurred in the certification object of the present certificate, please contact admin@qs-zuerich.ch

First certification date: 17.02.2007
Date of issue: 17.02.2016
Expiration date: 14.09.2018

QS Zürich AG
P.O. Box 6335
CH-8050 Zürich
qs-zuerich@quality-service.ch

Management

IGQ
ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

Certificato di conformità CE

1608 CPD P084

In conformità alla Direttiva 89/106/CEE del Consiglio delle Comunità Europee del 21 dicembre 1988 sull'armonizzazione delle leggi, delle regole e dei provvedimenti amministrativi degli Stati Membri inerenti i prodotti da costruzione (Direttiva Prodotti da Costruzione - CPD), emendata dalla Direttiva 93/68/CEE del Consiglio delle Comunità Europee del 22 luglio 1993, si certifica che i prodotti:

Pali d'acciaio per illuminazione pubblica

Tipologia Pali cilindrici rastremati saldati fino a 14,0 m	Configurazione testa palo
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Immessi sul mercato da:

CARPAL Srl
SS 265 km 26,200 81020 San Marco Evangelista CE - IT

fabbricati nell'unità produttiva di:
San Marco Evangelista CE-IT

sono sottoposti dal Produttore al sistema di controllo della produzione nella fabbrica e ad ulteriori prove di campioni prelevati dalla fabbrica secondo un piano di prove prestabilito e che l'organismo notificato IGQ ha effettuato le prove iniziali di tipo sulle caratteristiche del prodotto, l'ispezione iniziale della fabbrica e del controllo della produzione in fabbrica ed esegue la sorveglianza continua, la valutazione e l'approvazione del controllo della produzione in fabbrica.

Questo certificato attesta che tutti i provvedimenti concernenti l'attestazione di conformità di fabbrica e le prestazioni descritte nell'Allegato ZA della norma:

EN 40-5:2002

sono stati applicati e che il prodotto soddisfa tutti i requisiti prescritti.

prima emissione: 07/07/2009
emissione corrente: 28/09/2012

Ing. Carlo Agabito
Direttore

Questo certificato rimane valido fino a quando non siano significativamente modificate le condizioni stabilite nelle specifiche tecniche armonizzate richiamate o le condizioni di produzione nella fabbrica od il controllo della produzione di fabbrica stesso.

IGQ
ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

EC certificate of conformity

1608 CPD P084

In compliance with the Directive 89/106/EEC of the Council of the European Communities of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to the construction products (Construction Products Directive - CPD), amended by the Directive 93/68/EEC of the Council of the European Communities of 22 July 1993, this is to state that the products:

Steel lighting columns

Type Welded stepped cylindrical columns up to 14.0 m	Configuration top
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placed on the market by

CARPAL Srl
SS 265 km 26,200 81020 San Marco Evangelista CE - IT

and manufactured in the factory:
San Marco Evangelista CE-IT

are submitted by the manufacturer to a factory production control system (FPC) and to the further testing of samples taken at the factory in accordance with a prescribed test plan and that the notified body IGQ has performed the initial type-testing for the relevant characteristics of the products, the initial inspection of the factory and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control.

This certificate attests that all provisions concerning the attestation of conformity and the performances described in Annex ZA of the standard:

EN 40-5:2002

have been applied and that the products fulfill all the prescribed requirements.

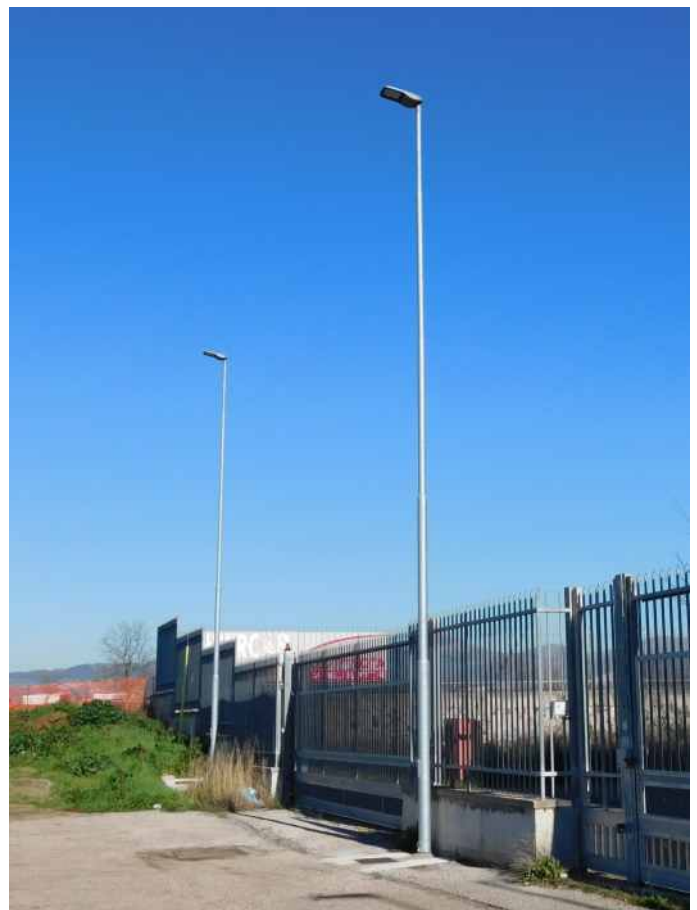
first issued on: 07/07/2009
current issue: 28/09/2012

Ing. Carlo Agabito
Director

This certificate remains valid as long as the conditions laid down in the harmonised technical specification in reference or the manufacturing conditions in the factory or the FPC itself are not significantly modified.













CHOICE OF POLE BY WIND CONDITIONS AND GROUND CATEGORIES

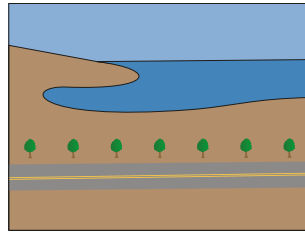
Choice of pole by wind conditions and ground categories According to the Ministerial Decree of January 14, 2008 "NEW TECHNICAL STANDARDS FOR CONSTRUCTIONS "the choice of the pole according to the height above ground and the load on top (PERFORMANCE NET) must be made in consideration of the wind conditions in the area installation and categories of land.



TABLE OF VENTOSITY

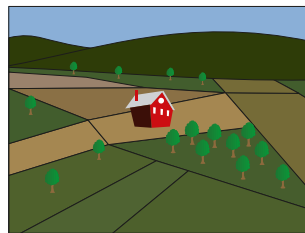
ZONE	REGION - PROVINCE	Vref, 0 (*) to	until a.s.l.
1	Val d'Aosta, Piemonte, Lombardia, Trentino Alto Adige, Veneto, Friuli Venezia Giulia	25	1.000
2	Emilia Romagna	25	750
3	Toscana, Marche, Umbria, Lazio, Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria	27	500
4	Sicilia e provincia di Reggio Calabria	28	500
5	Sardegna a oriente congiungente Capo Teulada - Isola della Maddalena	28	750
6	Sardegna a occidente congiungente Capo Teulada - Isola della Maddalena	28	500
7	Liguria	29	1.000
8	Provincia di Trieste	31	1.500
9	Isole (except Sicilia e Sardegna) e open sea	31	500

CATEGORY OF LANDS



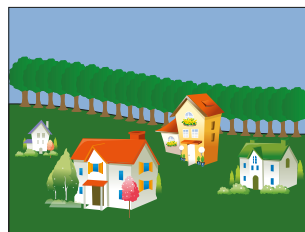
Category of land "I"

Sea coast. Coast of lake with at least 5 Km. Windward length. Plane land, without obstacles.



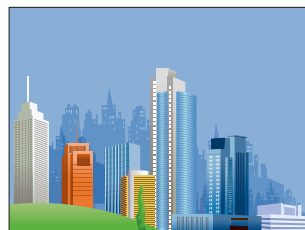
Category of land "II"

Cultivated land fenced by hedges, some small agricultural buildings, houses or trees.



Category of land "III"

Suburban or industrial areas and permanent forests.



Category of land "IV"

Urban areas where at least 15% of the surface is covered by buildings with an average height of more than 15 m.

GALVANIZING PROCESS

This treatment ensures double protection to steel metallurgy and electrochemistry, preventing the formation of rust.

By immersion of the steel poles in a bath of molten zinc at about 450° during which determines a reaction steel/zinc which leads to a diffusion of zinc in iron with formation of Fe-Zn alloy, giving predominance of pure Zn on the surface.

The Fe-Zn alloy gives the hot dip galvanizing of particular qualities as, increased abrasion resistance and excellent corrosion resistance.

The galvanizing process ensures a protective barrier between the internal and external atmosphere and the steel along the surface of our products.



GALVANIZING PROCESS

The phases of the galvanizing process are:

- 1. Preparation:** the materials are hung by wire and / or chains / equipment to <<frames>> to allow the movement along the entire production process.
- 2. Degreasing:** elimination of oil and fat from the surface of products by dipping in acidic degreasing solution, with added surfactants.
- 3. Pickling:** removal of iron oxides and iron residuals of rolling, using immersion in solutions composed of hydrochloric acid (HCl) and water (H₂O).
- 4. Washing:** elimination of waste acids, the previous processes, and through immersion rinsing in water.
- 5. Flushing:** immersion of the articles in an aqueous solution of «double salt» composed of zinc chloride and ammonium chloride ($ZnCl_2 \cdot 2NH_4Cl$).
- 6. Pre-heating:** the articles are heated in the oven dryer at about 100-120° C so that dried the flushing salts and reduce the thermal shock at the time of immersion in hot dip galvanizing.
- 7. Galvanizing:** immersion in a bath of molten zinc (Zn 98.5% min.) at a controlled temperature of 440-450 ° C.
- 8. Cooling:** natural cooling in the air at room temperature.
- 9. Detachment and control:** posting materials from the frames, quality control and finally packaging and finishing.



PROCESS OF PAINTING (EPOXY POWDER COATING PROCESS)

On request, the appearance of the products Carpal can be improved through a drawn painting operation performed polyester powder.

The process of polyester powder painting develops in the following phases:

1. Pretreatment

Process Engineering: shot blasting machine is via automatic modular jet with spherical metallic grit for the removal of surface impurities allowing the elimination of oxides, welding slag, ash and lumps.

Chemical Process of Phosphodegreasing: by degreasing the material is cleaned by waste machining oils and after with the use of phosphates is allows the powder paint to have a good seal adhesion.

2. Painting

Thermodrying: a process that occurs in a tunnel of controlled ventilation to ensure that the poles and accessories come in spray booth perfectly dry.

Thermosetting powder coating: A process that takes place in the cabin of the latest WAGNER generation fully automatic self-cleaning and allowing a perfect powder distribution up to 70/80 microns thick.

3. Polymerization

Cooking: at this stage polymerization takes place in the oven at a constant temperature of 190 ° for a minimum time of 50 minutes.

4. Controls and packaging

Controls: in this phase the material still attached to the system of painting, suffers a careful visual check by which ensures that the material is uniformly painted, that there are no differences in color, bubbles and cracks.

Packaging: only if the material is painted perfectly packaged individually, by a special coupling of bubble wrap 120 gr + expanded by 2 mm, and subsequently packed together with the other by plastic strapping.



N.B. To order painted items, apply a final "V" to the desired product code

PAINTING PROCESS FOR SALINE ENVIRONMENTS

Besides a purely aesthetic function, this painting process for salty environments guarantees a long protection in particularly aggressive environments.

The painting process for salt environments is developed in the following phases:

1. Alkaline degreasing to remove organic contaminants such as processing oils and flow-coating storage residues, for a time of 5 minutes with water and product at temperature of 60°;
2. Flushing flow-coating with tap water for 5 minutes;
3. Flow-coating pickling based on phosphoric acid at a temperature of 50°, for a time variable according to the oxidation of zinc to obtain a good adherence of the paint;
4. Flushing flow-coating with mains water at room temperature for 5 minutes;
5. Fluozirconic flow-coating passivation no chrome-free rinse suitable for depositing on the piece with an excellent chemical anchor a layer of 0.5-0.6 micron thickness of fluoride zirconium necessary for an excellent corrosion resistance and oxidation to improve the blistering (paint peeling);
6. Flushing flow-coating with mains water at room temperature for 5 minutes;
7. Final flow-coating rinsing with demineralized water at room temperature for 8 minutes;
8. Drying in oven at 130/50°;
9. Application of primer based on epoxy zinc powder 50/60 micron thickness;
10. Polymerization in ventilated oven with forced air circulation up to complete cross-linking of the paint film respecting the indications given in the supplier's data sheet 180° oven temperature product;
11. Application of TGIC Free polyester powder in the cab with n° 10 automatic guns up to reach 60/70 microns thick;
12. Polymerization in ventilated oven with forced air circulation up to complete cross-linking of the paint film respecting the indications given in the supplier's data sheet 180° oven temperature product;
13. Quality Controls: in this phase the material still fixed to the painting plant suffers a accurate visual check by means of which it is ensured that the material is uniform painted, that there are no differences in color, bubbles and cracks;
14. Packaging: only if perfectly painted, the material is individually packed by means of a special lamination of 120g + 2 mm bubble wrap, e subsequently packaged together with the others using plastic straps.

COLOR TABLE RAL – CLASSIC

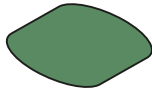
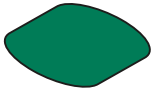
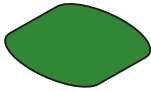
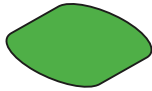
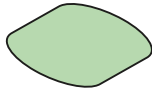
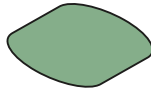
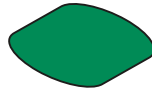
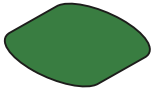
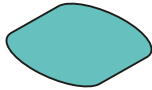
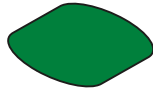
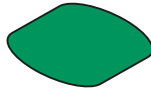
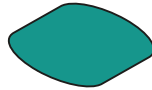
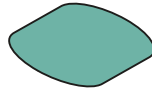
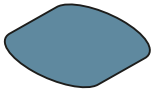
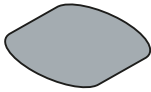
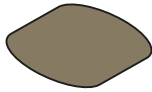
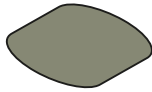
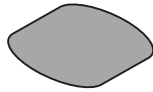
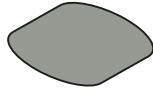
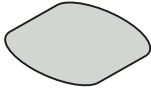
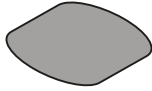
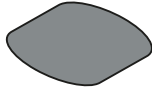
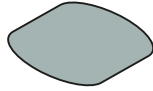
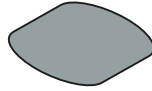
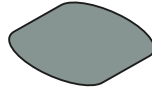
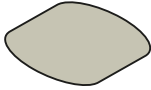
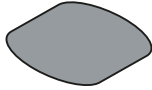
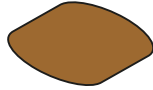
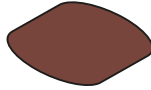
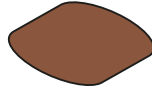
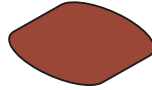
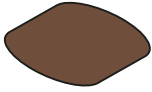
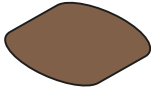
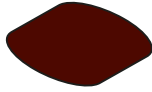
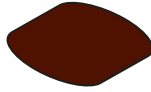
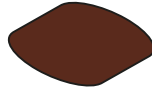
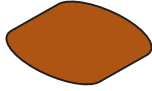
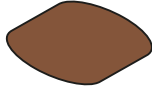
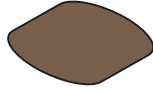
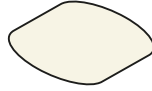
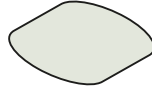
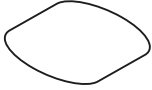
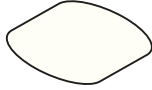
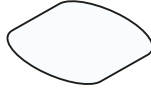
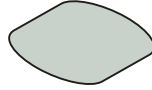
RAL 1000	RAL 1001	RAL 1002	RAL 1003	RAL 1004	RAL 1005	RAL 1006	RAL 1007
RAL 1011	RAL 1012	RAL 1013	RAL 1014	RAL 1015	RAL 1016	RAL 1017	RAL 1018
RAL 1019	RAL 1020	RAL 1021	RAL 1023	RAL 1024	RAL 1027	RAL 1028	RAL 1032
RAL 1033	RAL 1034	RAL 2000	RAL 2001	RAL 2002	RAL 2003	RAL 2004	RAL 2008
RAL 2009	RAL 2010	RAL 2011	RAL 2012	RAL 3000	RAL 3001	RAL 3002	RAL 3003
RAL 3004	RAL 3005	RAL 3007	RAL 3009	RAL 3011	RAL 3012	RAL 3013	RAL 3014
RAL 3015	RAL 3016	RAL 3017	RAL 3018	RAL 3020	RAL 3022	RAL 3027	RAL 3031
RAL 4001	RAL 4002	RAL 4003	RAL 4004	RAL 4005	RAL 4006	RAL 4007	RAL 4008
RAL 4009	RAL 5000	RAL 5001	RAL 5002	RAL 5003	RAL 5004	RAL 5005	RAL 5007
RAL 5008	RAL 5009	RAL 5010	RAL 5011	RAL 5012	RAL 5013	RAL 5014	RAL 5015
RAL 5017	RAL 5018	RAL 5019	RAL 5020	RAL 5021	RAL 5022	RAL 5023	RAL 5024
RAL 6000	RAL 6001	RAL 6002	RAL 6003	RAL 6004	RAL 6005	RAL 6006	RAL 6007

The exposed RAL colors can be made in a smooth or opaque finish

The representation of the RAL colors reported, is to be considered approximate and not completely faithful to the reproduction on the metal

N.B. To order painted items, apply a final "V" to the desired product code

COLOR TABLE RAL – CLASSIC

							
RAL 6008	RAL 6009	RAL 6010	RAL 6011	RAL 6012	RAL 6013	RAL 6014	RAL 6015
							
RAL 6016	RAL 6017	RAL 6018	RAL 6019	RAL 6020	RAL 6021	RAL 6022	RAL 6024
							
RAL 6025	RAL 6026	RAL 6027	RAL 6028	RAL 6029	RAL 6032	RAL 6033	RAL 6034
							
RAL 7000	RAL 7001	RAL 7002	RAL 7003	RAL 7004	RAL 7005	RAL 7006	RAL 7008
							
RAL 7009	RAL 7010	RAL 7011	RAL 7012	RAL 7013	RAL 7015	RAL 7016	RAL 7021
							
RAL 7022	RAL 7023	RAL 7024	RAL 7026	RAL 7030	RAL 7031	RAL 7032	RAL 7033
							
RAL 7034	RAL 7035	RAL 7036	RAL 7037	RAL 7038	RAL 7039	RAL 7040	RAL 7042
							
RAL 7043	RAL 7044	RAL 7045	RAL 8000	RAL 8001	RAL 8002	RAL 8003	RAL 8004
							
RAL 8007	RAL 8008	RAL 8011	RAL 8012	RAL 8014	RAL 8015	RAL 8016	RAL 8017
							
RAL 8019	RAL 8022	RAL 8023	RAL 8024	RAL 8025	RAL 8028	RAL 9001	RAL 9002
							
RAL 9003	RAL 9004	RAL 9005	RAL 9010	RAL 9011	RAL 9016	RAL 9017	RAL 9018

The exposed RAL colors can be made in a smooth or opaque finish

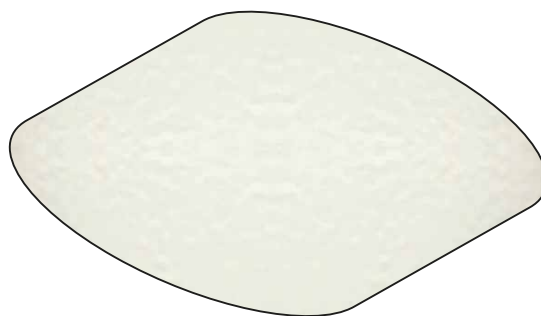
The representation of the RAL colors reported, is to be considered approximate and not completely faithful to the reproduction on the metal

N.B. To order painted items, apply a final "V" to the desired product code

RECOMMENDED COLOR TABLE



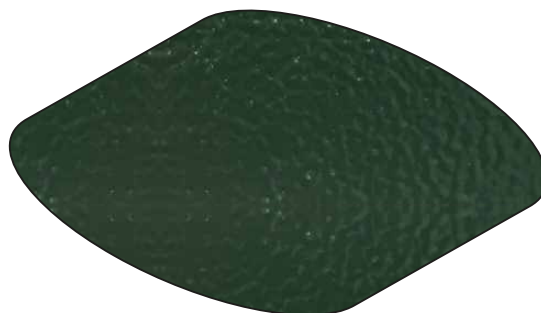
STONE WHITE



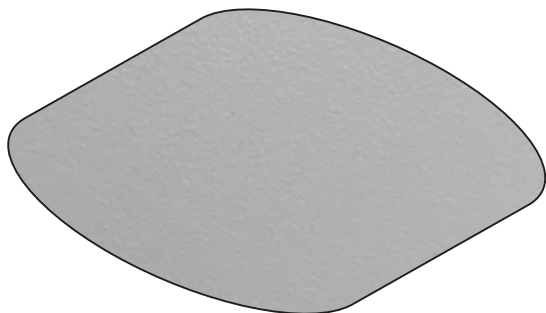
WHITE RAL 9010 ROUGH



GREEN RAL 6005 GRINZ



GREEN RAL 6005 ROUGH



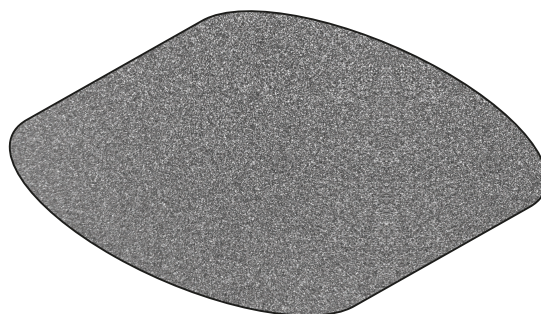
GREY RAL 9006 GRINZ



GREY RAL 9006 ROUGH



GREY RAL 9007 GRINZ



SCRATCHPROOF GREY AK

The representation of the RAL colors reported, is to be considered approximate and not completely faithful to the reproduction on the metal

N.B. To order painted items, apply a final "V" to the desired product code

RECOMMENDED COLOR TABLE



GREY RAL 7016 ROUGH



DARK GREY SATIN



DARK GREY RAL 2011 SATIN



ANCIENT MARBLE GREY



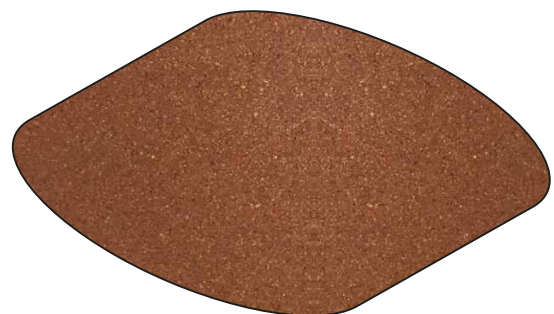
BLACK RAL 9005 GRINZ



BLACK RAL 9005 ROUGH



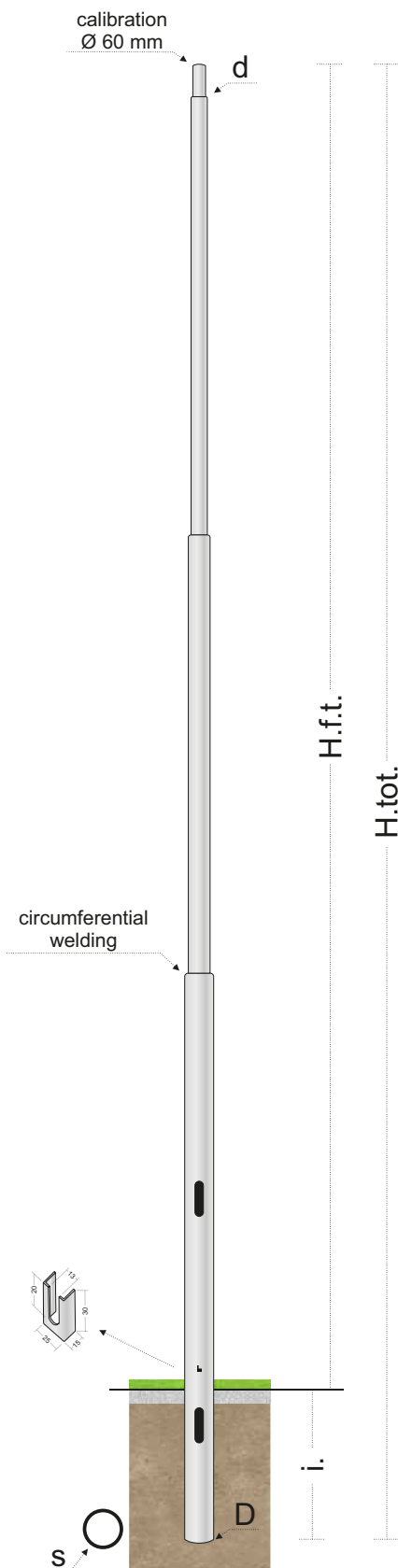
MIX DARK WOOD



MIX WOOD

The representation of the RAL colors reported, is to be considered approximate and not completely faithful to the reproduction on the metal

N.B. To order painted items, apply a final "V" to the desired product code



Our tapered poles are constructed with longitudinally welded tubes by induction, made of steel sheet S235JR (EN 10219-01).

The tubes of different diameters, are joined together by circumferential welding in matching to tapers.

For each pole, if for buried line, the following processes are realized:

cable entry slot;

application of pocket grounding;

terminal board slot.

All poles are calibrated on top with stem height 180 mm and Ø 60 mm suitable for mounting accessories and lighting.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in compliance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each pole comes with adhesive label CE.

STRAIGHT TAPERED POLES "thickness 3 mm"									
Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s pipe thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R763Z	3.000	2.500	500	76	60	3+3	16	0,64	93,00
R7635Z	3.500	3.000	500	76	60	3+3	18	0,75	100,00
R764Z	4.000	3.500	500	76	60	3+3	20	0,85	107,00
R894Z	4.000	3.500	500	89	60	3+3+3	23	0,94	114,00
R8945Z	4.500	4.000	500	89	60	3+3+3	25	1,05	124,00
R895Z	5.000	4.500	500	89	60	3+3+3	28	1,17	135,00
R8955Z	5.500	5.000	500	89	60	3+3+3	30	1,29	146,00
R1146Z	6.000	5.200	800	114	70/76	3+3+3	44	1,79	200,00
R1147Z	7.000	6.200	800	114	70/76	3+3+3+3	52	2,09	220,00
R1148Z	8.000	7.200	800	114	70/76	3+3+3+3	58	2,39	242,00
R1276Z	6.000	5.200	800	127	70/76	3+3+3	48	1,91	225,00
R1277Z	7.000	6.200	800	127	70/76	3+3+3+3	55	2,23	245,00
R1278Z	8.000	7.200	800	127	70/76	3+3+3+3	61	2,55	270,00
R1279Z	9.000	8.200	800	127	70/76	3+3+3+3	67	2,87	291,00
R12710Z	10.000	9.200	800	127	70/76	3+3+3+3+3	77	3,19	327,00
R1397Z/3	7.000	6.200	800	139	70/76	3+3+3+3	59	2,36	257,00
R1398Z/3	8.000	7.200	800	139	70/76	3+3+3+3	66	2,70	283,00
R1399Z/3	9.000	8.200	800	139	70/76	3+3+3+3	72	3,04	321,00
R13910Z/3	10.000	9.200	800	139	70/76	3+3+3+3+3	80	3,38	342,00
R13911Z/3	11.000	10.200	800	139	70/76	3+3+3+3+3	86	3,71	359,00

All poles are calibrated at the top with a shank of a height of 180 mm and a diameter of 60 mm, suitable for mounting accessories and lighting bodies



STRAIGHT TAPERED POLES

STRAIGHT TAPERED POLES "thickness 4/5 mm"

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s pipe thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R1397Z	7.000	6.200	800	139	70/76	4+3+3+3	69	2,36	277,00
R1398Z	8.000	7.200	800	139	70/76	4+3+3+3	75	2,70	293,00
R1399Z	9.000	8.200	800	139	70/76	4+3+3+3	82	3,04	341,00
R13910Z	10.000	9.200	800	139	70/76	4+3+3+3+3	90	3,38	362,00
R13911Z	11.000	10.200	800	139	70/76	4+3+3+3+3	96	3,71	379,00
R1527Z	7.000	6.200	800	152	89	4+4+3+3	82	2,65	349,00
R1528Z	8.000	7.200	800	152	89	4+4+3+3	91	3,03	373,00
R1529Z	9.000	8.200	800	152	102	4+4+3+3	100	3,59	405,00
R15210Z	10.000	9.200	800	152	89	4+4+4+3+3	106	3,78	422,00
R15211Z	11.000	10.200	800	152	89	4+4+3+3+3	113	4,16	444,00
R15212Z	12.000	11.200	800	152	89	4+4+3+3+3	125	4,54	479,00
R1687Z	7.000	6.200	800	168	89	4+4+3+3	89	2,82	381,00
R1688Z	8.000	7.200	800	168	89	4+4+3+3	98	3,23	408,00
R1689Z	9.000	8.200	800	168	102	4+4+3+3	108	3,82	437,00
R16810Z	10.000	9.200	800	168	89	4+4+4+3+3	124	4,03	487,00
R16811Z	11.000	10.200	800	168	89	4+4+4+3+3	134	4,44	514,00
R16812Z	12.000	11.200	800	168	89	4+4+4+3+3	149	4,84	552,00
R1937Z	7.000	6.200	800	193	114	4+4+4+3	110	3,37	521,00
R1938Z	8.000	7.200	800	193	114	4+4+4+3	122	3,86	547,00
R1939Z	9.000	8.200	800	193	114	4+4+4+3	133	4,34	577,00
R19310Z	10.000	9.200	800	193	102	4+4+4+3+3	140	4,63	624,00
R19311Z	11.000	10.200	800	193	102	4+4+4+3+3	147	5,09	683,00
R19312Z	12.000	11.200	800	193	114	4+4+4+3+3	162	5,78	748,00
R19313Z	13.000	12.200	800	193	114	4+4+4+3+3	171	6,27	796,00
R2197Z	7.000	6.200	800	219	114	5+4+4+4+3	137	3,66	657,00
R2198Z	8.000	7.200	800	219	114	5+4+4+4+3	148	4,18	688,00
R2199Z	9.000	8.200	800	219	114	5+4+4+4+3	165	4,71	719,00
R21910Z	10.000	9.200	800	219	114	5+4+4+4+3	183	5,23	787,00
R21911Z	11.000	10.200	800	219	114	5+4+4+4+3	193	5,75	871,00
R21912Z	12.000	11.200	800	219	114	5+4+4+4+3	212	6,27	946,00
R21913Z	13.000	12.200	800	219	114	5+4+4+4+3	228	6,80	999,00

STRAIGHT TAPERED POLES IN TWO TRUNKS

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s pipe thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R21913Z/2T	13.000	12.000	1.000	219	114	5	272	6,80	1.098,00
R21914Z/2T	14.000	13.000	1.000	219	114	5	287	7,32	1.182,00
R21915Z/2T	15.000	14.000	1.000	219	114	5	306	7,84	1.323,00
R21916Z/2T	16.000	15.000	1.000	219	114	5	318	8,36	1.420,00

All poles are calibrated at the top with a shank of a height of 180 mm and a diameter of 60 mm, suitable for mounting accessories and lighting bodies

STRAIGHT TAPARED POLES - net performance in m² useful to reach the top

Article Code	Zone 1: max 1.000 m asl Zone 2: max 750 m asl				Zone 3: max 500 m asl				Zone 4: max 500 m asl Zone 5: max 750 m asl Zone 6: max 500 m asl				Zone 7: max 1.000 m asl				Zone 8: max 1.500 m asl Zone 9: max 500 m asl			
	Vref = 25 m sec. ⁻¹				Vref = 27 m sec. ⁻¹				Vref = 28 m sec. ⁻¹				Vref = 29 m sec. ⁻¹				Vref = 31 m sec. ⁻¹			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
R763Z	1,00	1,10	1,20	1,25	0,80	0,95	1,05	1,10	0,80	0,85	0,95	1,00	0,75	0,80	0,90	0,95	0,65	0,70	0,80	0,85
R7635Z	0,70	0,80	0,90	0,95	0,60	0,70	0,75	0,80	0,55	0,70	0,70	0,80	0,60	0,65	0,70	0,75	0,50	0,55	0,60	0,65
R764Z	0,55	0,65	0,70	0,70	0,45	0,55	0,60	0,60	0,40	0,50	0,55	0,60	0,40	0,45	0,50	0,55	0,35	0,40	0,45	0,50
R894Z	0,65	0,75	0,85	0,90	0,55	0,65	0,75	0,75	0,50	0,60	0,65	0,70	0,50	0,55	0,65	0,70	0,40	0,50	0,55	0,60
R8945Z	0,60	0,75	0,85	0,90	0,50	0,65	0,70	0,75	0,50	0,60	0,65	0,70	0,45	0,55	0,65	0,65	0,40	0,50	0,55	0,60
R895Z	0,45	0,60	0,65	0,70	0,40	0,50	0,60	0,65	0,35	0,45	0,55	0,55	0,35	0,40	0,50	0,50	0,30	0,35	0,40	0,45
R8955Z	0,35	0,45	0,55	0,55	0,30	0,35	0,45	0,45	0,25	0,35	0,40	0,45	0,25	0,30	0,35	0,40	0,20	0,25	0,30	0,35
R1146Z	0,55	0,70	0,90	0,95	0,50	0,60	0,75	0,80	0,45	0,55	0,70	0,70	0,40	0,50	0,65	0,65	0,35	0,45	0,55	0,55
R1147Z	0,45	0,55	0,70	0,75	0,35	0,45	0,60	0,60	0,35	0,40	0,55	0,55	0,30	0,40	0,50	0,50	0,25	0,30	0,40	0,45
R1148Z	0,30	0,35	0,50	0,55	0,20	0,30	0,40	0,45	0,20	0,25	0,35	0,40	0,15	0,20	0,30	0,35	0,15	0,20	0,25	0,30
R1276Z	0,70	0,85	1,00	1,05	0,60	0,70	0,90	0,95	0,60	0,65	0,80	0,85	0,50	0,60	0,75	0,80	0,45	0,55	0,65	0,70
R1277Z	0,60	0,75	0,90	0,95	0,50	0,60	0,80	0,80	0,45	0,55	0,70	0,75	0,40	0,50	0,65	0,70	0,35	0,45	0,55	0,60
R1278Z	0,40	0,50	0,70	0,75	0,30	0,40	0,55	0,60	0,30	0,40	0,50	0,55	0,30	0,35	0,50	0,50	0,20	0,30	0,40	0,40
R1279Z	0,25	0,35	0,50	0,55	0,20	0,30	0,40	0,45	0,15	0,25	0,40	0,40	0,15	0,20	0,35	0,35	0,10	0,15	0,25	0,30
R12710Z	0,15	0,20	0,35	0,40	-----	0,15	0,25	0,30	-----	0,15	0,20	0,25	-----	0,10	0,20	0,20	-----	-----	0,10	0,10
R1397Z/3	0,80	1,00	1,25	1,30	0,70	0,85	1,05	1,10	0,65	0,75	1,00	1,00	0,60	0,70	0,90	0,95	0,50	0,60	0,80	0,80
R1398Z/3	0,55	0,70	0,90	0,95	0,45	0,55	0,75	0,80	0,40	0,50	0,70	0,75	0,40	0,50	0,65	0,70	0,30	0,40	0,55	0,60
R1399Z/3	0,40	0,50	0,70	0,75	0,30	0,40	0,60	0,60	0,25	0,35	0,50	0,55	0,25	0,30	0,45	0,50	0,20	0,25	0,40	0,45
R13910Z/3	0,20	0,30	0,45	0,50	0,20	0,25	0,35	0,40	0,15	0,20	0,30	0,35	0,15	0,20	0,30	0,30	0,10	0,15	0,25	0,25
R13911Z/3	0,15	0,20	0,30	0,35	0,10	0,15	0,25	0,30	-----	0,10	0,20	0,25	-----	0,10	0,20	0,20	-----	-----	0,15	0,15
R1397Z	1,00	1,25	1,50	1,60	0,85	1,05	1,30	1,35	0,80	1,00	1,20	1,25	0,75	0,90	1,15	1,20	0,65	0,80	1,00	1,05
R1398Z	0,70	0,85	1,15	1,20	0,60	0,70	0,95	1,00	0,55	0,65	0,90	0,95	0,50	0,60	0,80	0,85	0,45	0,55	0,70	0,75
R1399Z	0,50	0,60	0,80	0,85	0,40	0,50	0,70	0,70	0,35	0,45	0,60	0,65	0,30	0,40	0,55	0,60	0,30	0,35	0,50	0,50
R13910Z	0,30	0,40	0,60	0,65	0,25	0,35	0,50	0,55	0,25	0,30	0,45	0,50	0,20	0,25	0,40	0,45	0,15	0,20	0,30	0,35
R13911Z	0,20	0,25	0,40	0,45	0,15	0,20	0,30	0,35	0,15	0,15	0,30	0,35	0,10	0,15	0,25	0,30	0,10	0,10	0,20	0,25
R1527Z	1,45	1,75	2,20	2,30	1,25	1,50	1,90	1,95	1,15	1,40	1,75	1,85	1,10	1,30	1,65	1,70	0,95	1,15	1,45	1,50
R1528Z	1,05	1,25	1,65	1,70	0,90	1,10	1,40	1,90	0,80	1,00	1,30	1,35	0,75	0,95	1,20	1,25	0,65	0,80	1,05	1,10
R1529Z	0,75	0,90	1,20	1,30	0,65	0,75	1,05	1,10	0,60	0,70	0,95	1,00	0,55	0,65	0,90	0,95	0,50	0,60	0,70	0,80
R15210Z	0,55	0,70	0,95	1,05	0,45	0,55	0,80	0,85	0,45	0,50	0,70	0,80	0,40	0,50	0,65	0,75	0,35	0,40	0,55	0,65
R15211Z	0,40	0,50	0,70	0,80	0,30	0,40	0,60	0,65	0,30	0,35	0,55	0,60	0,25	0,35	0,50	0,55	0,20	0,30	0,40	0,50
R15212Z	0,30	0,40	0,55	0,70	0,25	0,30	0,45	0,55	0,20	0,30	0,40	0,50	0,20	0,25	0,35	0,35	0,45	0,15	0,20	0,30
R1687Z	1,85	2,25	2,75	2,90	1,60	1,95	2,40	2,50	1,50	1,80	2,20	2,30	1,40	1,70	2,05	2,15	1,25	1,45	1,80	1,90
R1688Z	1,40	1,65	2,15	2,25	1,20	1,40	1,85	1,95	1,10	1,30	1,70	1,80	1,05	1,25	1,60	1,70	0,90	1,10	1,40	1,45
R1689Z	0,90	1,10	1,45	1,55	0,80	0,95	1,27	1,30	0,70	0,85	1,15	1,20	0,70	0,80	1,10	1,15	0,60	0,70	0,95	1,00
R16810Z	0,85	1,00	1,35	1,50	0,70	0,85	1,15	1,25	0,65	0,80	1,05	1,15	0,60	0,75	1,00	1,10	0,55	0,65	0,85	0,95
R16811Z	0,55	0,70	0,95	1,05	0,50	0,60	0,80	0,90	0,45	0,55	0,70	0,85	0,40	0,50	0,65	0,75	0,35	0,45	0,60	0,65
R16812Z	0,45	0,55	0,80	0,95	0,40	0,50	0,65	0,80	0,35	0,45	0,60	0,70	0,35	0,40	0,55	0,65	0,30	0,35	0,45	0,55
R1937Z	2,70	3,80	4,00	4,15	2,35	2,80	3,40	3,60	2,20	2,00	3,20	3,35	2,05	2,45	3,00	3,15	1,80	2,15	2,65	2,75
R1938Z	2,10	2,45	3,15	3,25	1,75	2,10	2,70	2,85	1,65	2,00	2,50	2,65	1,55	1,80	2,35	2,45	1,35	1,60	2,05	2,20
R1939Z	1,50	1,75	2,30	2,45	1,30	1,50	2,00	2,10	1,20	1,40	1,90	2,00	1,15	1,30	1,75	1,85	1,00	1,15	1,55	1,60
R19310Z	1,30	1,50	2,00	2,20	1,10	1,30	1,70	1,90	1,00	1,20	1,60	1,75	0,95	1,15	1,50	1,65	0,80	1,00	1,30	1,45
R19311Z	1,00	1,20	1,60	1,80	0,90	1,05	1,35	1,55	0,80	1,00	1,30	1,45	0,75	0,90	1,20	1,35	0,65	0,80	1,05	1,20
R19312Z	0,85	1,00	1,30	1,50	0,70	0,85	1,10	1,30	0,65	0,80	1,00	1,20	0,60	0,70	0,95	1,10	0,50	0,60	0,80	1,00
R19313Z	0,65	0,80	1,00	1,25	0,60	0,70	0,90	1,05	0,50	0,60	0,80	1,00	0,50	0,60	0,75	0,90	0,40	0,50	0,65	0,80
R2197Z	4,50	5,35	6,45	6,70	3,95	4,70	5,65	5,85	3,70	4,40	5,30	5,50	3,50	4,15	5,00	5,20	3,10	3,65	4,40	4,65
R2198Z	3,90	4,60	5,80	6,05	3,40	4,00	5,05	5,25	3,15	3,75	4,70	4,90	3,00	3,50	4,45	4,60	2,60	3,10	3,90	4,10
R2199Z	2,70	3,15	4,20	4,40	2,30	2,75	3,60	3,80	2,15	2,55	3,40	3,55	2,00	2,40	3,20	3,35	1,70	2,05	2,75	2,90
R21910Z	2,00	2,35	3,05	3,30	1,70	2,00	2,65	2,90	1,60	1,90	2,50	2,70	1,50	1,75	2,30	2,50	1,30	1,55	2,65	2,20
R21911Z	1,50	1,80	2,30	2,60	1,30	1,50	2,00	2,25	1,20	1,40	1,85	2,10	1,15	1,35	1,75	2,00	1,00	1,15	1,50	1,75
R21912Z	1,35	1,60	2,00	2,35	1,15	1,35	1,75	2,05	1,05	1,25	1,65	1,90	1,00	1,20	1,50	1,80	0,90	1,05	1,35	1,60
R21913Z	1,15	1,35	1,75	2,10	1,00	1,15	1,50	1,85	0,95	1,10	1,40	1,70	0,85	1,00	1,30	1,60	0,70	0,90	1,15	1,40
R21913Z/2T	0,75	0,90	1,20	1,45	0,65	0,75	1,00	1,25	0,60	0,70	0,95	1,15	0,55	0,65	0,90	1,05	0,45	0,55	0,75	0,90
R21914Z/2T	0,90	1,05	1,35	1,70	0,75	0,90	1,15	1,45	0,65	0,85	1,05	1,35	0,60	0,75	1,00	1,25	0,50	0,65	0,85	1,05
R21915Z/2T	0,75	0,90	1,15	1,45	0,60	0,75	1,00	1,25	0,55	0,70	0,90	1,15	0,50	0,65	0,85	1,05	0,40	0,50	0,70	0,90
R21916Z/2T	0,75	0,85	1,10	1,40	0,65	0,75	0,95	1,20	0,60	0,70	0,90	1,15	0,50	0,65	0,85	1,05	0,45	0,55	0,75	0,95

STRAIGHT TAPERED POLES - in configuration with single arm (BS series, see page 84)

Article Code	Zone 1: max 1.000 m asl Zone 2: max 750 m asl				Zone 3: max 500 m asl				Zone 4: max 500 m asl Zone 5: max 750 m asl Zone 6: max 500 m asl				Zone 7: max 1.000 m asl				Zone 8: max 1.500 m asl Zone 9: max 500 m asl			
	Vref = 25 m sec. ⁻¹				Vref = 27 m sec. ⁻¹				Vref = 28 m sec. ⁻¹				Vref = 29 m sec. ⁻¹				Vref = 31 m sec. ⁻¹			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
R1146Z	1015	2015	2015	2015	1010	1515	2015	2015	1010	1015	2015	2015	-----	1010	1515	2015	-----	1010	1015	1515
R1147Z	1015	2015	2015	2015	1010	1515	2015	2015	1010	1015	2015	2015	-----	1010	1515	2015	-----	1010	1015	1515
R1148Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1276Z	2020	2020	2020	2020	2015	2020	2020	2020	1515	2015	2020	2020	1515	2015	2020	2020	1010	1515	2015	2020
R1277Z	2020	2020	2020	2020	2015	2020	2020	2020	1015	2015	2020	2020	1515	2015	2020	2020	1010	1515	2015	2020
R1278Z	1515	2015	2015	2015	-----	1515	1515	2015	-----	1010	1515	2015	-----	-----	1015	1515	-----	-----	1010	1015
R1279Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R12710Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1397Z/3	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1515	2015	2020	2020
R1398Z/3	2020	2020	2020	2020	1515	2020	2020	2020	1515	2015	2020	2020	1010	1015	2015	2020	1010	1515	2020	2020
R1399Z/3	1515	2015	2015	2015	1010	1515	2015	2015	1010	1515	2015	2015	1515	1515	2015	2015	-----	-----	1515	1515
R13910Z/3	-----	1015	1015	1015	-----	-----	1010	1015	-----	-----	-----	1010	-----	-----	-----	1010	-----	-----	-----	-----
R13911Z/3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1397Z	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1515	2015	2020	2020
R1398Z	2020	2020	2020	2020	1515	2020	2020	2020	1515	2015	2020	2020	1015	2015	2020	2020	1015	1515	2020	2020
R1399Z	2015	2020	2020	2020	1015	2015	2020	2020	1010	1515	2015	2015	1515	1515	2020	2020	1515	1515	2015	2015
R13910Z	1010	1515	1515	1515	-----	1010	1015	1515	-----	-----	1015	1515	-----	-----	1010	1010	-----	-----	1010	1010
R13911Z	-----	1010	1515	1515	-----	-----	1015	1015	-----	-----	1010	1010	-----	-----	-----	-----	-----	-----	-----	-----
R1527Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	1515	2015	2020	2020	1015	1515	2020	2020
R1528Z	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1515	2015	2020	2020
R1529Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R15210Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R15211Z	1015	2015	2015	2015	1010	2015	2015	2015	-----	1015	2015	2015	-----	-----	2015	2015	-----	-----	1515	1515
R15212Z	-----	1015	1015	1015	-----	-----	1015	1015	-----	-----	1015	1015	-----	-----	1015	1015	-----	-----	-----	1015
R1687Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020
R1688Z	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1515	2015	2020	2020
R1689Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R16810Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R16811Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R16812Z	2015	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1515	2015	2020	2020	1515	2105	2020	2020
R1937Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2015	2020	2020
R1938Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020
R1939Z	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020
R19310Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020
R19311Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R19312Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R19313Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1515	2015	2020	2020	1515	2015	2020	2020
R2197Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
R2198Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020
R2199Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2015	2015	2020	2020
R21910Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020
R21911Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R21912Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020
R21913Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2015	2020	2020	1515	2015	2020	2020

Considering the application of 1 0.12 m² street light

Ogni casella contiene un codice numerico composto da 4 cifre, le prime due indicano l'altezza dello sbraccio mentre le seconde due indicano la sporgenza

STRAIGHT TAPARED POLES - in configuration with double arms (BD series, see page 84)

Article Code	Zone 1: max 1.000 m asl Zone 2: max 750 m asl				Zone 3: max 500 m asl				Zone 4: max 500 m asl Zone 5: max 750 m asl Zone 6: max 500 m asl				Zone 7: max 1.000 m asl				Zone 8: max 1.500 m asl Zone 9: max 500 m asl			
	Vref = 25 m sec. ⁻¹				Vref = 27 m sec. ⁻¹				Vref = 28 m sec. ⁻¹				Vref = 29 m sec. ⁻¹				Vref = 31 m sec. ⁻¹			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
R1146Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1147Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1148Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1276Z	1015	1515	1520	1520	-----	1015	1520	1520	-----	1015	1520	1520	-----	1010	1515	1515	-----	-----	1015	1015
R1277Z	1015	1515	1520	1520	-----	1015	1520	1520	-----	1015	1520	1520	-----	1010	1515	1515	-----	-----	1015	1015
R1278Z	-----	1010	1010	1010	-----	-----	1010	1010	-----	-----	1010	1010	-----	-----	-----	1010	-----	-----	-----	-----
R1279Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R12710Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1397Z/3	1520	1520	1520	1520	1015	1515	1520	1520	1015	1515	1520	1520	1015	1015	1520	1520	-----	1015	1520	1520
R1398Z/3	1015	1515	1515	1515	-----	1015	1515	1515	-----	1015	1520	1515	-----	-----	1515	1515	-----	-----	1015	1015
R1399Z/3	-----	1010	1010	1010	-----	-----	1010	1010	-----	-----	1010	1010	-----	-----	-----	1010	-----	-----	-----	-----
R13910Z/3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R13911Z/3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1397Z	1520	1520	1520	1520	1515	1515	1520	1520	1515	1515	1520	1520	1515	1515	1520	1520	1515	1515	1520	1520
R1398Z	1515	1520	1520	1520	1015	1515	1520	1520	1010	1015	1520	1520	1010	1015	1520	1520	-----	1015	1515	1520
R1399Z	-----	1015	1015	1015	-----	-----	1015	1015	-----	-----	1015	1015	-----	-----	1010	1015	-----	-----	-----	1010
R13910Z	-----	-----	1010	1015	-----	-----	-----	1010	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R13911Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1527Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	1520	2020	2020	2020
R1528Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1520	2020	2020	2020	1520	1520	2020	2020
R1529Z	1520	2020	2020	2020	1520	2020	2020	2020	2015	2015	2020	2020	1520	2015	2020	2020	1520	1520	2020	2020
R15210Z	1015	1520	1520	1520	1015	1515	1520	1520	-----	1515	1520	1520	-----	1015	1520	1520	-----	1015	1520	1520
R15211Z	-----	-----	1010	1515	-----	-----	1010	1015	-----	-----	-----	1015	-----	-----	-----	1010	-----	-----	-----	-----
R15212Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
R1687Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	1520	2020	2020	2020
R1688Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1520	2015	2020	2020	1520	2020	2020	2020
R1689Z	2015	2020	2020	2020	2015	2020	2020	2020	1520	2020	2020	2020	1520	2015	2020	2020	1520	1520	2020	2020
R16810Z	2015	2020	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1515	1520	2020	2020
R16811Z	1015	1520	1520	1520	1015	1515	1520	1520	-----	1515	1520	1520	-----	1015	1520	1520	-----	1015	1520	1520
R16812Z	1010	1515	1520	1520	1015	1015	1520	1520	-----	1015	1520	1520	-----	1015	1520	1520	-----	1010	1015	1520
R1937Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
R1938Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2015	2020	2020	2020	1520	2020	2020
R1939Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1520	2015	2020	2020
R19310Z	2020	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1520	2020	2020	2020	1520	2015	2020	2020
R19311Z	2015	2020	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1515	1520	2020	2020
R19312Z	1520	2015	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1520	1520	2020	2020	1515	1520	2015	2020
R19313Z	1515	2015	2015	2015	1515	1520	2015	2015	1515	1520	2015	2015	1515	1520	2015	2015	1015	1515	2015	2015
R2197Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
R2198Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020
R2199Z	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2020	2025	2020	2020	1520	2020	2020
R21910Z	2020	2020	2020	2020	1520	2020	2020	2020	2015	2020	2020	2020	2015	2020	2020	2020	1520	2015	2020	2020
R21911Z	2015	2020	2020	2020	1520	2020	2020	2020	2015	2015	2020	2020	1520	2015	2020	2020	1520	1520	2020	2020
R21912Z	2015	2020	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1520	1520	2020	2020
R21913Z	1520	2020	2020	2020	1520	2015	2020	2020	1520	2015	2020	2020	1520	1520	2020	2020	1515	1520	2015	2020

Considering the application of 1 0.12 m² street light

Ogni casella contiene un codice numerico composto da 4 cifre, le prime due indicano l'altezza dello sbraccio mentre le seconde due indicano la sporgenza

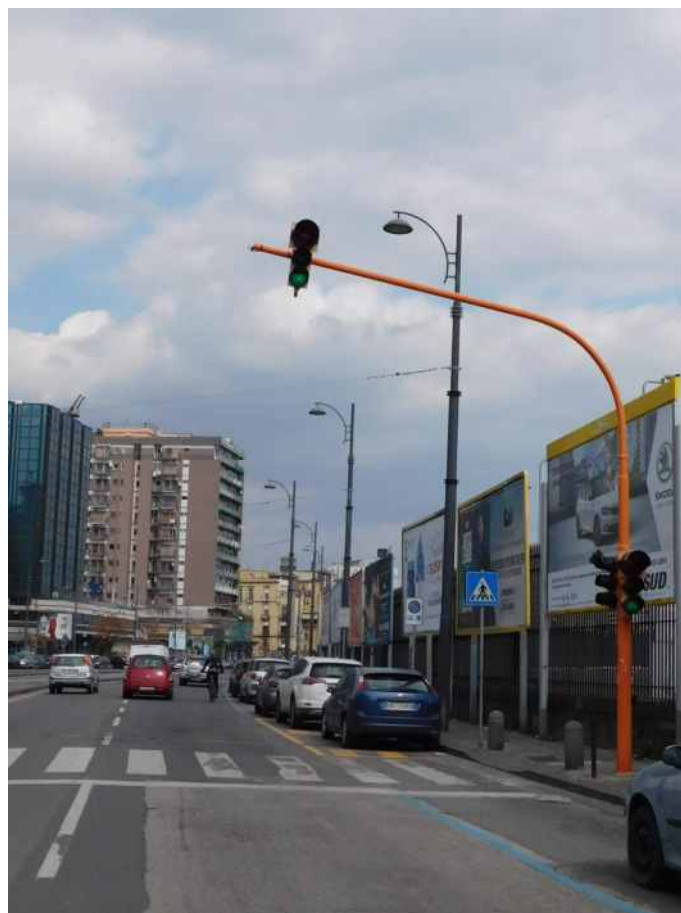
All poles are calibrated on top with stem height 180 mm and Ø 60 mm suitable for mounting accessories and illuminating.

Each post comes with adhesive label CE.

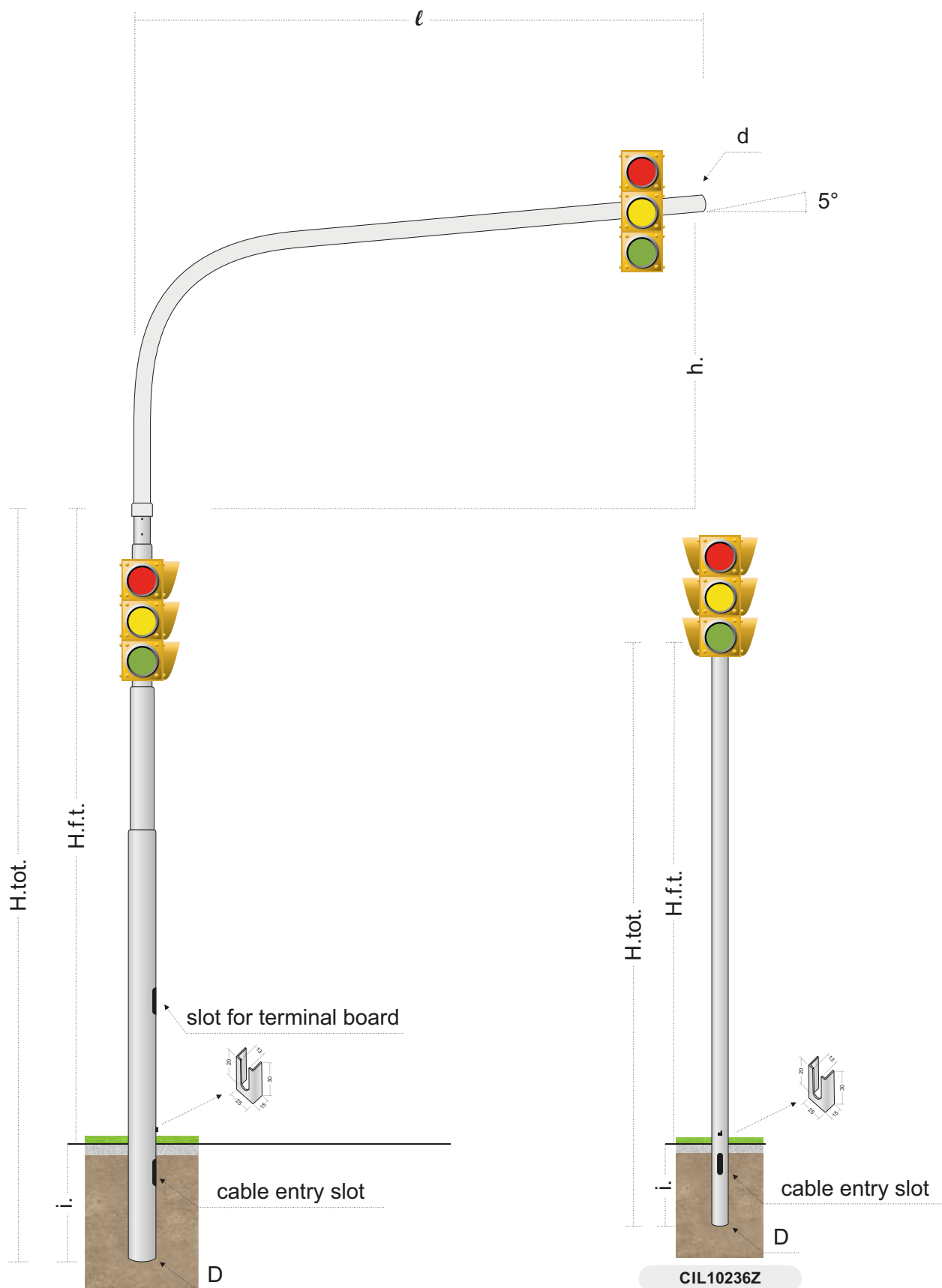
TAPARED POLES FOR AIRLINE "thickness 4/5 mm"

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s pipe thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R1527Z	7.000	6.200	800	152	89	4+4+3+3	82	2,65	349,00
R1528Z	8.000	7.200	800	152	89	4+4+3+3	91	3,03	373,00
R1529Z	9.000	8.200	800	152	102	4+4+3+3	100	3,59	405,00
R1687Z	7.000	6.200	800	168	89	4+4+3+3	89	2,82	381,00
R1688Z	8.000	7.200	800	168	89	4+4+3+3	98	3,23	408,00
R1689Z	9.000	8.200	800	168	102	4+4+3+3	108	3,82	437,00
R1937Z	7.000	6.200	800	193	114	4+4+4+3	110	3,37	521,00
R1938Z	8.000	7.200	800	193	114	4+4+4+3	122	3,86	547,00
R1939Z	9.000	8.200	800	193	114	4+4+4+3	133	4,34	577,00
R19310Z	10.000	9.200	800	193	102	4+4+4+3+3	133	4,63	624,00
R2197Z	7.000	6.200	800	219	114	5+4+4+4+3	137	3,66	657,00
R2198Z	8.000	7.200	800	219	114	5+4+4+4+3	148	4,18	688,00
R2199Z	9.000	8.200	800	219	114	5+4+4+4+3	165	4,71	719,00
R21910Z	10.000	9.200	800	219	114	5+4+4+4+3	176	5,23	787,00
R21911Z	11.000	10.200	800	219	114	5+4+4+4+3	193	5,75	871,00









Our poles for traffic light systems are built using welded tapered poles longitudinally induction, made of sheet steel S235JR (EN 10219-01).

The pipes, of different diameters, are joined together by circumferential welding in correspondence tapering.

For each pole for traffic light systems, the following processes are carried out:

- cable entry slot;
- application of the grounding pocket;
- slot for terminal board;
- Ø 114 mm glass welded on top for the application of the traffic light arm.

The galvanization of the materials is obtained by immersion in melted zinc tanks whose thickness of the zinc layer complies with the UNI EN ISO 1461 standards.

Each pole is equipped with a CE adhesive label.

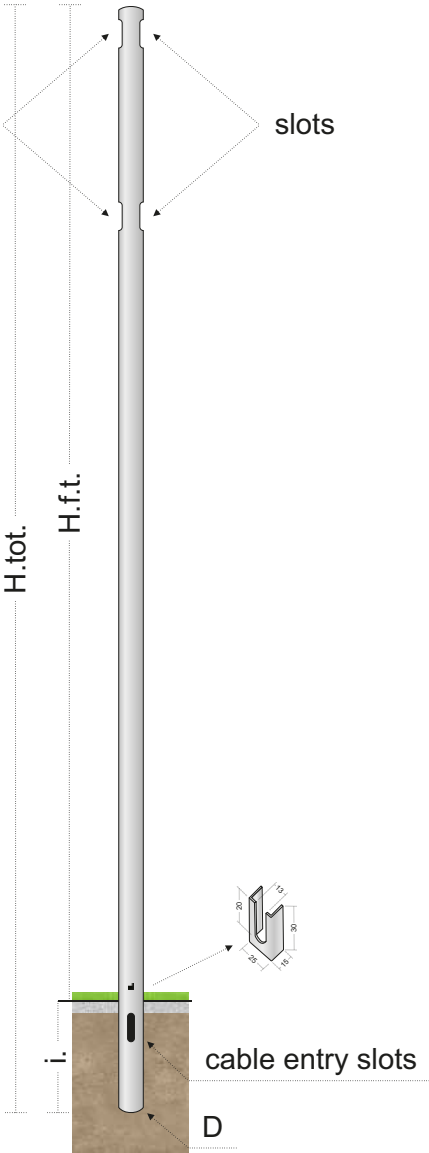
TAPERED POLES FOR TRAFFIC LIGHT SYSTEM									
Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s pipe thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R1685Z/SF	5.250	4.450	800	168	114	4+4	78	2,32	390,00
R1935Z/SF	5.250	4.450	800	193	114	4+4	88	2,53	490,00
R2195Z/SF	5.250	4.450	800	219	114	5+4+4	116	3,12	590,00
CIL10236Z/SF	3.600	3.100	500	102	102	3	28	1,15	135,00
CIL10245Z/SF	4.500	4.000	500	102	102	3	33	1,44	170,00

Curved cylindrical supports for traffic lights are made of S235JR steel, thickness 4 mm, with a protrusion ranging from 3,000 mm to a maximum of 7,000 mm and are supplied complete with welded nuts and galvanized steel bolts.

CYLINDRICAL OUTREACHES FOR TRAFFIC LIGHT SYSTEM							
Article Code	h height mm	ℓ projection mm	d diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
B10230Z/SF	1.850	3.000	102	4	44	1,44	265,00
B10235Z/SF	1.900	3.500	102	4	49	1,60	275,00
B10240Z/SF	1.950	4.000	102	4	54	1,76	285,00
B10245Z/SF	1.980	4.500	102	4	59	1,92	295,00
B10250Z/SF	2.020	5.000	102	4+3	63	2,06	305,00
B10260Z/SF	2.100	6.000	102	4+3	71	2,34	325,00
B10270Z/SF	2.200	7.000	102	4+3	79	2,62	345,00







Our poles for video surveillance systems and ZTL are built using tapered poles longitudinally induction welded, made of S235JR sheet steel (UNI EN 10219-01).

The pipes of different diameters are joined together by circumferential welding in correspondence of the tapers.

The following processes are carried out at each post:

- cable entry slot;
- application of the grounding pocket;
- slots and / or cable exit holes at different heights.

The cylindrical supports for video surveillance systems and ZTL are made of S235JR steel different diameters and thicknesses, with a protrusion ranging from 2,000 mm to a maximum of 6,000 mm.

Made on reinforced couplers for pole fixing.

Each arm is correlated with special lanyards, redances, clamps and bolts for the installation.

The galvanization of the materials is obtained by immersion in melted zinc tanks whose thickness of the zinc layer complies with the UNI EN ISO 1461 standards.

The poles are built in compliance with the UNI EN 40-5 and related standards:

Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification of characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each pole is equipped with a CE adhesive label.

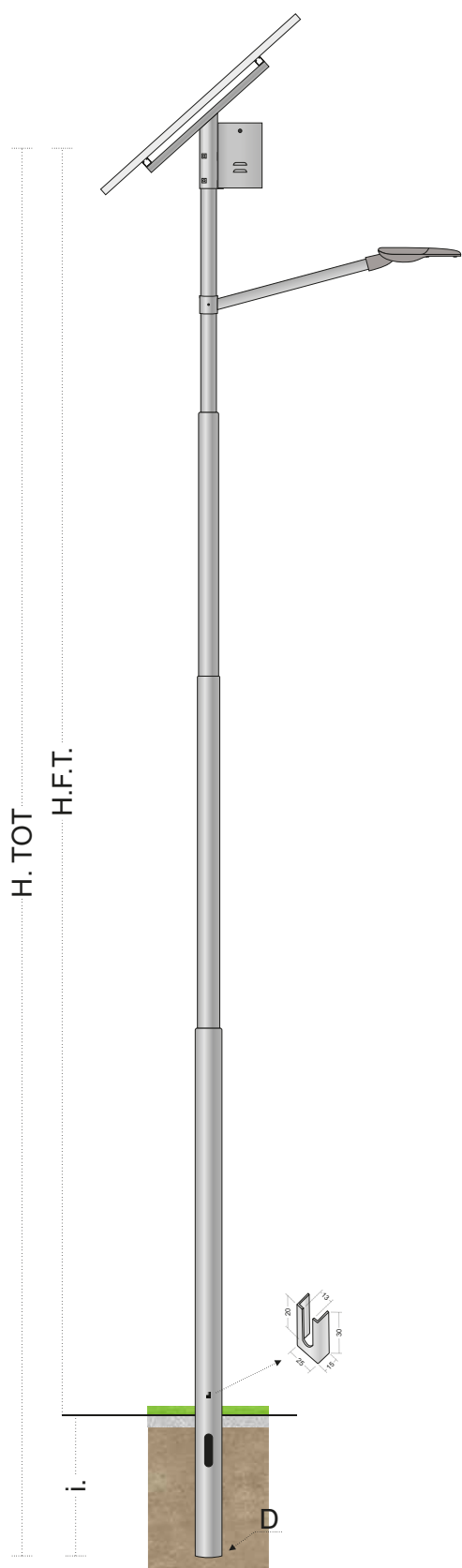
POLES FOR VIDEO SURVEILLANCE SYSTEM

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R1938ZTL	7.800	7.000	800	193	139	4	120	4,07	585,00
CIL11473Z	7.300	6.500	800	114	114	4	83	2,61	415,00

CYLINDRICAL OUTREACHES FOR THE POLE R1938ZTL

Article Code	ℓ projection mm	tie n°	d diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
B10220ZTL	2.000	----	102	4	56	0,79	625,00
B10230ZTL	3.000	1	102	4	62	1,27	640,00
B10240ZTL	4.000	1	102	4	70	1,59	700,00
B10250ZTL	5.000	2	102	4	78	1,91	730,00
B10260ZTL	6.000	2	102	4	86	2,23	745,00

Carpal has developed over the years an important experience in the field of Green Energy, succeeding today in offering countless lighting solutions. Whether you're talking about the simple pole or "island systems" (stand-alone), here are our suggestions.



SINGLE PHOTOVOLTAIC KIT

Article Code	Description	Unit Price €
KIT/FV26W	The photovoltaic kit includes: • Galvanized steel pole with variable section; • Metal support arm for the lighting body; • 26W LED luminaire; • Pole top for panel support; • 145Wp photovoltaic panel; • Battery box; • 12V battery with 100 Ah capacity; • Charge controller; • 2 Profile bars; • 4 Terminals; • Bolts. Estimated autonomy for 8 hours of operation per day: 3 days	2.185,00





DOUBLE PHOTOVOLTAIC KIT

Article Code	Description	Unit Price €
KIT/FV44W	The photovoltaic kit includes: • Galvanized steel pole with variable section; • Metal support arm for the lighting body; • 44W LED luminaire; • Pole top for panel support; • 250Wp photovoltaic panel; • 2 Battery box; • 2 12V batteries with 100 Ah capacity; • Charge controller; • 2 Profile bars; • 6 Terminals; • Bolts. Estimated autonomy for 8 hours of operation per day: 4 days	2.915,00



Our tapered poles for photovoltaic systems are made of welded pipes longitudinally induction, made of sheet steel S235JR (EN 10219-01).

The tubes, of different diameters, are joined together by circumferential welding in correspondence of the tapers.

The following processes are carried out on the same:

- cable entry slot (if required);
- application of the grounding pocket.

The galvanization of the materials is obtained by immersion in melted zinc tanks whose thickness of the zinc layer complies with the UNI EN ISO 1461 standards.

The poles are built in compliance with the UNI EN 40-5 and related standards:

Dimensions e tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification of characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each pole is equipped with a CE adhesive label.

TAPERED POLES FOR PHOTOVOLTAIC SYSTEM

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s pipe thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R1527Z/FV	6.800	6.000	800	152	89	4+4+3+3	81	2,57	349,00
R1528Z/FV	7.800	7.000	800	152	89	4+4+3+3	90	2,95	373,00
R1687Z/FV	6.800	6.000	800	168	89	4+4+3+3	88	2,74	381,00
R1688Z/FV	7.800	7.000	800	168	89	4+4+3+3	98	3,15	408,00
R1937Z/FV	6.800	6.000	800	193	114	4+4+4+3	109	3,28	521,00
R1938Z/FV	7.800	7.000	800	193	114	4+4+4+3	121	3,76	547,00

Different top diameters, only on request

FLOW SPECIFICATION OF PHOTOVOLTAIC POLES FOR INSTALLATION IN AREA 3: MAX 500 m a.s.l. (vref: 27 m sec. ⁻¹)

Article Code	Category of land			
	I	II	III	IV
R1527Z/FV	1,25	1,50	1,90	1,95
R1528Z/FV	0,90	1,10	1,40	1,90
R1687Z/FV	1,60	1,95	2,40	2,50
R1688Z/FV	1,20	1,40	1,85	1,95
R1937Z/FV	2,35	2,80	3,40	3,60
R1938Z/FV	1,75	2,10	2,70	2,85

In general, a 140 Wp photovoltaic panel develops 1.00 m² of wind-exposed surface

LED ROAD LIGHTING ZORA SERIES

LED street lighting with high efficiency optics.

Body entirely in die-cast aluminum with inclination adjustment support.

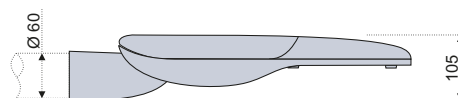
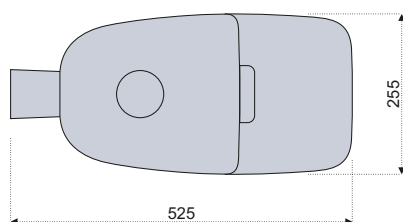
Painted with thermosetting powders in 190° oven, satin gray RAL 9007.

Watertight cable gland for Ø 9-12 mm cable, filter and anticondensation valve.

Transparent glass, 5 mm thick, tempered, resistant to impact and thermal shock.

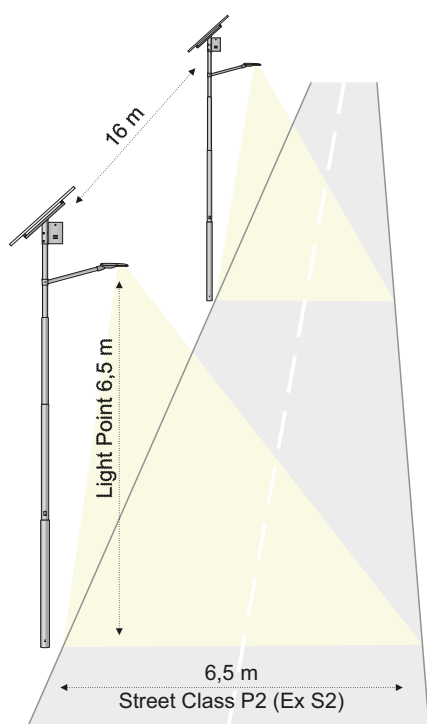
Opening without tools and with locking device for accidental closing of the shell in maintenance phase.

Reduced maintenance thanks to the average life of each LED above 100,000 hours.

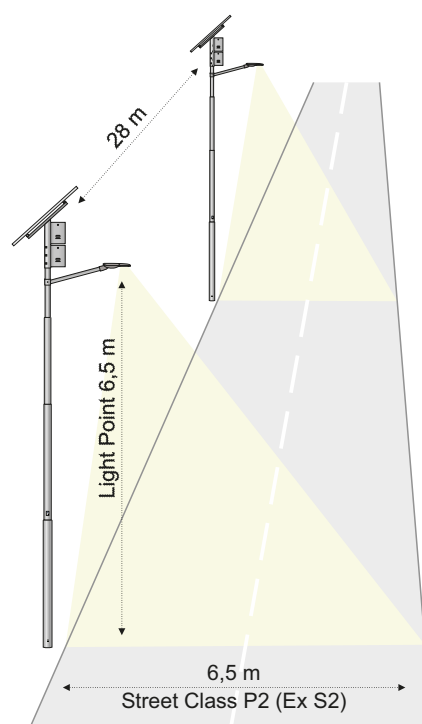


KIT/FV26W	
ZORA-S/3/40/700	3 LED
OSRAM P10 - SERIE	GW P7STA1P.PM
Photometric code	740/669
Light color	4000K
Color rendering index	72
Nominal values of the initial color coordinates and maintained over time	6
Flush maintenance code	9
Power supply	700 mA
Optical	DWC
Rated power consumption (W)	26
Nominal luminous flux LED (lumens)	3300
Nominal luminous flux (lumens)	2706
Efficiency of the LED luminaire (lumen/W)	104

KIT/FV44W	
ZORA-S/6/40/600	6 LED
OSRAM P10 - SERIE	GW P7STA1P.PM
Photometric code	740/669
Light color	4000K
Color rendering index	72
Nominal values of the initial color coordinates and maintained over time	6
Flush maintenance code	9
Power supply	600 mA
Optical	DWC
Rated power consumption (W)	44
Nominal luminous flux LED (lumens)	5808
Nominal luminous flux (lumens)	4763
Efficiency of the LED luminaire (lumen/W)	107



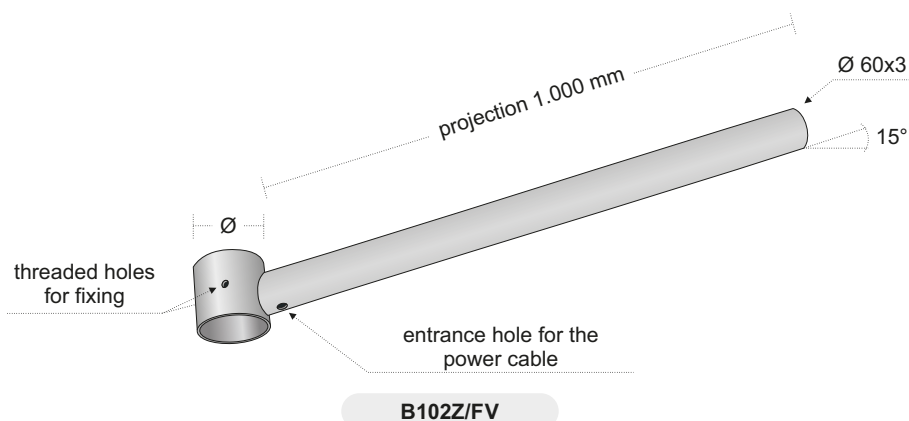
10,56 average lux



10,42 average lux

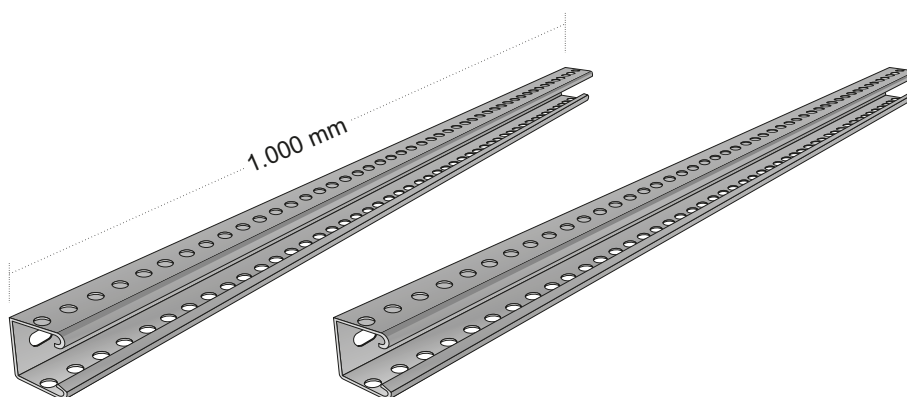
OUTREACHES FOR PHOTOVOLTAIC POLES

Article Code	Description	P galvanized weight Kg	paintable surface m ²	Unit Price €
B102Z/FV	Cylindrical Ø 60 mm outreach, made with Ø 102 mm adapter for be inserted on the poles: R1527Z/FV - R1528Z/FV - R1687Z/FV - R1688Z/FV	5,5	0,25	40,00
B127Z/FV	Cylindrical Ø 60 mm outreach, made with Ø 127 mm adapter for be inserted on the poles: R1937Z/FV - R1938Z/FV	5,5	0,29	44,00



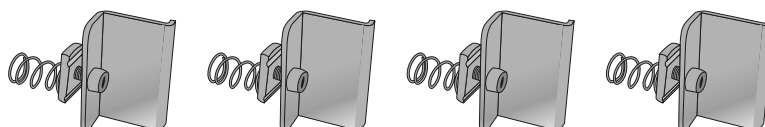
PROFILES

For each stand alone kit, 2 U profiles will be supplied. These accessories, fixed by pole-top screws, constitute the load-bearing structure of the photovoltaic panels.



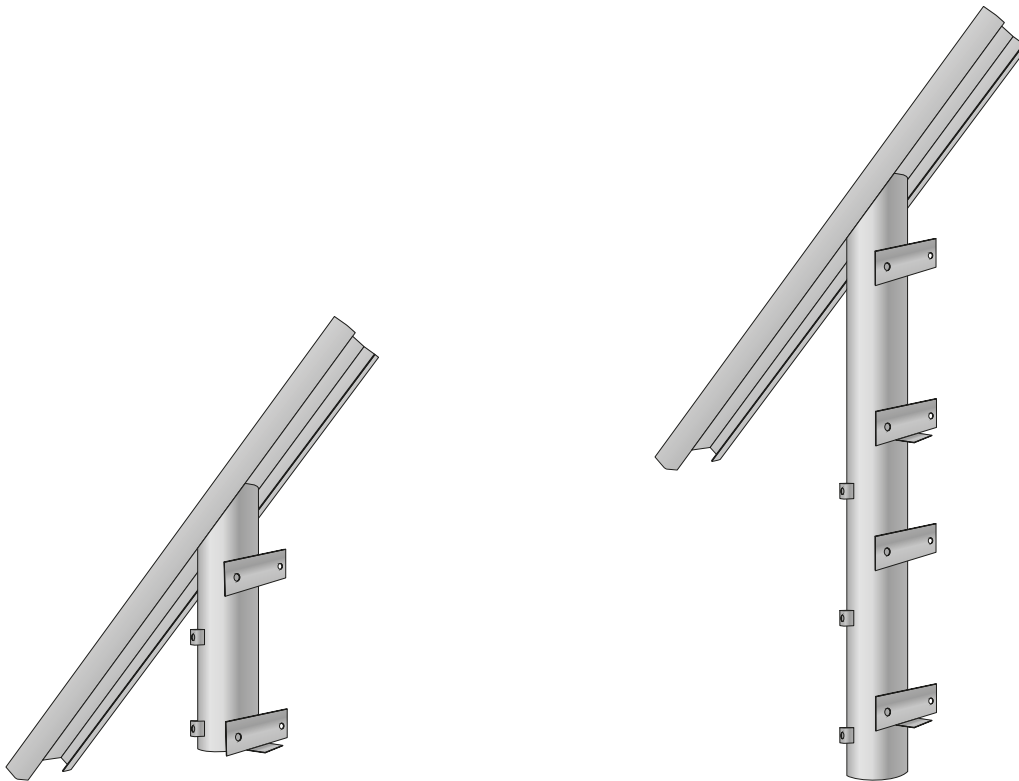
CLAMPS

For each stand-alone kit, 4 galvanized clamps will be supplied. These accessories allow the photovoltaic panel to be fixed to the profiles.



POLE-TOP

The pole-top is a simple angled structure with a cup-top grafting system. The pole-like structure, through a series of predispositions, allows the fixing of the charge regulator, pro files and battery box.



BATTERY BOX

The battery box consists of a lamellar structure equipped with dissipating slots and a lockable rear door. In this structure the battery will be positioned preserving it from the action of atmospheric agents.

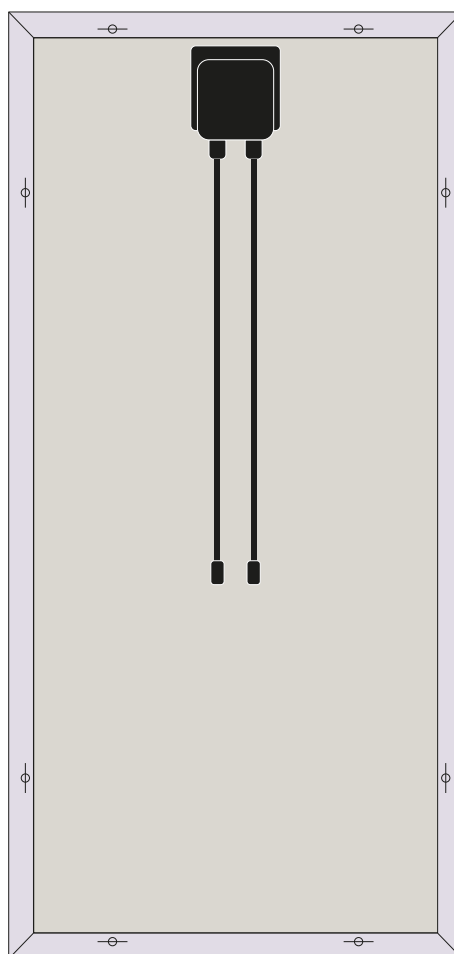
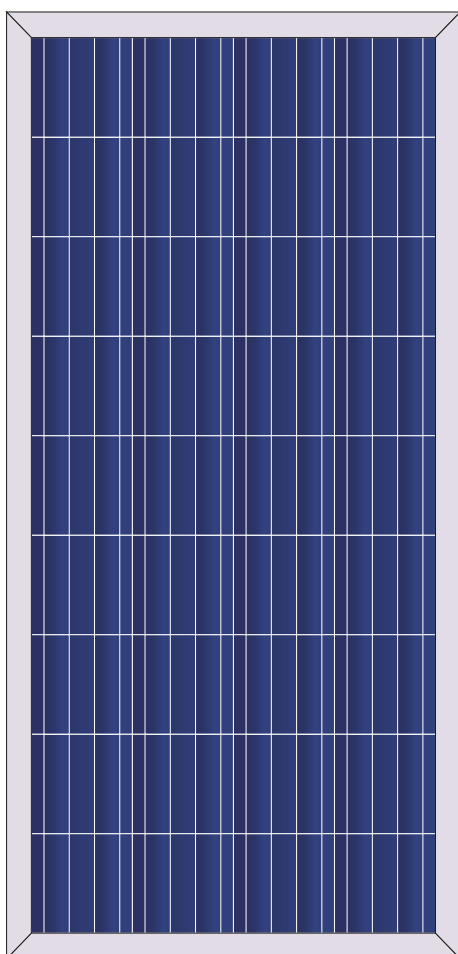


PHOTOVOLTAIC MODULES

Depending on the kit chosen, it is possible to have a 145Wp or 250Wp panel. These panels are suitable for companies and environments, as well as for big dimensions implants.

Thanks to the commitment of high quality photovoltaic cells, polycrystalline silicon modules they reach an energy yield that is above average and the search for facts continues to be reliable even in non-optimal environmental conditions.

The frame, very light but at the same time extremely resistant, facilitates installation and confer a strength to the panel.



BATTERIES



Batteries designed for optimum performance and to protect against network disturbances.

Ideal for renewable energy storage systems.

Optimized for discharges up to 20 hours.

VRLA AGM and gas recombination technology, with 99% of the recombined internal gases.

No maintenance, no topping up.

Not dangerous for transport by air / sea / rail / road. 100% recyclable.

BATTERIE - SERIE FGL

Article Code	Nominal Tension (V)	Capacity (Ah)				weig. (kg)	Dimensions (mm)				Types of terminals
		dischar. 20h 1,75V/el	dischar. 10h 1,75V/el	dischar. 5h 1,70V/el	dischar. 1,5h 1,60V/el		Lenght	Width	Height	tot. Height	
12FGL100	12	100	94	85	71	32,5	329	172	214	221	Female M6

Constant Power discharge table (Ampere)

Final tension: 1,67 V/el - Temperature: 25° C

Model	5 min	10 min	15 min	20 min	30 min	45 min	1 ora	2 ore	3 ore	5 ore	10 ore	20 ore
12FGL100	309	230	184	152	113	81,6	64,5	35,9	25,5	16,7	9,45	5,07

Constant Power discharge table (Watts per block)

Final tension: 1,67 V/el - Temperature: 25° C

Model	5 min	10 min	15 min	20 min	30 min	45 min	1 ora	2 ore	3 ore	5 ore	10 ore	20 ore
12FGL100	3240	2462	1988	1657	1240	906	718	405	289	190	109	58,5

Technical features

Grid	Obtained by gravity casting with highly pure lead-calcium-tin alloy.
Separators	Electrolyte completely absorbed in high-fiber glass separators (AGM) microporosity.
Terminal connection	Threaded insert that guarantees high conductivity and allows easy installation.
Polar sealing	High reliability polar passages, specially designed to prevent them acid infiltration in a wide temperature range.
Unidirectional safety valve	Allows excess gas to come out in the event of overcharging.
Fireproof device	Prevents sparks or flames from entering the battery.
Containers and lid	Designed with thick ABS walls for high mechanical strength.
Self-discharge	<2% per month at 20° C, allows 6 months of storage without recharging.

Reference Regulations

- IEC 60896 Part 21 - test methods for regulated batteries from valve (VRLA)
- IEC 60896 Part 22 - requirements of the VRLA
- BS 6290 Part 4 - specifications for the VRLA classification
- Certificate UL

Certifications

- ISO 9001 - Sistema di Gestione della Qualità
- ISO 14001 - Environmental Management System
- OHSAS 18001 - Safety at work and health

CHARGE CONTROLLER

The charge controller is a complete solution for the realization of photovoltaic systems, to power road sign systems, lighting systems, small users a low voltage and for recharging batteries in campers or boats.

This charge controller implements a search circuit of maximum panel power which, regardless of the battery voltage and its state of charge, always makes the work PV module at its maximum power point.

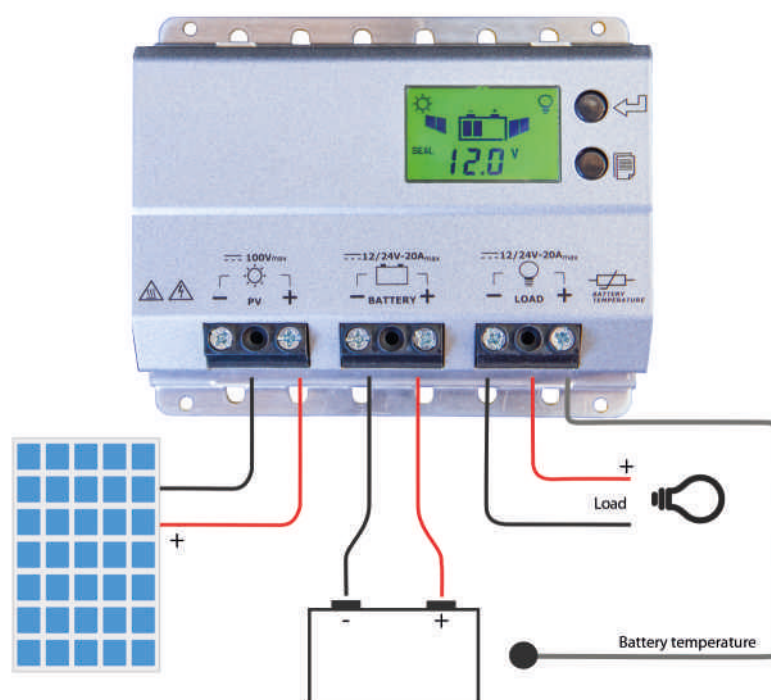
With the regulator, you can also install the cheapest modules normally used for systems connected to the network, with a number of cells different than 36 or 72.

Furthermore, it is possible to use the amorphous silicon modules normally not suitable for PWM regulators.

The Controller detects the day / night status based on the PV module voltage, so it is not additional sensors must be connected. A large display shows the operating status of the regulator, both through simple and intuitive icons, and by displaying the current value charging, the battery voltage, the energy produced by the PV module, the load current e the energy consumed by the load.

Electrical specifications and technical data

Nominal voltage of the system	12 Volt	24 Volt
Battery voltage	10/17V	20/34V
Operating temperature	da -10° C a +50° C	da -10° C a +50° C
Weight kg	0,515	0,515
Cable connectors	1 mm ²	1 mm ²
Degree of isolation	Ip20	Ip20



The poles for small windmills are supports designed for the installation of a small wind generator.

The choice of support will follow an accurate planning phase in which the dimensioning of the pole to be used will be combined with factors such as:

- size, weight and number of wind turbines;
- nominal electric power of the generator;
- characteristics of the rotor;
- working height above the ground;
- minimum and maximum speed of movement of the blades;
- installation area.

Therefore the Carpal staff is at your complete disposal to develop any request.





POLES FOR SPORTS FACILITIES AND ACCESSORIES



Our tapered poles for sport facilities are made with longitudinally welded tubes by induction, made of steel sheet S235JR (EN 10219-01).

The tubes of different diameters, are joined together by circumferential welding in matching to tapers.

Depending on the use, the poles are made workings of buried line or are applied eyebolts for the passage of ropes to support networking.

All poles are calibrated on top with stem height 180 mm and Ø 60 mm suitable for mounting of the accessories and lightings.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in compliance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each post comes with adhesive label CE.

TAPERED POLES FOR SPORTS FACILITIES

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pip diameter mm	s pipe tickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
R1688Z	8.000	7.200	800	168	89	4+4+3+3	98	3,23	408,00
R1689Z	9.000	8.200	800	168	102	4+4+3+3	108	3,82	437,00
R16810Z	10.000	9.200	800	168	89	4+4+4+3+3	124	4,03	487,00
R16811Z	11.000	10.200	800	168	89	4+4+4+3+3	134	4,44	514,00
R16812Z	12.000	11.200	800	168	89	4+4+4+3+3	149	4,84	552,00
R1938Z	8.000	7.200	800	193	114	4+4+4+3	122	3,86	547,00
R1939Z	9.000	8.200	800	193	114	4+4+4+3	133	4,34	577,00
R19310Z	10.000	9.200	800	193	102	4+4+4+3+3	133	4,63	624,00
R19311Z	11.000	10.200	800	193	102	4+4+4+3+3	147	5,09	683,00
R19312Z	12.000	11.200	800	193	114	4+4+4+3+3	162	5,78	748,00
R19313Z	13.000	12.200	800	193	114	4+4+4+3+3	171	6,27	796,00
R2198Z	8.000	7.200	800	219	114	5+4+4+4+3	148	4,18	688,00
R2199Z	9.000	8.200	800	219	114	5+4+4+4+3	165	4,71	719,00
R21910Z	10.000	9.200	800	219	114	5+4+4+4+3	176	5,23	787,00
R21911Z	11.000	10.200	800	219	114	5+4+4+4+3	193	5,75	871,00
R21912Z	12.000	11.200	800	219	114	5+4+4+4+3	202	6,27	946,00
R21913Z	13.000	12.200	800	219	114	5+4+4+4+3	215	6,80	999,00

The table below shows a series of articles for the construction of low height fences for sports facilities.

Usually the distance between the poles corresponds to the height above ground of the poles themselves.

Our cylindrical poles are made with longitudinally welded tubes by induction, made of steel sheet S235JR (EN 10219-01).

Usually for these achievements it using cylindrical tubes of small dimensions as Ø 48 mm or Ø 60 mm; supports of other diameters appear to be less recurrent but easily achievable.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in compliance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Cylindrical poles for sports facilities								
Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D/d tubolare cilindrico mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CIL483Z	3.000	2.700	300	48	3	10	0,24	44,00
CIL4833Z	3.300	3.000	300	48	3	11	0,26	51,00
CIL486Z	6.000	5.400	600	48	3	20	0,48	94,00
CIL603Z	3.000	2.700	300	60	3	13	0,30	50,00
CIL6033Z	3.300	3.000	300	60	3	14	0,33	58,00
CIL606Z	6.000	5.400	600	60	3	26	0,59	101,00



Do not forget the PVC pole closure plugs (page 98) useful to prevent water from entering the poles

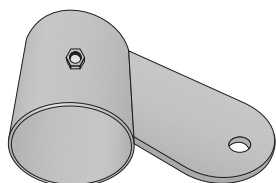
FIXING ACCESSORIES AND REINFORCEMENT DIAGONALS

These accessories allow the fastening of the reinforcement crosspieces (diagonals) to the corner posts for the enclosure of sports facilities.

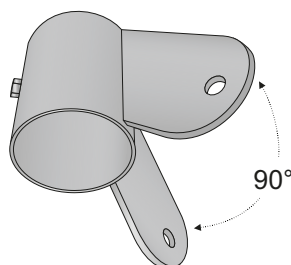
Using the aforementioned articles you will avoid strenuous and destructive operations welding on hot galvanized materials.

These accessories must be inserted from the top of the pole and lowered down placing it at the desired height.

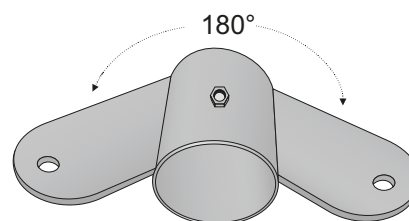
Fixing accessories and reinforcement diagonals			
Article Code	Description	paintable surface m ²	Unit Price €
FISDI1	Fixing ring for 1 diagonal	0,12	50,00
FISDI2/90	Fixing ring at 90° for 2 diagonals	0,18	65,00
FISDI2/180	Fixing ring a 180° for 2 diagonals	0,18	65,00
FISDI3/90	Fixing ring a 90° for 3 diagonals	0,24	75,00
FISDIT	Plate for diagonal fixing on the ground	0,13	50,00
DIAG896Z	Diagonal, Ø 89, lenght 6.000 mm, with ends equipped with fixing plates	1,68	185,00
DIAG897Z	Diagonal, Ø 89, lenght 7.000 mm, with ends equipped with fixing plates	1,96	215,00
DIAG898Z	Diagonal, Ø 89, lenght 8.000 mm, with ends equipped with fixing plates	2,24	245,00
DIAG899Z	Diagonal, Ø 89, lenght 9.000 mm, with ends equipped with fixing plates	2,52	275,00



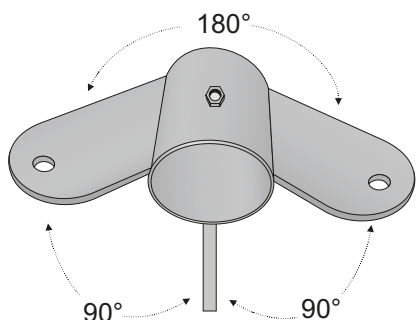
FISDI1



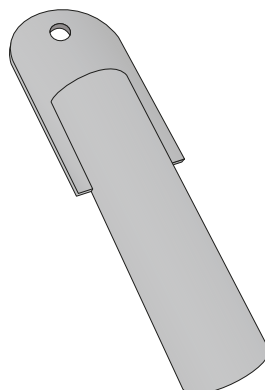
FISDI2/90



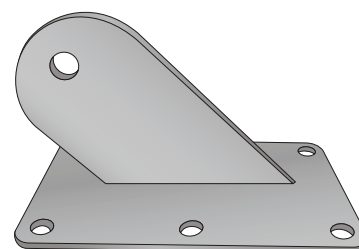
FISDI2/180



FISDI3/90



DIAG898Z



FISDIT

The straight conical poles in sheet are constructed by bending of circular trapezoid steel sheet S235JR (UNI EN 10025), then the longitudinal edges facing after bending are welded using automated certificate IIS.

Each pole is subject to the following processes:

- cable entry slot;
- application of pocket grounding;
- terminal board slot.

All poles, thanks to the taper of 10 mm/m ending at the top with a diameter of 60 mm suitable to the mounting for accessories and lighting.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in compliance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each post comes with adhesive label CE.



C3148Z



CONICAL STRAIGHT POLES "thickness 3 mm"

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
C3095Z	3.500	3.000	500	95	60	3	21	0,85	127,00
C3100Z	4.000	3.500	500	100	60	3	25	1,00	139,00
C3105Z	4.500	4.000	500	105	60	3	28	1,17	152,00
C3110Z	5.000	4.500	500	110	60	3	32	1,33	165,00
C3115Z	5.500	5.000	500	115	60	3	37	1,51	178,00
C3120Z	6.000	5.500	500	120	60	3	41	1,70	197,00
C3128Z	6.800	6.000	800	128	60	3	48	2,01	221,00
C3138Z	7.800	7.000	800	138	60	3	58	2,42	259,00
C3148Z	8.800	8.000	800	148	60	3	69	2,87	298,00
C3153Z	9.300	8.500	800	153	60	3	75	3,11	317,00
C3158Z	9.800	9.000	800	158	60	3	81	3,35	336,00
C3163Z	10.300	9.500	800	163	60	3	87	3,61	361,00
C3168Z	10.800	10.000	800	168	60	3	93	3,87	388,00
C3173Z	11.300	10.500	800	173	60	3	100	4,13	409,00
C3178Z	11.800	11.000	800	178	60	3	106	4,41	433,00
C3183Z	12.300	11.500	800	183	60	3	113	4,69	455,00
C3188Z	12.800	12.000	800	188	60	3	121	4,98	481,00

CONICAL STRAIGHT POLES "thickness 4 mm"

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
C4095Z	3.500	3.000	500	95	60	4	27	0,85	146,00
C4100Z	4.000	3.500	500	100	60	4	32	1,00	162,00
C4105Z	4.500	4.000	500	105	60	4	37	1,17	179,00
C4110Z	5.000	4.500	500	110	60	4	42	1,33	195,00
C4115Z	5.500	5.000	500	115	60	4	48	1,51	225,00
C4120Z	6.000	5.500	500	120	60	4	54	1,70	240,00
C4128Z	6.800	6.000	800	128	60	4	63	2,01	271,00
C4138Z	7.800	7.000	800	138	60	4	77	2,42	315,00
C4148Z	8.800	8.000	800	148	60	4	91	2,87	364,00
C4153Z	9.300	8.500	800	153	60	4	99	3,11	388,00
C4158Z	9.800	9.000	800	158	60	4	107	3,35	412,00
C4163Z	10.300	9.500	800	163	60	4	114	3,61	445,00
C4168Z	10.800	10.000	800	168	60	4	123	3,87	473,00
C4173Z	11.300	10.500	800	173	60	4	131	4,13	501,00
C4178Z	11.800	11.000	800	178	60	4	141	4,41	530,00
C4183Z	12.300	11.500	800	183	60	4	149	4,69	563,00
C4188Z	12.800	12.000	800	188	60	4	160	4,98	595,00

STRAIGHT CONICAL POLES - net performance in m² useful flow rate at the top "thickness 3 mm"

Article Code	Zone 1: max 1.000 m asl Zone 2: max 750 m asl				Zone 3: max 500 m asl				Zone 4: max 500 m asl Zone 5: max 750 m asl Zone 6: max 500 m asl				Zone 7: max 1.000 m asl				Zone 8: max 1.500 m asl Zone 9: max 500 m asl			
	Vref = 25 m sec. ⁻¹				Vref = 27 m sec. ⁻¹				Vref = 28 m sec. ⁻¹				Vref = 29 m sec. ⁻¹				Vref = 31 m sec. ⁻¹			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
C3095Z	0,88	1,02	1,12	1,17	0,76	0,88	0,97	1,01	0,70	0,82	0,90	0,94	0,66	0,77	0,84	0,88	0,57	0,67	0,74	0,77
C3100Z	0,77	0,92	1,01	1,06	0,65	0,79	0,87	0,91	0,61	0,73	0,81	0,85	0,56	0,68	0,75	0,79	0,49	0,60	0,66	0,69
C3105Z	0,67	0,83	0,92	0,96	0,57	0,71	0,79	0,82	0,54	0,66	0,73	0,77	0,49	0,61	0,68	0,71	0,42	0,50	0,59	0,62
C3110Z	0,60	0,75	0,86	0,90	0,51	0,63	0,73	0,77	0,47	0,59	0,68	0,71	0,44	0,55	0,63	0,66	0,38	0,47	0,55	0,58
C3115Z	0,54	0,67	0,80	0,83	0,46	0,57	0,67	0,71	0,42	0,52	0,62	0,67	0,40	0,49	0,58	0,61	0,33	0,42	0,50	0,53
C3120Z	0,50	0,62	0,76	0,80	0,42	0,52	0,60	0,67	0,38	0,48	0,59	0,62	0,35	0,44	0,55	0,58	0,30	0,39	0,47	0,50
C3128Z	0,42	0,53	0,67	0,71	0,35	0,44	0,56	0,59	0,32	0,41	0,52	0,55	0,29	0,37	0,47	0,50	0,25	0,32	0,41	0,43
C3138Z	0,36	0,46	0,64	0,66	0,30	0,38	0,52	0,55	0,27	0,34	0,47	0,50	0,24	0,31	0,43	0,46	0,20	0,26	0,36	0,38
C3148Z	0,32	0,41	0,60	0,63	0,26	0,33	0,48	0,52	0,22	0,30	0,44	0,47	0,20	0,27	0,40	0,43	0,17	0,22	0,33	0,35
C3153Z	0,31	0,40	0,58	0,63	0,24	0,32	0,47	0,51	0,22	0,28	0,42	0,45	0,19	0,26	0,38	0,42	0,16	0,21	0,30	0,35
C3158Z	0,23	0,31	0,45	0,49	0,18	0,24	0,35	0,40	0,16	0,22	0,33	0,36	0,14	0,19	0,29	0,33	0,11	0,14	0,24	0,27
C3163Z	0,27	0,35	0,52	0,59	0,20	0,27	0,42	0,48	0,12	0,18	0,29	0,38	0,16	0,22	0,34	0,38	-----	0,11	0,20	0,27
C3168Z	0,20	0,27	0,42	0,54	0,14	0,20	0,33	0,42	0,12	0,18	0,29	0,38	0,11	0,15	0,25	0,34	-----	0,11	0,20	0,27
C3173Z	0,23	0,31	0,47	0,56	0,18	0,23	0,37	0,45	0,15	0,21	0,33	0,40	0,12	0,18	0,30	0,36	0,10	0,14	0,24	0,29
C3178Z	0,22	0,30	0,45	0,55	0,16	0,23	0,36	0,44	0,14	0,20	0,32	0,39	0,12	0,17	0,28	0,35	0,09	0,13	0,22	0,28
C3183Z	0,21	0,28	0,43	0,52	0,15	0,21	0,34	0,42	0,13	0,18	0,30	0,38	0,11	0,16	0,26	0,34	-----	0,12	0,21	0,27
C3188Z	0,20	0,27	0,41	0,52	0,14	0,20	0,32	0,42	0,12	0,17	0,28	0,37	0,10	0,15	0,25	0,33	-----	0,11	0,19	0,26

STRAIGHT CONICAL POLES - net performance in m² useful flow rate at the top "thickness 4 mm"

Article Code	Zone 1: max 1.000 m asl Zone 2: max 750 m asl				Zone 3: max 500 m asl				Zone 4: max 500 m asl Zone 5: max 750 m asl Zone 6: max 500 m asl				Zone 7: max 1.000 m asl				Zone 8: max 1.500 m asl Zone 9: max 500 m asl			
	Vref = 25 m sec. ⁻¹				Vref = 27 m sec. ⁻¹				Vref = 28 m sec. ⁻¹				Vref = 29 m sec. ⁻¹				Vref = 31 m sec. ⁻¹			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
C4095Z	1,16	1,34	1,47	1,54	1,00	1,16	1,27	1,33	0,93	1,08	1,19	1,24	0,87	1,01	1,11	1,16	0,76	0,88	0,97	1,02
C4100Z	0,87	0,06	1,16	1,21	0,87	1,05	1,16	1,21	0,81	0,95	1,08	1,13	0,76	0,91	1,01	1,05	0,66	0,80	0,88	0,92
C4105Z	0,92	0,14	1,26	1,32	0,79	0,98	1,08	1,13	0,73	0,91	1,01	1,06	0,68	0,85	0,94	0,97	0,59	0,74	0,82	0,86
C4110Z	0,83	0,03	1,17	1,23	0,71	0,89	0,01	1,06	0,66	0,82	0,94	0,98	0,61	0,76	0,87	0,91	0,53	0,66	0,76	0,80
C4115Z	0,78	0,96	1,13	1,18	0,66	0,82	0,97	1,01	0,61	0,76	0,90	0,94	0,57	0,70	0,83	0,87	0,49	0,61	0,73	0,76
C4120Z	0,73	0,90	1,09	1,15	0,62	0,77	0,93	0,98	0,57	0,71	0,86	0,91	0,53	0,65	0,80	0,84	0,46	0,57	0,70	0,73
C4128Z	0,63	0,79	0,99	1,03	0,54	0,67	0,84	0,88	0,50	0,62	0,78	0,82	0,46	0,57	0,72	0,76	0,39	0,49	0,62	0,65
C4138Z	0,58	0,71	0,95	0,99	0,48	0,60	0,80	0,85	0,44	0,55	0,73	0,77	0,41	0,51	0,68	0,71	0,35	0,43	0,58	0,61
C4148Z	0,53	0,65	0,92	0,97	0,44	0,55	0,77	0,81	0,40	0,50	0,70	0,75	0,36	0,46	0,64	0,68	0,31	0,39	0,55	0,58
C4153Z	0,51	0,64	0,89	0,96	0,42	0,53	0,74	0,81	0,38	0,48	0,68	0,74	0,35	0,44	0,62	0,68	0,29	0,37	0,53	0,57
C4158Z	0,49	0,62	0,86	0,95	0,40	0,51	0,73	0,79	0,36	0,46	0,65	0,73	0,33	0,42	0,60	0,67	0,28	0,35	0,50	0,56
C4163Z	0,48	0,60	0,83	0,94	0,39	0,49	0,69	0,78	0,35	0,44	0,63	0,72	0,32	0,40	0,58	0,66	0,26	0,33	0,48	0,55
C4168Z	0,46	0,58	0,81	0,93	0,38	0,47	0,67	0,78	0,34	0,43	0,61	0,71	0,31	0,39	0,56	0,64	0,25	0,32	0,47	0,55
C4173Z	0,45	0,56	0,79	0,92	0,36	0,45	0,65	0,76	0,32	0,41	0,60	0,70	0,29	0,37	0,54	0,64	0,24	0,31	0,45	0,53
C4178Z	0,43	0,55	0,76	0,90	0,35	0,44	0,62	0,75	0,31	0,39	0,57	0,68	0,28	0,36	0,52	0,62	0,23	0,30	0,43	0,52
C4183Z	0,42	0,53	0,74	0,90	0,34	0,43	0,61	0,74	0,30	0,38	0,55	0,68	0,27	0,35	0,50	0,62	0,23	0,29	0,42	0,52
C4188Z	0,39	0,49	0,69	0,85	0,31	0,40	0,56	0,70	0,28	0,36	0,51	0,64	0,26	0,32	0,47	0,58	0,21	0,27	0,39	0,49

STRAIGHT CONICAL POLES - in configuration with single outreach (BS series, see page 84)

Article Code	Zone 1: max 1.000 m asl Zone 2: max 750 m asl				Zone 3: max 500 m asl				Zone 4: max 500 m asl Zone 5: max 750 m asl Zone 6: max 500 m asl				Zone 7: max 1.000 m asl				Zone 8: max 1.500 m asl Zone 9: max 500 m asl			
	Vref = 25 m sec. ⁻¹				Vref = 27 m sec. ⁻¹				Vref = 28 m sec. ⁻¹				Vref = 29 m sec. ⁻¹				Vref = 31 m sec. ⁻¹			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
C3128Z	1015	1515	2015	2015	-----	1015	2015	2015	-----	1010	1015	2015	-----	1010	1015	1515	-----	-----	1010	1015
C3138Z	1010	1515	2015	2015	-----	1010	2015	2015	-----	1010	1515	2015	-----	-----	1015	1015	-----	-----	1010	1015
C3148Z	1010	1515	2015	2015	-----	1010	2015	2015	-----	-----	1515	1515	-----	-----	1015	1515	-----	-----	1010	1010
C3153Z	-----	1015	2015	2015	-----	-----	1515	2015	-----	-----	1015	1515	-----	-----	1010	1015	-----	-----	-----	1010
C3158Z	-----	1015	2015	2015	-----	-----	1515	2015	-----	-----	1015	1515	-----	-----	1010	1015	-----	-----	-----	1010
C3163Z	-----	1010	2015	2015	-----	-----	1015	2015	-----	-----	1010	1515	-----	-----	1010	1015	-----	-----	-----	1010
C3168Z	-----	1010	2015	2015	-----	-----	1015	2015	-----	-----	1010	1515	-----	-----	1010	1015	-----	-----	-----	1010
C3173Z	-----	1010	2015	2015	-----	-----	1015	2015	-----	-----	1010	1515	-----	-----	-----	1015	-----	-----	-----	1010
C3178Z	-----	1010	2015	2015	-----	-----	1015	2015	-----	-----	1010	1515	-----	-----	-----	1015	-----	-----	-----	1010
C3183Z	-----	1010	1515	2015	-----	-----	1010	1515	-----	-----	1010	1015	-----	-----	-----	1015	-----	-----	-----	-----
C3188Z	-----	-----	1015	1515	-----	-----	-----	1015	-----	-----	-----	1010	-----	-----	-----	1010	-----	-----	-----	-----
C4128Z	2015	2020	2020	2020	1515	2015	2020	2020	1015	2015	2020	2020	1015	2015	2020	2020	1010	1015	2015	2015
C4138Z	2015	2020	2020	2020	1515	2015	2020	2020	1015	2015	2020	2020	1015	1515	2020	2020	1010	1015	2015	2020
C4148Z	2015	2020	2020	2020	1515	2015	2020	2020	1015	2015	2020	2020	1010	1515	2020	2020	1010	1015	2015	2020
C4153Z	2015	2020	2020	2020	1015	2015	2020	2020	1015	1515	2020	2020	1010	1515	2020	2020	-----	1010	2015	2020
C4158Z	2015	2020	2020	2020	1015	2015	2020	2020	1015	1515	2020	2020	1010	1515	2020	2020	-----	1010	2015	2020
C4163Z	2015	2020	2020	2020	1015	2015	2020	2020	1015	1515	2020	2020	1010	1515	2020	2020	-----	1010	2015	2020
C4168Z	2015	2020	2020	2020	1015	2015	2020	2020	1015	1515	2020	2020	1010	1515	2020	2020	-----	1010	2015	2020
C4173Z	1515	2020	2020	2020	1015	2015	2020	2020	1010	1515	2020	2020	1010	1015	1515	2020	-----	1010	2015	2020
C4178Z	1515	2020	2020	2020	1015	2015	2020	2020	1010	1515	2020	2020	1010	1015	1515	2020	-----	1010	2015	2020
C4183Z	1515	2015	2020	2020	1015	1515	2020	2020	1010	1515	2020	2020	1010	1015	1515	2015	-----	1010	1515	2020
C4188Z	1515	2015	2020	2020	1015	1515	2020	2020	1010	1515	2020	2020	1010	1015	1515	2015	-----	1010	1515	2020

Considering the application of 1 street lighting armor of 0.12m²

STRAIGHT CONICAL POLES - in configuration with double outreach (BD series, see page 84)

Article Code	Zone 1: max 1.000 m asl Zone 2: max 750 m asl				Zone 3: max 500 m asl				Zone 4: max 500 m asl Zone 5: max 750 m asl Zone 6: max 500 m asl				Zone 7: max 1.000 m asl				Zone 8: max 1.500 m asl Zone 9: max 500 m asl			
	Vref = 25 m sec. ⁻¹				Vref = 27 m sec. ⁻¹				Vref = 28 m sec. ⁻¹				Vref = 29 m sec. ⁻¹				Vref = 31 m sec. ⁻¹			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
C3128Z	-----	1015	1515	1515	-----	-----	1015	1015	-----	-----	1015	1015	-----	-----	1010	1010	-----	-----	-----	-----
C3138Z	-----	1010	1515	1515	-----	-----	1015	1015	-----	-----	1010	1010	-----	-----	-----	1010	-----	-----	-----	-----
C3148Z	-----	-----	1515	1515	-----	-----	1010	1015	-----	-----	-----	1010	-----	-----	-----	-----	-----	-----	-----	-----
C3153Z	-----	-----	1515	1515	-----	-----	1010	1010	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C3158Z	-----	-----	1015	1515	-----	-----	-----	1010	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C3163Z	-----	-----	1010	1515	-----	-----	-----	1010	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C3168Z	-----	-----	1010	151	-----	-----	-----	1010	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C3173Z	-----	-----	1010	1015	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C3178Z	-----	-----	-----	1015	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C3183Z	-----	-----	-----	1015	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C3188Z	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
C4128Z	1015	1515	1520	2020	1515	1015	1515	1515	-----	1015	1515	1515	-----	1010	1015	1515	-----	-----	1015	1015
C4138Z	1010	1515	1520	2020	1515	1015	1520	1520	-----	1010	1515	1515	-----	-----	1015	1515	-----	-----	1015	1015
C4148Z	1010	1015	1520	2020	1515	1010	1515	1520	-----	-----	1515	1515	-----	-----	1015	1515	-----	-----	1015	1015
C4153Z	-----	1015	1520	2020	1015	1010	1515	1520	-----	-----	1015	1515	-----	-----	1015	1515	-----	-----	1010	1015
C4158Z	-----	1015	1520	2020	1015	1010	1515	1520	-----	-----	1015	1515	-----	-----	1015	1515	-----	-----	1010	1015
C4163Z	-----	1015	1520	2020	1015	-----	1015	1520	-----	-----	1015	1515	-----	-----	1010	1015	-----	-----	-----	-----
C4168Z	-----	1015	1520	2020	1015	-----	1015	1520	-----	-----	1015	1515	-----	-----	1010	1015	-----	-----	-----	-----
C4173Z	-----	1010	1520	2020	1015	-----	1015	1520	-----	-----	1015	1515	-----	-----	1010	1015	-----	-----	-----	-----
C4178Z	-----	1010	1520	1520	1015	-----	1015	1520	-----	-----	1015	1515	-----	-----	1010	1015	-----	-----	-----	-----
C4183Z	-----	1010	1520	1520	1015	-----	1015	1515	-----	-----	1010	1515	-----	-----	1010	1015	-----	-----	-----	-----
C4188Z	-----	1010	1520	1520	1015	-----	1015	1515	-----	-----	1010	1515	-----	-----	1010	1015	-----	-----	-----	-----

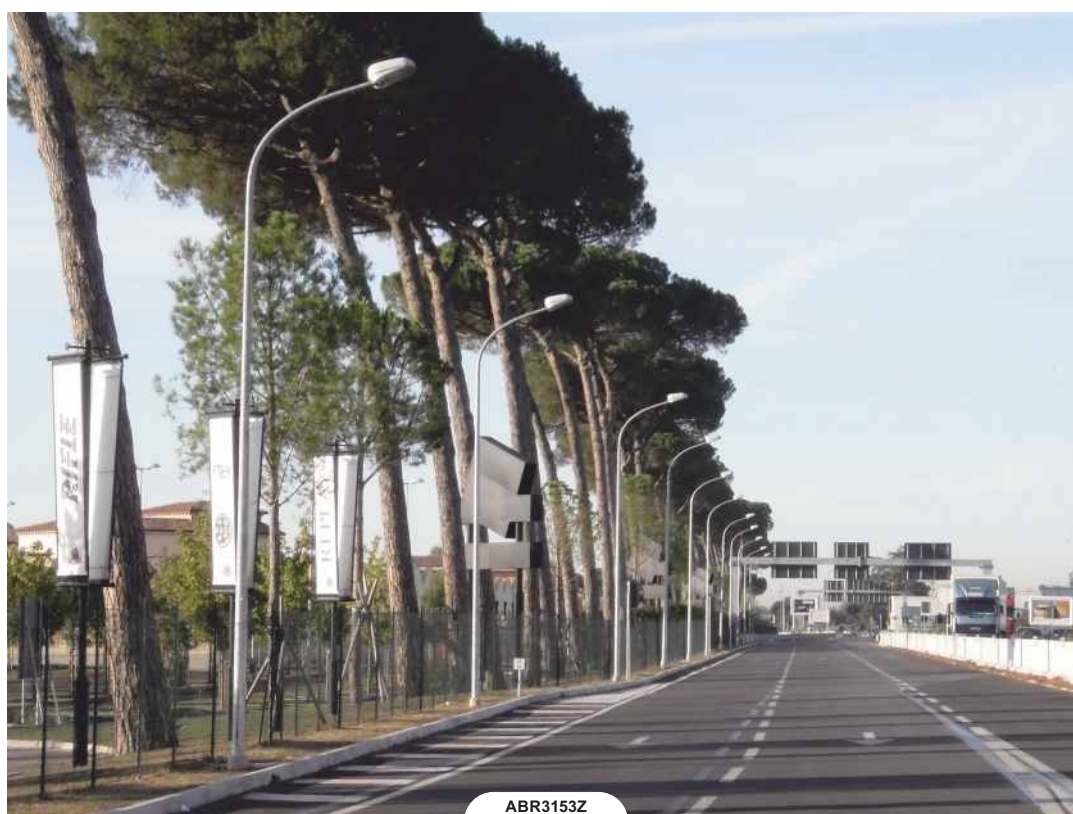
Considering the application of 2 street lighting armor of 0.12m² each

Each box contains a numeric code consisting of 4 digits, the first two indicate the height of the arm while the second two indicate the protrusion



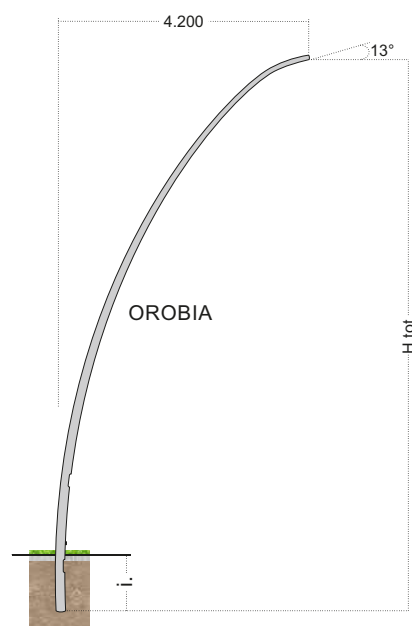
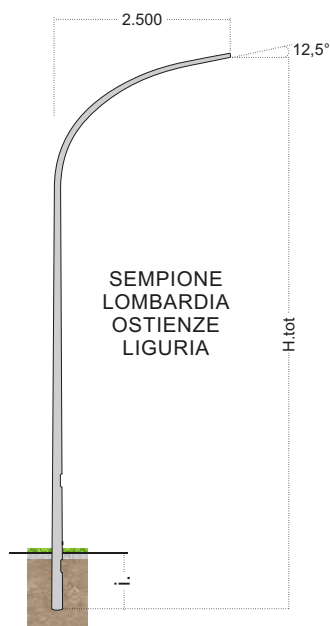
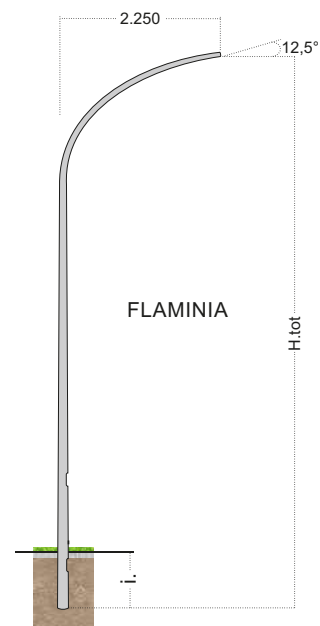
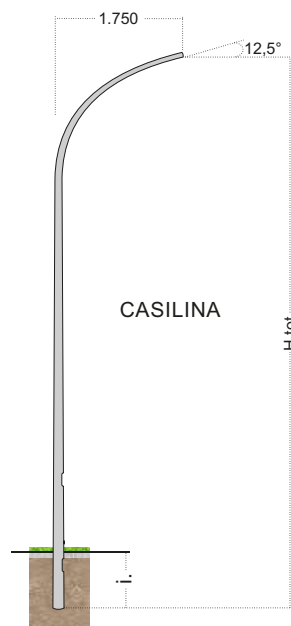
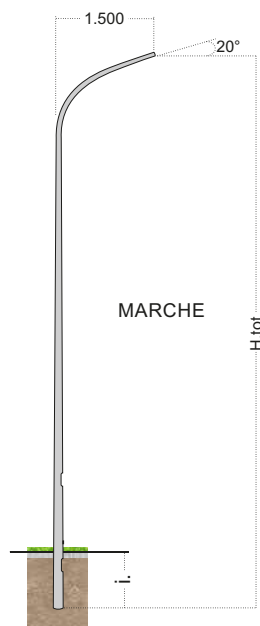
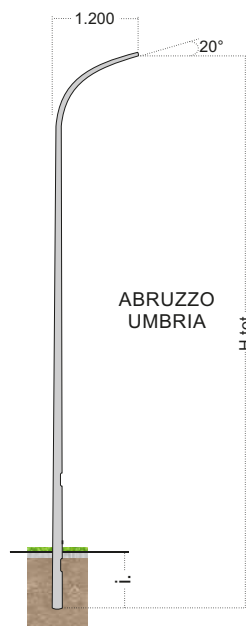
CONICAL CURVED POLES

Article Code	H.tot. total height mm	H.f.t. over land height mm	La sporgenza braccio mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CAS3148Z	7.800	7.000	1.750	800	148	60	3	69	2,87	348,00
FLA3153Z	8.000	7.200	2.250	800	153	60	3	75	3,11	372,00
ABR3153Z	8.600	7.800	1.200	800	153	60	3	75	3,11	372,00
SEM3163Z	9.100	8.300	2.700	800	163	60	3	87	3,61	421,00
UMB3163Z	9.600	8.800	1.200	800	163	60	3	87	3,61	421,00
OST3173Z	9.800	9.000	2.500	800	173	60	3	100	4,13	474,00
LOM3173Z	10.100	9.300	2.700	800	173	60	3	100	4,13	474,00
MAR3173Z	10.400	9.600	1.500	800	173	60	3	100	4,13	474,00
LIG3183Z	11.100	10.300	2.700	800	183	60	3	113	4,69	525,00
CAS4148Z	7.800	7.000	1.750	800	148	60	4	91	2,87	414,00
FLA4153Z	8.000	7.200	2.250	800	153	60	4	99	3,11	443,00
ABR4153Z	8.600	7.800	1.200	800	153	60	4	99	3,11	443,00
SEM4163Z	9.100	8.300	2.700	800	163	60	4	114	3,61	505,00
ORO4168Z	9.300	8.500	4.200	800	168	60	4	123	3,87	593,00
UMB4163Z	9.600	8.800	1.200	800	163	60	4	114	3,61	505,00
OST4173Z	9.800	9.000	2.500	800	173	60	4	131	4,13	566,00
CIL4188Z	9.800	9.000	2.900	800	188	60	4	160	4,98	715,00
LOM4173Z	10.100	9.300	2.700	800	173	60	4	131	4,13	566,00
MAR4173Z	10.400	9.600	1.500	800	173	60	4	131	4,13	566,00
LIG4183Z	11.100	10.300	2.700	800	183	60	4	149	4,69	633,00



ABR3153Z

These conical poles are suitable for the application of a 0.12 m² street lighting armor



Our tapered straight laminates poles are obtained by hot rolling of steel tubes UNI EN 10025 welded IN high frequency "ERW (Electrical Resistance Welded)" UNI EN 10217. The lamination/rotation pressing tube contents at a temperature around 700° C, the processing is fully managed CNC.

The poles are made of steel S275JR.

The lamination process allows to obtain a pole without external weld beads.

At each pole, the following operations are performed:

- cable entry slot;
- application of pocket grounding;
- terminal board slot.

All poles ending on top with Ø 60 mm suitable for mounting accessories and illuminating.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in accordance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

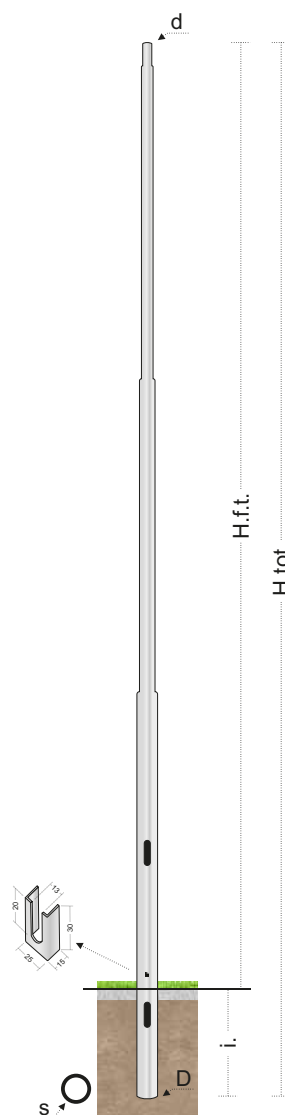
Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each post comes with adhesive label CE.



TAPERED STRAIGHT POLES HOT ROLLED IN HSP



TAPERED STRAIGHT POLES HOT ROLLED IN HSP

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d summit diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
RL8940Z	4.000	3.500	500	89	60	3,2	26	1,01	172,00
RL8945Z	4.500	4.000	500	89	60	3,2	30	1,13	200,00
RL8950Z	5.000	4.500	500	89	60	3,2	33	1,27	218,00
RL8960Z	6.000	5.500	500	89	60	3,2	39	1,52	247,00
RL10260Z	6.000	5.500	500	102	60	3,2	46	1,65	266,00
RL11460Z	6.000	5.500	500	114	60	3,4	50	1,83	299,00
RL12770Z	7.000	6.200	800	127	60	3,6	68	2,34	394,00
RL12780Z	8.000	7.200	800	127	60	3,6	78	2,68	434,00
RL12790Z	9.000	8.200	800	127	60	3,6	88	3,01	488,00
RL127100Z	10.000	9.200	800	127	60	3,6	97	3,35	538,00
RL13970Z	7.000	6.200	800	139	60	3,8	80	2,61	437,00
RL13980Z	8.000	7.200	800	139	60	3,8	92	3,00	479,00
RL13990Z	9.000	8.200	800	139	60	3,8	104	3,36	552,00
RL139100Z	10.000	9.200	800	139	60	3,8	115	3,73	614,00
RL139110Z	11.000	10.200	800	139	60	3,8	127	4,10	662,00
RL15280Z	8.000	7.200	800	152	60	4	106	3,16	539,00
RL15290Z	9.000	8.200	800	152	60	4	119	3,56	627,00
RL152100Z	10.000	9.200	800	152	60	4	132	4,06	686,00
RL152110Z	11.000	10.200	800	152	60	4	145	4,35	746,00
RL152120Z	12.000	11.200	800	152	60	4	159	4,74	850,00
RL16880Z	8.000	7.200	800	168	60	4	118	3,51	594,00
RL16890Z	9.000	8.200	800	168	60	4	133	3,95	684,00
RL168100Z	10.000	9.200	800	168	60	4	148	4,39	784,00
RL168110Z	11.000	10.200	800	168	60	4	163	4,83	848,00
RL168120Z	12.000	11.200	800	168	60	4	178	5,27	924,00
RL168130Z	13.000	12.000	1.000	168	60	4	193	5,93	965,00

Our conical poles straight laminates are obtained by hot rolling of steel tubes UNI EN 10025 high frequency welded "E.R.W. (Electrical Resistance Welded)" UNI EN 10217. The lamination / rotation pressing of the tube contents at a temperature around 700° C, the processing is fully managed CNC. The poles are made of steel S275JR. The lamination process allows to obtain a pole without external weld beads.

At each pole, the following operations are performed:

- cable entry slot;
- application of pocket grounding;
- terminal board slot.

All poles ending on top with Ø 60 mm suitable for mounting accessories and illuminating.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in accordance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

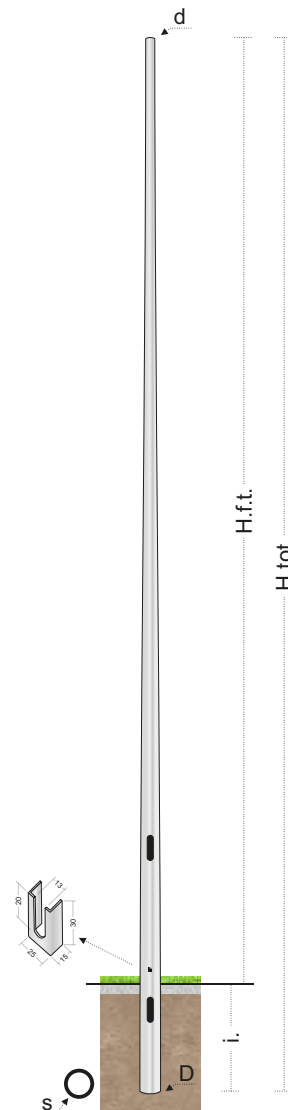
Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each post comes with adhesive label CE.



CONICAL STRAIGHT POLES HOT ROLLED IN HSP



CONICAL STRAIGHT POLES HOT ROLLED IN HSP									
Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CL8935Z	3.500	3.000	500	89	60	3,2	24	0,82	159,00
CL8940Z	4.000	3.500	500	89	60	3,2	27	0,98	181,00
CL8945Z	4.500	4.000	500	89	60	3,2	31	1,05	197,00
CL8952Z	5.200	4.700	500	89	60	3,2	35	1,26	225,00
CL8960Z	6.000	5.500	500	89	60	3,2	40	1,40	240,00
CL10260Z	6.000	5.500	500	102	60	3,2	46	1,53	263,00
CL11460Z	6.000	5.500	500	114	60	3,4	51	1,72	302,00
CL11468Z	6.800	6.000	800	114	60	3,4	58	1,94	333,00
CL11478Z	7.800	7.000	800	114	60	3,4	69	2,13	373,00
CL11488Z	8.800	8.000	800	114	60	3,4	74	2,40	416,00
CL11493Z	9.300	8.500	800	114	60	3,4	79	2,63	443,00
CL12768Z	6.800	6.000	800	127	60	3,6	68	2,15	365,00
CL12778Z	7.800	7.000	800	127	60	3,6	78	2,45	422,00
CL12788Z	8.800	8.000	800	127	60	3,6	87	2,75	444,00
CL12793Z	9.300	8.500	800	127	60	3,6	92	2,90	521,00
CL12798Z	9.800	9.000	800	127	60	3,6	97	3,05	551,00
CL127103Z	10.300	9.500	800	127	60	3,6	102	3,20	582,00
CL127108Z	10.800	10.000	800	127	60	3,6	107	3,35	598,00
CL127113Z	11.300	10.500	800	127	60	3,6	112	3,50	631,00
CL13978Z	7.800	7.000	800	139	60	3,8	87	2,44	461,00
CL13988Z	8.800	8.000	800	139	60	3,8	98	2,93	527,00
CL13993Z	9.300	8.500	800	139	60	3,8	104	3,09	574,00
CL13998Z	9.800	9.000	800	139	60	3,8	109	3,25	613,00
CL139103Z	10.300	9.500	800	139	60	3,8	115	3,42	651,00
CL139108Z	10.800	10.000	800	139	60	3,8	120	3,58	662,00
CL139113Z	11.300	10.800	800	139	60	3,8	126	3,74	686,00
CL139123Z	12.300	11.500	800	139	60	3,8	136	4,06	790,00
CL139128Z	12.800	12.000	800	139	60	3,8	142	4,22	805,00
CL15298Z	9.800	9.000	800	152	60	4	144	3,82	700,00
CL152108Z	10.800	10.000	800	152	60	4	158	4,20	768,00
CL152128Z	12.800	12.000	800	152	60	4	188	4,96	900,00
CL16898Z	9.800	9.000	800	168	60	4	154	4,09	757,00
CL168108Z	10.800	10.000	800	168	60	4	170	4,50	846,00
CL168123Z	12.300	11.500	800	168	60	4	193	5,10	986,00
CL168128Z	12.800	12.000	800	168	60	4	201	5,31	1.004,00

Our conical curved laminates poles are obtained by hot rolling of steel tubes UNI EN 10025 welded in high frequency "ERW (Electrical Resistance Welded)" UNI EN 10217. The lamination / pressorotazione tube occurs at a temperature of about 700° C, the processing is fully managed CNC.

The poles are made of steel S275JR.

The lamination process allows to obtain a pole without external weld beads.

At each pole, the following operations are performed:

- cable entry slot;
- application of pocket grounding;
- terminal board slot.

All poles ending on top with Ø 60 mm suitable for mounting accessories and bodies illuminating.

Subsequently, the straight poles are subjected to cold bending on suitable matrices and by the action of an electric winch assume the required curvature.

The galvanization of materials is obtained by dipping into bath of molten zinc whose thickness of the zinc coating complies with UNI EN ISO 1461.

The poles are made in accordance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

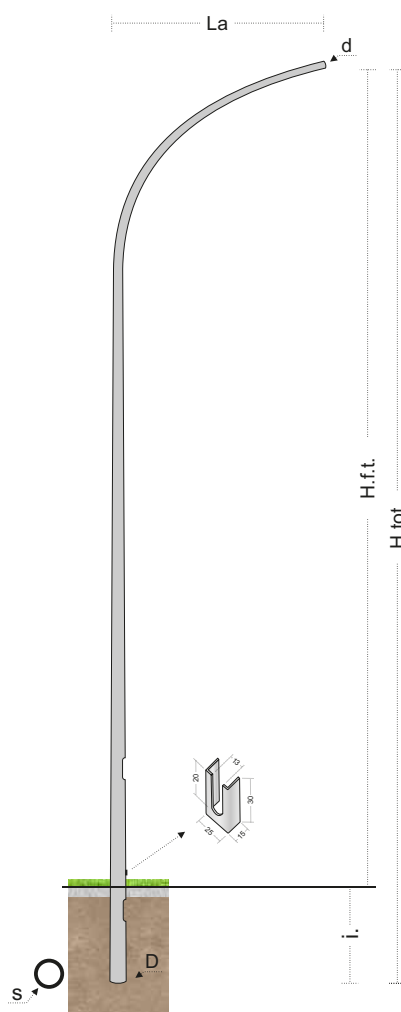
Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each post comes with adhesive label CE.

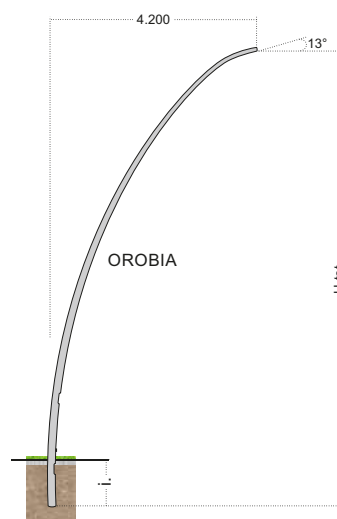
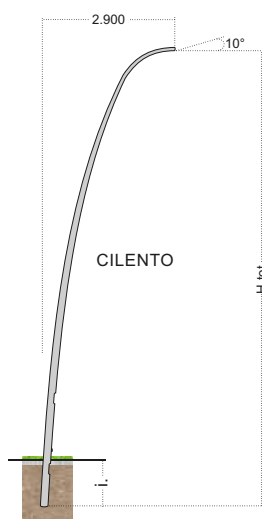
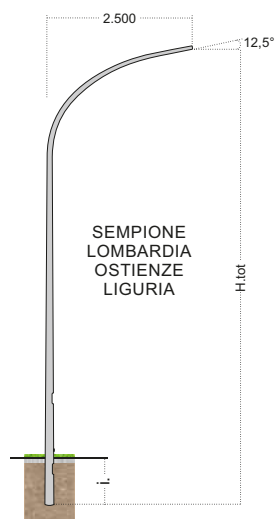
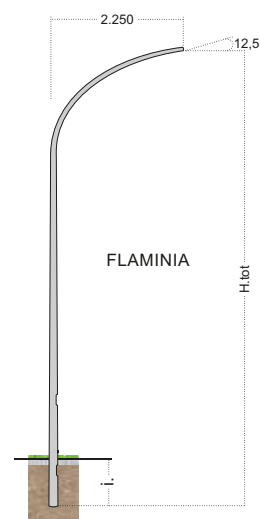
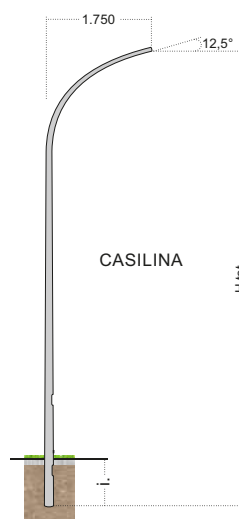
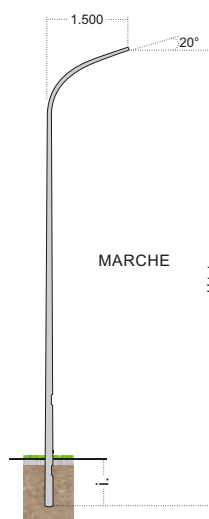
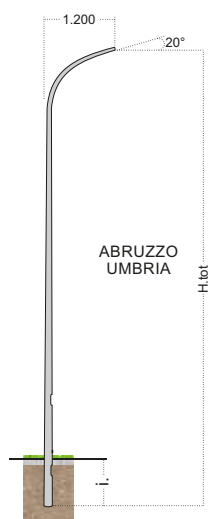


CONICAL CURVED POLES HOT ROLLED IN HSP



CONICAL CURVED POLES HOT ROLLED IN HSP

Article Code	H.tot. total height mm	H.f.t. over land height mm	La sporgenza braccio mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CASL13988Z	7.800	7.000	1.750	800	139	60	3,8	98	2,93	577,00
FLAL13993Z	8.000	7.200	2.250	800	139	60	3,8	104	3,09	629,00
ABRL11493Z	8.600	7.800	1.200	800	114	60	3,4	79	2,63	498,00
ABRL12793Z	8.600	7.800	1.200	800	127	60	3,6	92	2,90	576,00
SEML127103Z	9.100	8.300	2.700	800	127	60	3,6	102	3,20	642,00
SEML139103Z	9.100	8.300	2.700	800	139	60	3,8	115	3,42	711,00
OROL127108Z	9.300	8.500	4.200	800	127	60	3,6	107	3,35	718,00
OROL152108Z	9.300	8.500	4.200	800	152	60	4	158	4,20	888,00
UMBL127103Z	9.600	8.800	1.200	800	127	60	3,6	102	3,20	642,00
OSTL127113Z	9.800	9.000	2.500	800	127	60	3,6	112	3,50	696,00
OSTL139113Z	9.800	9.000	2.500	800	139	60	3,8	126	3,74	751,00
CILL139128Z	9.800	9.000	2.900	800	139	60	3,8	142	4,22	925,00
LOML139113Z	10.100	9.300	2.700	800	139	60	3,8	126	3,74	751,00
MARL139113Z	10.400	9.600	1.500	800	139	60	3,8	126	3,74	751,00
LIGL152128Z	11.100	10.300	2.700	800	152	60	4	188	4,96	970,00





Our cylindrical poles are made of steel sheet S235JR (EN 10219-01).

Usually for this realizations are used as the specific diameters Ø 89 mm or the Ø 102 mm; poles of other diameters appear to be less recurrent but quietly achievable.

The closure of the top of the cylindrical poles is achieved by a bottom plate, welding in circumferential manner at the top of the pole, on that cap is subsequently welded centrally and vertically, a cylindrical sleeve Ø 60 mm for allowing the accommodation of the lighting fixtures or any other of our top accessory.

At each pole are made the following processes:

- cable entry slot;
- application of pocket grounding;
- terminal board slot.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in compliance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each post comes with adhesive label CE.

CYLINDRICAL POLES								
Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CIL8935Z	3.500	3.000	500	89	3	24	0,98	124,00
CIL8940Z	4.000	3.500	500	89	3	27	1,12	134,00
CIL8945Z	4.500	4.000	500	89	3	30	1,26	144,00
CIL8950Z	5.000	4.500	500	89	3	33	1,40	154,00
CIL8955Z	5.500	5.000	500	89	3	36	1,54	164,00
CIL8960Z	6.000	5.500	500	89	3	39	1,68	174,00
CIL10235Z	3.500	3.000	500	102	3	27	1,12	138,00
CIL10240Z	4.000	3.500	500	102	3	31	1,28	150,00
CIL10245Z	4.500	4.000	500	102	3	35	1,44	162,00
CIL10250Z	5.000	4.500	500	102	3	39	1,60	174,00
CIL10255Z	5.500	5.000	500	102	3	43	1,76	186,00
CIL10260Z	6.000	5.500	500	102	3	47	1,92	198,00

On request, the cylindrical poles can be painted with thermosetting powders



POLES FOR FLAG-RAISING AND POLES FOR BANNER HOLDERS



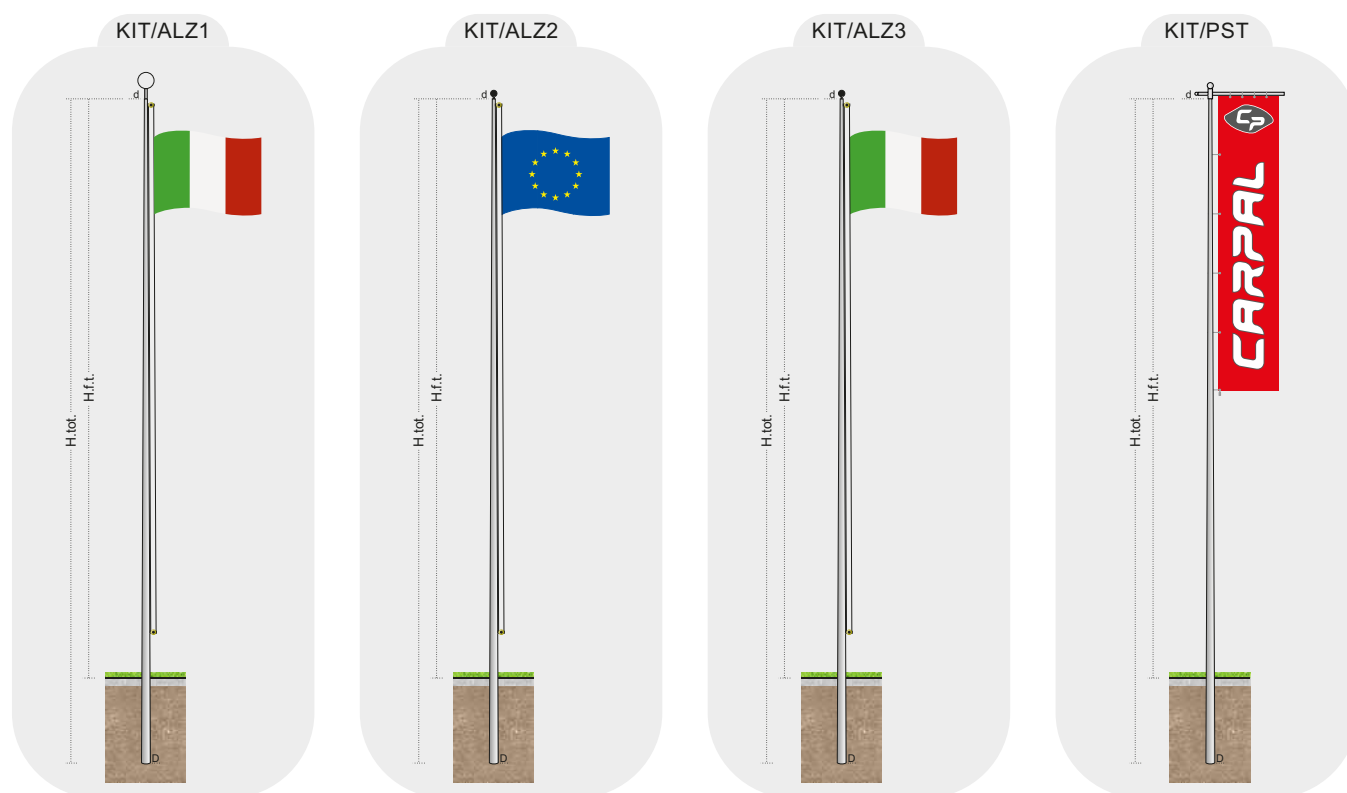
For the realization of poles for flag-raising and poles for banner holder can be used tapered and conical poles, of any height, by us adequately prepared for the application of one of the KIT underposts.

For each pole for flag-raising are made for the following processes:

- cable entry slot;
- application of pocket grounding;
- preparation and supply of caps basis, of terminals, threaded holes and welded nuts for the application of the desired kit.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

Each post comes with adhesive label CE.



ACCESSORIES FOR FLAG-RAISING AND BANNER HOLDER

Article Code	Description	Unit Price €
KIT/ALZ1	Composed of 2 pulleys + cylindrical terminal Ø 220 mm	115,00
KIT/ALZ2	Composed of n° 2 pulleys + spherical terminal Ø 102 mm	135,00
KIT/ALZ3	Composed of n° 2 pulleys + spherical terminal Ø 102 mm + base cap	195,00
KIT/PST	Composed of n° 2 decorative spheres and a bannerholder system	335,00

For the realization of a flag-raising /banner holder system, you have to choose the desired height pole, and to it you must add one of the 4 kits. (Example: Pole R1398Z + KIT / ALZ1)

The poles for canopies shading are supports made by using conical poles sheet in steel S235JR (UNI EN 10025), bent in order to obtain the required characteristics.

These poles can be supplied for direct burying in the foundation plinth, both with special base flange.

Each post is equipped with pocket for canopies grounding welded to the base and cap laminated PVC closure ends.

The recommended spacing (between pole and pole), for the realization of a shading structure standard, is about 5 meters.

The pole is used a conical straight sheet to 6,800 mm, 4 mm thick base with Ø 128 mm and top Ø 60 mm, which after bending develops a projection of 4,500 mm and a height maximum measured peak of 2,900 mm.

Between the pole and the pole will be placed 5 sleepers made cylindrical tube Ø 60 mm thickness 3 mm and length 5,000 mm.

These sleepers will be fixed on the back of each pole bent through 5 anchoring systems provided by us.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The shading cloth is not supplied.

EXAMPLE 1

Single module for 2 cars:

For the realization of a single module suitable for the parking of 2 cars, it will be necessary to get:

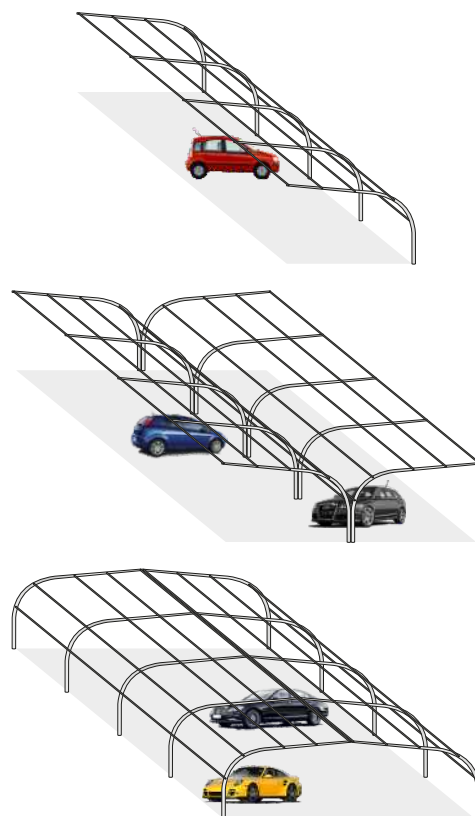
- 2 curve poles (C4128Z/PENS)
- 5 cross beams (CIL605Z/IMB)
- 10 couplers (2 ACCP76, 2 ACCP89, 2 ACCP102, 2 ACCP114, 2 ACCP127)

EXAMPLE 2

Double module for 4 cars:

For the realization of a double module suitable for the parking of 4 cars, it will be necessary to get:

- 3 curve poles (C4128Z/PENS)
- 10 cross beams (CIL605Z/IMB)
- 15 couplers (3 ACCP76, 3 ACCP89, 3 ACCP102, 3 ACCP114, 3 ACCP127)



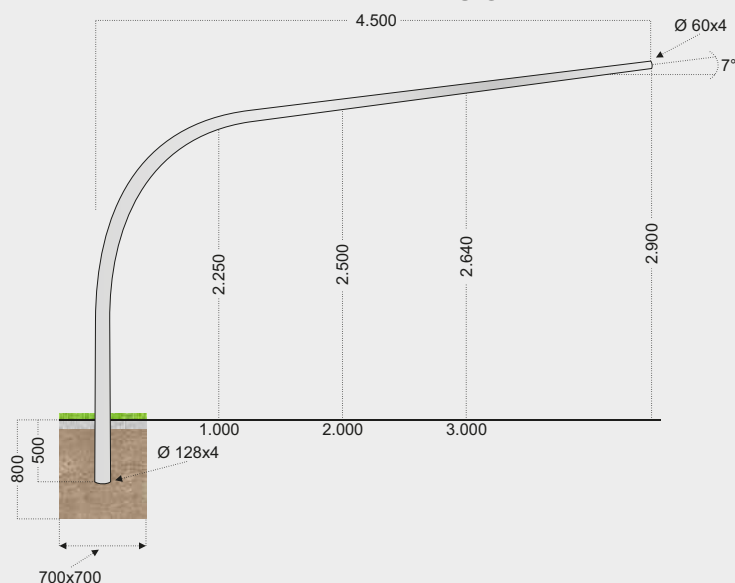
POLES FOR CANTILEVER SHADING ROOF AND ACCESSORIES



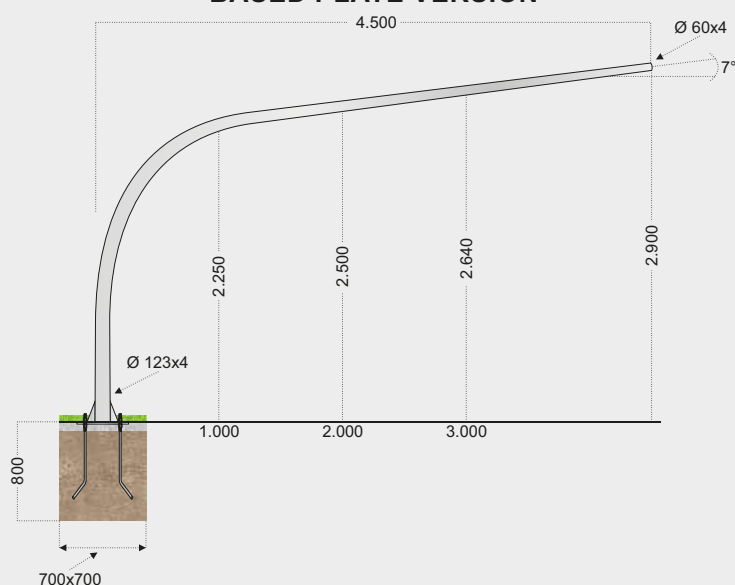
POLES FOR CANTILEVER SHADING ROOF

Article Code	description	H.f.t. altezza max fuori terra mm	i. landfill mm	D base diameter mm	d last pipe diameter mm	s thickness mm	La sporgenza mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
C4128Z/PENS	landfilled pole	2.900	500	128	60	4	4.500	63	2,01	408,00
C4123Z/PENS	Based plate pole	2.900	Piastra 350x350	123	60	4	4.500	68	2,20	494,00
KITP35	Bolts kit consisting of: 4 M22 anchor bolts, height 600 mm + 12 nuts + 8 washers + rough counterplate, 4 mm thick (specifications on page 92)									124,00

LANDFILLED VERSION



BASED PLATE VERSION



N.B. The pole for cantilever is supplied complete with black PVC lamellar stopper Ø 60 mm for end closure

A simple and cheap system for the assembly of shading shelters. Each pole will welcome 5 ring couplers made with different diameters.

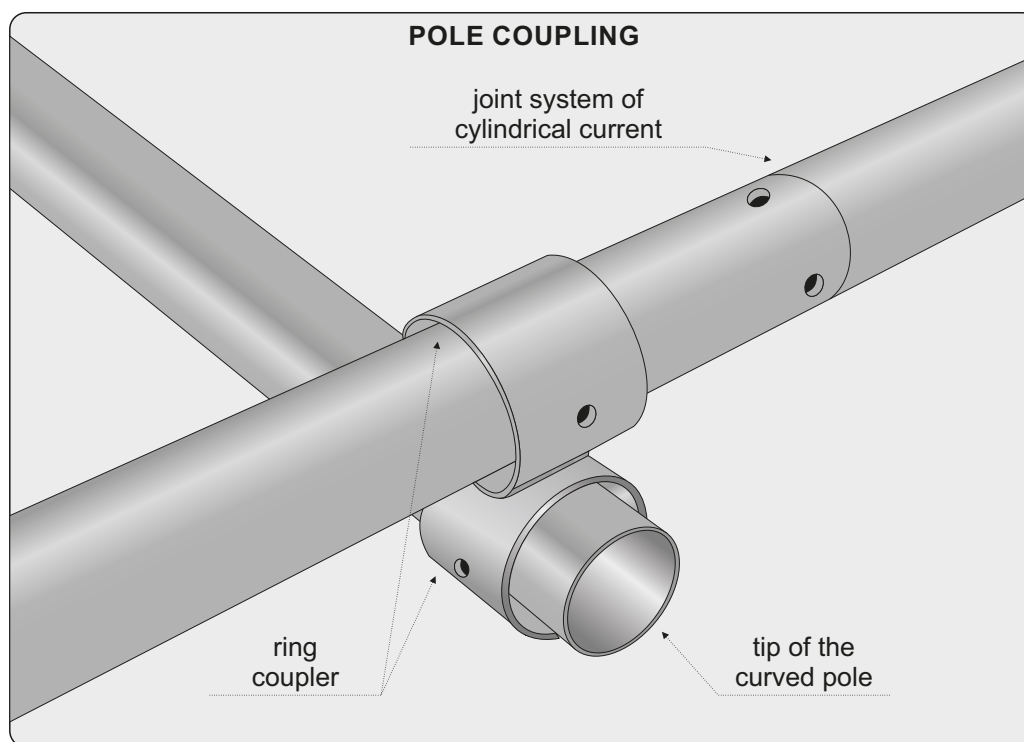
Once inserted from the top of the pole, you will run them to the point of no return, keeping a distance between them (ring / ring) of 1,200 mm they will be blocked by screwing the side screws supplied.

Subsequently it will be necessary to insert each of the 5 crosspieces (cylindrical tube Ø 60 mm thickness 3 mm and length 5,000 mm deep-drawn on one end) inside the upper rings of the couplers.

After this operation, simply tighten the screws to fix everything.

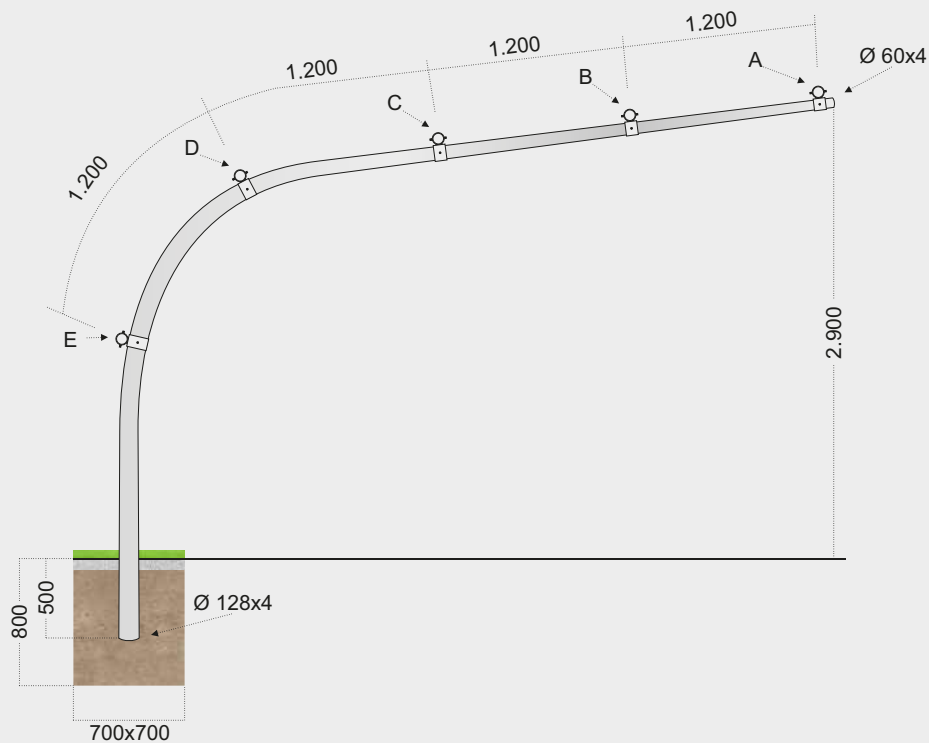
In a short time you will see assembled the supporting structure of your shading shelter.

The shade cloth are to be considered excluded from the supply.



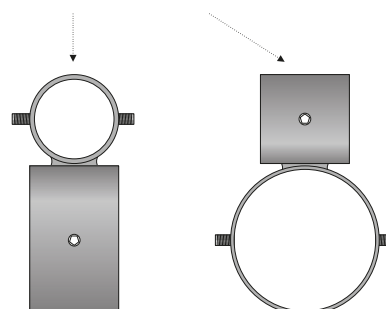
CYLINDRICAL DIAGONAL							
Article Code	description	ℓ projection mm	D diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CIL605Z/IMB	Cylindrical diagonal with joint funnel	5.000	60	3	22	0,94	69,00

COUPLERS FOR FIXING DIAGONAL ON POLE BACK



RING COUPLERS FOR FIXING ON POLE BACK

	Article Code	dm ring	distance from the tip	side view	front view	Unit Price €
A	ACCP76	76	50 mm			23,00
B	ACCP89	89	1.250 mm			23,00
C	ACCP102	102	2.450 mm			23,00
D	ACCP114	114	3.650 mm			23,00
E	ACCP127	127	4.850 mm			23,00



The polygonal poles (octagonal/decagonal) straight of sheets are made by folding in subsequent phases of trapezoid in steel sheet S235JR (UNI EN 10025), then the flaps facing longitudinal after folding are welded using automated process IIS certificated.

At each pole are made the following processes:

- cable entry slot;
- application of pocket grounding;
- terminal board slot.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

The poles are made in accordance with the UNI EN 40-5 and related regulations:

Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3;

Surface protection: UNI EN 40-4.

Each pole comes with adhesive label CE.

OCTAGONAL POLES "thickness 3 mm»									
Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d summit diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CO3035Z	3.500	3.000	500	97	60	3	21	0,86	131,00
CO3040Z	4.000	3.500	500	102	60	3	25	1,02	145,00
CO3045Z	4.500	4.000	500	107	60	3	28	1,18	160,00
CO3050Z	5.000	4.500	500	113	60	3	32	1,36	174,00
CO3055Z	5.500	5.000	500	118	60	3	37	1,54	190,00
CO3060Z	6.000	5.500	500	123	60	3	41	1,72	208,00
CO3068Z	6.800	6.000	800	131	60	3	48	2,04	234,00
CO3078Z	7.800	7.000	800	141	60	3	58	2,46	273,00
CO3088Z	8.800	8.000	800	151	60	3	68	2,92	315,00
CO3093Z	9.300	8.500	800	157	60	3	74	3,17	335,00
CO3098Z	9.800	9.000	800	162	60	3	80	3,42	354,00
CO3103Z	10.300	9.500	800	167	60	3	86	3,67	378,00
CO3108Z	10.800	10.000	800	172	60	3	92	3,93	403,00
CO3113Z	11.300	10.500	800	177	60	3	99	4,20	425,00
CO3118Z	11.800	11.000	800	183	60	3	105	4,50	446,00
CO3123Z	12.300	11.500	800	188	60	3	111	4,79	466,00
CO3128Z	12.800	12.000	800	193	60	3	117	5,08	494,00

OCTAGONAL POLES "thickness 4 mm»

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d summit diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CO4035Z	3.500	3.000	500	97	60	4	27	0,86	156,00
CO4040Z	4.000	3.500	500	102	60	4	32	1,02	174,00
CO4045Z	4.500	4.000	500	107	60	4	37	1,18	192,00
CO4050Z	5.000	4.500	500	113	60	4	42	1,36	211,00
CO4055Z	5.500	5.000	500	118	60	4	48	1,54	241,00
CO4060Z	6.000	5.500	500	123	60	4	54	1,72	256,00
CO4068Z	6.800	6.000	800	131	60	4	63	2,04	286,00
CO4078Z	7.800	7.000	800	141	60	4	76	2,46	335,00
CO4088Z	8.800	8.000	800	151	60	4	91	2,92	389,00
CO4093Z	9.300	8.500	800	157	60	4	98	3,17	414,00
CO4098Z	9.800	9.000	800	162	60	4	107	3,42	437,00
CO4103Z	10.300	9.500	800	167	60	4	113	3,67	472,00
CO4108Z	10.800	10.000	800	172	60	4	123	3,93	499,00
CO4113Z	11.300	10.500	800	177	60	4	130	4,20	529,00
CO4118Z	11.800	11.000	800	183	60	4	141	4,50	557,00
CO4123Z	12.300	11.500	800	188	60	4	148	4,79	591,00
CO4128Z	12.800	12.000	800	193	60	4	160	5,08	623,00

OCTAGONAL POLES IN TWO TRUNKS

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d summit diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CO44130Z	13.000	12.000	1.000	237	90	4-4	223	6,67	945,00
CO44140Z	14.000	13.000	1.000	250	90	4-4	248	7,47	1.020,00
CO44150Z	15.000	14.000	1.000	262	90	4-4	274	8,29	1.098,00
CO44160Z	16.000	15.000	1.000	274	90	4-4	302	9,14	1.192,00
CO44172Z	17.200	16.000	1.200	288	90	4-4	329	10,21	1.275,00

DODECAGONAL POLES IN TWO TRUNKS

Article Code	H.tot. total height mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d summit diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CD44130Z	13.000	12.000	1.000	315	110	4-4	290	8,67	1.127,00
CD44140Z	14.000	13.000	1.000	331	110	4-4	324	9,69	1.221,00
CD44150Z	15.000	14.000	1.000	348	110	4-4	359	10,79	1.319,00
CD44160Z	16.000	15.000	1.000	364	110	4-4	403	11,91	1.439,00
CD44172Z	17.200	16.000	1.200	384	110	4-4	441	13,34	1.545,00
CD44182Z	18.200	17.000	1.200	401	110	4-4	482	14,60	1.656,00
CD44192Z	19.200	18.000	1.200	417	110	4-4	524	15,89	1.787,00



The lighting towers are structures built to support projectors and accessories, are made with tubular sections of truncated pyramid shape press-folded sheet and welded longitudinally. These sections should then be assembled on site by grafting forced (Slip on Joint). The stems are made of steel sheet S355JR UNI 10025 press-folded in subsequent stages and welded with welding process certificate IIS.

The light towers can be classified into three categories:

- with fixed platform;
- with mobile crown manual;
- with mobile crown electric (roundup or integrated).

For each tower are made the following processes:

- cable entry slot (if is the type buried)
- application to 180° of n° 2 grounding conductors;
- buttonhole inspection.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

LIGHTING TOWERS IN FIXED PLATFORM

Each lighting tower in fixed platform is equipped with a caged lift ladder, with intermediate rest area and a superior sizing platform suitable for the pre-established use.

LIGHTING TOWER WITH FIXED PLATFORM TPI series with direct infusion								
Article Code	H.tot. tot. lenght innested stem mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d summit diameter mm	n° of stems	s thickness mm	P galvanized weight Kg
CTPI16Z	17.200	16.000	1.200	449	143	2	4-4	750
CTPI18Z	19.200	18.000	1.200	489	163	2	4-4	935
CTPI20Z	21.500	20.000	1.500	561	194	2	4-4	1.125
CTPI25Z	26.700	25.000	1.700	734	245	3	5-4-4	1.950
CTPI30Z	32.000	30.000	2.000	775	245	3	6-6-5	2.950

LIGHTING TOWER WITH FIXED PLATFORM TPF series with flange and bolts								
Article Code	H.f.t. over land height mm	D.f. flange diameter mm	n° number x type of bolts	D base diameter mm	d summit diameter mm	n° of stems	s thickness mm	P galvanized weight Kg
CTPF16Z	16.000	580	16xM27	398	143	2	4-4	725
CTPF18Z	18.000	640	16xM27	438	163	2	4-4	890
CTPF20Z	20.000	705	16xM27	510	194	2	4-4	1.060
CTPF25Z	25.000	900	16xM27	693	245	3	5-4-4	1.830
CTPF30Z	30.000	930	16xM33	724	245	3	6-6-5	2.750

LIGHTING TOWERS WITH MOBILE CROWN

The lighting towers in mobile platform are constituted by a crown, made of structural steel cold shaped and welded, that attached to the lifting head by elastic brackets and cables, allows to reach the top of the tower and descend to 1,600/1,700 mm from the ground for maintenance operations.

LIGHTING TOWERS WITH MOBILE CROWN TCI series with direct infusion								
Article Code	H.tot. lungh. tot. steli innestati mm	H.f.t. over land height mm	i. landfill mm	D base diameter mm	d summit diameter mm	n° of stems	s thickness mm	P galvanized weight Kg
CTMI16Z	17.000	16.000	1.000	402	140	2	4-4	610
CTMI18Z	19.200	18.000	1.200	437	140	2	4-4	705
CTCI20Z	21.500	20.000	1.500	568	200	2	4-4	980
CTCI25Z	26.700	25.000	1.700	649	200	3	4-4-4	1.345
CTCI30Z	31.900	30.000	1.900	741	200	3	5-4-4	1.890
CTCI35Z	37.200	35.000	2.200	821	200	4	5-5-4-4	2.525

LIGHTING TOWERS WITH MOBILE CROWN TCF series with flange and bolts								
Article Code	H.f.t. over land height mm	D.f. flange diameter mm	n° number for type of bolt	D base diameter mm	d summit diameter mm	n° of stems	s thickness mm	P galvanized weight Kg
CTMF16Z	16.000	576	16xM22	386	140	2	4-4	600
CTMF18Z	18.000	608	16xM22	418	140	2	4-4	685
CTCF20Z	20.000	769	16xM27	542	200	2	4-4	945
CTCF25Z	25.000	846	16xM27	619	200	3	4-4-4	1.300
CTCF30Z	30.000	935	16xM27	707	200	3	5-4-4	1.785
CTCF35Z	35.000	1.052	16xM33	783	200	4	5-5-4-4	2.410

ASSEMBLY TOWERS

Carpal between the services offered to its customers provides, on request, the installation of lighting towers, run by a qualified team and provided with all the equipment necessary.



Our cylindrical outreaches are made with steel pipes S235JR Ø 60 mm thickness 3 mm curved to the desired radius. The lower part of the outreach, in order to allow the accommodation on all types of Carpal pole, is enlarged with special press realizing a dinghy Ø 70 mm drilled and threaded for the engagement and subsequent locking on the top of the pole.

The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

Outreaches are manufactured in accordance with UNI EN 40-5 and related regulations:

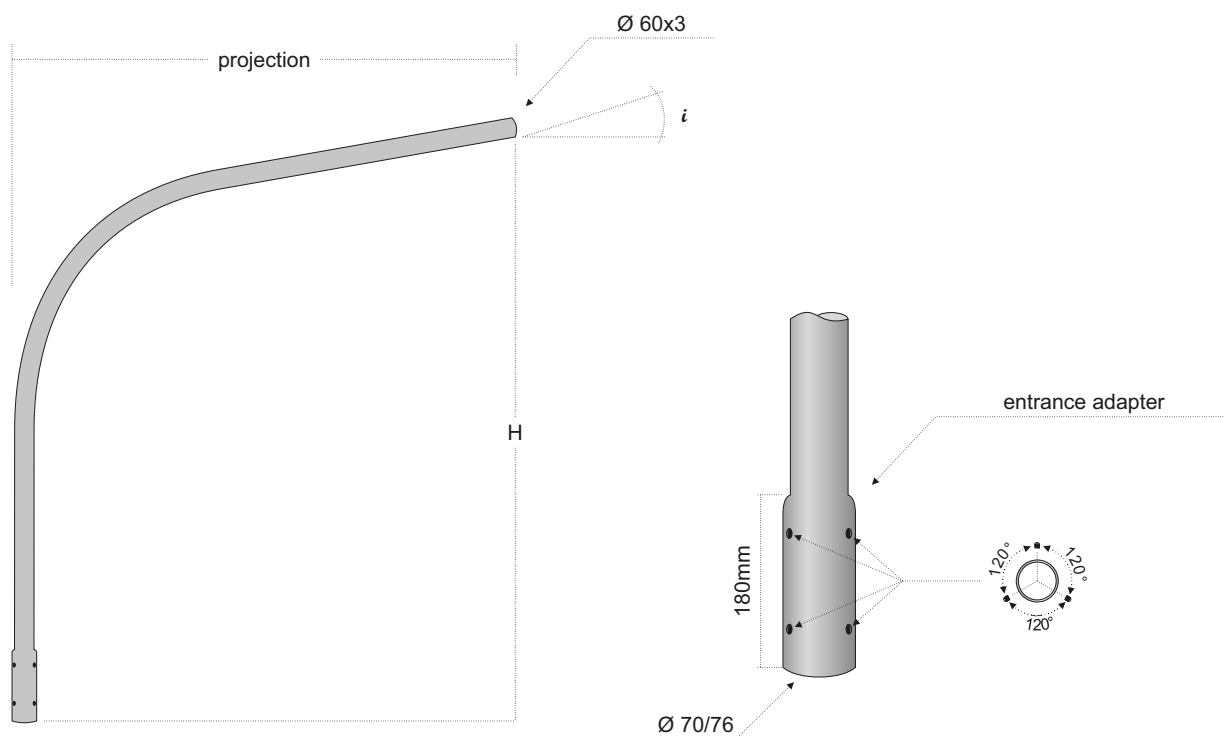
Dimensions and tolerances: UNI EN 40-2;

Materials: UNI EN 40-5;

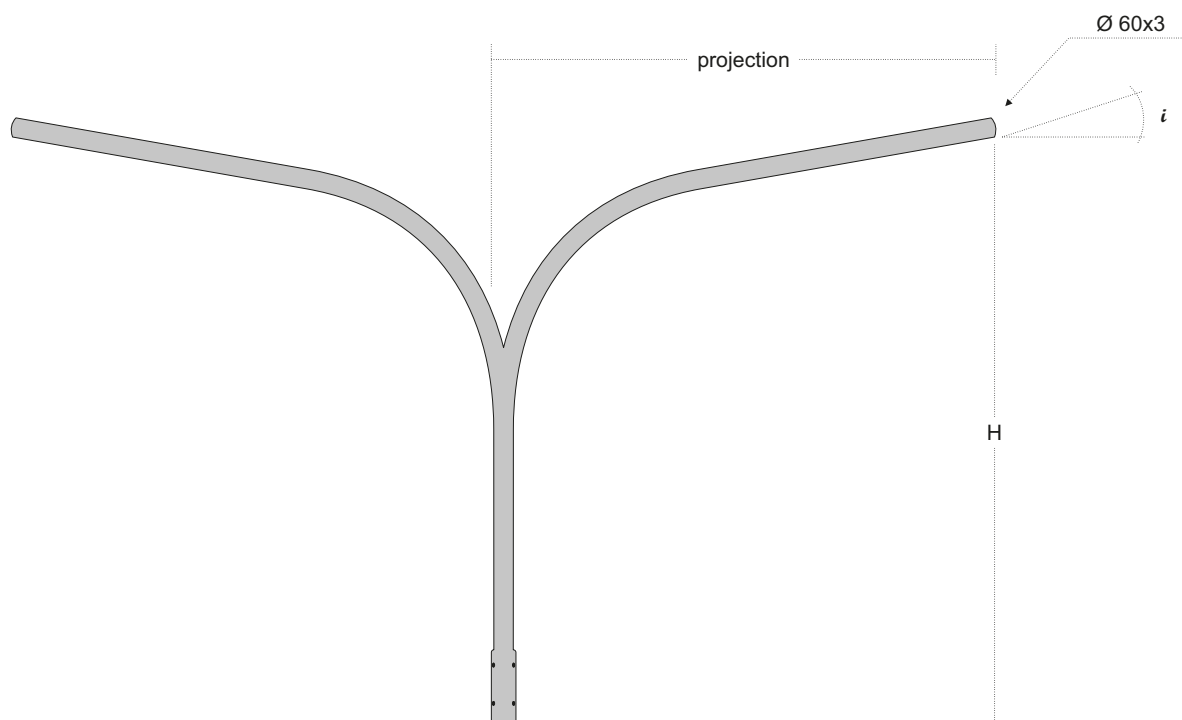
Specification for characteristic loads: UNI EN 40-3-1;

Verification by calculation: UNI EN 40-3-3.





BS1515Z



BD1515Z

CURVED CYLINDRICAL OUTREACHES

Article Code	type	H	ℓ	R	i	D	s	P	paintable surface m ²	Unit Price €
		height mm	projection mm	radius mm	inclination degrees	diameter mm	thickness mm	galvanized weight Kg		
BS1010Z	single	1.000	1.000	500	10°	60	3	9	0,35	61,00
BS1015Z	single	1.000	1.500	500	10°	60	3	11	0,43	67,00
BS1515Z	single	1.500	1.500	500	10°	60	3	13	0,51	73,00
BS1520Z	single	1.500	2.000	500	10°	60	3	14	0,57	79,00
BS2015Z	single	2.000	1.500	500	10°	60	3	14	0,57	79,00
BS2020Z	single	2.000	2.000	750	10°	60	3	16	0,62	85,00
BD1010Z	double	1.000	1.000	500	10°	60	3	15	0,66	158,00
BD1015Z	double	1.000	1.500	500	10°	60	3	19	0,83	170,00
BD1515Z	double	1.500	1.500	500	10°	60	3	23	0,98	182,00
BD1520Z	double	1.500	2.000	500	10°	60	3	27	1,09	194,00
BD2015Z	double	2.000	1.500	500	10°	60	3	27	1,09	194,00
BD2020Z	double	2.000	2.000	750	10°	60	3	29	1,21	206,00
BT1010Z	triple	1.000	1.000	500	10°	60	3	22	0,97	217,00
BT1015Z	triple	1.000	1.500	500	10°	60	3	28	1,22	235,00
BT1515Z	triple	1.500	1.500	500	10°	60	3	32	1,45	253,00
BT1520Z	triple	1.500	2.000	500	10°	60	3	38	1,62	271,00
BT2015Z	triple	2.000	1.500	500	10°	60	3	38	1,62	271,00
BQ1010Z	quadruple	1.000	1.000	500	10°	60	3	30	1,28	317,00
BQ1015Z	quadruple	1.000	1.500	500	10°	60	3	35	1,62	341,00
BQ1515Z	quadruple	1.500	1.500	500	10°	60	3	41	1,92	365,00
BQ1520Z	quadruple	1.500	2.000	500	10°	60	3	48	2,15	389,00
BQ2015Z	quadruple	2.000	1.500	500	10°	60	3	48	2,15	389,00

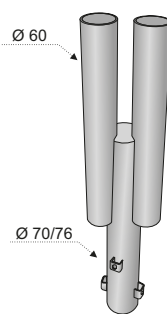


On request, Carpal can make outreaches of any size, radius of curvature, inclination

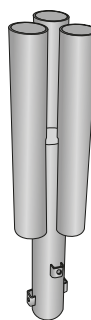
MULTIPLE JUNCTION

The joints, made of S235JRH steel, can be applied on top of the Carpal's lighting poles making it possible to install multiple Outreaches or several pipettes at the same time.

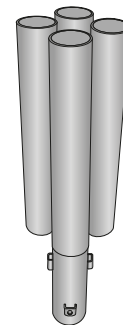
MULTIPLE JUNCTION							
Article Code	type	H height mm	D base diameter mm	d top junction diameter mm	s thickness mm	P galvanized weight Kg	Unit Price €
SN-BDZ	double	650	70/76	60	3	7	65,00
SN-BTZ	triple	650	70/76	60	3	8	85,00
SN-BQZ	quadruple	650	70/76	60	3	10	108,00



SN-BDZ



SN-BTZ



SN-BQZ

STRAIGHT REDUCERS

The straight reducers are accessories that allow, by their application, to reduce the top pole to Ø 60, such as to make it suitable for attaching lighting bodies or accessories.

STRAIGHT REDUCERS						
Article Code	type of connection on pole	D diameter pole top mm	d diameter reducer top mm	s thickness mm	P galvanized weight Kg	Unit Price €
RD89/60Z	external	76	60	3	2,5	31,00
RD102/60Z	external	89	60	3	2,5	33,00
RD114/60Z	external	102	60	3	2,5	36,00
RD127/60Z	external	114	60	3	3	40,00
RD60/60ZIN	internal	76	60	3	1,5	30,00
RD76/60ZIN	internal	89	60	3	2	33,00
RD89/60ZIN	internal	102	60	3	2	36,00
RD102/60ZIN	internal	114	60	3	2	40,00
RD114/60ZIN	internal	127	60	3	2	44,00
RD127/60ZIN	internal	139	60	3	2,5	48,00



RD89/60Z



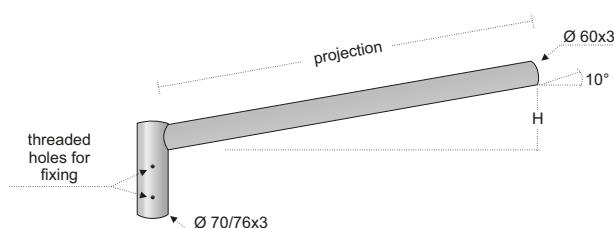
RD102/60ZIN

Our square outreaches are made of steel pipes S235JR Ø 60 mm, 3 mm thick. The lower part of the outreach, in order to allow the accommodation on each type of Carpal lighting poles, is made cylindrical tube Ø 76 mm drilled and threaded for attachment on top of the pole.

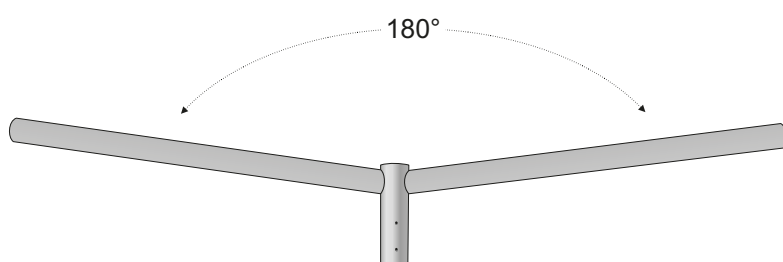
The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

Dimensions and tolerances are conform to UNI EN 40-2.

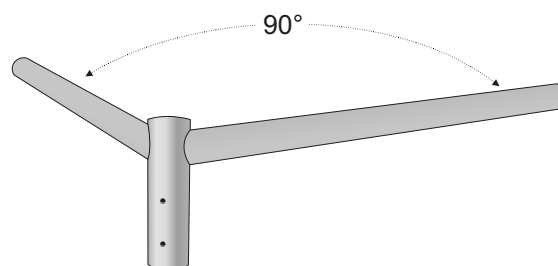
SQUARE OUTREACHES									
Article Code	type	H height mm	ℓ projection mm	i inclination degrees	D diameter mm	s thickness mm	P galvanized weight Kg	paintable surface m²	Unit Price €
BSSQ10Z	single	250	1.000	10°	60	3	6	0,25	48,00
BSSQ15Z	single	400	1.500	10°	60	3	8	0,34	57,00
BSSQ20Z	single	550	2.000	10°	60	3	10	0,44	66,00
BDSQ10Z	double	250	1.000	10°	60	3	10	0,44	82,00
BDSQ10Z/90°	double/90°	250	1.000	10°	60	3	10	0,44	82,00
BDSQ10Z/120°	double/120°	250	1.000	10°	60	3	10	0,44	82,00
BDSQ15Z	double	400	1.500	10°	60	3	15	0,62	95,00
BDSQ15Z/90°	double/90°	400	1.500	10°	60	3	15	0,62	95,00
BDSQ15Z/120°	double/120°	400	1.500	10°	60	3	15	0,62	95,00
BDSQ20Z	double	550	2.000	10°	60	3	20	0,81	113,00
BDSQ20Z/90°	double/90°	550	2.000	10°	60	3	20	0,81	113,00
BDSQ20Z/120°	double/120°	550	2.000	10°	60	3	20	0,81	113,00
BTSQ10Z	triple	250	1.000	10°	60	3	15	0,62	116,00
BTSQ15Z	triple	400	1.500	10°	60	3	22	0,91	143,00
BTSQ20Z	triple	550	2.000	10°	60	3	29	1,19	170,00
BQSQ10Z	quadruple	250	1.000	10°	60	3	19	0,81	146,00
BQSQ15Z	quadruple	400	1.500	10°	60	3	28	1,19	182,00
BQSQ20Z	quadruple	550	2.000	10°	60	3	37	1,57	218,00



BSSQ10Z



BDSQ10Z



BDSQ10Z/90

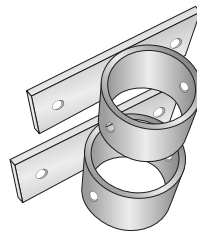
N.B. Each square outreach is supplied complete with bolts and a PVC cap for top closure

Our wall accessories are manufactured with longitudinally welded tubes by induction, made of sheet steel S235JR (EN 10219-01), acts for wall fixing of outreaches and luminaires.

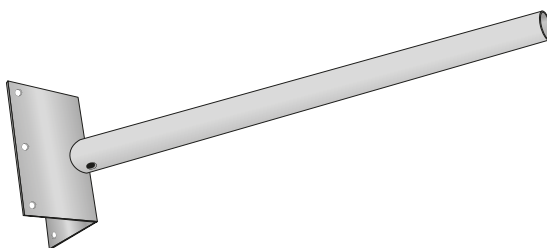
The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

Dimensions and tolerances are conform to UNI EN 40-2.

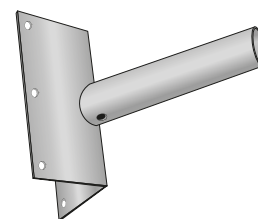
WALL ACCESSORIES				
Article Code	Description	P galvanized weight Kg	paintable surface m ²	Unit Price €
CPP76Z	Pair of ring plates for wall outreaches	1	0,03	38,00
MPPZ	Wall sleeve with 350 mm projection, incl. 10°	3	0,14	38,00
MPPZ/1	Wall sleeve with 1.000 mm projection, incl. 10°	6	0,26	47,00
MPPAZ	Corner wall-mounted sleeve with 350 mm projection, incl. 10°	4,5	0,22	48,00
MPPAZ/1	Corner wall-mounted sleeve with 1.000 mm projection, incl. 10°	7,5	0,34	57,00



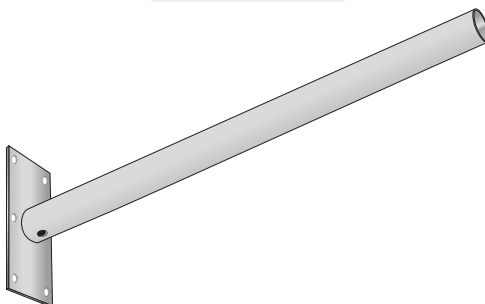
CPP76Z



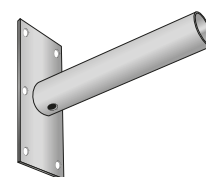
MPPAZ/1



MPPAZ



MPPZ/1



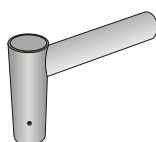
MPPZ

Our pipette sleeves are made with steel tubes S235JR Ø 60 mm, 3 mm thick.
The lower part of the sleeves, in order to allow the accommodation on each type of Carpal's lighting pole, it's realized with cylindrical tube or with extended reduction by special press realizing a dinghy Ø 70/76 mm drilled and threaded for attachment on top of the pole.

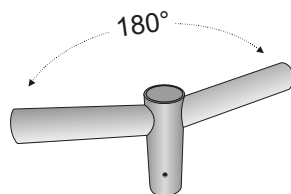
The galvanization of materials is obtained by dipping into bath of molten zinc which thickness of the zinc coating is conform with UNI EN ISO 1461.

Dimensions and tolerances are conform to UNI EN 40-2.

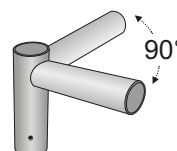
PIPETTE SLEEVES								
Article Code	type	ℓ projection mm	i inclination degrees	D diameter mm	s thickness mm	P paintable surface Kg	paintable surface m ²	Unit Price €
MP1Z	single	250	10°	60	3	2,5	0,11	31,00
MP2Z	double/180°	250	10°	60	3	3,6	0,16	48,00
MP2Z/90	double/90°	250	10°	60	3	3,6	0,16	48,00
MP3Z	triple/120°	250	10°	60	3	5	0,21	68,00
MP4Z	quadruple/90°	250	10°	60	3	6	0,26	91,00



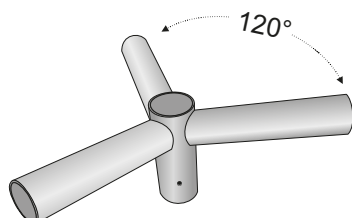
MP1Z



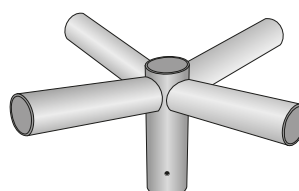
MP2Z



MP2Z/90



MP3Z



MP4Z

N.B. Each pipette sleeve is equipped with bolts for fixing and PVC caps for top closure

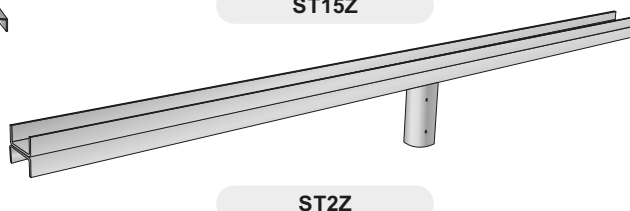
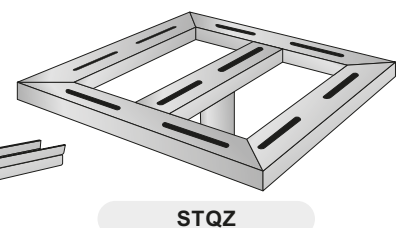
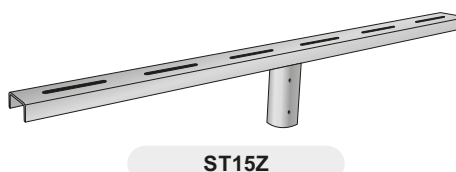
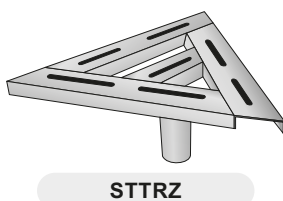
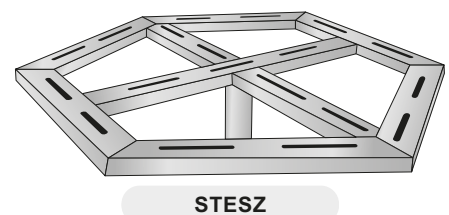
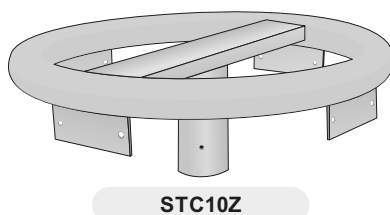
Our projectors brackets are made using a specific C profile strategically slotted (circular brackets made with cylindrical tubes).

The lower part of the brackets, in order to allow accommodation on any type of Carpal's lighting pole, it is made with a cylindrical Ø 70/76 mm tube, drilled and threaded for the locking on top of each pole.

The galvanization of the materials is obtained by immersion in melted zinc tanks whose thickness of the zinc layer complies with the UNI EN ISO 1461 standards.

Dimensions and tolerances comply with the UNI EN 40-2 standards.

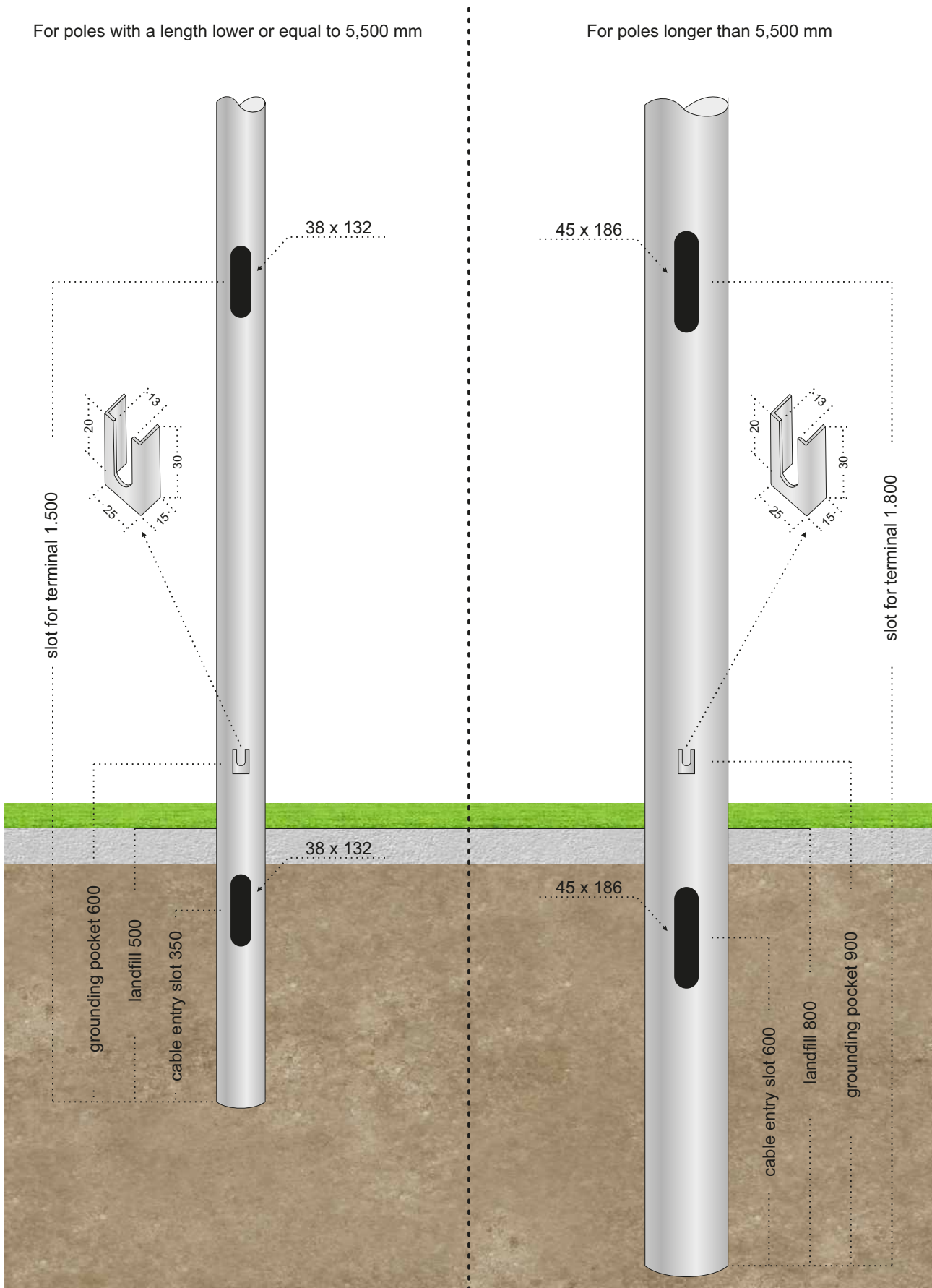
PROJECTORS BRACKETS						
Article Code	type	ℓ side width mm	n° projectors	P galvanized weight Kg	paintable surface m²	Unit Price €
ST05Z	linear	500	1	3,5	0,23	57,00
ST1Z	linear	1.000	2/4	5,5	0,40	84,00
ST15Z	linear	1.500	3/5	7,5	0,57	99,00
ST2Z	linear	2.000	4/6	9,5	1,02	115,00
STTRZ	triangular	600	3	13	0,70	125,00
STRTZ	rectangular	600x300	4	14	0,71	141,00
STQZ	square	600	4	15	1,01	156,00
STPTZ	pentagonal	600	5	19	2,39	204,00
STESZ	hexagonal	600	6	24	2,59	224,00
STOTTZ	octagonal	600	8	29	3,27	249,00
STC10Z	circular	Ø 1.000	4	23	0,93	258,00
STC12Z	circular	Ø 1.200	5	25	1,10	278,00
STC14Z	circular	Ø 1.400	6	27	1,27	298,00



This box shows the specific, relative to the standard processing, realized at the base of our lighting poles.

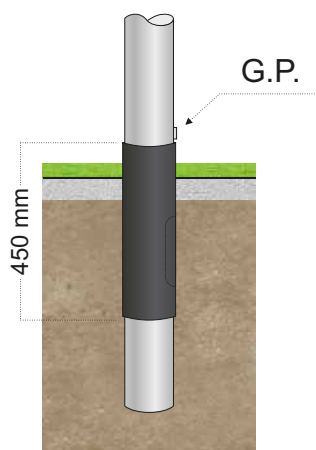
For poles with a length lower or equal to 5,500 mm

For poles longer than 5,500 mm



HEAT-SHRINKING SEATH BAND

It consists of the hot application at the base of the pole at the base of the base of a special coextruded cross-linked polyolefin sleeve, fitted inside an adhesive which thanks to the action of the heat adheres perfectly to the galvanized surface.

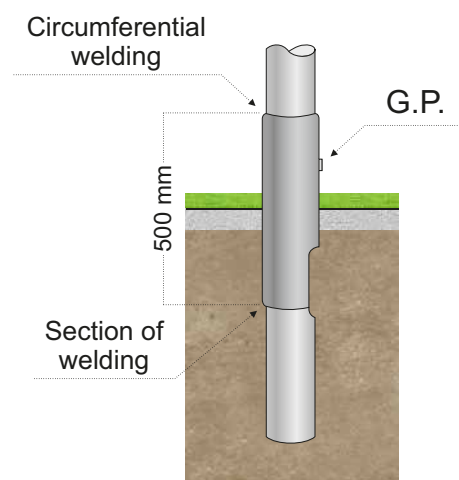


HEAT-SHRINKING SEATH BAND		
Article Code	Description	Unit Price €
FAS80/55	Band for poles with a diameter less than 80 mm	31,00
FAS112/81	Band for poles with a diameter less than 112 mm	33,00
FAS150/104	Band for poles with a diameter less than 150 mm	41,00
FAS196/153	Band for poles with a diameter less than 196 mm	46,00
FAS255/190	Band for poles with a diameter less than 255 mm	69,00

STEEL REINFORCED SLEEVE

The base of the pole can also be reinforced thanks to the application, of a cylindrical steel sleeve S235JR with a height of 500 mm, at the center line of the landfill point, fixed to the base of the pole by welding.

This application is carried out on the raw material which is only subsequently hot-dip galvanized in melted zinc tanks together with the pole.



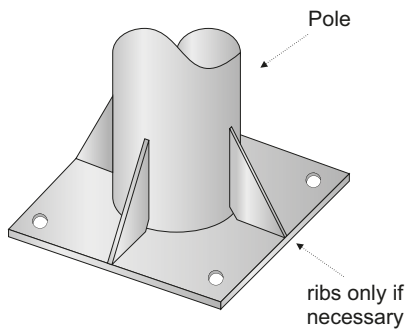
STEEL REINFORCED SLEEVE		
Article Code	Description	Unit Price €
MACC89/114	Steel sleeve, L. 500 mm at the center line of the landfill point fixed to the base of the pole by welding Ø 89 to 114 mm	52,00
MACC127/152	Steel sleeve, L. 500 mm at the center line of the landfill point fixed to the base of the pole by welding Ø 127 to 152 mm	58,00
MACC168/193	Steel sleeve, L. 500 mm at the center line of the landfill point fixed to the base of the pole by welding Ø 168 to 193 mm	72,00

BASIC PLATE (welded to the pole)

An alternative solution to the traditional burial of lighting poles is installation using a base plate. This operation consists in welding at the base of the pole an adequate square plate perforated in steel S355, and if necessary, also the application of 4 triangular reinforcement ribs between the plate and the pole.

This operation precedes the hot dip galvanizing phase.

On request the base plate can also be made of a non-square shape.



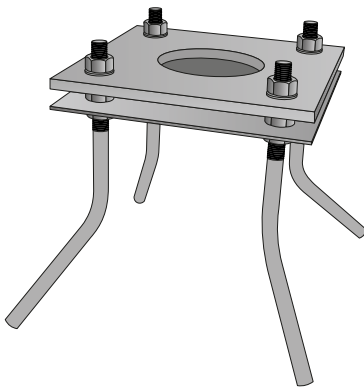
BASE PLATE (welded to the pole)					
Article Code	plate dimension mm	holes interaxis mm	s thickness mm	max diameter pole base mm	Unit Price €
PIAST200	200x200	140	10	110	68,00
PIAST250	250x250	190	10	127	72,00
PIAST300	300x300	200	15	152	104,00
PIAST350	350x350	250	15	194	131,00
PIAST400	400x400	300	20	219	165,00

On request the base plate can also be made of a non-square shape

GROUND ANCHOR KIT

Indispensable for a correct installation of the pole on a base plate, is the use of the GROUND ANCHOR KIT.

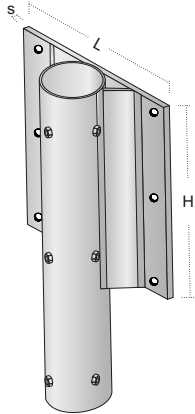
The KIT consists of a rough counter-plate with a thickness of 4 mm, n° 12 galvanized nuts, n° 8 washers and n° 4 raw bolts.



BOLT KIT FOR ONE PLATE (4 bolts + 12 nuts + 8 washers + rough counterplate 4 mm)				
Article Code	suitable for plate	step thread mm	ℓ length mm	Unit Price €
KITP20	PIAST200	M14	300	68,00
KITP25	PIAST250	M16	400	73,00
KITP30	PIAST300	M18	500	88,00
KITP35	PIAST350	M22	600	96,00
KITP40	PIAST400	M27	700	124,00

LATERAL CANNON FOR WALL-MOUNTED POLE FIXING

This accessory is an alternative solution to the traditional burial of poles for lighting, allowing to create an anchor for the side fixing of the pole to the wall.

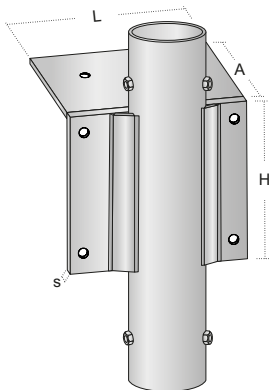


LATERAL CANNON FOR WALL-MOUNTED POLE FIXING

Article Code	D max pole diameter mm	L x H plate dimensions mm	s plate thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CAM139	127	400 x 500	10	25	0,75	132,00
CAM152	139	450 x 500	10	29	0,83	154,00
CAM168	152	450 x 550	10	33	0,92	181,00
CAM193	168	450 x 600	10	37	1,02	215,00
CAM219	193	450 x 650	10	42	1,14	248,00

L-CANNON FOR WALL-MOUNTED POLE FIXING

The L-shaped cannon, consisting of a cylindrical tube laterally welded to a corner plate, allows you to create a wall anchor as an alternative to traditional landfill.

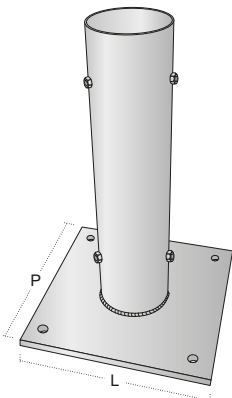


CANNONE AD L PER FISSAGGIO PALO A MURO

Article Code	D max pole diameter mm	L x A x H plate dimensions mm	s plate thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CAL139	127	400 x 200 x 400	10	30	0,83	149,00
CAL152	139	400 x 200 x 400	10	32	0,86	171,00
CAL168	152	400 x 200 x 400	10	34	0,90	198,00
CAL193	168	400 x 200 x 400	10	36	0,96	222,00
CAL219	193	500 x 200 x 400	10	40	1,15	255,00

CANNON ON PLATE

With this accessory, made by welding the cannon on a square-shaped plate, you will have the possibility to fix the pole by means of ground anchors.



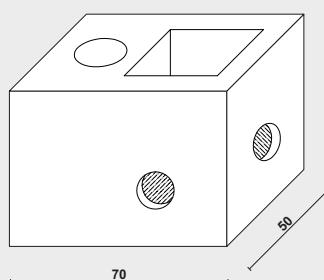
CANNONE SU PIASTRA

Article Code	D max pole diameter mm	L x P plate dimensions mm	s plate thickness mm	P galvanized weight Kg	paintable surface m ²	Unit Price €
CAN139	127	250 x 250	10	17	0,47	122,00
CAN152	139	300 x 300	15	24	0,56	144,00
CAN168	152	350 x 350	15	30	0,67	166,00
CAN193	168	350 x 350	15	32	0,73	200,00
CAN219	193	400 x 400	20	50	0,83	228,00

Any special needs will be studied and processed by our technical department

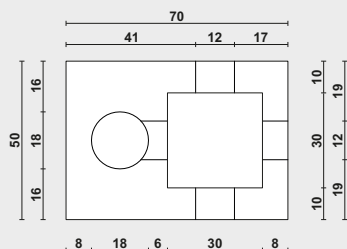
POLE PLINTHS 50X70XH50

RECTANGULAR SECTION PLINTHS



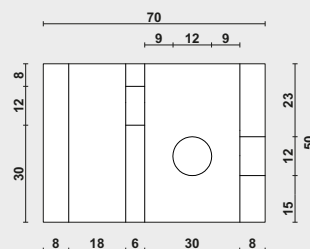
RECTANGULAR SECTION PLINTHS

PLANT



RECTANGULAR SECTION PLINTHS

SECTION

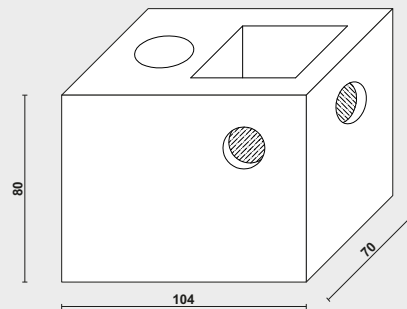


PREFABRICATED PLINTHS

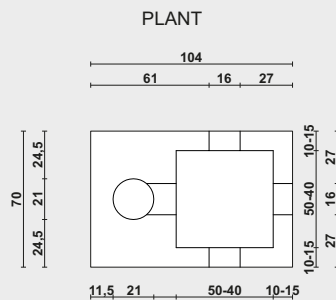
Article Code	Description	P x L x H External dimension mm	Weight Kg	Unit Price €
PP50X70X50/4	Plinth holder in c.a.v. rectangular section, with cockpit for built-in inspection int. size 30x30 cm., Reinforced with mesh electro-welded Ø 5 cm. 15x15 cm mesh, with 18 cm hole. for lighting poles max 4.0 m.f.t.	500x700x500	280	143,00

POLE PLINTHS 70X104XH80

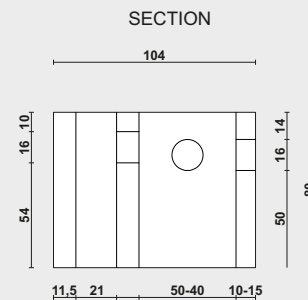
RECTANGULAR SECTION PLINTH



RECTANGULAR SECTION PLINTH



RECTANGULAR SECTION PLINTH

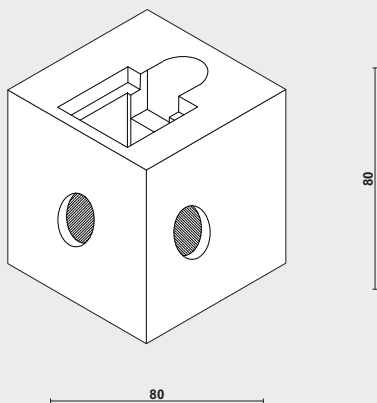


PREFABRICATED PLINTHS

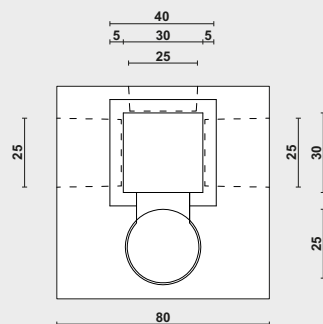
Article Code	Description	P x L x H External dimensions mm	Weight Kg	Unit Price €
PP70X104X80/6,5	Plinth pole holder in c.a.v. rectangular section, with inspection hole built-in dimension int. 50x50 cm., Reinforced with Ø 5 cm electrically welded mesh. 15x15 cm mesh, with Ø 21 cm hole. for lighting poles from 5 to 6.5 m.o.g.	700x1040x800	830	203,00
PP70X104X80/7	Plinth pole holder in c.a.v. rectangular section, with inspection hole built-in dimension int. 40x40 cm., Reinforced with Ø 5 cm electrically welded mesh. 15x15 cm mesh, with Ø 21 cm hole. for lighting poles from 5.5 to 7 m.o.g	700x1040x800	995	233,00

POLE PLINTHS 80X80XH80

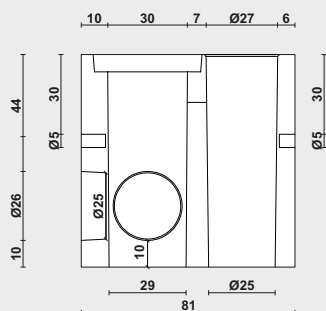
SQUARE SECTION PLINTH



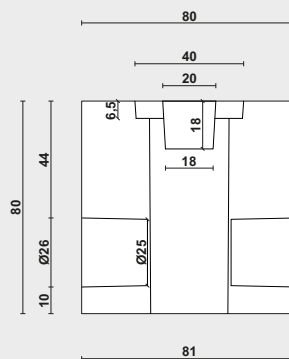
SQUARE SECTION PLINTH



SQUARE SECTION PLINTH



SQUARE SECTION PLINTH

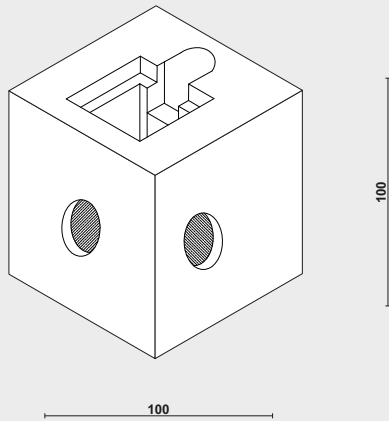


PREFABRICATED PLINTHS

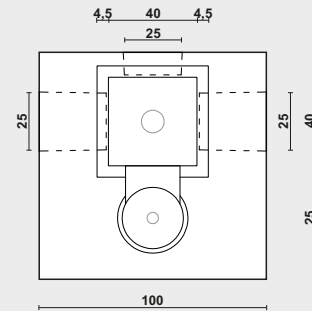
Article Code	Description	P x L x H External dimension mm	Weight Kg	Unit Price €
PP80X80X80/7	Plinth pole holder in c.a.v. square section, with inspection hole built-in dimension int. 30x30 cm., Reinforced with Ø 5 cm perimeter brackets, with Ø 25 cm hole. for lighting poles from 6 to 7 m.o.g.	800x800x800	910	261,00

POLE PLINTHS 100X100XH100

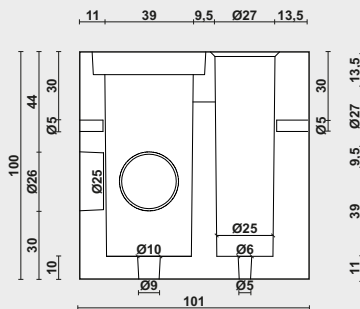
SQUARE SECTION PLINTHS



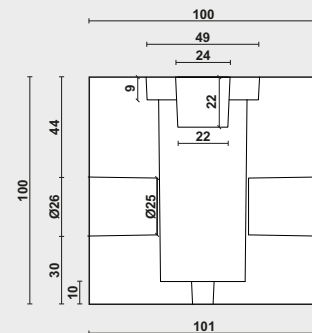
SQUARE SECTION PLINTHS



SQUARE SECTION PLINTHS



SQUARE SECTION PLINTHS



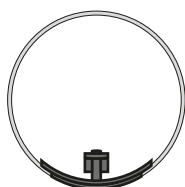
PLINTI PREFABBRICATI

Article Code	Description	P x L x H External dimension mm	Weight Kg	Unit Price €
PP100X100X100/10,5	Plinth pole holder in c.a.v. square section, with inspection hole built-in dimension int. 40x40 cm., Reinforced with Ø 5 cm perimeter brackets, with Ø 25 or 35 cm hole. for lighting poles from 8 to 10.5 m.o.g.	1000x1000x1000	1.800	154,00

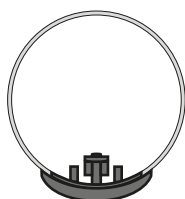
In this section we show the complete list of doors and terminal blocks supplied with the poles for lighting and a wide range of PVC plugs for closing the upper end of the same poles.

HATCHES - TERMINAL		
Article Code	Description	Unit Price €
Z132P	Pole hatches for loophole 38 x 132 mm	11,00
Z186P	Pole hatches for loophole 45 x 186 mm	13,00
R186P	Pole hatches for loophole 45 x 186 mm	28,00
Z132M	Terminal block to a single fuse holder recessed inside the pole 38 x 132 mm	17,00
Z132M/2	Terminal block to a double fuse holder recessed inside the pole 38 x 132 mm	23,00
Z186M	Terminal block to a single fuse holder recessed inside the pole 45 x 186 mm	22,00
Z186M/2	Terminal block to a double fuse holder recessed inside the pole 45 x 186 mm	27,00
R186M	Terminal board for pole touch system to a single fuse holder	30,00
R186M/2	Terminal board for pole touch system to a double fuse holder	35,00

CAPS		
Article Code	Description	Unit Price €
TAP16	Plastic cap top closure pole or accessories for Ø 16 mm	2,00
TAP32	Plastic cap top closure pole or accessories for Ø 32 mm	3,50
TAP42	Plastic cap top closure pole or accessories for Ø 42 mm	3,50
TAP48	Plastic cap top closure pole or accessories for Ø 48 mm	3,50
TAP60	Plastic cap top closure pole or accessories for Ø 60 mm	4,00
TAP70	Plastic cap top closure pole or accessories for Ø 70 mm	4,00
TAP76	Plastic cap top closure pole or accessories for Ø 76 mm	4,00
TAP89	Plastic cap top closure pole or accessories for Ø 89 mm	4,50
TAP102	Plastic cap top closure pole or accessories for 102 mm	4,50
TAP114	Plastic cap top closure pole or accessories for Ø 114 mm	5,00
TAP120	Plastic cap top closure pole or accessories for Ø 120 mm	5,50
TAP127	Plastic cap top closure pole or accessories for Ø 127 mm	6,00
TAP139	Plastic cap top closure pole or accessories for Ø 139 mm	6,50
TAP152	Plastic cap top closure pole or accessories for Ø 152 mm	7,00
TAP60CROM	Plastic chrome-painted top closure pole or accessories for Ø 60 mm	6,00
TAP60BOMB	Plastic half spheroidal top closure pole or accessories for Ø 60 mm	6,00



Hatch with pole touch system



Hatch with traditional system



Z186P



Z186M



TAP32 / TAP152



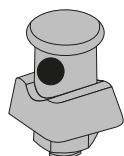
TAP60CROM



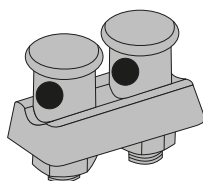
TAP60BOMB

In support of the lighting poles, in the table below you find a series of articles for the construction of grounding systems.

GROUNDING SYSTEM		
Article Code	Description	Unit Price €
MATBDM12Z	Nut + bolt M12 galvanized for grounding pocket	2,00
MATCR10	Thick cross diffuser 5 mm, H 1.000 mm	13,10
MATCR15	Thick cross diffuser 5 mm, H 1.500 mm	20,60
MATMORSS	Simple terminal clamp 8/10	1,20
MATMORSR	Double terminal clamp 8/10	2,70
MATDISPR15	Auburn diffuser Ø 18 mm, with threaded ends, 100 µm, H 1.500 mm	20,30
MATCAPT15	Copper pickup auction Ø 18 mm, H 1.500 mm	15,80
MATMORSR	Copper-plated steel clamp Ø 18 mm with threaded ends, 20 µm	1,30
MATGIUNZ	Junction sleeve Ø 18 mm	6,00
MATPERC	Collar clamp in copper-plated steel Ø 18 mm	4,00



MATMORSS



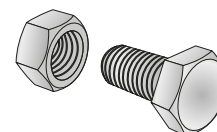
MATMORSR



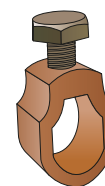
MATCR15



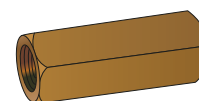
MATDISPR15



MATBDM12Z



MATMORSR



MATGIUNZ

STREET FURNITURE

The new market requirement combined with the growing stimuli for innovation have made us ask the attention on the most complicated, but at the same time the most attractive world of the URBAN FURNITURE, in which elements such as shapes, lights, colors and curves combined together can recreate an infinity of new styles and new solutions.

The pole takes connotations that in the past were unimaginable, passing from a cold iron rod to an awesome piece of furniture, straight, semispherical, wavy, pointed, two-tone, overturned, inclined...

we could continue indefinitely but the pages that follow, in a simple and explanatory way, they realize our projects.

We present a series of solutions already implemented, and to follow schematize the main ones furniture lines.

In case you need different sizes, lines or shapes, do not hesitate to contact us, a young and dynamic staff will be at your disposal to satisfy even the most bizarre requests.



MONTECARLO



MANILA



LONDRA



VIENNA



PARIGI



CANBERRA



DOHA



ALGERI



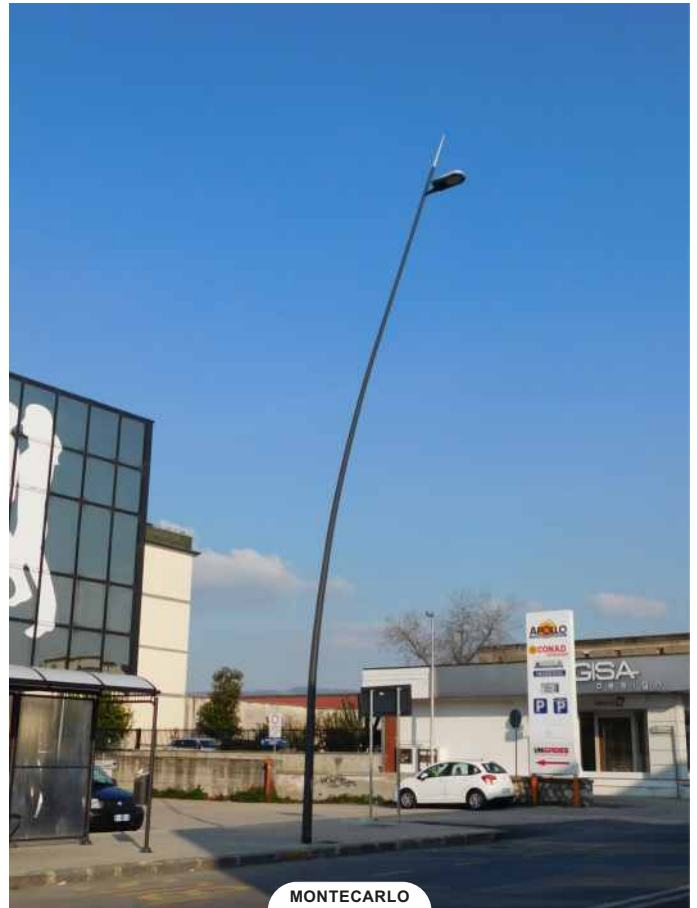
MANILA



BRASILIA



SOFIA



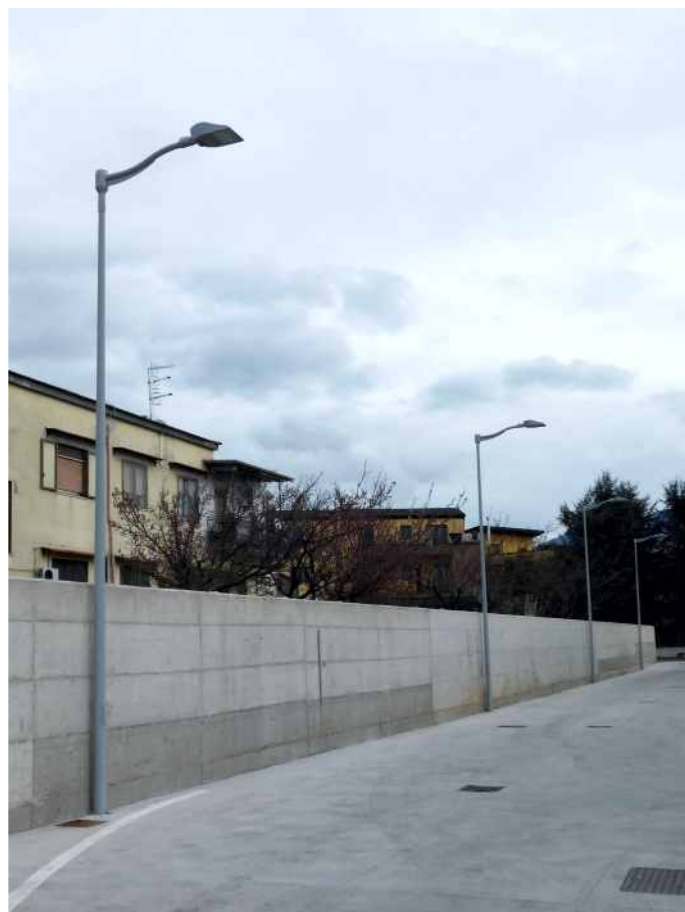
MONTECARLO



ALGERI



MONTECARLO







MIAMI



BRASILIA



MONTECARLO



ABU-DHABI



ALGERI



AMSTERDAM

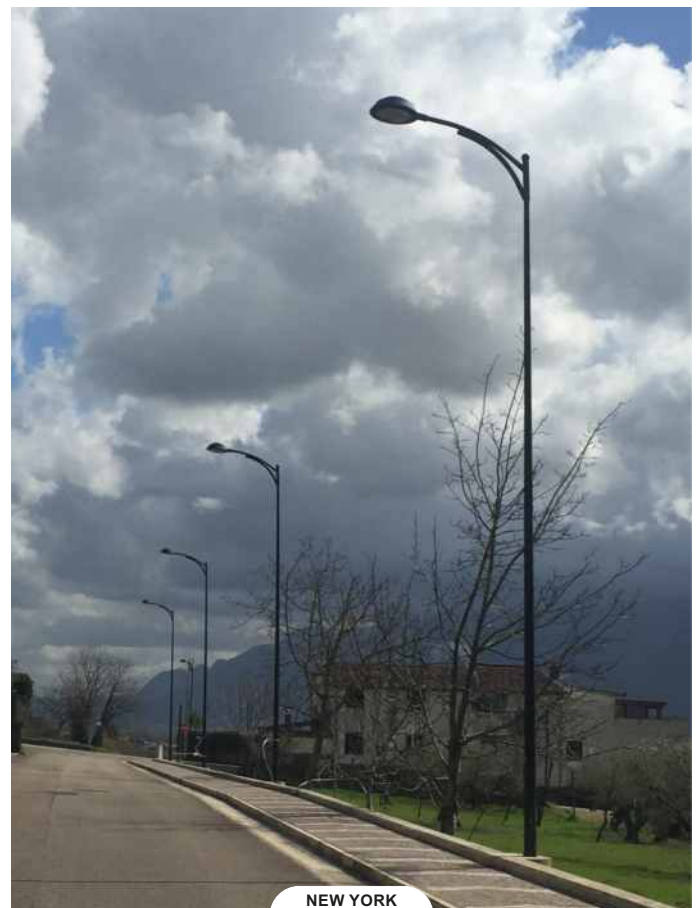


ROMA



PARIGI





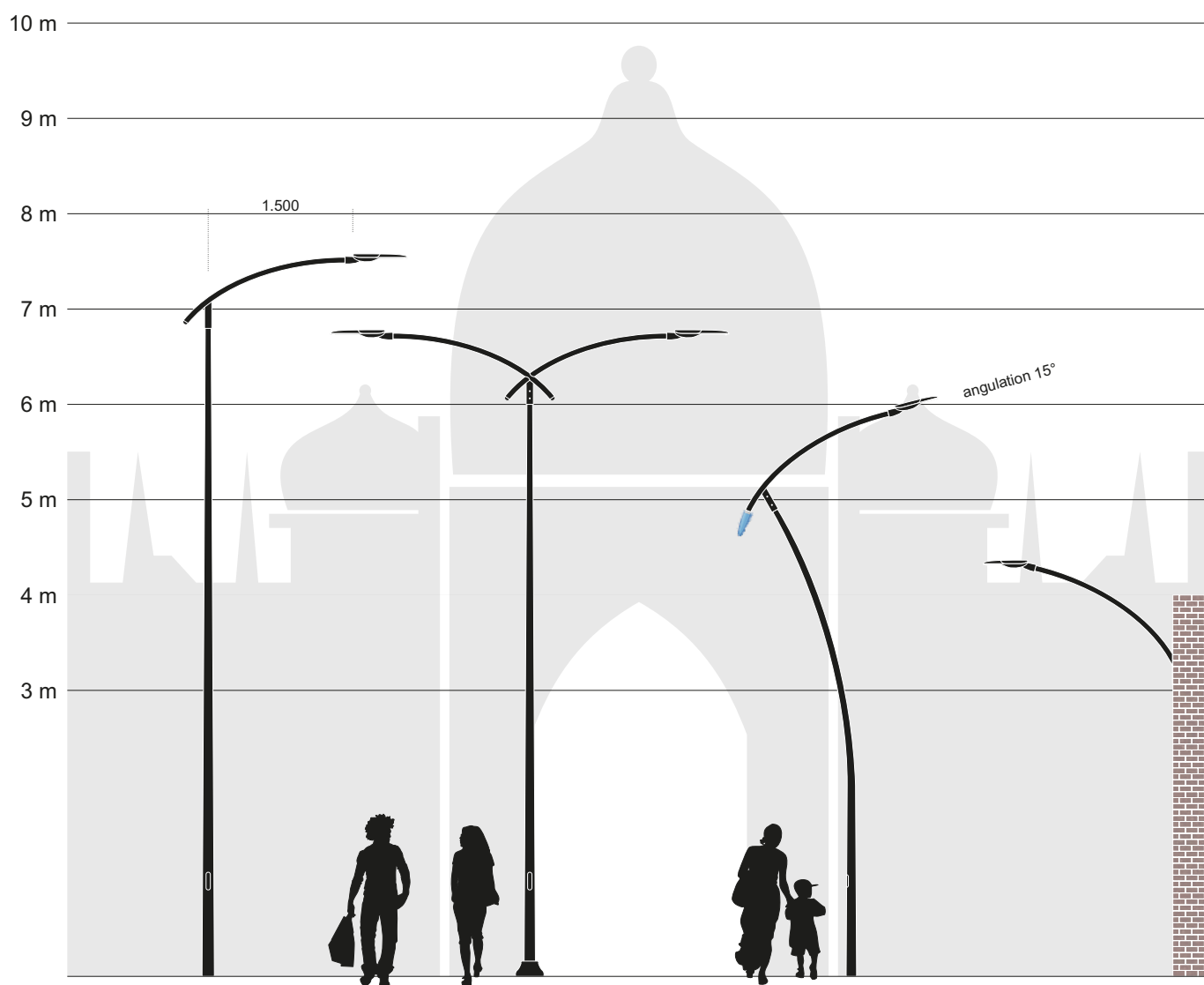


ABU-DHABI



Abu-Dhabi

Two simple adjectives, essentiality and harmony.
A curved recessed jib on the pole top Ø 60 mm.
The optical effect is a curve that continues along the back of the pole.



ABU-DHABI

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
ABU-DHABI-PL4X1500	4.000	1.500	----	----	500	287,00	368,00
ABU-DHABI-PL4X1500-CURVO	4.000	1.500	----	----	500	437,00	518,00
ABU-DHABI-PL5X1500	5.000	1.500	----	----	500	328,00	431,00
ABU-DHABI-PL5X1500-CURVO	5.000	1.500	----	----	500	478,00	581,00
ABU-DHABI-PL5+5X1500	5.000	1.500	5.000	1.500	500	403,00	516,00
ABU-DHABI-PL6X1500	6.000	1.500	----	----	800	371,00	500,00
ABU-DHABI-PL6+6X1500	6.000	1.500	6.000	1.500	800	446,00	600,00
ABU-DHABI-PL7X1500	7.000	1.500	----	----	800	424,00	585,00
ABU-DHABI-PL7+7X1500	7.000	1.500	7.000	1.500	800	509,00	700,00
ABU-DHABI-PL8X1500	8.000	1.500	----	----	800	463,00	648,00
ABU-DHABI-PL8+8X1500	8.000	1.500	8.000	1.500	800	598,00	763,00

WALL OUTREACHES ABU-DHABI MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	isntallation	Unit Price €	Prezzo U. Verniciato €
ABU-DHABI-15-MURO	1.000	1.500	wall fixing	95,00	130,00

RECOMMENDED ACCESSORIES

Decorative
bases

pag. 218

Caps



pag. 98

Decorative
tips

pag. 220

Decorative
LED tips

pag. 221





ALGERI

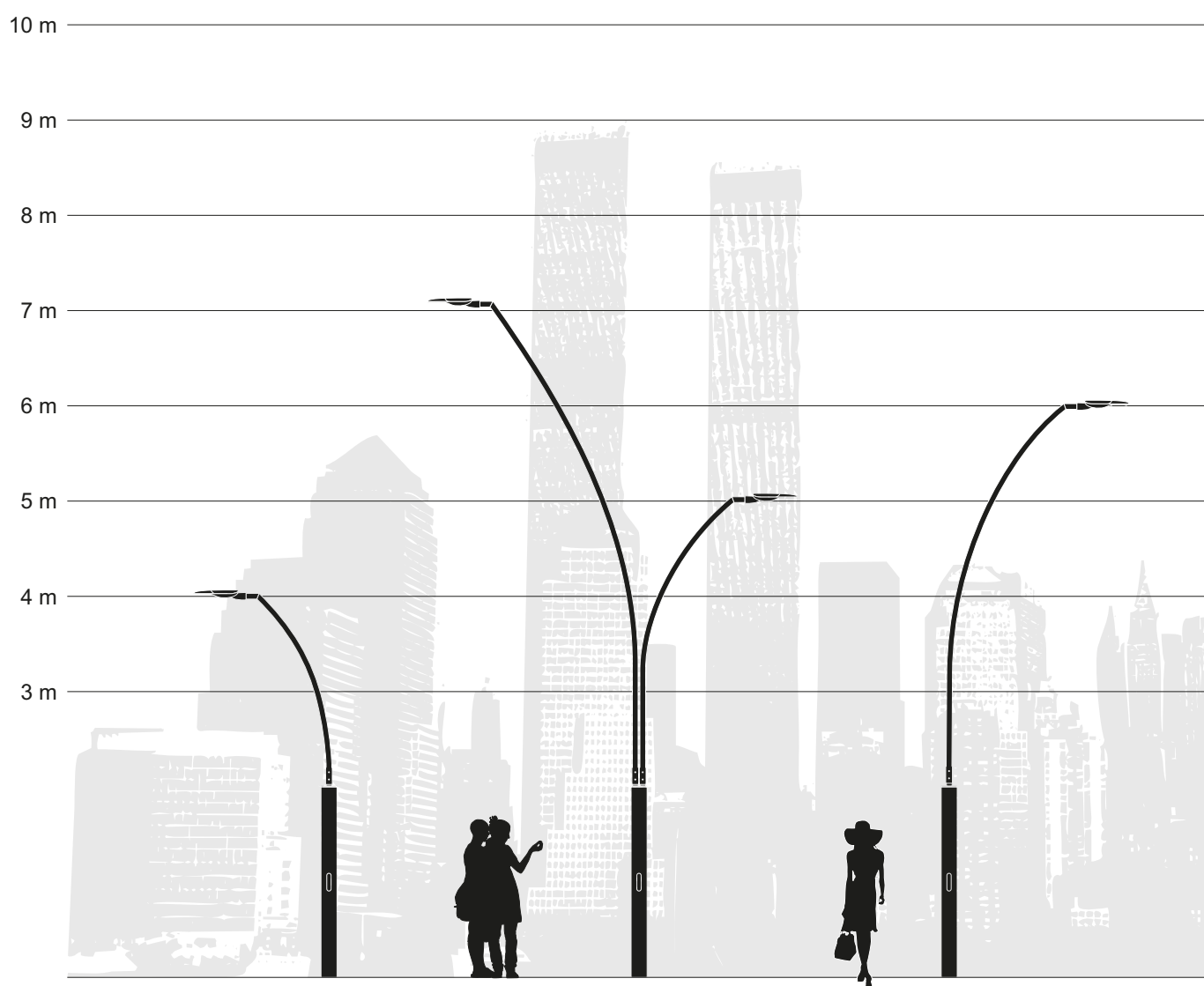


Algeri

A sinuous line, a cylinder that becomes elegance.

Its extraordinary beauty derives from the simplicity of cylindrical elements caressed to soft wavy shapes.

Available in single, double, triple and quadruple versions.



ALGERI

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
ALGERI-PL4	4.000	800	----	----	500	340,00	440,00
ALGERI-PL5	5.000	800	----	----	800	420,00	564,00
ALGERI-PL6	6.000	1.500	----	----	800	460,00	636,00
ALGERI-PL6+4	6.000	1.500	4.000	800	800	650,00	901,00
ALGERI-PL7	7.000	1.500	----	----	800	516,00	724,00
ALGERI-PL7+5	7.000	1.500	5.000	800	800	706,00	989,00
ALGERI-PL8	8.000	1.500	----	----	800	560,00	803,00
ALGERI-PL8+6	8.000	1.500	6.000	800	800	750,00	1.128,00





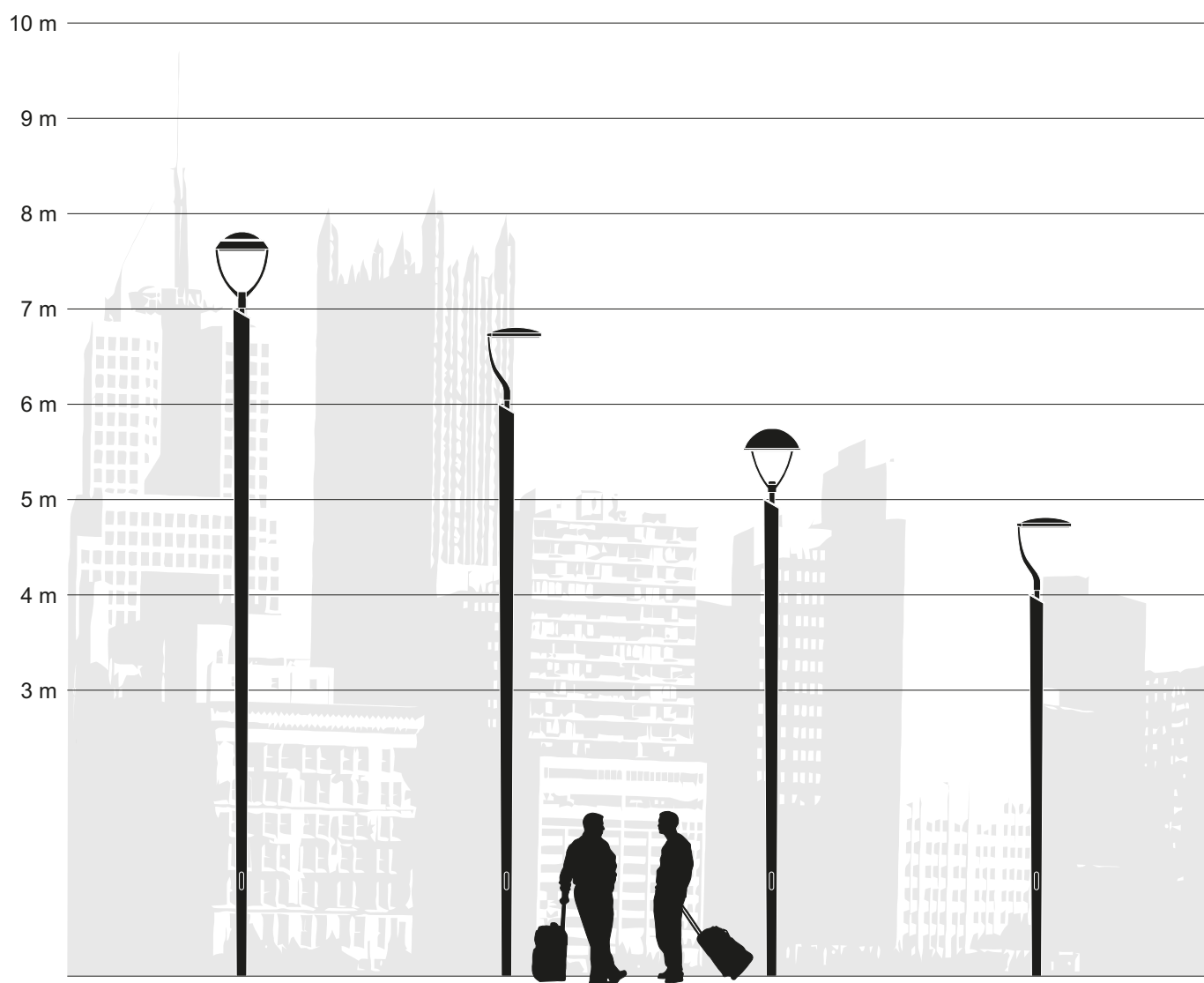
AMSTERDAM



Amsterdam

The world and its opposite, the consuetudine, the paradox, in a nutshell the reverse way of see the light.

Available in different heights, with 30° inclined top, with Ø 60 mm calibration for allow the insertion of any lighting body.



AMSTERDAM

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
AMSTERDAM-PL4	4.000	----	----	----	800	500,00	600,00
AMSTERDAM-PL5	5.000	----	----	----	800	550,00	670,00
AMSTERDAM-PL6	6.000	----	----	----	800	600,00	745,00
AMSTERDAM-PL7	7.000	----	----	----	800	660,00	825,00



RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218



ANKARA



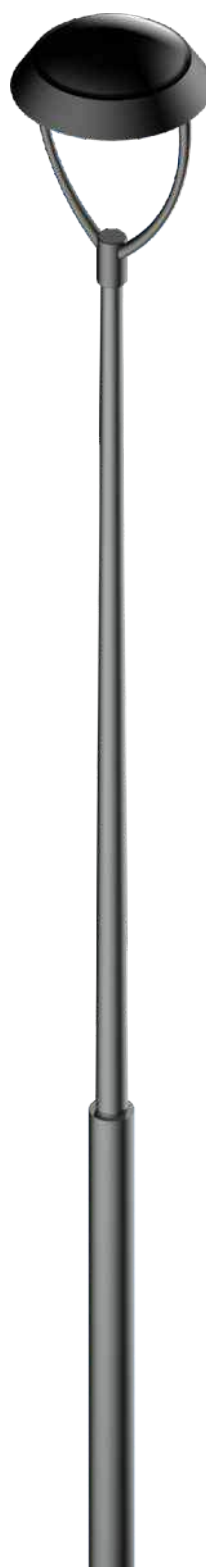
Ankara

Linear and slender, the Ankara model consists of a combination of geometries. A 4 meter cylindrical base that reaches the Ø 60 mm at the top. Suitable for any lighting body.



ANKARA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
ANKARA-PL6	6.000	----	----	----	800	490,00	585,00
ANKARA-PL7	7.000	----	----	----	800	530,00	645,00
ANKARA-PL8	8.000	----	----	----	800	570,00	710,00
ANKARA-PL9	9.000	----	----	----	800	620,00	780,00



RECOMMENDED ACCESSORIES

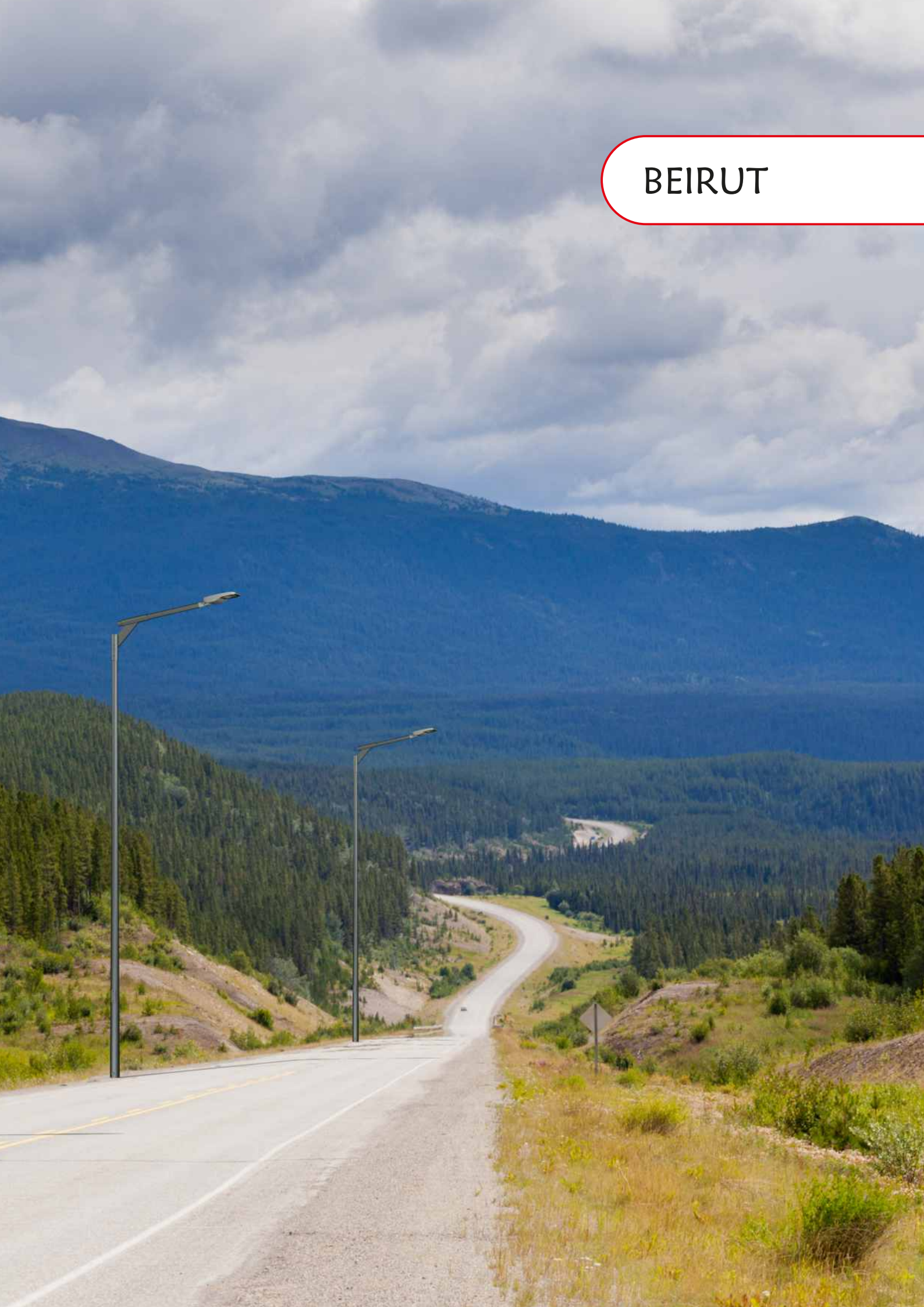
Decorative
Bases



pag. 218



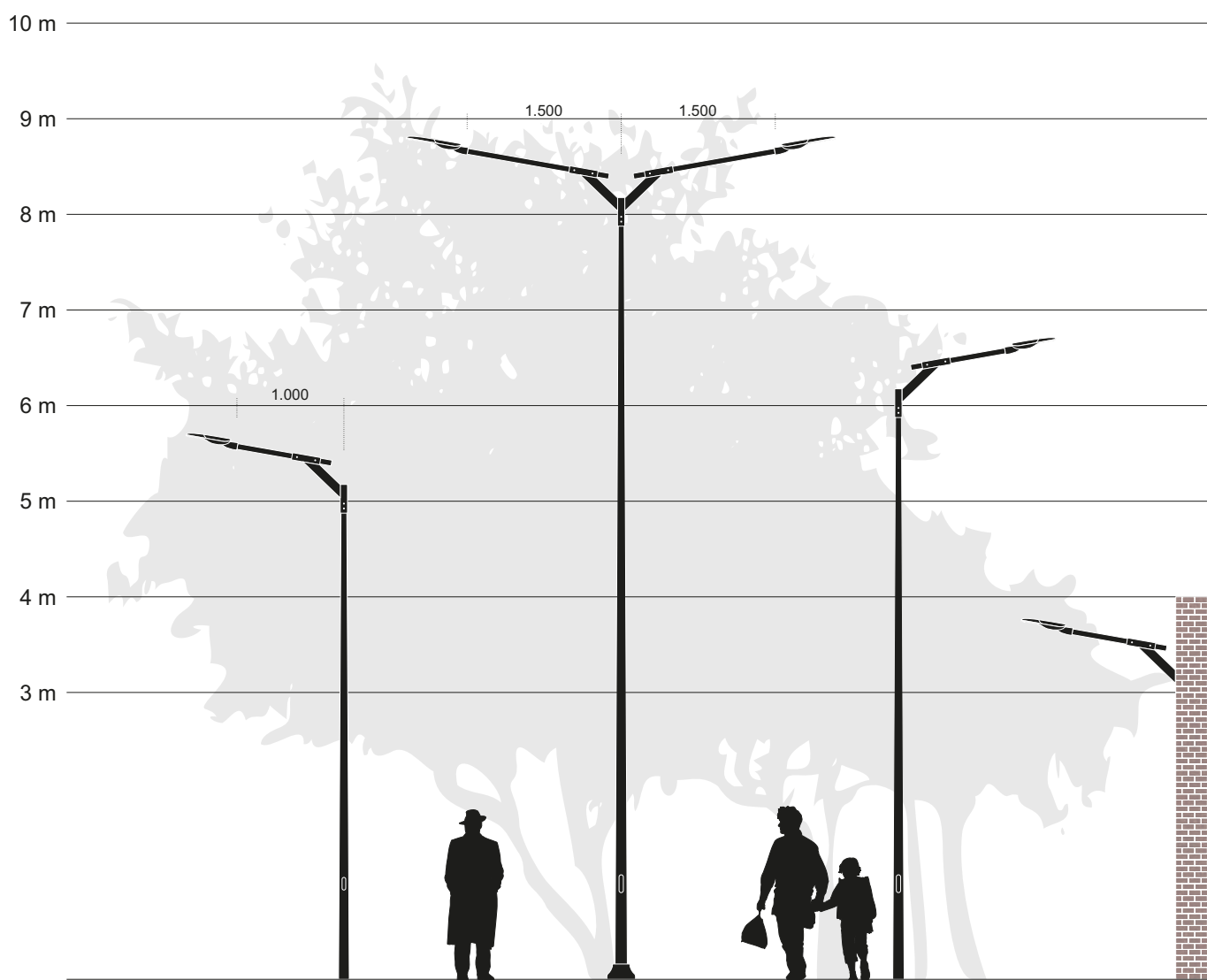
BEIRUT



Beirut

The furnishing arm model Beirut combines cylindrical parts with rectangular molded fittings to create coordinated angular shapes and showy corners. Made on a cylindrical glass, he sees his own application on any type of pole with a Ø 60 mm top.

Available in single and double version, with protrusion from 1.000 to 1,500 mm.



BEIRUT

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
BEIRUT-PL4X1000	4.000	1.000	----	----	500	312,00	393,00
BEIRUT-PL5X1000	5.000	1.000	----	----	500	353,00	456,00
BEIRUT-PL5+5X1000	5.000	1.000	5.000	1.000	500	453,00	566,00
BEIRUT-PL6X1000	6.000	1.000	----	----	800	396,00	525,00
BEIRUT-PL6+6X1000	6.000	1.000	6.000	1.000	800	496,00	650,00
BEIRUT-PL7X1000	7.000	1.000	----	----	800	449,00	610,00
BEIRUT-PL7+7X1000	7.000	1.000	7.000	1.000	800	559,00	750,00
BEIRUT-PL8X1000	8.000	1.000	----	----	800	488,00	673,00
BEIRUT-PL8+8X1000	8.000	1.000	8.000	1.000	800	598,00	813,00
BEIRUT-PL9X1000	9.000	1.000	----	----	800	526,00	736,00

WALL OUTREACHES BEIRUT MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
BEIRUT-10-MURO	450	1.000	wall fixing	100,00	125,00
BEIRUT-15-MURO	550	1.500	wall fixing	115,00	140,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221





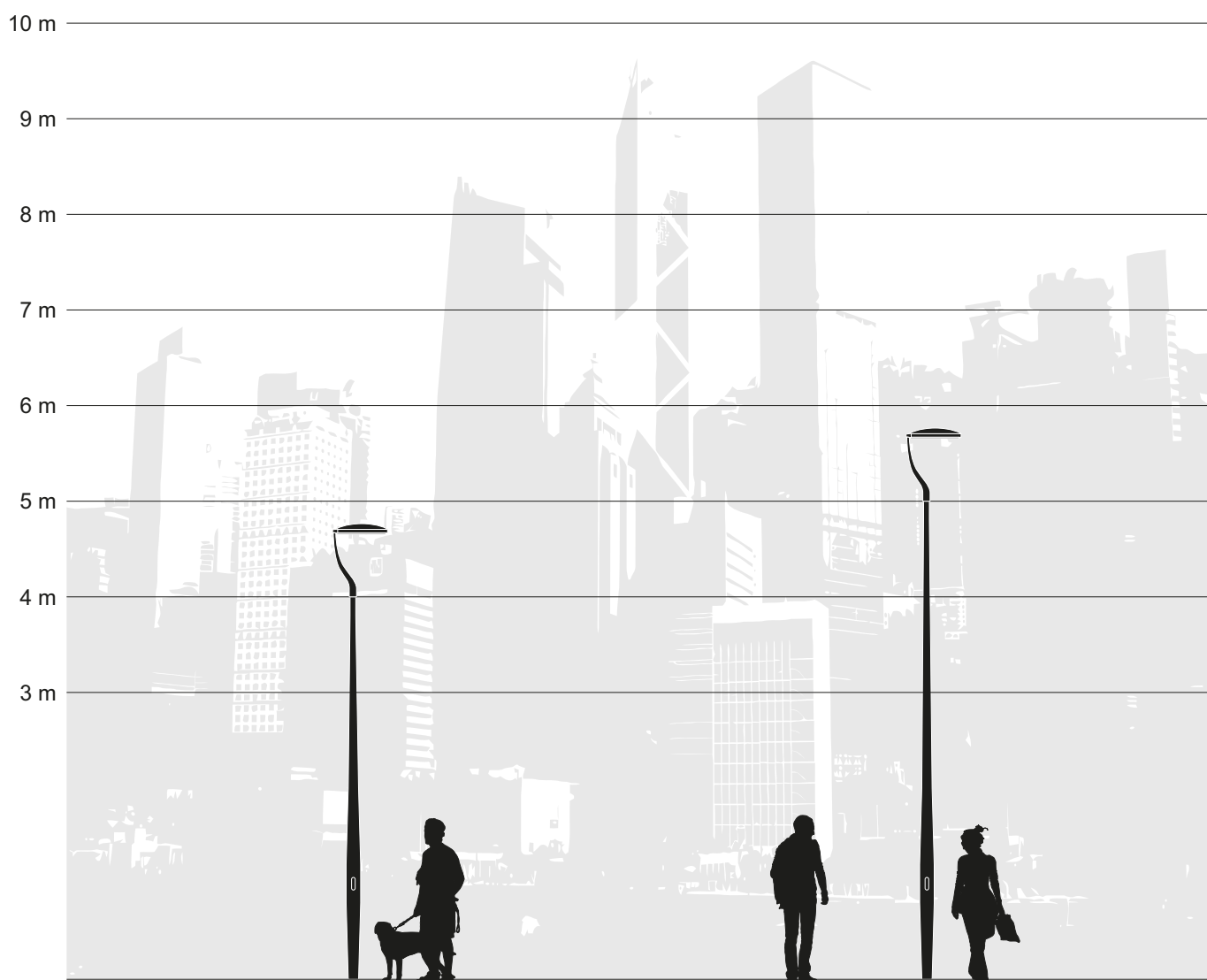
A photograph of a long, two-story red brick building with many windows, a paved path, and green grass. The building is made of red brick and has two rows of windows. The top row has taller, narrower windows, and the bottom row has shorter, wider windows. A paved path runs along the side of the building, and there are several black lampposts. To the right of the path is a grassy area with a large tree. The sky is blue and clear.

BOGOTA'

Bogotá

Pure elegance, a pole able to evoke the shape of a barrel, extruded by hot with an elaborate rolling process.

Available in two versions, from 4,000 mm and 5,000 mm above ground level.



BOGOTA'

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
BOGOTA'-PL4	4.000	----	----	----	500	485,00	585,00
BOGOTA'-PL5	5.000	----	----	----	500	585,00	695,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218





BRASILIA



Brasilia

A distinguishing element of this line is the cylindrical outreach that thanks to a complex bending process assumes this particular wavy shape.

He sees his best combination on well-prepared cylindrical bases.

It can be supplied either in one way or as a double offset light point.

This line is used mainly for the furnishing of urban parks and residential complexes.



BRASILIA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
BRASILIA-PL5	5.000	750	----	----	500	700,00	850,00
BRASILIA-PL5+45	5.000	750	4.500	750	500	775,00	900,00
BRASILIA-PL6	6.000	750	----	----	800	800,00	1.020,00
BRASILIA-PL6+55	6.000	750	5.500	750	800	850,00	1.070,00
BRASILIA-PL7	7.000	750	----	----	800	860,00	1.100,00
BRASILIA-PL7+65	7.000	750	6.500	750	800	910,00	1.150,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218



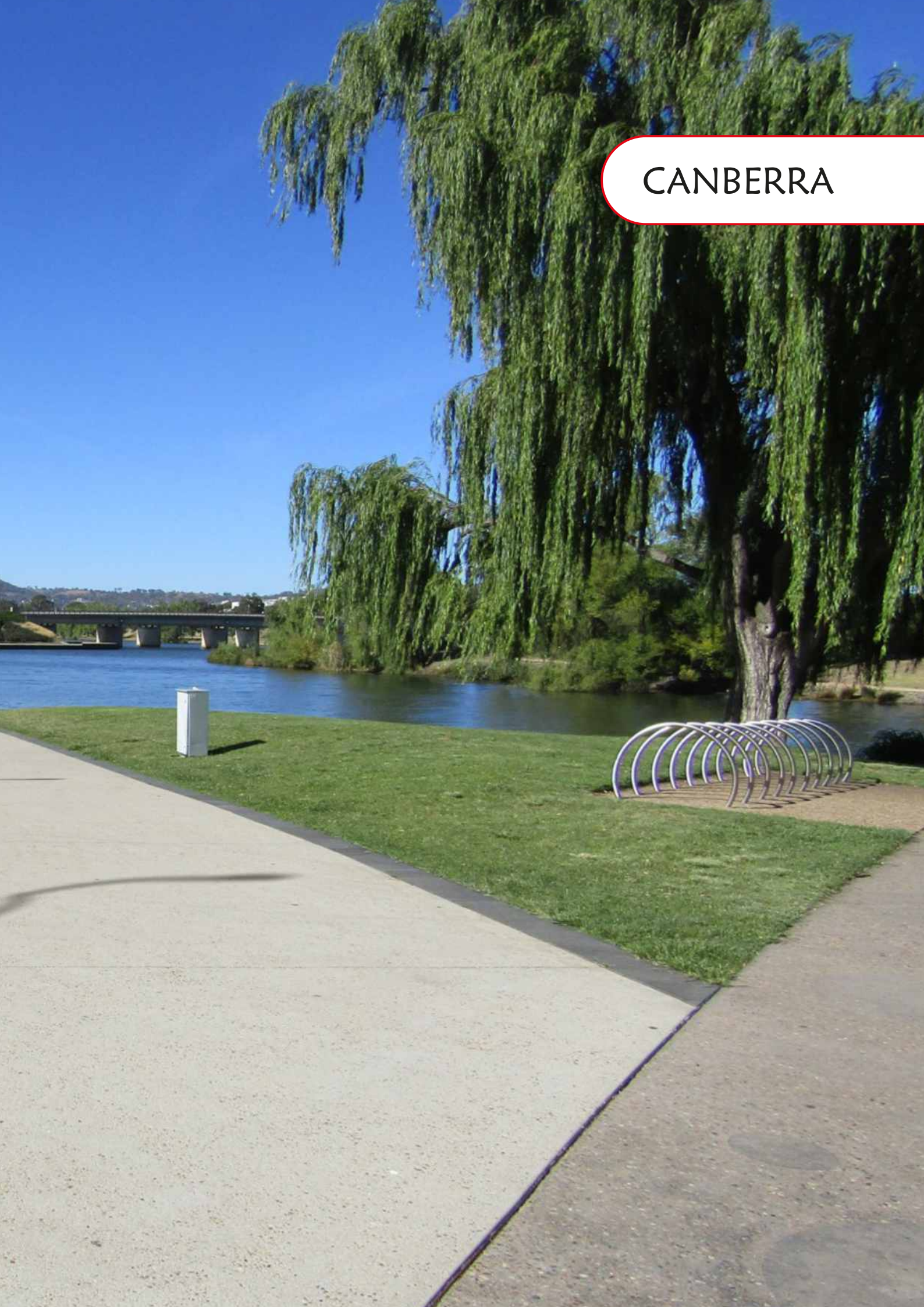
Caps

pag. 98





CANBERRA



Canberra

A cylindrical stem which combines a particular outreach.
Available in various heights this model combines functional and aesthetic needs and manages to beautify even the darkest road.



CANBERRA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
CANBERRA-PL4	4.000	450	----	----	500	337,00	418,00
CANBERRA-PL5	5.000	450	----	----	500	378,00	481,00
CANBERRA-PL6	6.000	450	----	----	500	421,00	550,00
CANBERRA-PL7	7.000	450	----	----	800	474,00	635,00
CANBERRA-PL8	8.000	450	----	----	800	513,00	698,00



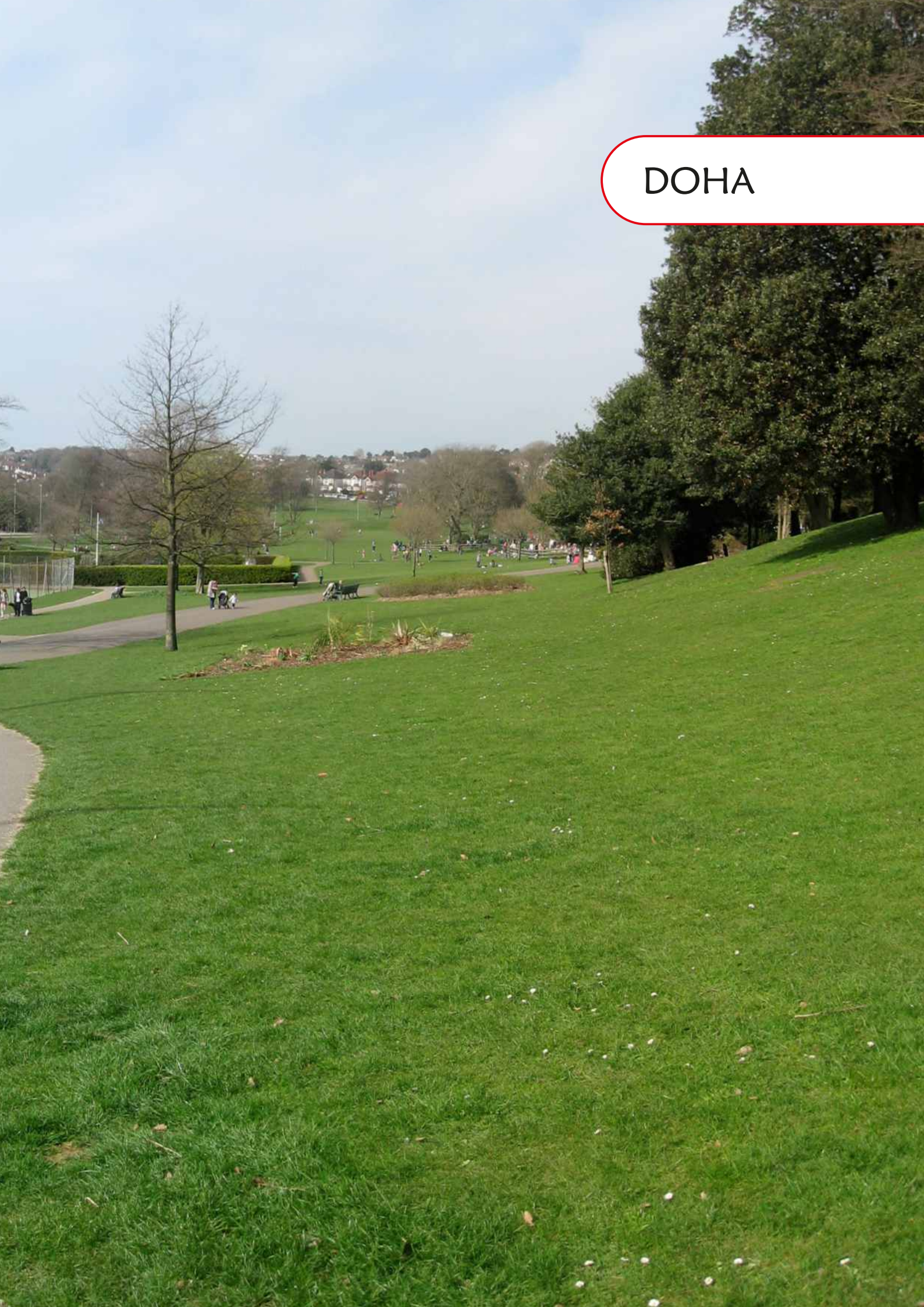
RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

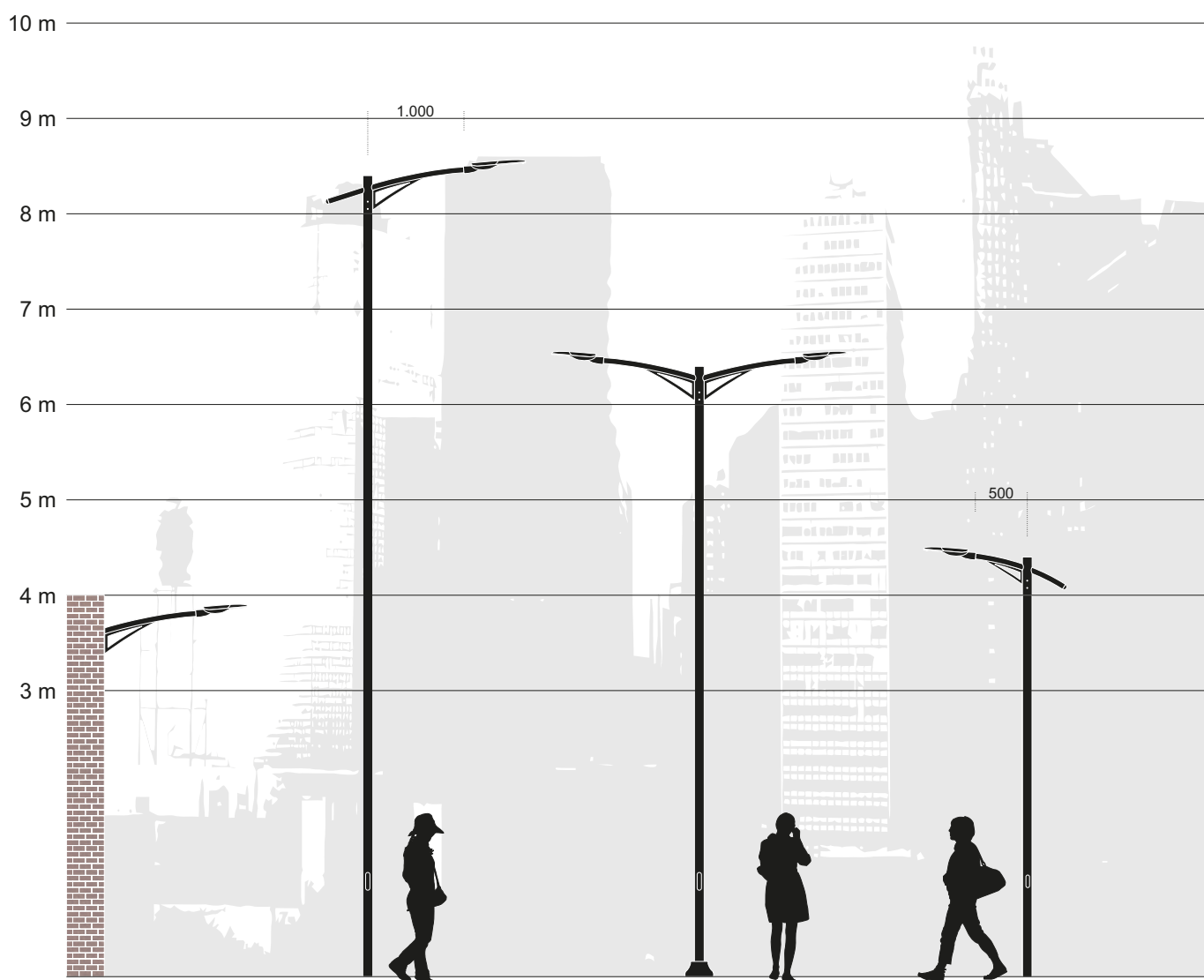


DOHA



Doha

The Doha model is the composition of a cylindrical stem available in different heights at which we provide a cylindrical outreach with a passing effect on the pole and triangular top decorative laser cut sheet applied by welding below the same outreach.



DOHA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
DOHA-PL4X1000	4.000	1.000	----	----	800	337,00	418,00
DOHA-PL5X1000	5.000	1.000	----	----	800	378,00	481,00
DOHA-PL5+5X1000	5.000	1.000	5.000	1.000	800	503,00	616,00
DOHA-PL6X1000	6.000	1.000	----	----	800	421,00	550,00
DOHA-PL6+6X1000	6.000	1.000	6.000	1.000	800	546,00	700,00
DOHA-PL7X1000	7.000	1.000	----	----	800	474,00	635,00
DOHA-PL7+7X1000	7.000	1.000	7.000	1.000	800	609,00	800,00
DOHA-PL8X1000	8.000	1.000	----	----	800	513,00	698,00
DOHA-PL8+8X1000	8.000	1.000	8.000	1.000	800	648,00	863,00

WALL OUTREACHES DOHA MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
DOHA-5-MURO	200	500	wall fixing	115,00	140,00
DOHA-10-MURO	300	1.000	wall fixing	130,00	155,00



RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



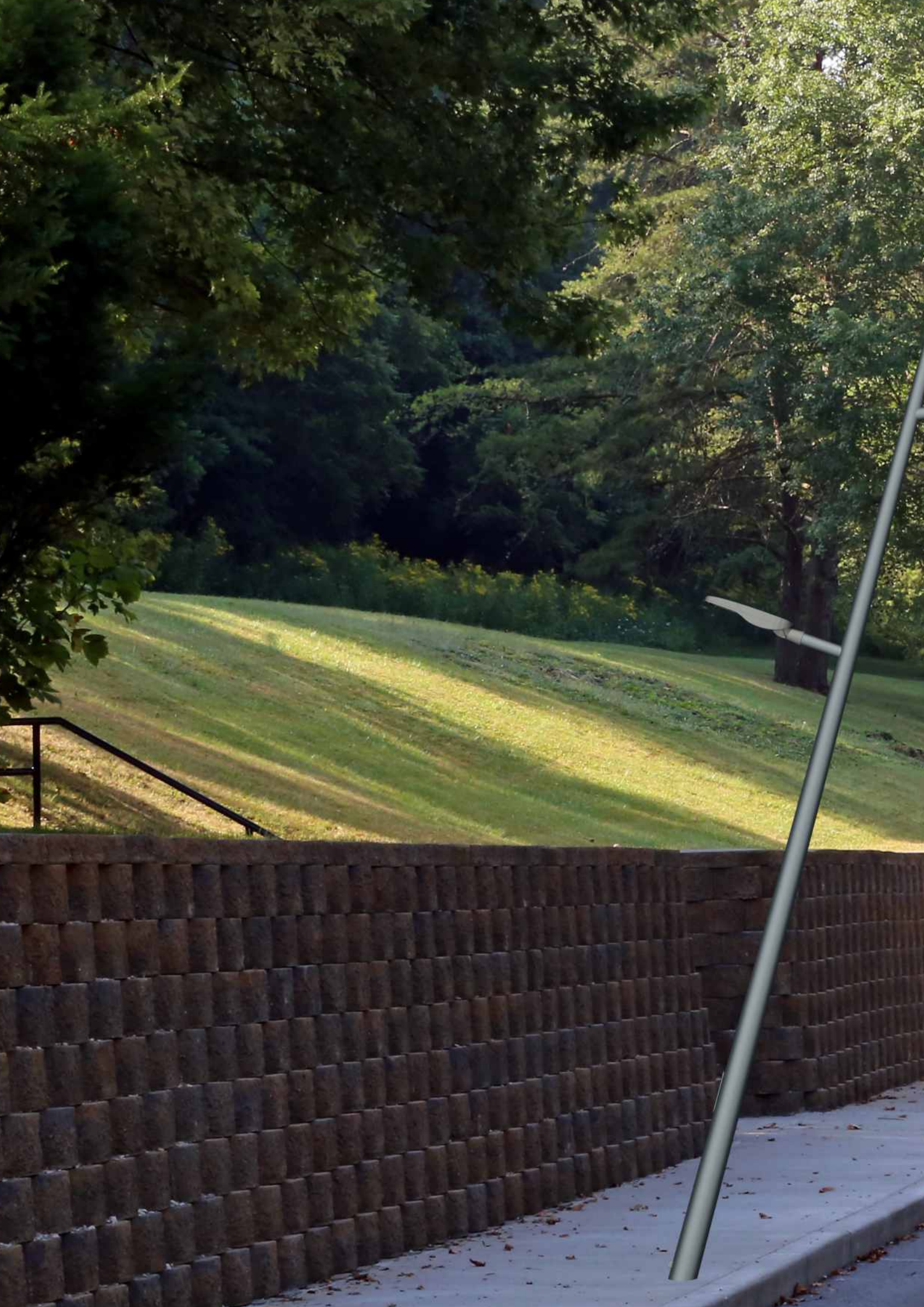
pag. 98

Decorative
Tips

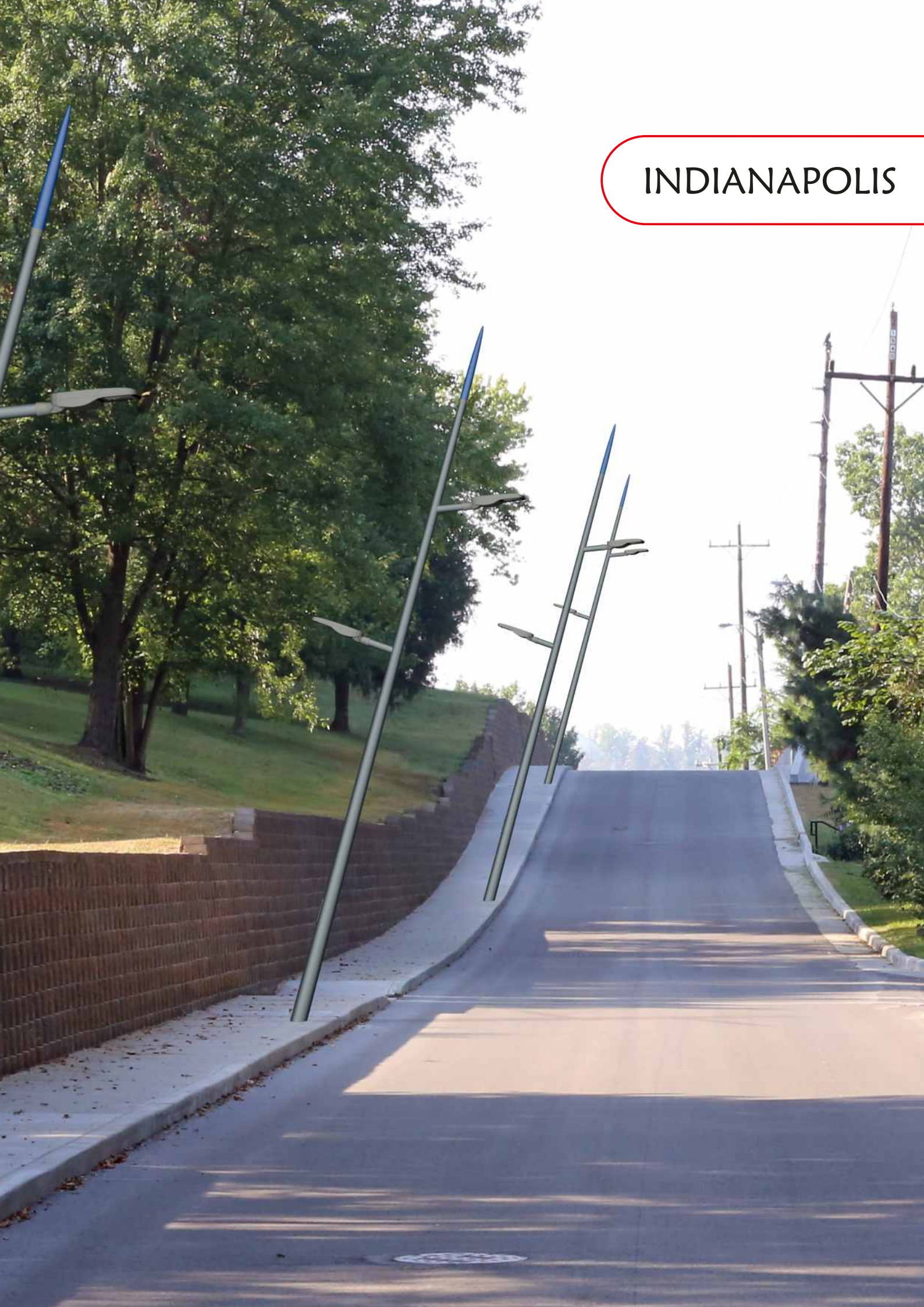
pag. 220

Decorative
LED TipsDecorative
Terminals

pag. 222



INDIANAPOLIS

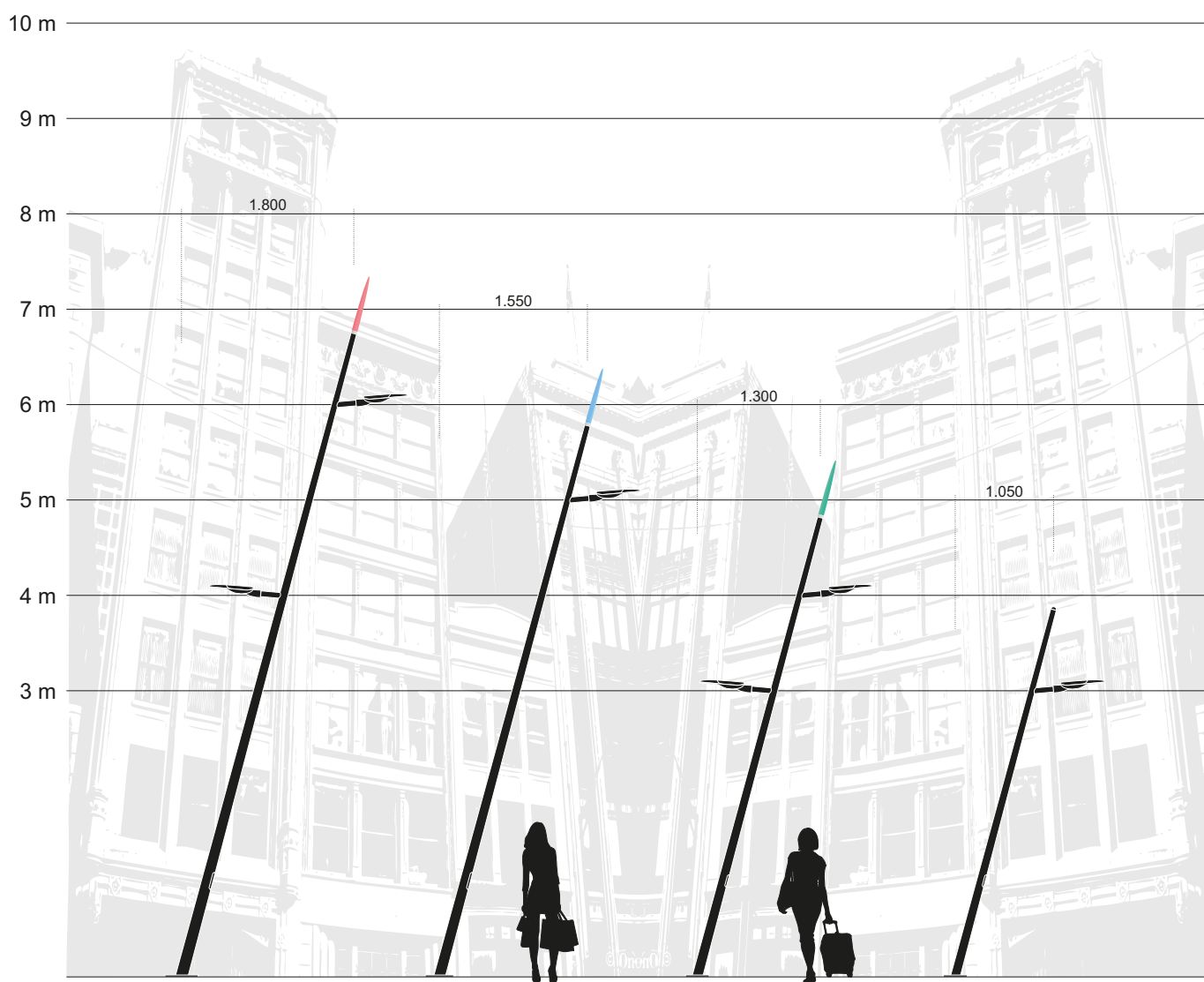


Indianapolis

Tilted conical pole made on a base plate and then applicable by counterplate and anchor bolts.

An innovative, almost futuristic idea, thanks to which the horizon inclines and geometries they change perspective.

Available in different heights in single and double versions.



INDIANAPOLIS

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
INDIANAPOLIS-PL3	3.000	1.050	----	----	ON PLATE	500,00	600,00
INDIANAPOLIS-PL4	4.000	1.300	----	----	ON PLATE	550,00	670,00
INDIANAPOLIS-PL4+3	4.000	1.300	5.000	3.000	ON PLATE	585,00	710,00
INDIANAPOLIS-PL5	5.000	1.550	----	----	ON PLATE	600,00	745,00
INDIANAPOLIS-PL5+4	5.000	1.550	6.000	4.000	ON PLATE	635,00	795,00
INDIANAPOLIS-PL6	6.000	1.800	----	----	ON PLATE	660,00	825,00
INDIANAPOLIS-PL6+5	6.000	1.800	7.000	5.000	ON PLATE	695,00	865,00

RECOMMENDED ACCESSORIES

Bolts Kit



pag. 92

Caps



pag. 98

Decorative Tips



pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





KIEV



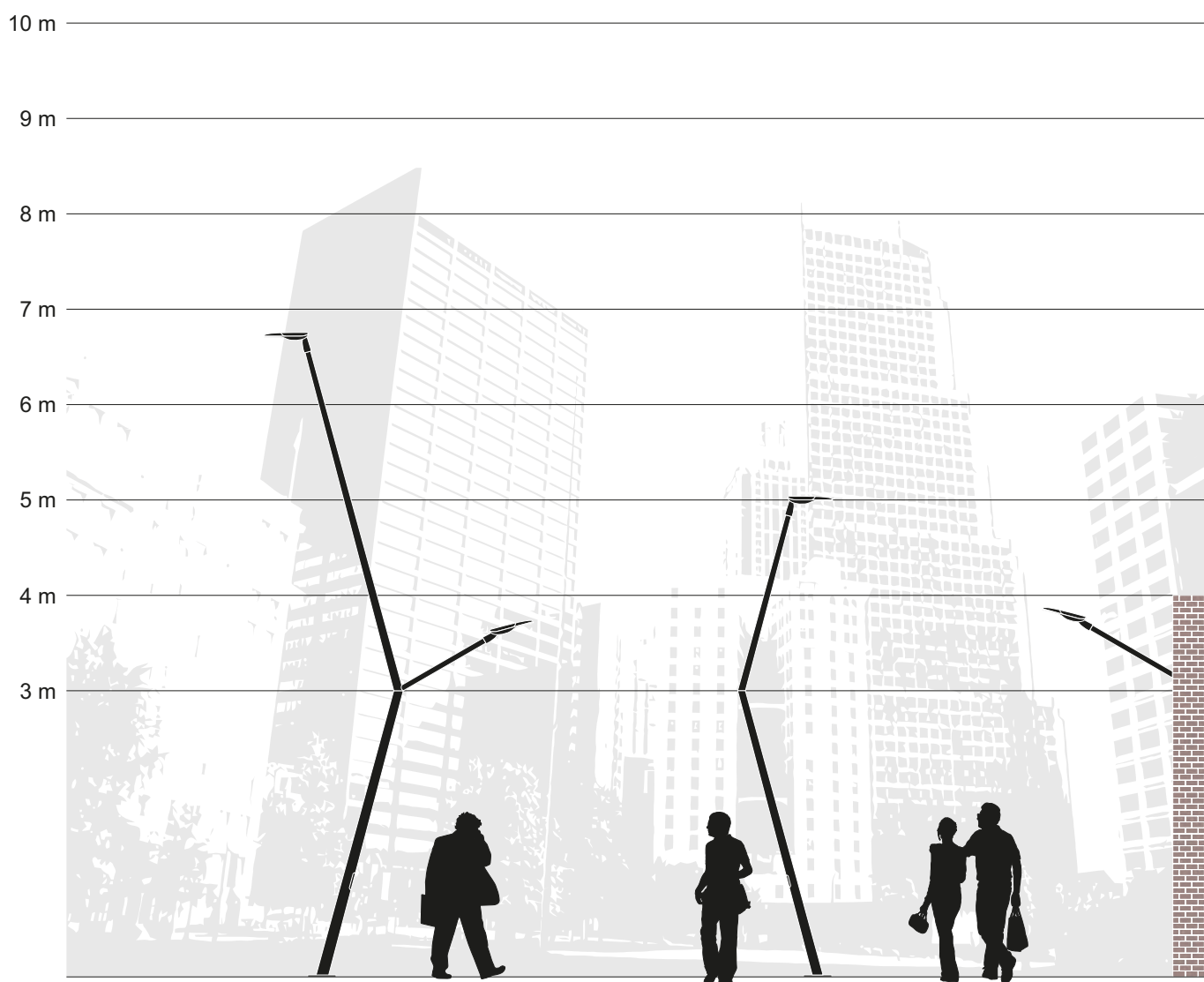
Kiev

The desire to work with new shapes pushes us to abandon radiuses of curvature to develop the idea of Angle.

The Kiev pole wants to please for its eccentric angularity.

For an illumination that wants to be seen as well as... to illuminate.

Made on base plate, in single and double version.



KIEV

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
KIEV-PL5	5.000	----	----	----	ON PLATE	380,00	529,00
KIEV-PL6	6000	----	----	----	ON PLATE	420,00	601,00
KIEV-PL6+4	6.000	----	4.000	800	ON PLATE	510,00	701,00
KIEV-PL7	7.000	----	----	----	ON PLATE	476,00	689,00
KIEV-PL7+4	7.000	----	4.000	800	ON PLATE	566,00	789,00

WALL OUTREACHES KIEV MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
KIEV-05-MURO	500	850	wall fixing	90,00	110,00

RECOMMENDED ACCESSORIES

Bolts Kit



pag. 92





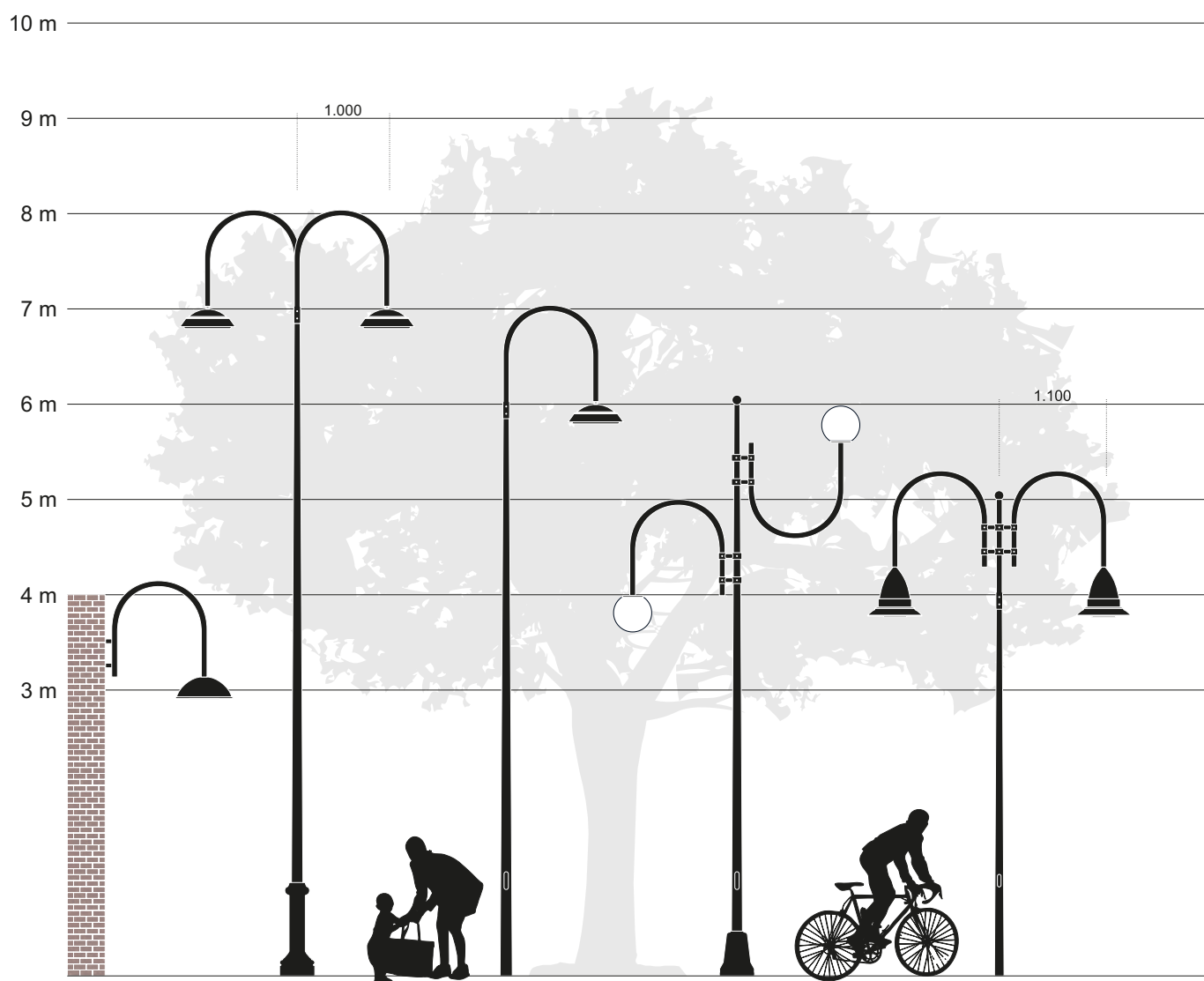
LONDRA



Londra

The London model consists of a conical stem which is combined with a handle arm of an umbrella pointing up or down.

Available in single, double, triple and even quadruple versions.



LONDRA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
LONDRA-PL4	4.000	1.000	----	----	500	302,00	401,00
LONDRA-PL4+4	4.000	1.000	4.000	1.000	500	452,00	589,00
LONDRA-PL5	5.000	1.000	----	----	500	382,00	444,00
LONDRA-PL5+5	5.000	1.000	5.000	1.000	500	478,00	632,00
LONDRA-PL6	6.000	1.000	----	----	800	371,00	513,00
LONDRA-PL6+4	6.000	1.000	4.000	1.000	800	521,00	701,00
LONDRA-PL6+6	6.000	1.000	6.000	1.000	800	521,00	701,00
LONDRA-PL7	7.000	1.000	----	----	800	409,00	573,00
LONDRA-PL7+5	7.000	1.000	5.000	1.000	800	559,00	761,00
LONDRA-PL7+7	7.000	1.000	7.000	1.000	800	559,00	761,00
LONDRA-PL8	8.000	1.000	----	----	800	448,00	636,00
LONDRA-PL8+6	8.000	1.000	6.000	1.000	800	598,00	824,00
LONDRA-PL8+8	8.000	1.000	8.000	1.000	800	598,00	824,00

WALL OUTREACHES LONDRA MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
LONDRA-MURO	----	1.100	wall fixing	150,00	188,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Terminals

pag. 222





MANHATTAN



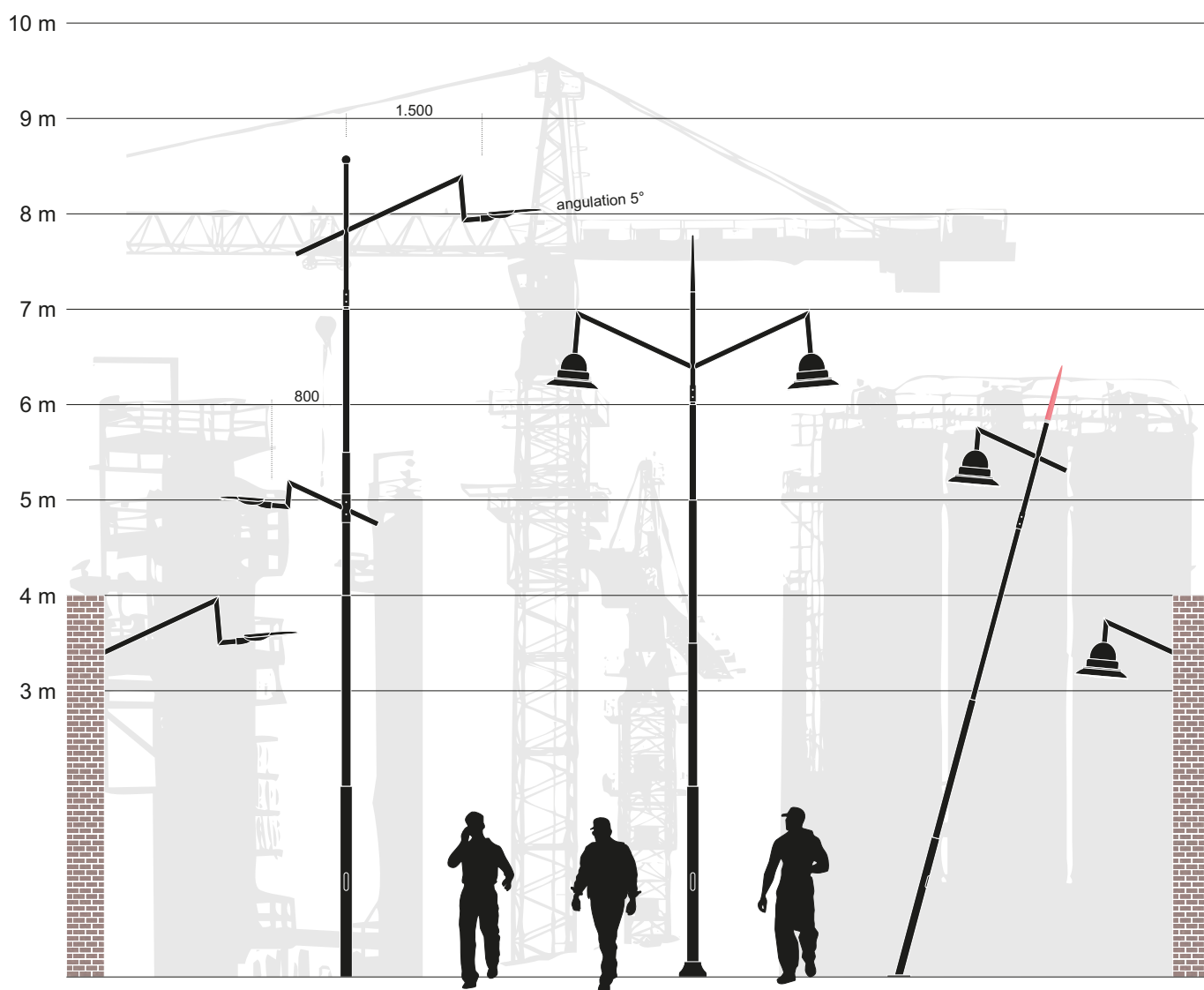
Manhattan

Decisive, edgy, the Manhattan model wants to be distinguished from everything that furniture is not.

Made with a tapered stem and Ø 60 mm steel coupling on a cup.

Available in single and double version, symmetrical or offset.

Countless accessories from be able to provide this model.



MANHATTAN

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
MANHATTAN-PL4X800	4.000	800	----	----	500	312,00	393,00
MANHATTAN-PL5X800	5.000	800	----	----	500	353,00	456,00
MANHATTAN-PL5+5X800	5.000	800	5.000	800	500	453,00	566,00
MANHATTAN-PL6X1500	6.000	1.500	----	----	800	396,00	525,00
MANHATTAN-PL6+6X1500	6.000	1.500	6.000	1.500	800	496,00	650,00
MANHATTAN-PL7X1500	7.000	1.500	----	----	800	449,00	610,00
MANHATTAN-PL7+7X1500	7.000	1.500	7.000	1.500	800	559,00	750,00
MANHATTAN-PL7X1500+5X800	7.000	1.500	5.000	800	800	639,00	850,00
MANHATTAN-PL8X1500	8.000	1.500	----	----	800	488,00	673,00
MANHATTAN-PL8+8X1500	8.000	1.500	8.000	1.500	800	598,00	813,00
MANHATTAN-PL8X1500+5X800	8.000	1.500	5.000	800	800	678,00	913,00
MANHATTAN-PL9X1500	9.000	1.500	----	----	800	526,00	736,00

WALL OUTREACHES MANHATTAN MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
MANHATTAN-08-MURO	----	800	wall fixing	90,00	110,00
MANHATTAN-15-MURO	----	1.500	wall fixing	110,00	140,00
MANHATTAN/S-08-MURO	----	800	wall fixing	110,00	130,00
MANHATTAN/S-15-MURO	----	1.500	wall fixing	130,00	150,00

RECOMMENDED ACCESSORIES

Bolts Kit



pag. 92

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED TipsDecorative
Terminals

pag. 222





MANILA

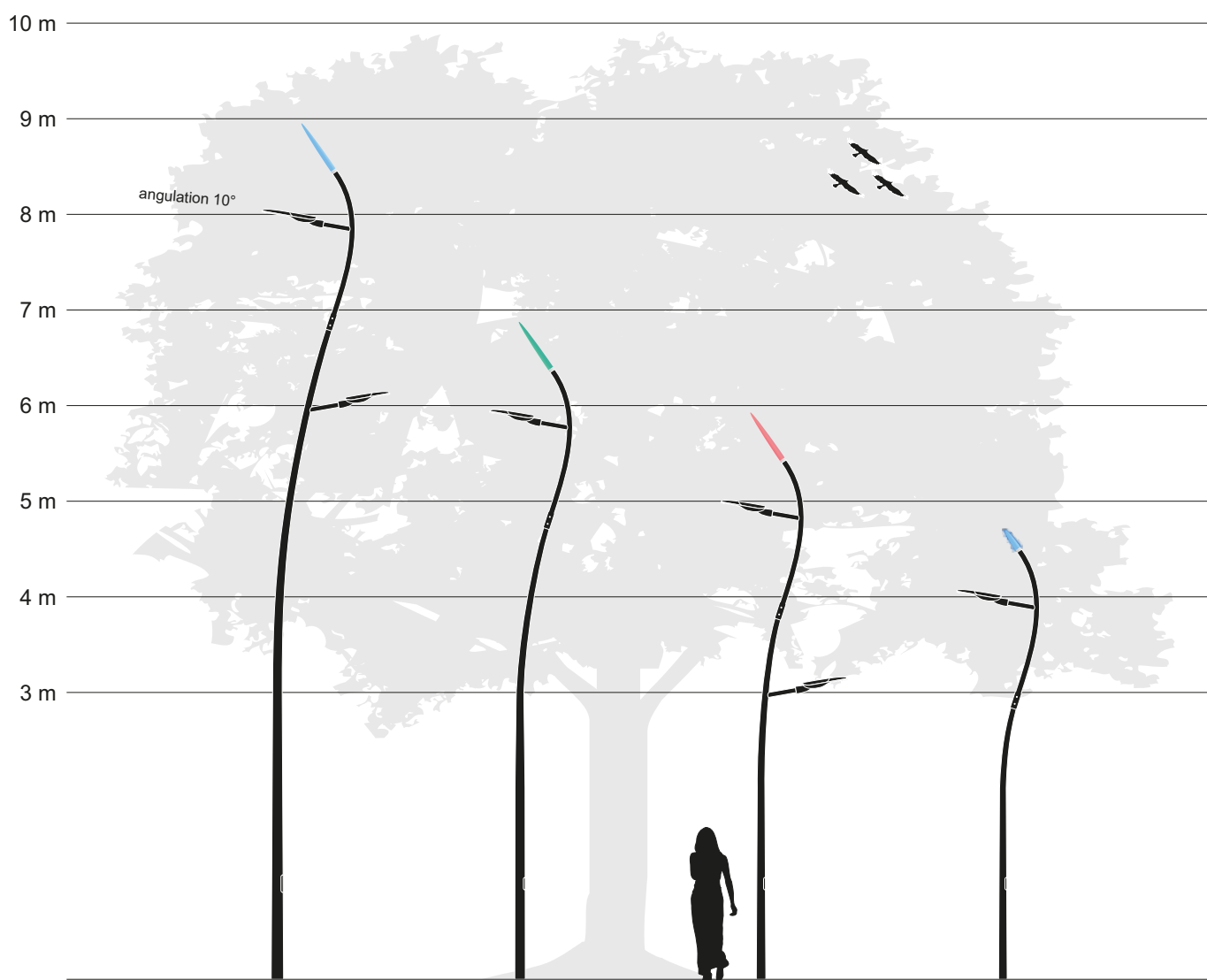


Manila

Curved conical pole of extraordinary beauty, its wavy line reproduces the one of the trunks of Manila.

Depending on the requirements it can be supplied with different heights and degrees of inclination.

It can be embellished thanks to the use of the LED tip.



MANILA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La sporgenza 2° punto luce mm	i. landfill mm	Unit Price €	Painted Unit Price €
MANILA-PL4	4.000	----	----	----	500	415,00	540,00
MANILA-PL5	5.000	----	----	----	500	494,00	664,00
MANILA-PL5+3	5.000	----	3.000	200	500	545,00	724,00
MANILA-PL6	6.000	----	----	----	500	535,00	736,00
MANILA-PL6+4	6.000	----	4.000	200	500	585,00	796,00
MANILA-PL7	7.000	----	----	----	500	591,00	824,00
MANILA-PL7+5	7.000	----	5.000	200	500	641,00	884,00
MANILA-PL8	8.000	----	----	----	500	635,00	903,00
MANILA-PL8+6	8.000	----	6.000	200	500	685,00	963,00
MANILA-PL9	9.000	----	----	----	500	735,00	1.040,00
MANILA-PL9+7	9.000	----	7.000	200	500	785,00	1.100,00
MANILA-PL10	10.000	----	----	----	500	935,00	1.278,00
MANILA-PL10+8	10.000	----	8.000	200	500	985,00	1.338,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Puntali
DecorativiDecorative
Tips
pag. 220Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





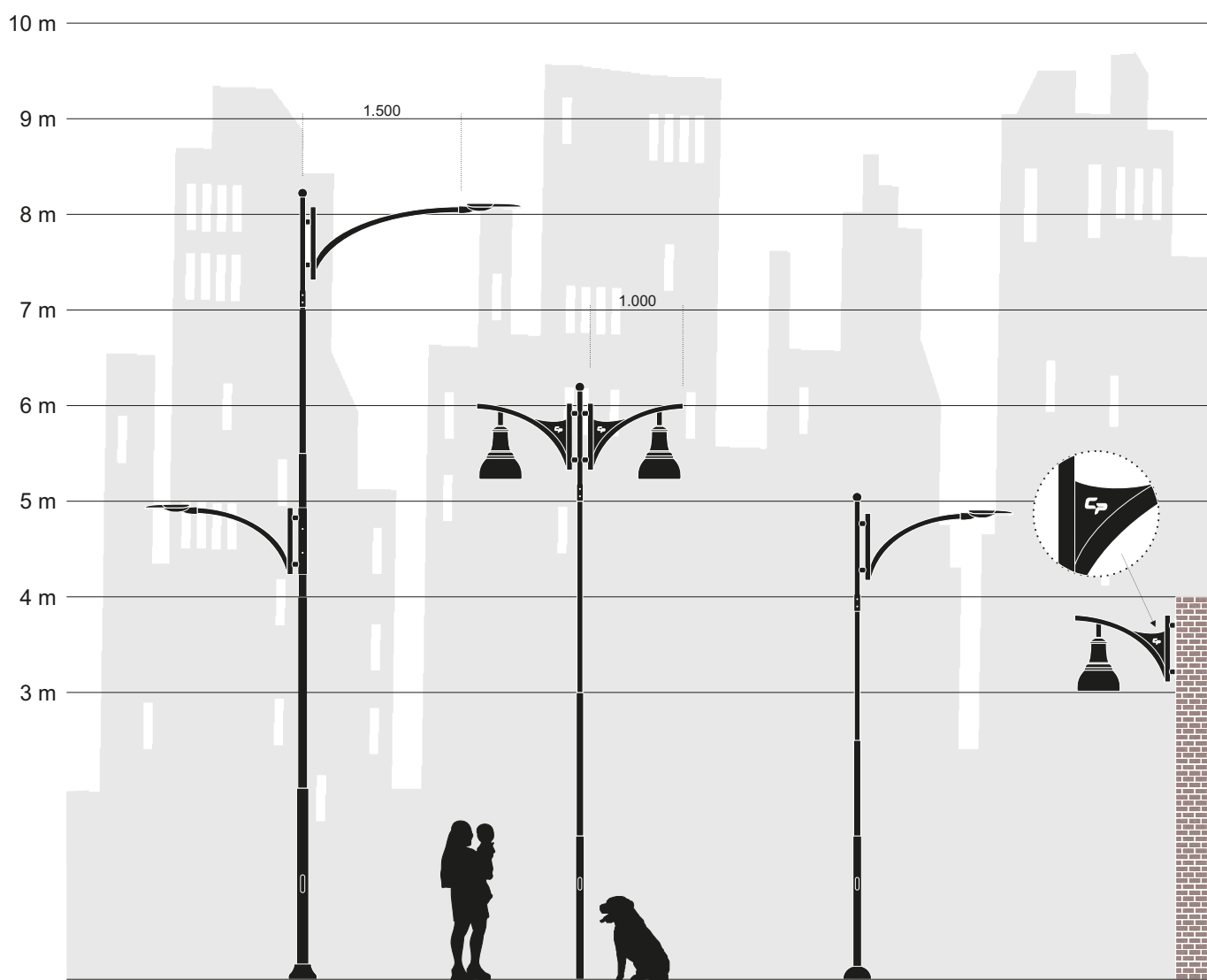
MIAMI



Miami

Tapered stem and curved arm with gull wing made of cylindrical tube Ø 60 mm available from 1,000 to 1,500 mm of projection, both in the whip and suspension version.

On request, this arm can be embellished with a sheet of neutral sheet or engraved at will with laser cutting.



MIAMI

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
MIAMI-PL4X1000	4.000	1.000	----	----	500	322,00	413,00
MIAMI-PL5X1000	5.000	1.000	----	----	500	363,00	476,00
MIAMI-PL5X1000	5.000	1.000	5.000	1.000	500	473,00	606,00
MIAMI-PL6X1000	6.000	1.000	----	----	800	406,00	545,00
MIAMI-PL6+6X1000	6.000	1.000	6.000	1.000	800	516,00	690,00
MIAMI-PL7X1500	7.000	1.500	----	----	800	464,00	635,00
MIAMI-PL7+7X1500	7.000	1.500	7.000	1.500	800	589,00	800,00
MIAMI-PL7X1500+5X200	7.000	1.500	5.000	200	800	619,00	835,00
MIAMI-PL8X1500	8.000	1.500	----	----	800	503,00	698,00
MIAMI-PL8+8X1500	8.000	1.500	8.000	1.500	800	628,00	853,00
MIAMI-PL8X1500+5X200	8.000	1.500	5.000	200	800	658,00	888,00
MIAMI-PL9X1500	9.000	1.500	----	----	800	541,00	761,00

WALL OUTREACHES MIAMI MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
MIAMI-10-MURO	300	1.000	wall fixing	110,00	145,00
MIAMI-15-MURO	350	1.500	wall fixing	125,00	165,00
MIAMI/S-10-MURO	100	800	wall fixing	130,00	165,00
MIAMI/S-15-MURO	150	1.300	wall fixing	145,00	185,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222



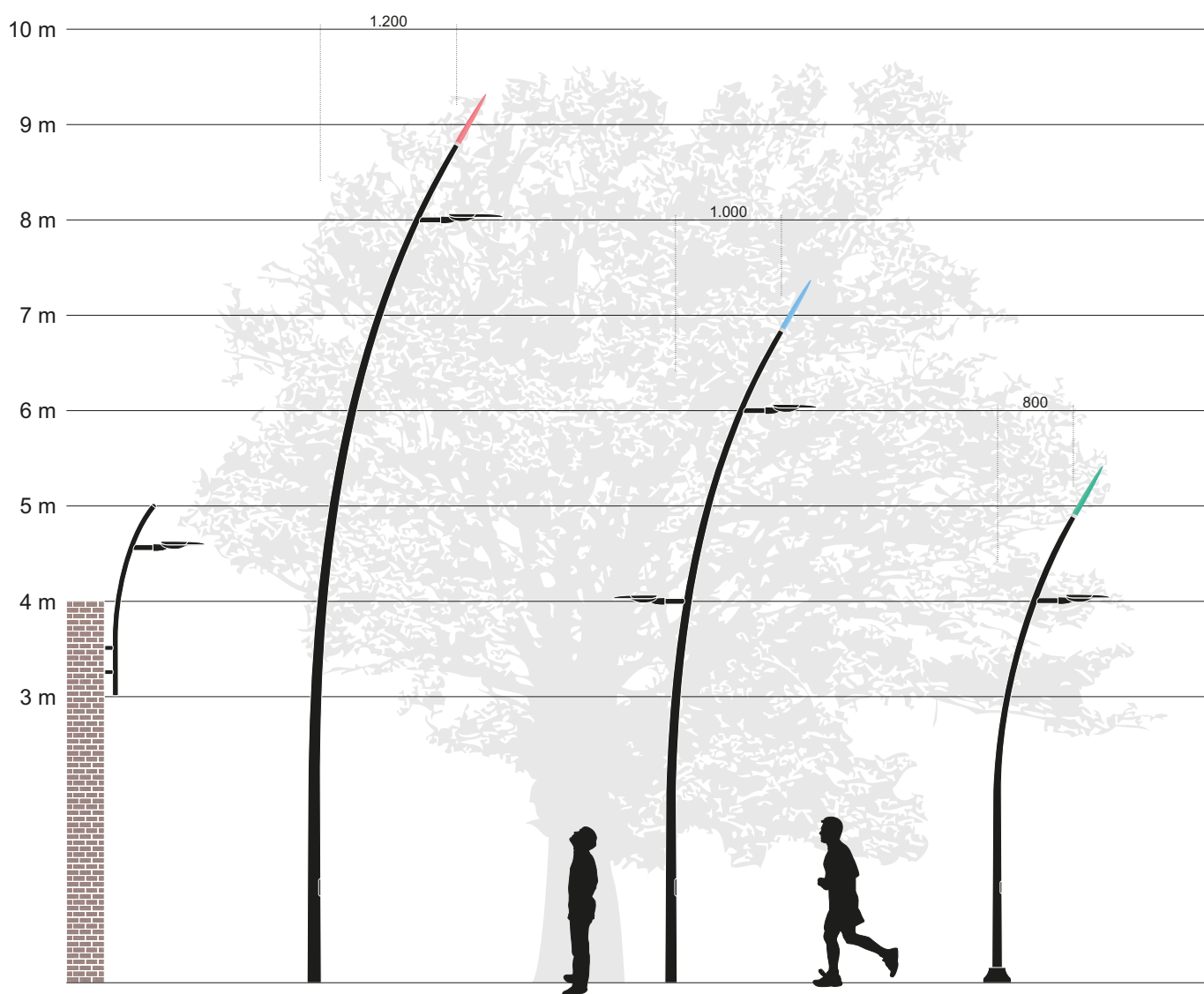


MONTECARLO



Montecarlo

One of the most used furnishing models, thanks to the enormous versatility. The Montecarlo model is a curved conical pole, made in different heights and different projections, available in single or double staggered versions. Ideal for lighting cycle paths, small gardens, city streets and roundabouts.



MONTECARLO

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
MONTECARLO-PL4	4.000	800	----	----	500	340,00	440,00
MONTECARLO-PL4+3	4.000	800	3.000	200	500	390,00	500,00
MONTECARLO-PL5	5.000	800	----	----	800	420,00	564,00
MONTECARLO-PL5+3	5.000	800	3.000	200	800	470,00	624,00
MONTECARLO-PL5+4	5.000	800	4.000	200	800	470,00	624,00
MONTECARLO-PL6	6.000	1.000	----	----	800	460,00	636,00
MONTECARLO-PL6+3	6.000	1.000	3.000	200	800	510,00	696,00
MONTECARLO-PL6+4	6.000	1.000	4.000	200	800	510,00	696,00
MONTECARLO-PL6+5	6.000	1.000	5.000	200	800	510,00	696,00
MONTECARLO-PL7	7.000	1.000	----	----	800	516,00	724,00
MONTECARLO-PL7+5	7.000	1.000	5.000	200	800	566,00	784,00
MONTECARLO-PL8	8.000	1.200	----	----	800	560,00	803,00
MONTECARLO-PL8+6	8.000	1.200	6.000	200	800	610,00	863,00
MONTECARLO-PL9	9.000	1.500	----	----	800	660,00	940,00
MONTECARLO-PL9+6	9.000	1.500	6.000	200	800	710,00	1.000,00
MONTECARLO-PL10	10.000	1.500	----	----	800	860,00	1.178,00
MONTECARLO-PL10+8	10.000	1.500	8.000	200	800	910,00	1.238,00

WALL OUTREACHES MONTECARLO MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
MONTECARLO-MURO	1.500	500	wall fixing	199,00	251,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

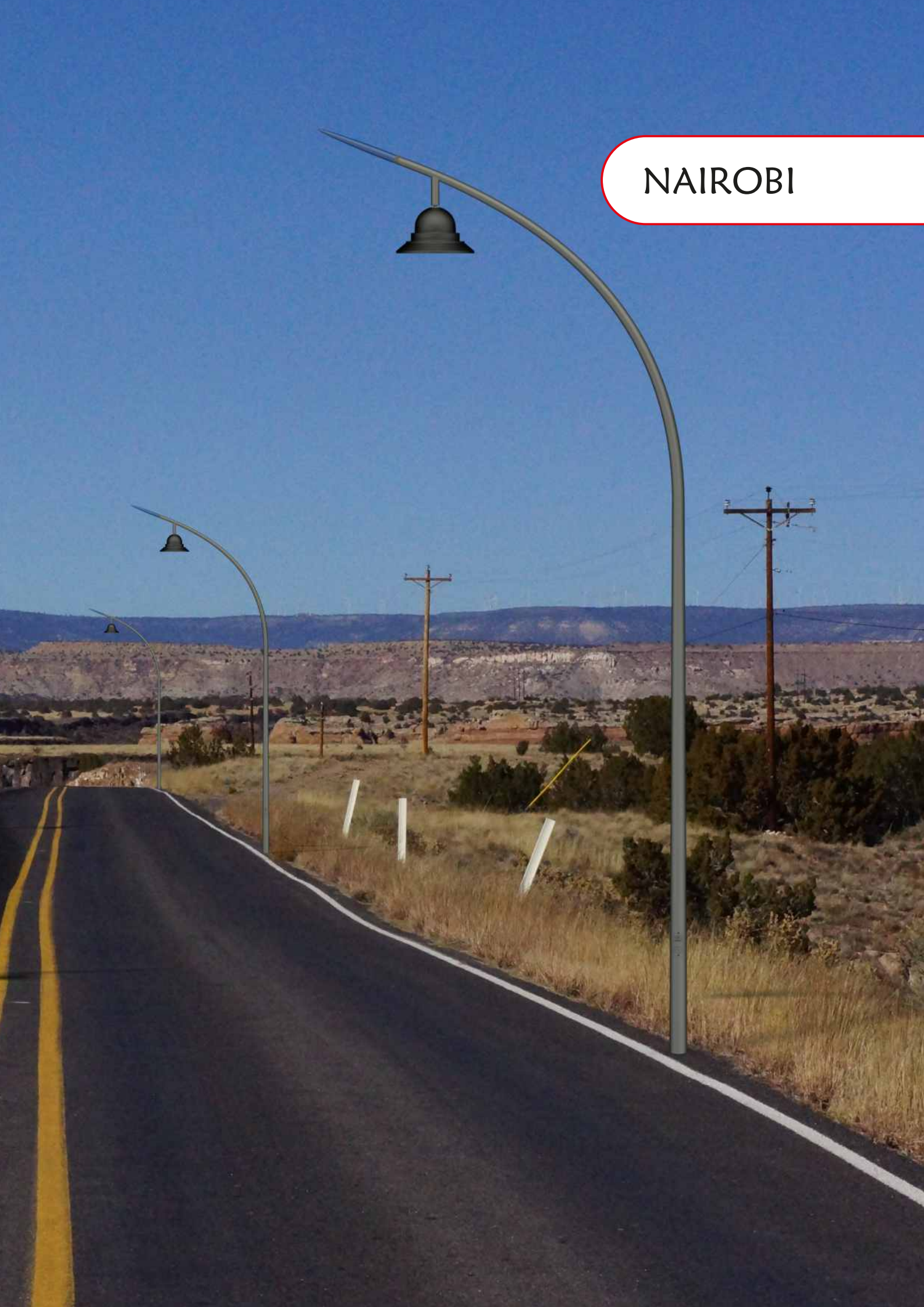
Decorative
Terminals

pag. 222





NAIROBI



Nairobi

Curved pole with conical stem, for hanging lanterns.

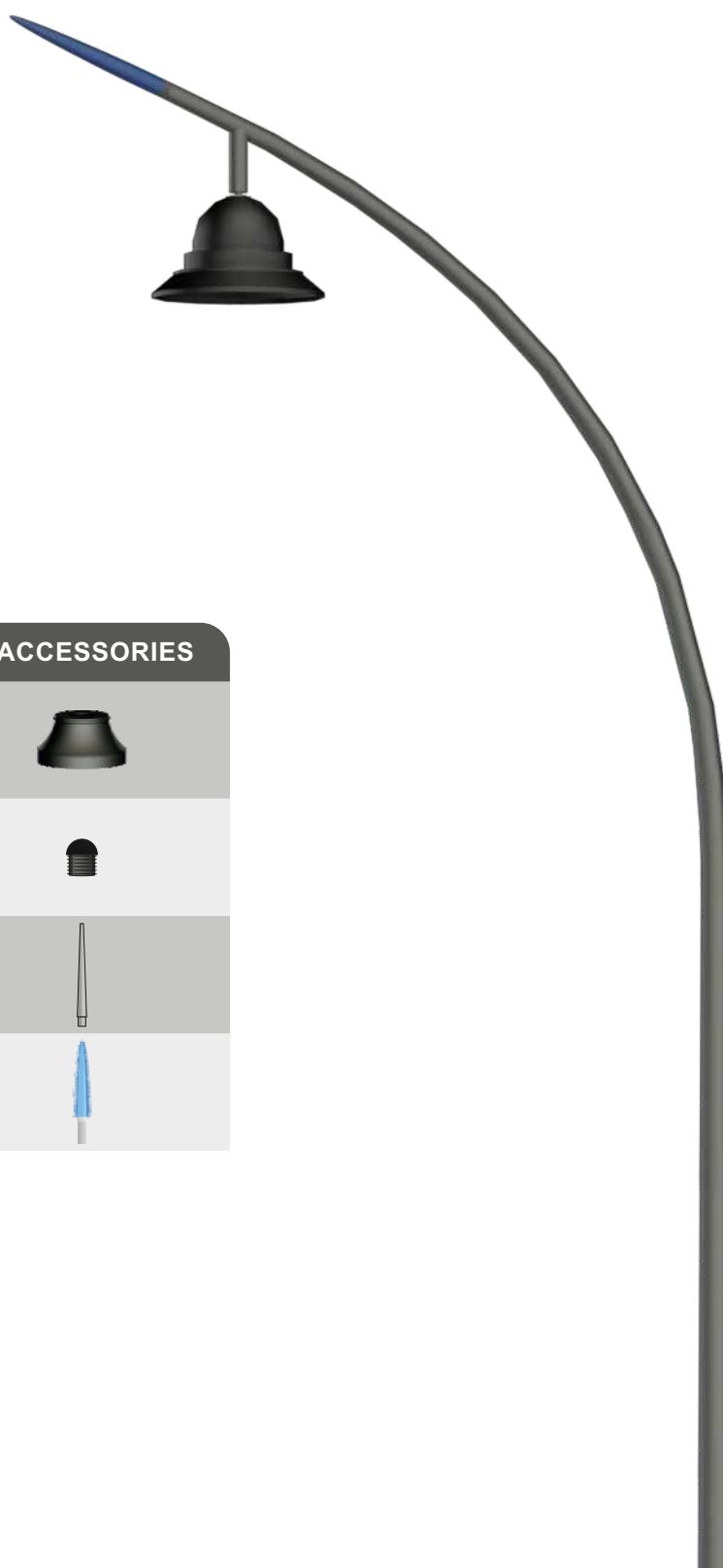
Available in single version, with different heights, turns out to be ideal for lighting pedestrian areas, but also roundabouts and city centers.

It can be embellished with the use of the LED tip.



NAIROBI

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
NAIROBI-PL3	3.000	1.500	----	----	500	410,00	586,00
NAIROBI-PL4	4.000	2.000	----	----	500	466,00	574,00
NAIROBI-PL5	5.000	2.000	----	----	800	510,00	753,00
NAIROBI-PL6	6.000	2.000	----	----	800	610,00	890,00
NAIROBI-PL7	7.000	2.000	----	----	800	720,00	990,00



RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221



NAPOLI

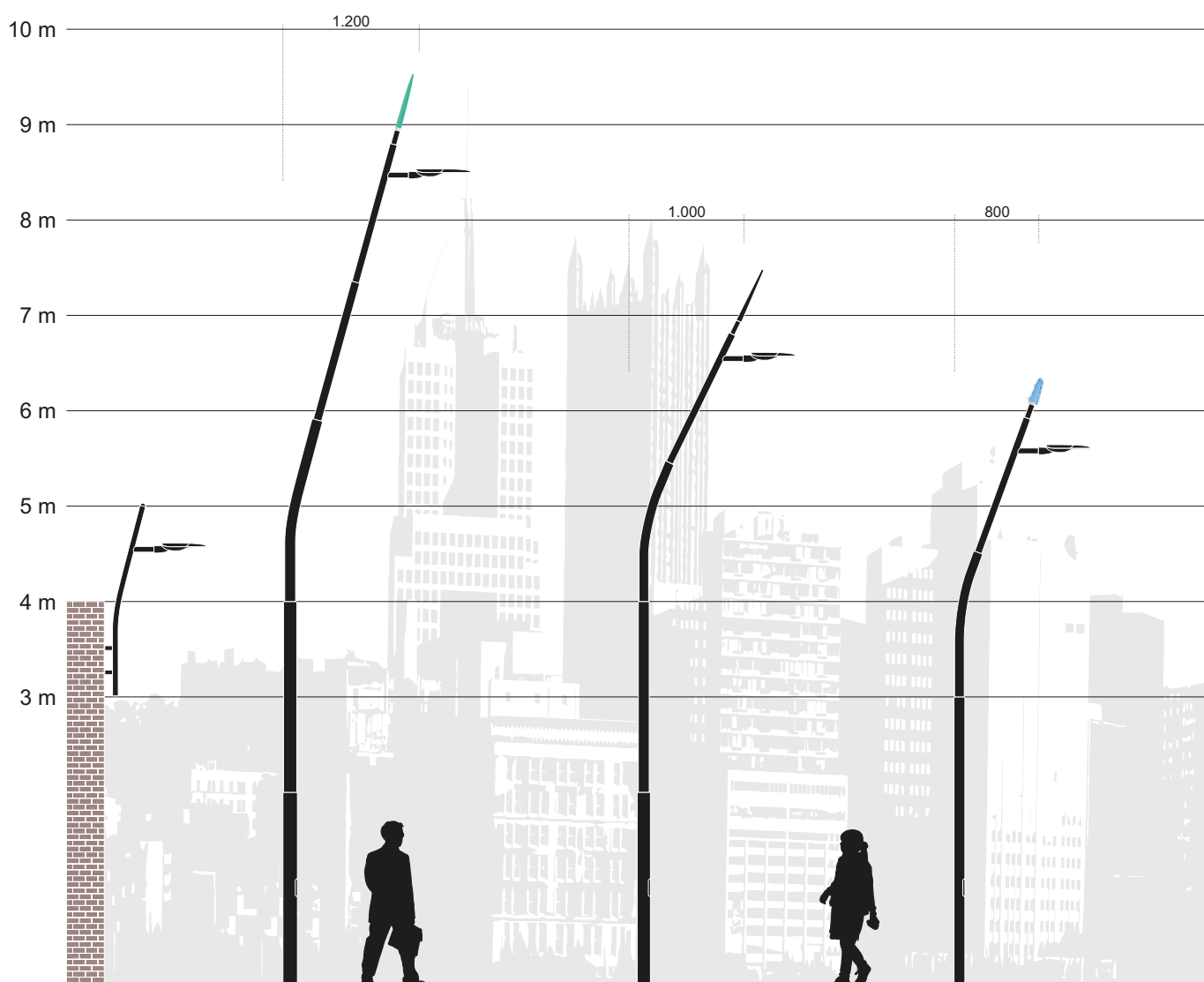


Napoli

A line that represents the tribute to this extraordinary city.

A tapered pole that arches like an inch to its artists, and its history.

The Napoli model is available in different height and protrusion versions.



NAPOLI

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
NAPOLI-PL45	4.500	600	----	----	800	310,00	410,00
NAPOLI-PL55	5.500	700	----	----	800	385,00	529,00
NAPOLI-PL65	6.500	800	----	----	800	420,00	596,00
NAPOLI-PL75	7.500	1.000	----	----	800	466,00	674,00
NAPOLI-PL85	8.500	1.200	----	----	800	500,00	743,00
NAPOLI-PL95	9.500	1.500	----	----	800	590,00	870,00

WALL OUTREACHES NAPOLI MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price
NAPOLI-MURO	1.500	500	wall fixing	189,00	241,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

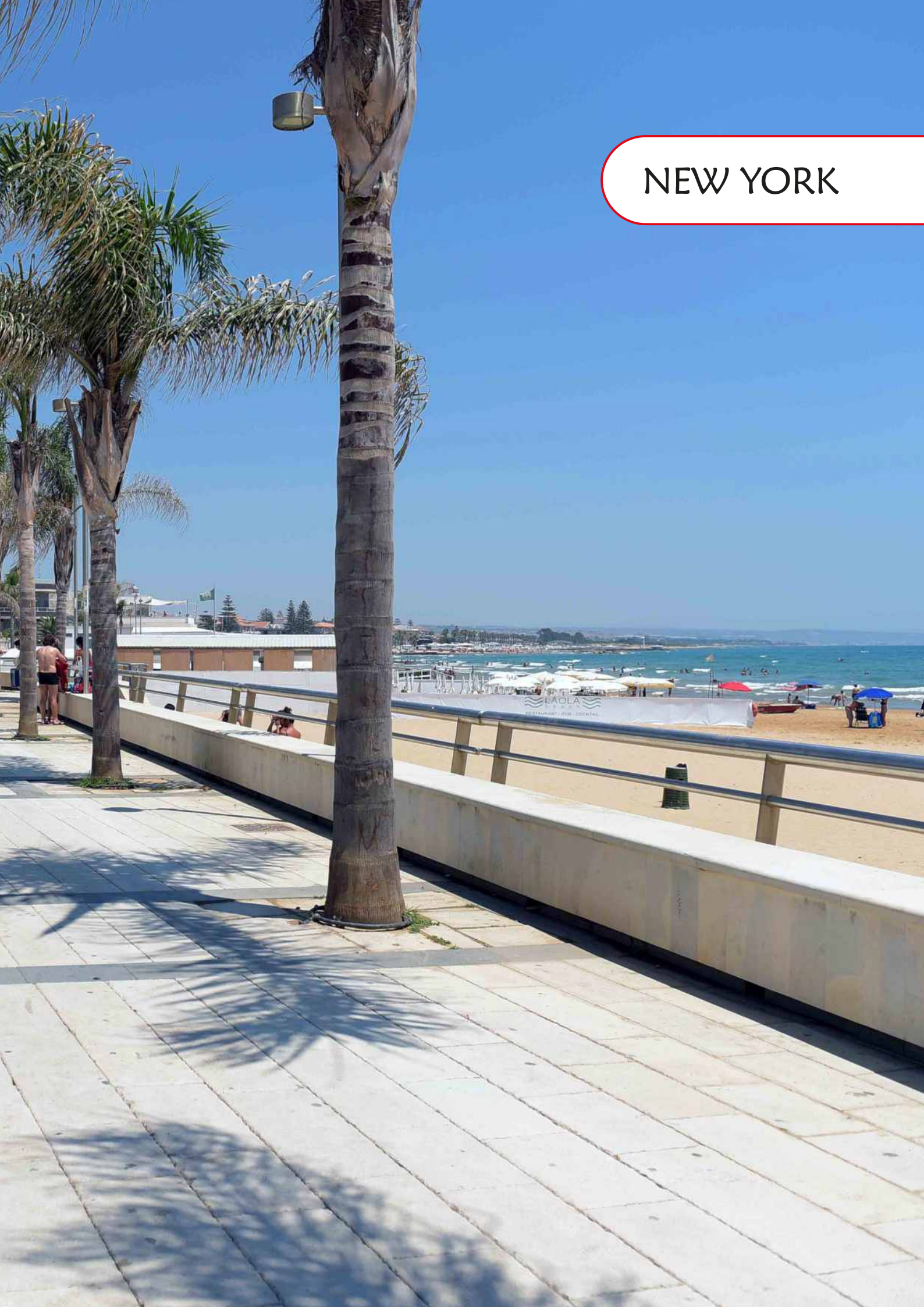
Decorative
Terminals

pag. 222





NEW YORK

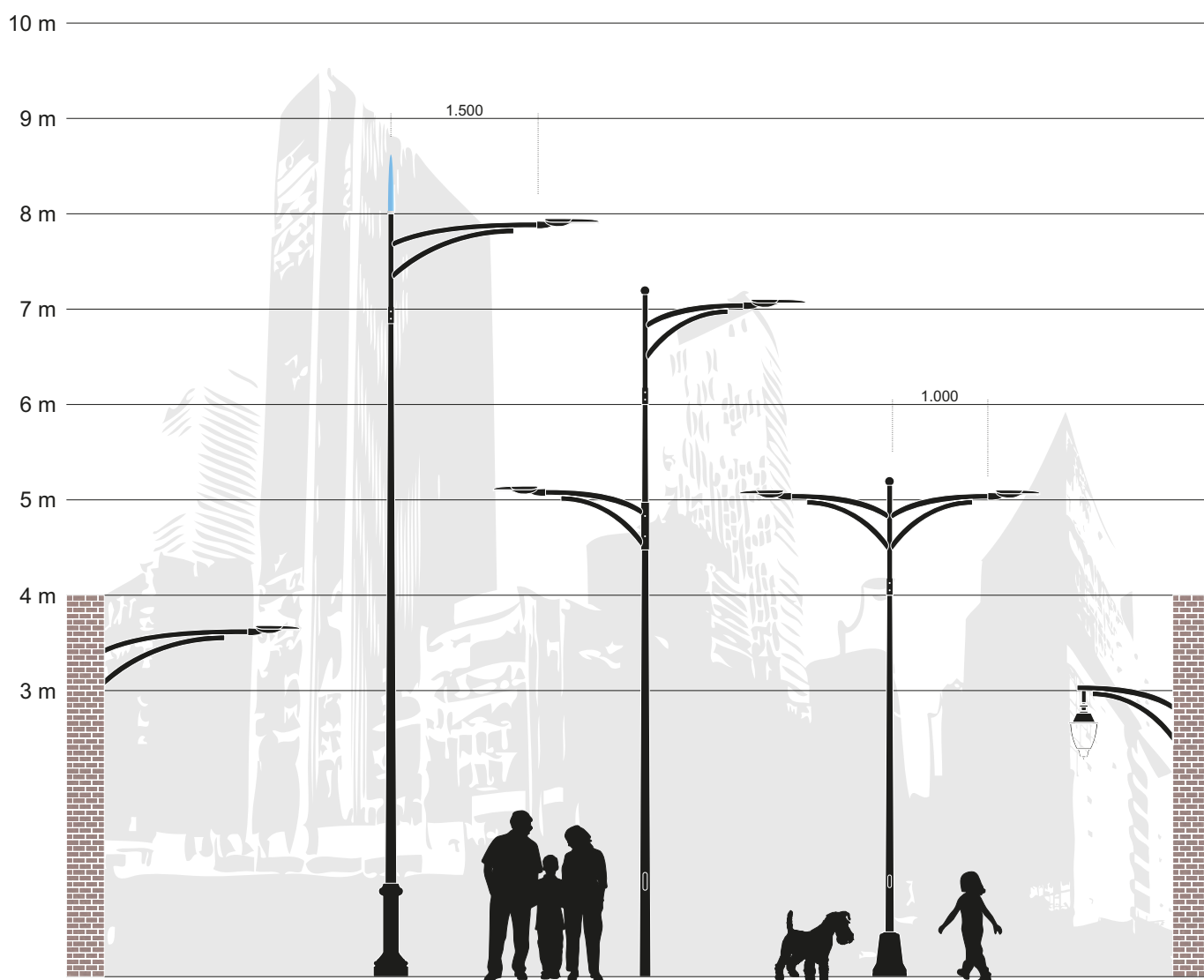


New York

The New York model consists of a straight conical stem combined with a wonderful curved arm with double ribs in cylindrical steel.

Available in two different protrusions of 1,000 and 1,500 mm, applicable for grafting onto a pole using a cylindrical adapter.

Available both in a whip version, suitable for lighting urban and extra-urban roads, that suspension for the lighting of historic centers and slow-flowing roads.



NEW YORK

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
NEW YORK-PL4X1000	4.000	1.000	----	----	500	332,00	423,00
NEW YORK-PL5X1000	5.000	1.000	----	----	500	373,00	486,00
NEW YORK-PL5+5X1000	5.000	1.000	5.000	1.000	500	493,00	626,00
NEW YORK-PL6X1000	6.000	1.000	----	----	800	416,00	555,00
NEW YORK-PL6+6X1000	6.000	1.000	6.000	1.000	800	536,00	710,00
NEW YORK-PL7X1500	7.000	1.500	----	----	800	474,00	645,00
NEW YORK-PL7+7X1500	7.000	1.500	7.000	1.500	800	609,00	820,00
NEW YORK-PL7X1500+5X200	7.000	1.500	5.000	200	800	639,00	855,00
NEW YORK-PL8X1500	8.000	1.500	----	----	800	513,00	708,00
NEW YORK-PL8+8X1500	8.000	1.500	8.000	1.500	800	648,00	873,00
NEW YORK-PL8X1500+5X200	8.000	1.500	5.000	200	800	678,00	908,00
NEW YORK-PL9X1500	9.000	1.500	----	----	800	551,00	771,00

WALL OUTREACHES NEW YORK MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
NEW YORK-10-MURO	400	1.000	wall fixing	120,00	155,00
NEW YORK-15-MURO	400	1.500	wall fixing	135,00	175,00
NEW YORK/S-10-MURO	200	1.000	wall fixing	140,00	175,00
NEW YORK/S-15-MURO	200	1.500	wall fixing	155,00	195,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





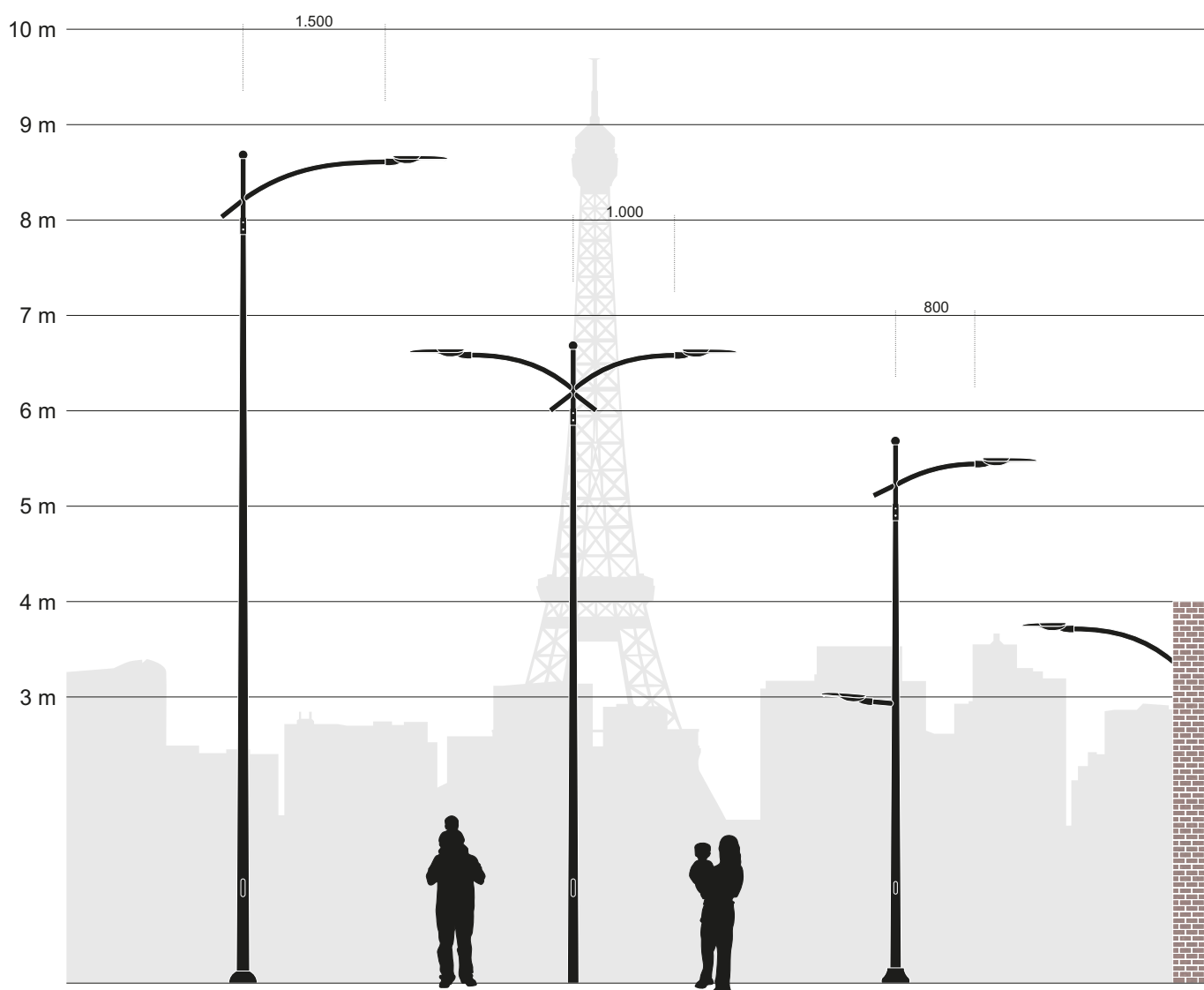
PARIGI



Parigi

Elegant, linear, clean, the Paris arm is ideal for streets with large carriageways, where the goal of lighting combines elegantly with a touch of class.

Available in different sizes, from 800 to 1,500 mm, in single, double, triple and quadruple versions.



PARIGI

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
PARIGI-PL4X800	4.000	800	----	----	500	312,00	393,00
PARIGI-PL5X1000	5.000	1.000	----	----	500	353,00	456,00
PARIGI-PL5+5X1000	5.000	1.000	5.000	1.000	500	453,00	566,00
PARIGI-PL6X1000	6.000	1.000	----	----	800	396,00	525,00
PARIGI-PL6+6X1000	6.000	1.000	6.000	1.000	800	496,00	650,00
PARIGI-PL7X1500	7.000	1.500	----	----	800	449,00	610,00
PARIGI-PL7+7X1500	7.000	1.500	7.000	1.500	800	559,00	750,00
PARIGI-PL7X1500+5X200	7.000	1.500	5.000	200	800	489,00	660,00
PARIGI-PL8X1500	8.000	1.500	----	----	800	488,00	673,00
PARIGI-PL8+8X1500	8.000	1.500	8.000	1.500	800	598,00	813,00
PARIGI-PL8X1500+5X200	8.000	1.500	5.000	200	800	528,00	710,00
PARIGI-PL9X1500	9.000	1.500	----	----	800	526,00	736,00

WALL OUTREACHES PARIGI MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
PARIGI-08-MURO	200	800	wall fixing	90,00	110,00
PARIGI-10-MURO	350	1.000	wall fixing	100,00	125,00
PARIGI-15-MURO	400	1.500	wall fixing	110,00	140,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





RABAT

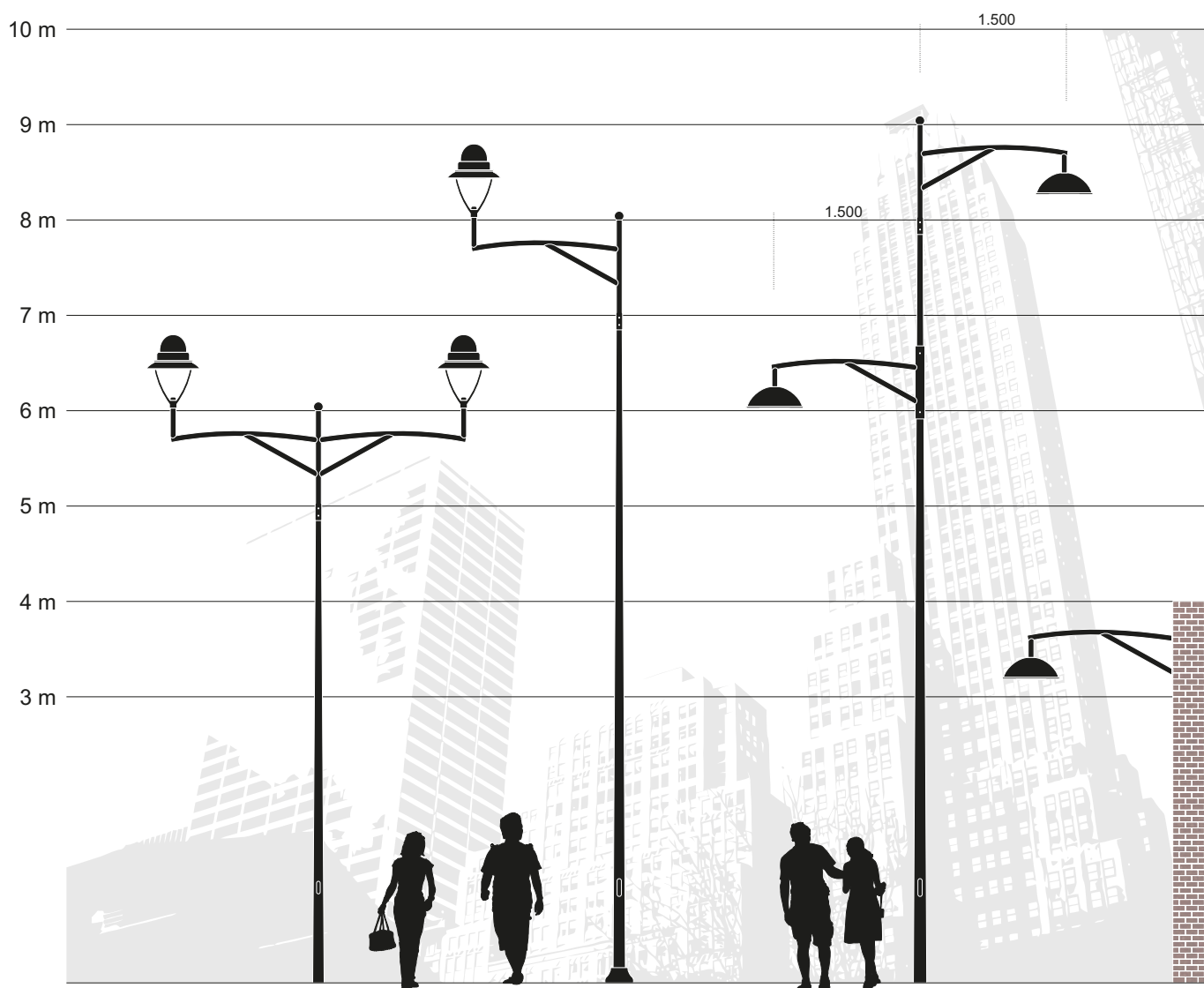


Rabat

The Rabat line consists of a straight conical pole which combines an elegant, slightly curved 1.500mm outreach with cylindrical reinforcement.

Available in single, double, triple and quadruple versions, both symmetrical and offset.

Ideal for both hanging and whip lighting fixtures.



RABAT

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
RABAT-PL5X1500	5.000	1.500	----	----	500	373,00	486,00
RABAT-PL5+5X1500	5.000	1.500	5.000	1.500	500	493,00	626,00
RABAT-PL6X1500	6.000	1.500	----	----	800	416,00	555,00
RABAT-PL6+6X1500	6.000	1.500	6.000	1.500	800	536,00	710,00
RABAT-PL7X1500	7.000	1.500	----	----	800	474,00	645,00
RABAT-PL7+7X1500	7.000	1.500	7.000	1.500	800	609,00	820,00
RABAT-PL7X1500+5X1500	7.000	1.500	5.000	1.500	800	689,00	915,00
RABAT-PL8X1500	8.000	1.500	----	----	800	513,00	708,00
RABAT-PL8+8X1500	8.000	1.500	8.000	1.500	800	648,00	873,00
RABAT-PL8X1500+5X1500	8.000	1.500	5.000	1.500	800	728,00	968,00
RABAT-PL9X1500	9.000	1.500	----	----	800	551,00	771,00

WALL OUTREACHES RABAT MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
RABAT-15-MURO	----	1.500	wall fixing	135,00	175,00

RECOMMENDED ACCESSORIES

Decorative
Bases

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





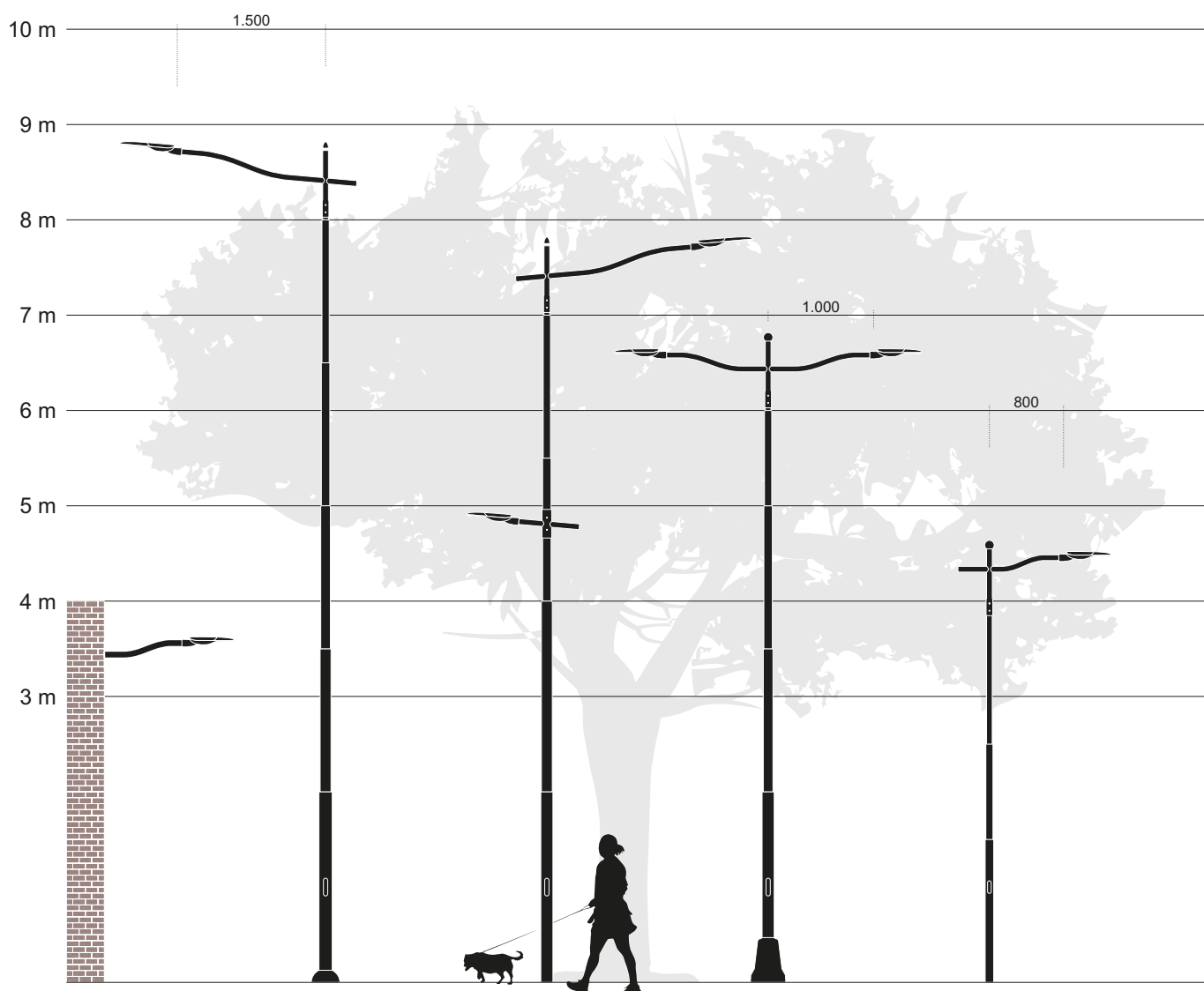
ROMA



Roma

The Rome line consists of a tapered pole to which is combined a gently wavy outreach made on a cylindrical glass to which a rear tail is welded to recreate a pleasant passing- through effect.

Available in three different protruding, 800, 1,000 and 1,500 mm, in the single, double, triple and quadruple versions, both symmetrical and offset.



ROMA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
ROMA-PL4X800	4.000	800	----	----	500	287,00	368,00
ROMA-PL5X1000	5.000	1.000	----	----	500	328,00	431,00
ROMA-PL5+5X1000	5.000	1.000	5.000	1.000	500	428,00	541,00
ROMA-PL6X1000	6.000	1.000	----	----	800	371,00	500,00
ROMA-PL6+6X1000	6.000	1.000	6.000	1.000	800	471,00	625,00
ROMA-PL7X1500	7.000	1.500	----	----	800	424,00	585,00
ROMA-PL7+7X1500	7.000	1.500	7.000	1.500	800	534,00	725,00
ROMA-PL7X1500+5X200	7.000	1.500	5.000	200	800	464,00	635,00
ROMA-PL8X1500	8.000	1.500	----	----	800	463,00	648,00
ROMA-PL8+8X1500	8.000	1.500	8.000	1.500	800	573,00	788,00
ROMA-PL8X1500+5X200	8.000	1.500	5.000	200	800	503,00	685,00
ROMA-PL9X1500	9.000	1.500	----	----	800	501,00	711,00

WALL OUTREACHES ROMA MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
ROMA-08-MURO	100	800	wall fixing	90,00	110,00
ROMA-10-MURO	150	1.000	wall fixing	100,00	125,00
ROMA-15-MURO	200	1.500	wall fixing	110,00	140,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





SOFIA

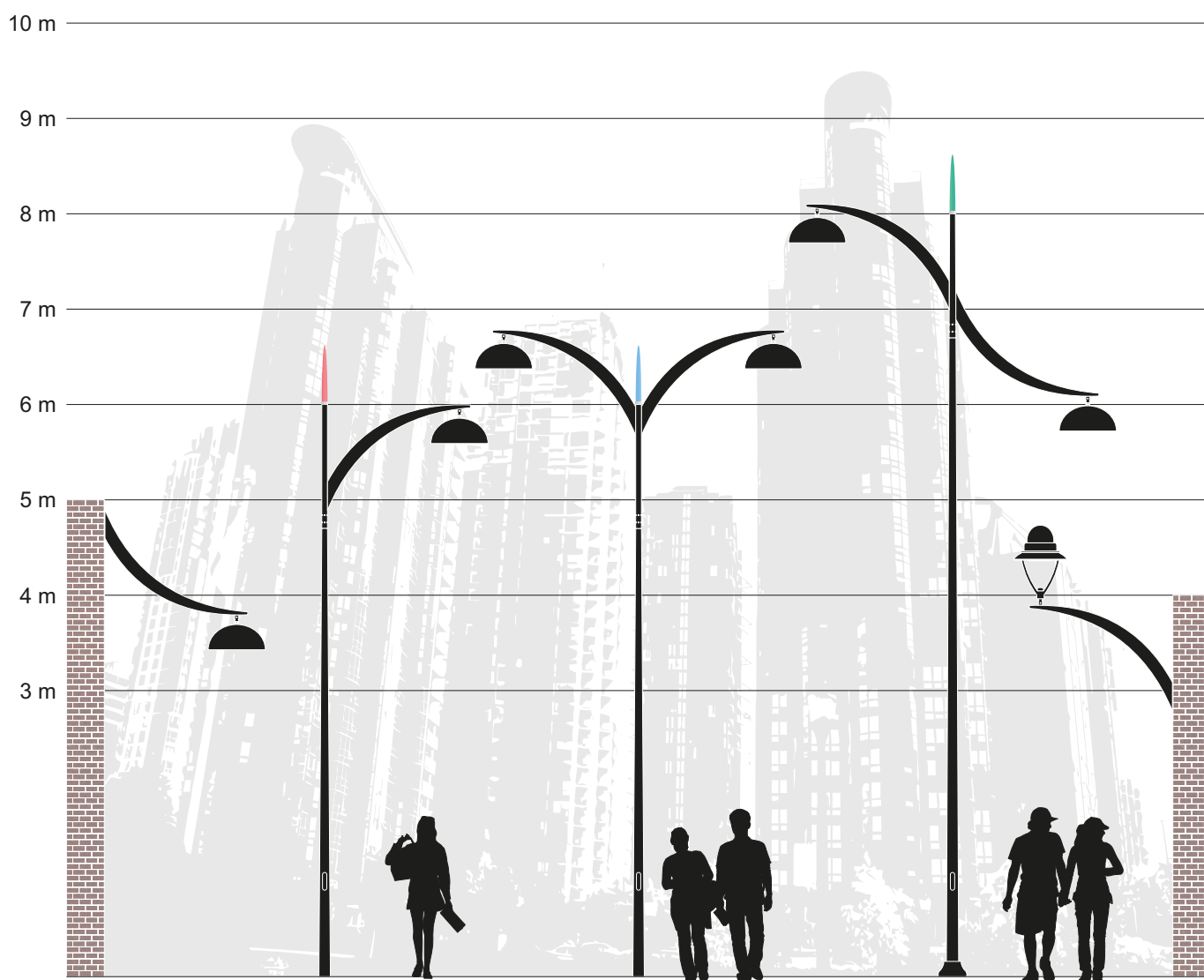


Sofia

This new line is the result of long experimentations.

Laminated conical stem combined with an elaborate half-moon outreach made of box steel.

The Sofia line is available in both the pole and wall versions, with suspend and non-suspending arrangements.



SOFIA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
SOFIA-PL5X1400	5.000	1.400	----	----	500	575,00	756,00
SOFIA-PL5+5X1400	5.000	1.400	5.000	1.400	500	950,00	1.126,00
SOFIA-PL6X1400	6.000	1.400	----	----	800	625,00	816,00
SOFIA-PL6+6X1400	6.000	1.400	6.000	1.400	800	1.000,00	1.316,00
SOFIA-PL6+4X1400	6.000	1.400	4.000	1.400	800	1.000,00	1.316,00
SOFIA-PL7X1400	7.000	1.400	----	----	800	705,00	915,00
SOFIA-PL7+7X1400	7.000	1.400	7.000	1.400	800	1.080,00	1.416,00
SOFIA-PL7+5X1400	7.000	1.400	5.000	1.400	800	1.080,00	1.416,00
SOFIA-PL8X1400	8.000	1.400	----	----	800	785,00	1.016,00
SOFIA-PL8+8X1400	8.000	1.400	8.000	1.400	800	1.160,00	1.516,00
SOFIA-PL8+6X1400	8.000	1.400	6.000	1.400	800	1.160,00	1.516,00

WALL OUTREACHES SOFIA MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
SOFIA-15-MURO-VA	1.000	1.400	wall fixing	375,00	500,00
SOFIA-15-MURO-VB	-1.000	1.400	wall fixing	375,00	500,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





TAIPEI



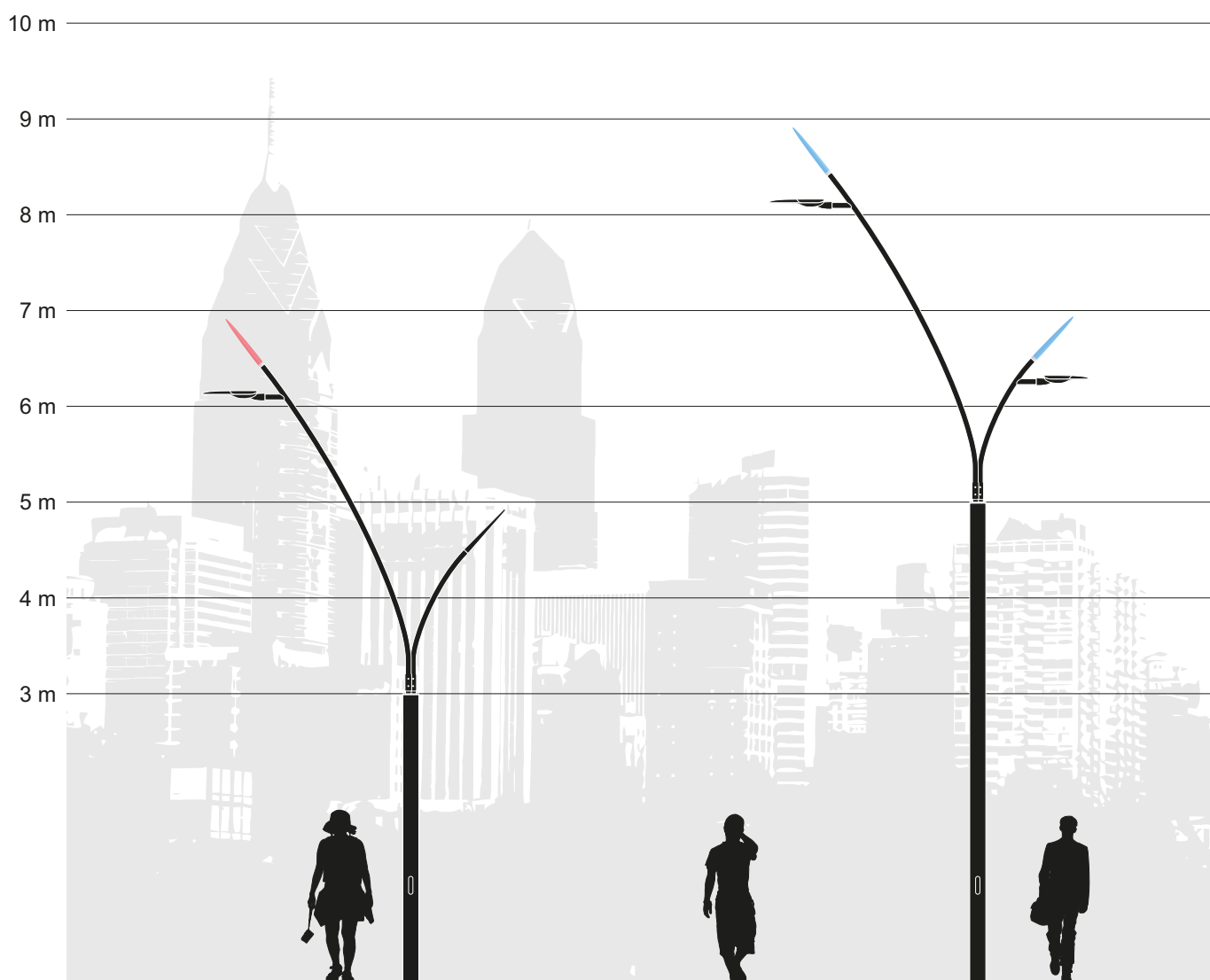
Taipei

Simplicity that becomes ingenuity.

A curious solution for offset lighting or even for a burlesque bifurcated effect.

Embellish it with our conical tips or even better with LED tips.

Available in multiple heights to satisfy every need.



TAIPEI

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
TAIPEI-PL4	4.000	800	----	----	500	350,00	455,00
TAIPEI-PL5	5.000	800	----	----	800	430,00	579,00
TAIPEI-PL6	6.000	1.500	----	----	800	470,00	651,00
TAIPEI-PL6+4	6.000	1.500	4.000	800	800	660,00	616,00
TAIPEI-PL7	7.000	1.500	----	----	800	526,00	739,00
TAIPEI-PL7+5	7.000	1.500	5.000	800	800	716,00	1.004,00
TAIPEI-PL8	8.000	1.500	----	----	800	570,00	818,00
TAIPEI-PL8+6	8.000	1.500	6.000	800	800	760,00	1.143,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222





TIRANA



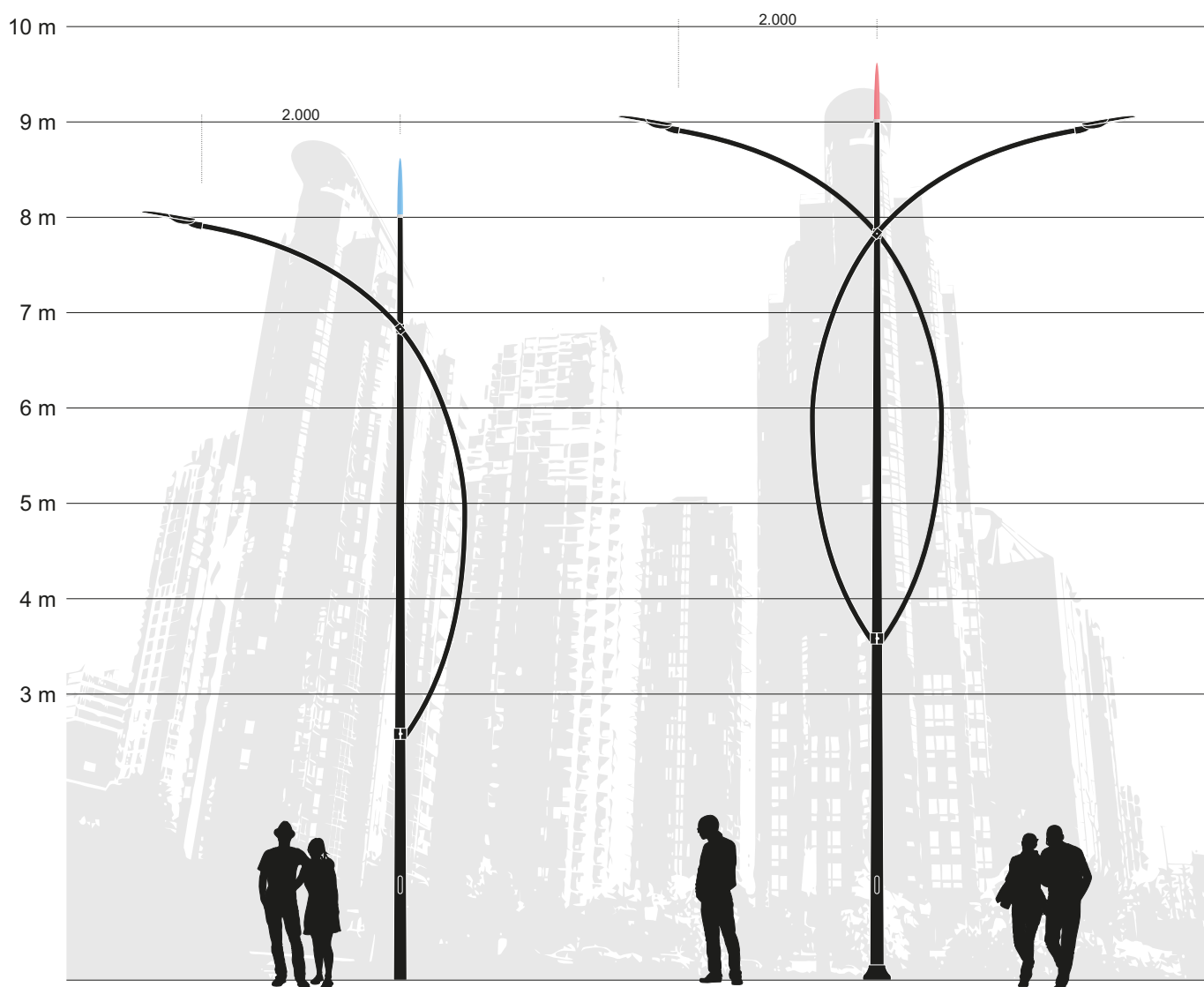
Tirana

Hypnotic, the Tirana model looks like a snake ready to attack its prey.

Not just light, but also energy, power and vigor.

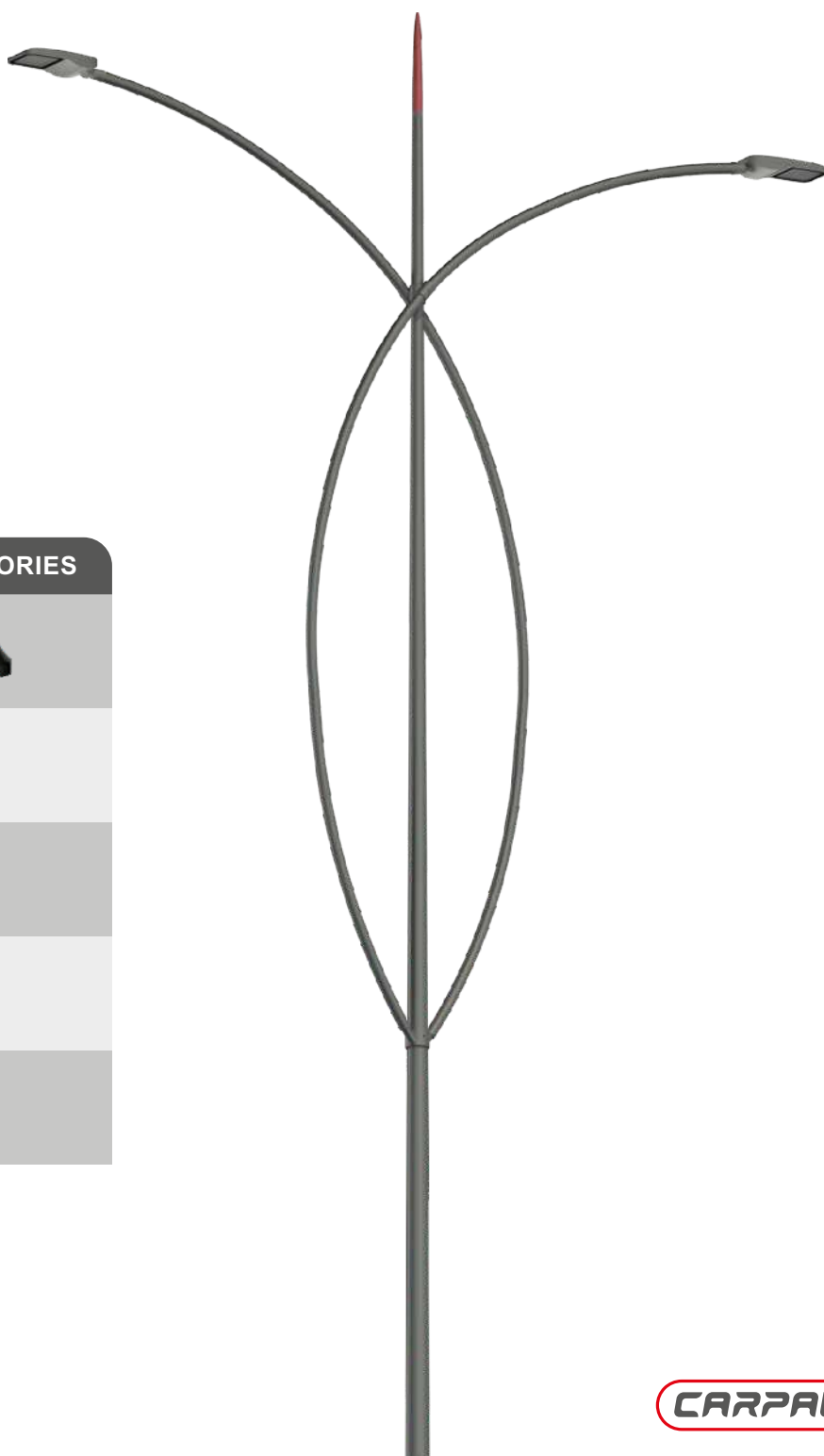
Straight conical central stem and Ø 60 mm lateral appliques in cylindrical steel to support the most performing lighting bodies.

It can be equipped with one of our top pole tips.



TIRANA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
TIRANA-PL8X2000	8.000	2.000	----	----	500	560,00	800,00
TIRANA-PL8+8X2000	8.000	2.000	8.000	2.000	800	935,00	1.300,00
TIRANA-PL9X2000	9.000	2.000	----	----	800	620,00	880,00
TIRANA-PL9X9X2000	9.000	2.000	9.000	2.000	800	996,00	1.380,00
TIRANA-PL10X2000	10.000	2.000	----	----	800	680,00	960,00
TIRANA-PL10+10X2000	10.000	2.000	10.000	2.000	800	1.056,00	1.460,00



RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222



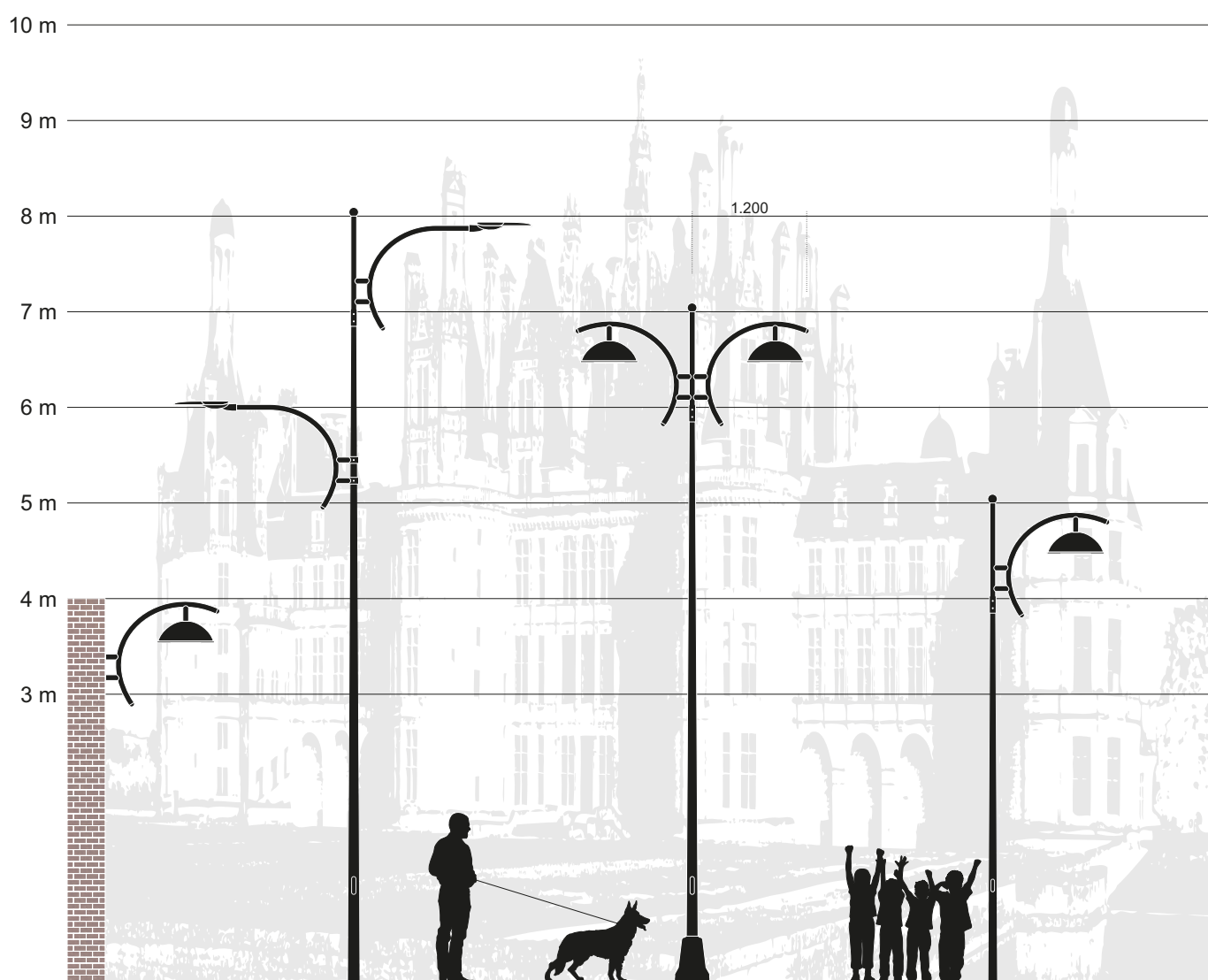
VIENNA



Vienna

The Vienna line is ideal for the lighting of historic centers, ancient villages and anything else that needs a touch of style modernized by sweet and always appreciated forms.

Available both in the whip and suspension version.



VIENNA

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
VIENNA-PL4X850	4.000	850	-----	-----	500	332,00	423,00
VIENNA-PL5X850	5.000	850	-----	-----	500	373,00	486,00
VIENNA-PL5+5X850	5.000	850	5.000	850	500	493,00	626,00
VIENNA-PL6X850	6.000	850	-----	-----	800	416,00	555,00
VIENNA-PL6+6X850	6.000	850	6.000	850	800	536,00	710,00
VIENNA-PL7X850	7.000	850	-----	-----	800	474,00	645,00
VIENNA-PL7+7X850	7.000	850	7.000	850	800	609,00	820,00
VIENNA-PL7+5X850	7.000	850	5.000	850	800	639,00	855,00
VIENNA-PL8X850	8.000	850	-----	-----	800	513,00	708,00
VIENNA-PL8+8X850	8.000	850	8.000	850	800	648,00	873,00
VIENNA-PL8+5X850	8.000	850	5.000	850	800	678,00	908,00
VIENNA-PL9X850	9.000	850	-----	-----	800	551,00	771,00
VIENNA-PL9+9X850	9.000	850	9.000	850	800	671,00	911,00

WALL OUTREACHES VIENNA MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
VIENNA-12-MURO	800	850	wall fixing	135,00	175,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 222





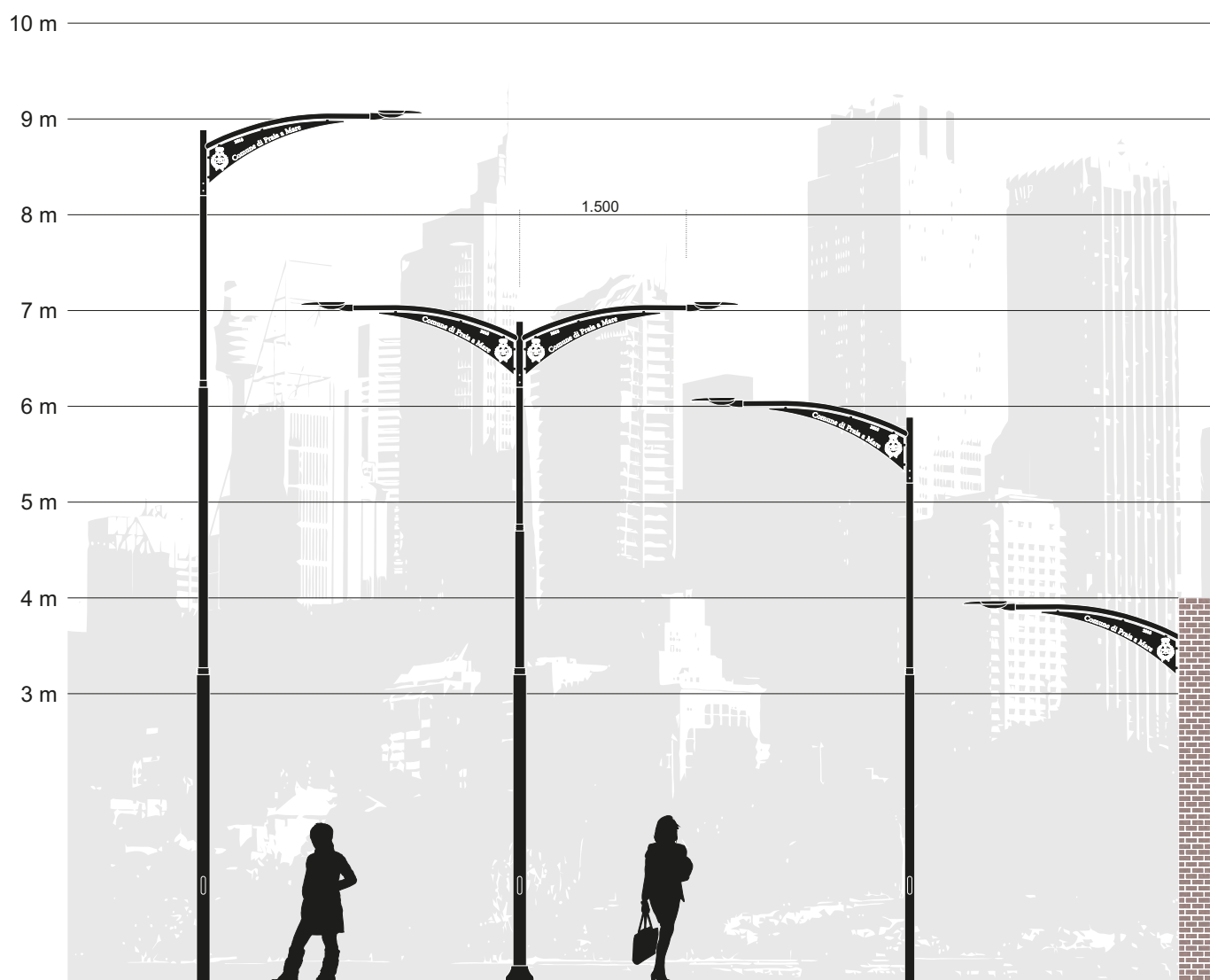
VILNIUS



Vilnius

Vilnius is a new and elegant model made up of a tapered cylindrical pole equipped with ring-shaped ring-reducing reducers and a beautiful slightly curved arm with laser-decorated sheet metal.

Available with both suspension and whip, in the single and double version. The wall model is also extremely beautiful.



VILNIUS

Article Code	H.p.l. height 1° light point mm	La projection 1° light point mm	H.p.l. height 2° light point mm	La projection 2° light point mm	i. landfill mm	Unit Price €	Painted Unit Price €
VILNIUS-PL5X1500	5.000	1.500	----	----	500	475,00	636,00
VILNIUS-PL5+5X1500	5.000	1.500	5.000	1.500	500	850,00	1.006,00
VILNIUS-PL6X1500	6.000	1.500	----	----	800	525,00	696,00
VILNIUS-PL6+6X1500	6.000	1.500	6.000	1.500	800	900,00	1.196,00
VILNIUS-PL7X1500	7.000	1.500	----	----	800	605,00	795,00
VILNIUS-PL7+7X1500	7.000	1.500	7.000	1.500	800	980,00	1.296,00
VILNIUS-PL8X1500	8.000	1.500	----	----	800	685,00	896,00
VILNIUS-PL8+8X1500	8.000	1.500	8.000	1.500	800	1.060,00	1.396,00

WALL OUTREACHES VILNIUS MODEL

Article Code	H.p.l. height light point mm	La projection light point mm	installation	Unit Price €	Painted Unit Price €
VILNIUS-10-MURO	500	1.000	wall fixing	375,00	500,00
VILNIUS-15-MURO	500	1.500	wall fixing	375,00	500,00

RECOMMENDED ACCESSORIES

Decorative
Bases

pag. 218

Caps



pag. 98

Decorative
Tips

pag. 220

Decorative
LED Tips

pag. 221

Decorative
Terminals

pag. 222



In this section we group a series of decorative cast iron, cast aluminum in sheet or, more simply, for the decoration of the base of the pole.

DECORATIVE BASES					
Article Code	Description	H.tot. height mm	L. width mm	Ø max pole diameter mm	Unit Price €
BAS300	Decorative base in printed plate	140	300	139	167,00
BAS/ACC/300	Decorative base in aluminum (coupled)	160	300	139	177,00
BAS/M/G	Decorative base in cast iron	470	370	127	275,00
BAS/G/G	Decorative base in cast iron	980	370	127	515,00



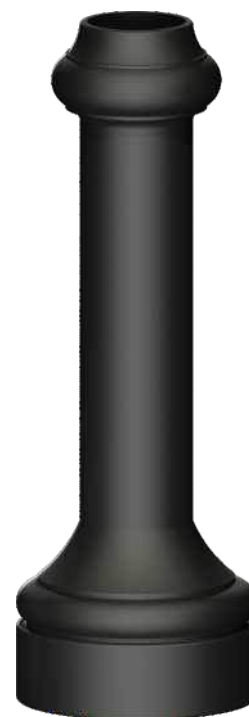
BAS300



BAS/ACC/300



BAS/M/G



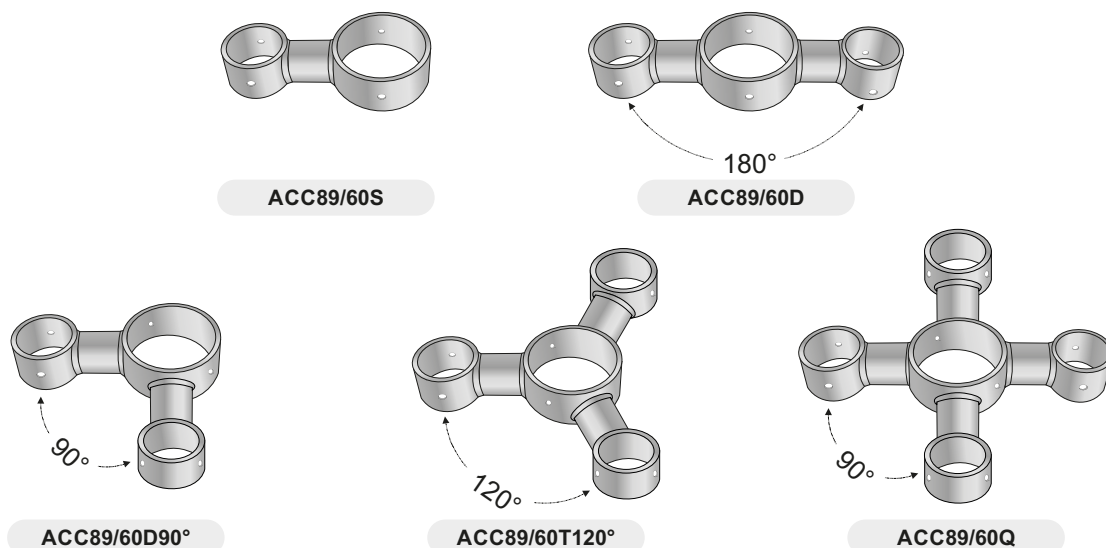
BAS/G/G

For solutions to urban design, Carpal made a series of couplers galvanized steel suitable for fixing side of outreaches.

COUPLERS POLE/OUTREACH							
Article Code	Ø pole diameter mm	Ø outreach diameter mm	type	spacing degrees	P galvanized weight Kg	paintable surface m ²	Unit Price €
ACC89/42S	89	42	single	-	0,5	0,04	51,00
ACC89/42D90°	89	42	double	90°	1	0,06	79,00
ACC89/42D	89	42	double	180°	1	0,06	79,00
ACC89/42T90°	89	42	triple	90°	1,5	0,07	107,00
ACC89/42T120°	89	42	triple	120°	1,5	0,07	107,00
ACC89/42Q	89	42	quadruple	90°	2	0,09	135,00
ACC89/48S	89	48	single	-	0,5	0,04	52,00
ACC89/48D90°	89	48	double	90°	1	0,06	81,00
ACC89/48D	89	48	double	180°	1	0,06	81,00
ACC89/48T90°	89	48	triple	90°	1,5	0,08	110,00
ACC89/48T120°	89	48	triple	120°	1,5	0,08	110,00
ACC89/48Q	89	48	quadruple	90°	2	0,10	139,00
ACC89/60S	89	60	single	-	0,5	0,04	53,00
ACC89/60D90°	89	60	double	90°	1	0,06	83,00
ACC89/60D	89	60	double	180°	1	0,06	83,00
ACC89/60T90°	89	60	triple	90°	1,5	0,08	114,00
ACC89/60T120°	89	60	triple	120°	1,5	0,08	114,00
ACC89/60Q	89	60	quadruple	90°	2	0,11	140,00
ACC102/60S	102	60	single	-	0,5	0,04	55,00
ACC102/60D90°	102	60	double	90°	1	0,06	86,00
ACC102/60D	102	60	double	180°	1	0,06	86,00
ACC102/60T90°	102	60	triple	90°	1,5	0,09	118,00
ACC102/60T120°	102	60	triple	120°	1,5	0,09	118,00
ACC102/60Q	102	60	quadruple	90°	2	0,11	142,00

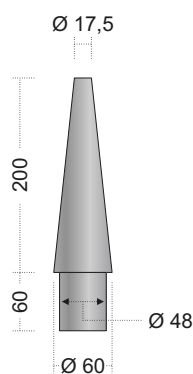
N.B. The price refers to the single coupler

N.B. The "pole diameter" column refers to the diameter of the pole in correspondence with the fixing of the couplers

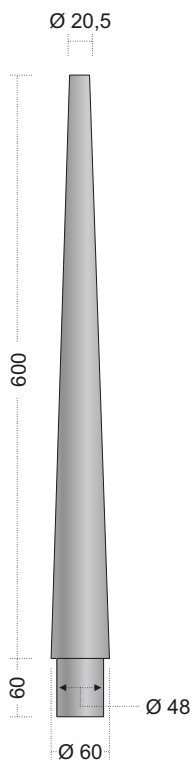


In this section we group a wide range of decorative accessories for the top pole.
A series of conical tips of different heights useful to embellish the top of your poles.

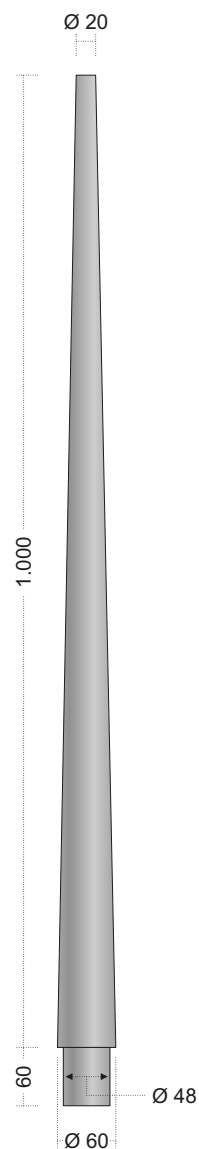
DECORATIVE TIPS			
Article Code	Description	Unit Price €	Painted Unit Price €
PUNT200	Tip made of conical steel, height 200 mm, hot-dip galvanized	69,00	94,00
PUNT600	Tip made of conical steel, height 600 mm, hot-dip galvanized	89,00	119,00
PUNT1000	Tip made of conical steel, height 1000 mm, hot-dip galvanized	109,00	144,00



PUNT200



PUNT600



PUNT1000

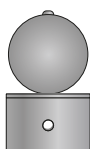
A simple way to make the concept of lighting futuristic.
Available in 4 different colors.
The new tips with LED technology will make your streets unique.

DECORATIVE LED TIPS		
Article Code	Description	Unit Price €
PUNTBLU300LED	Decorative Blue tip in polycarbonate, height 290 mm, equipped with LED CREE technology, with internal power supply.	165,00
PUNTBLU600LED	Decorative Blue tip in polycarbonate, height 620 mm, equipped with LED CREE technology, with internal power supply.	238,00
PUNTWHI600LED	Decorative White tip in polycarbonate, height 620 mm, equipped with LED CREE technology, with internal power supply.	238,00
PUNTRED600LED	Decorative Red tip in polycarbonate, height 620 mm, equipped with LED CREE technology, with internal power supply.	238,00
PUNTGRE600LED	Decorative Green tip in polycarbonate, height 620 mm, equipped with LED CREE technology, with internal power supply.	238,00



In this section we group a wide range of decorative accessories for the top pole.
A series of terminals useful to embellish the top of your poles.

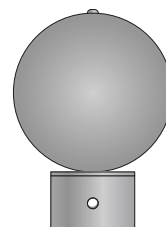
DECORATIVE TERMINALS			
Article Code	Description	Unit Price €	Painted Unit Price €
SFER60	Decorative iron sphere Ø 60 mm	29,00	41,00
SFER100	Decorative iron sphere Ø 100 mm	42,00	54,00
SFER120	Decorative iron sphere Ø 120 mm	47,00	59,00
SFER/ALL60	Spheroidal decorative terminal in cast aluminum, with plug	47,00	59,00
PIGNA60	Decorative pine cone-shaped aluminum melt terminal	47,00	59,00
UCCMER	Laser-cut iron silhouette in the shape of a bird	99,00	111,00
PERSONALIZED	Custom iron silhouette according to your needs	on request	on request



SFER60



SFER100



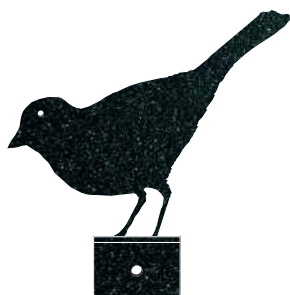
SFER120



SFER/ALL60



PIGNA60



UCCMER



PERSONALIZED

ARTICLE	PAG.
ABR3153Z	60
ABR4153Z	60
ABRL11493Z	67
ABRL12793Z	67
ABU-DHABI-15-MURO	113
ABU-DHABI-PL4X1500	113
ABU-DHABI-PL4X1500-CURVO	113
ABU-DHABI-PL5+5X1500	113
ABU-DHABI-PL5X1500	113
ABU-DHABI-PL5X1500-CURVO	113
ABU-DHABI-PL6+6X1500	113
ABU-DHABI-PL6X1500	113
ABU-DHABI-PL7+7X1500	113
ABU-DHABI-PL7X1500	113
ABU-DHABI-PL8+8X1500	113
ABU-DHABI-PL8X1500	113
ACC102/60D	219
ACC102/60D90°	219
ACC102/60Q	219
ACC102/60S	219
ACC102/60T120°	219
ACC102/60T90°	219
ACC89/42D	219
ACC89/42D90°	219
ACC89/42Q	219
ACC89/42S	219
ACC89/42T120°	219
ACC89/42T90°	219
ACC89/48D	219
ACC89/48D90°	219
ACC89/48Q	219
ACC89/48S	219
ACC89/48T120°	219
ACC89/48T90°	219
ACC89/60D	219
ACC89/60D90°	219
ACC89/60Q	219
ACC89/60S	219
ACC89/60T120°	219
ACC89/60T90°	219
ACCP102	75
ACCP114	75
ACCP127	75
ACCP76	75
ACCP89	75
ALGERI-PL4	117
ALGERI-PL5	117
ALGERI-PL6	117
ALGERI-PL6+4	117
ALGERI-PL7	117
ALGERI-PL7+5	117
ALGERI-PL8	117
ALGERI-PL8+6	117
AMSTERDAM-PL4	121
AMSTERDAM-PL5	121
AMSTERDAM-PL6	121
AMSTERDAM-PL7	121
ANKARA-PL6	125
ANKARA-PL7	125
ANKARA-PL8	125
ANKARA-PL9	125
B10220ZTL	39
B10230Z/SF	35
B10230ZTL	39
B10235Z/SF	35
B10240Z/SF	35

ARTICLE	PAG.
B10240ZTL	39
B10245Z/SF	35
B10250Z/SF	35
B10250ZTL	39
B10260Z/SF	35
B10260ZTL	39
B10270Z	35
B102Z/FV	44
B127Z/FV	44
BAS/ACC/300	218
BAS/G/G	218
BAS/M/G	218
BAS300	218
BD1010Z	84
BD1015Z	84
BD1515Z	84
BD1520Z	84
BD2015Z	84
BD2020Z	84
BDSQ10Z	86
BDSQ10Z/120°	86
BDSQ10Z/90°	86
BDSQ15Z	86
BDSQ15Z/120°	86
BDSQ15Z/90°	86
BDSQ20Z	86
BDSQ20Z/120°	86
BDSQ20Z/90°	86
BEIRUT-10-MURO	129
BEIRUT-15-MURO	129
BEIRUT-PL4X1000	129
BEIRUT-PL5+5X1000	129
BEIRUT-PL5X1000	129
BEIRUT-PL6+6X1000	129
BEIRUT-PL6X1000	129
BEIRUT-PL7+7X1000	129
BEIRUT-PL7X1000	129
BEIRUT-PL8+8X1000	129
BEIRUT-PL8X1000	129
BEIRUT-PL9X1000	129
BOGOTA'-PL4	133
BOGOTA'-PL5	133
BQ1010Z	84
BQ1015Z	84
BQ1515Z	84
BQ1520Z	84
BQ2015Z	84
BQSQ10Z	86
BQSQ15Z	86
BQSQ20Z	86
BRASILIA-PL5	137
BRASILIA-PL5+45	137
BRASILIA-PL6	137
BRASILIA-PL6+55	137
BRASILIA-PL7	137
BRASILIA-PL7+65	137
BS1010Z	84
BS1015Z	84
BS1520Z	84
BS2015Z	84
BS2020Z	84
BSSQ10Z	86
BSSQ15Z	86
BSSQ20Z	86
BT1010Z	84

ARTICLE	PAG.
BT1015Z	84
BT1515Z	84
BT1520Z	84
BT2015Z	84
BTSQ10Z	86
BTSQ15Z	86
BTSQ20Z	86
C3095Z	55
C3100Z	55
C3105Z	55
C3110Z	55
C3115Z	55
C3120Z	55
C3128Z	55
C3138Z	55
C3148Z	55
C3153Z	55
C3158Z	55
C3163Z	55
C3168Z	55
C3173Z	55
C3178Z	55
C3183Z	55
C3188Z	55
C4095Z	55
C4100Z	55
C4105Z	55
C4110Z	55
C4115Z	55
C4120Z	55
C4123Z/PENS	73
C4128Z	55
C4128Z/PENS	73
C4138Z	55
C4148Z	55
C4153Z	55
C4158Z	55
C4163Z	55
C4168Z	55
C4173Z	55
C4178Z	55
C4183Z	55
C4188Z	55
CAL139	93
CAL152	93
CAL168	93
CAL193	93
CAL219	93
CAM139	93
CAM152	93
CAM168	93
CAM193	93
CAM219	93
CAN139	93
CAN152	93
CAN168	93
CAN193	93
CAN219	93
CANBERRA-PL4	141
CANBERRA-PL5	141
CANBERRA-PL6	141
CANBERRA-PL7	141
CANBERRA-PL8	141
CAS3148Z	60
CAS4148Z	60
CASL13988Z	67

ARTICLE	PAG.
CD44130Z	77
CD44140Z	77
CD44150Z	77
CD44160Z	77
CD44172Z	77
CD44182Z	77
CD44192Z	77
CIL10235Z	69
CIL10236Z/SF	35
CIL10240Z	69
CIL10245Z	69
CIL10245Z/SF	35
CIL10250Z	69
CIL10255Z	69
CIL10260Z	69
CIL11473Z	39
CIL4188Z	60
CIL4833Z	52
CIL483Z	52
CIL486Z	52
CIL6033Z	52
CIL603Z	52
CIL605Z/IMB	74
CIL606Z	52
CIL8935Z	69
CIL8940Z	69
CIL8945Z	69
CIL8950Z	69
CIL8955Z	69
CIL8960Z	69
CILL139128Z	67
CL10260Z	65
CL11460Z	65
CL11468Z	65
CL11478Z	65
CL11488Z	65
CL11493Z	65
CL127103Z	65
CL127108Z	65
CL127113Z	65
CL12768Z	65
CL12778Z	65
CL12788Z	65
CL12793Z	65
CL12798Z	65
CL139103Z	65
CL139108Z	65
CL139113Z	65
CL139123Z	65
CL139128Z	65
CL13978Z	65
CL13988Z	65
CL13993Z	65
CL13998Z	65
CL152108Z	65
CL152128Z	65
CL15298Z	65
CL168108Z	65
CL168123Z	65
CL168128Z	65
CL16898Z	65
CL8935Z	65
CL8940Z	65
CL8945Z	65
CL8952Z	65
CL8960Z	65



ALPHABETICAL INDEX

ARTICLE	PAG.
CO3035Z	76
CO3040Z	76
CO3045Z	76
CO3050Z	76
CO3055Z	76
CO3060Z	76
CO3068Z	76
CO3078Z	76
CO3088Z	76
CO3093Z	76
CO3098Z	76
CO3103Z	76
CO3108Z	76
CO3113Z	76
CO3118Z	76
CO3123Z	76
CO3128Z	76
CO4035Z	77
CO4040Z	77
CO4045Z	77
CO4050Z	77
CO4055Z	77
CO4060Z	77
CO4068Z	77
CO4078Z	77
CO4088Z	77
CO4093Z	77
CO4098Z	77
CO4103Z	77
CO4108Z	77
CO4113Z	77
CO4118Z	77
CO4123Z	77
CO4128Z	77
CO44130Z	77
CO44140Z	77
CO44150Z	77
CO44160Z	77
CO44172Z	77
CPP76Z	87
CTCF20Z	80
CTCF25Z	80
CTCF30Z	80
CTCF35Z	80
CTCI20Z	80
CTCI25Z	80
CTCI30Z	80
CTCI35Z	80
CTMF16Z	80
CTMF18Z	80
CTMI16Z	80
CTMI18Z	80
CTPF16Z	79
CTPF18Z	79
CTPF20Z	79
CTPF25Z	79
CTPF30Z	79
CTPI16Z	79
CTPI18Z	79
CTPI20Z	79
CTPI25Z	79
CTPI30Z	79
DIAG896Z	53
DIAG897Z	53
DIAG898Z	53
DIAG899Z	53

ARTICLE	PAG.
DOHA-10-MURO	145
DOHA-5-MURO	145
DOHA-PL4X1000	145
DOHA-PL5+5X1000	145
DOHA-PL5X1000	145
DOHA-PL6+6X1000	145
DOHA-PL6X1000	145
DOHA-PL7+7X1000	145
DOHA-PL7X1000	145
DOHA-PL8+8X1000	145
DOHA-PL8X1000	145
FAS112/81	91
FAS150/104	91
FAS196/153	91
FAS255/190	91
FAS80/55	91
FISDI1	53
FISDI2/180	53
FISDI2/90	53
FISDI3/90	53
FISDIT	53
FLA3153Z	60
FLA4153Z	60
FLAL13993Z	67
INDIANAPOLIS-PL3	149
INDIANAPOLIS-PL4	149
INDIANAPOLIS-PL4+3	149
INDIANAPOLIS-PL5	149
INDIANAPOLIS-PL5+4	149
INDIANAPOLIS-PL6	149
INDIANAPOLIS-PL6+5	149
KIEV-05-MURO	153
KIEV-PL5	153
KIEV-PL6	153
KIEV-PL6+4	153
KIEV-PL7	153
KIEV-PL7+4	153
KIT/ALZ1	71
KIT/ALZ2	71
KIT/ALZ3	71
KIT/FV26W	40
KIT/FV44W	41
KIT/PST	71
KITP20	92
KITP25	92
KITP30	92
KITP35	73
KITP35	92
KITP40	92
LIG3183Z	60
LIG4183Z	60
LIGL152128Z	67
LOM3173Z	60
LOM4173Z	60
LOML139113Z	67
LONDRA-MURO	157
LONDRA-PL4	157
LONDRA-PL4+4	157
LONDRA-PL5	157
LONDRA-PL5+5	157
LONDRA-PL6	157
LONDRA-PL6+4	157
LONDRA-PL6+6	157
LONDRA-PL7	157
LONDRA-PL7+5	157
LONDRA-PL7+7	157

ARTICLE	PAG.
LONDRA-PL8	157
LONDRA-PL8+6	157
LONDRA-PL8+8	157
MACC127/152	91
MACC168/193	91
MACC89/114	91
MANHATTAN/S-08-MURO	161
MANHATTAN/S-15-MURO	161
MANHATTAN-08-MURO	161
MANHATTAN-15-MURO	161
MANHATTAN-PL4X800	161
MANHATTAN-PL5+5X800	161
MANHATTAN-PL5X800	161
MANHATTAN-PL6+6X1500	161
MANHATTAN-PL6X1500	161
MANHATTAN-PL7+7X1500	161
MANHATTAN-PL7X1500	161
MANHATTAN-PL7X1500+5X800	161
MANHATTAN-PL8+8X1500	161
MANHATTAN-PL8X1500	161
MANHATTAN-PL8X1500+5X800	161
MANHATTAN-PL9X1500	161
MANILA-PL10	165
MANILA-PL10+8	165
MANILA-PL4	165
MANILA-PL5	165
MANILA-PL5+3	165
MANILA-PL6	165
MANILA-PL6+4	165
MANILA-PL7	165
MANILA-PL7+5	165
MANILA-PL8	165
MANILA-PL8+6	165
MANILA-PL9	165
MANILA-PL9+7	165
MAR3173Z	60
MAR4173Z	60
MARL139113Z	67
MATBDM12Z	99
MATCAPT15	99
MATCR10	99
MATCR15	99
MATDISPR15	99
MATGIUNZ	99
MATMORS	99
MATMORSR	99
MATMORSS	99
MATPERC	99
MIAMI/S-10-MURO	169
MIAMI/S-15-MURO	169
MIAMI-10-MURO	169
MIAMI-15-MURO	169
MIAMI-PL4X1000	169
MIAMI-PL5X1000	169
MIAMI-PL5X1000	169
MIAMI-PL6+6X1000	169
MIAMI-PL6X1000	169
MIAMI-PL7+7X1500	169
MIAMI-PL7X1500	169
MIAMI-PL7X1500+5X200	169
MIAMI-PL8+8X1500	169
MIAMI-PL8X1500	169
MIAMI-PL8X1500+5X200	169
MIAMI-PL9X1500	169
MONTECARLO-MURO	173
MONTECARLO-PL10	173

ARTICLE	PAG.
LONDRA-PL8	173
LONDRA-PL8+6	173
LONDRA-PL8+8	173
MACC127/152	173
MACC168/193	173
MACC89/114	173
MANHATTAN/S-08-MURO	173
MANHATTAN/S-15-MURO	173
MANHATTAN-08-MURO	173
MANHATTAN-15-MURO	173
MANHATTAN-PL4X800	173
MANHATTAN-PL5+5X800	173
MANHATTAN-PL5X800	173
MANHATTAN-PL6+6X1500	173
MANHATTAN-PL6X1500	173
MANHATTAN-PL7+7X1500	173
MANHATTAN-PL7X1500	88
MANHATTAN-PL7X1500+5X800	88
MANHATTAN-PL8+8X1500	88
MANHATTAN-PL8X1500	88
MANHATTAN-PL8X1500+5X800	88
MANHATTAN-PL9X1500	87
MANILA-PL10	87
MANILA-PL10+8	87
MANILA-PL4	87
MANILA-PL5	177
MANILA-PL5+3	177
MANILA-PL6	177
MANILA-PL6+4	177
MANILA-PL7	177
MANILA-PL7+5	181
MANILA-PL8	181
MANILA-PL8+6	181
MANILA-PL9	181
MANILA-PL9+7	181
MAR3173Z	181
MAR4173Z	181
MARL139113Z	185
MATBDM12Z	185
MATCAPT15	185
MATCR10	185
MATCR15	185
MATDISPR15	185
MATGIUNZ	185
MATMORS	185
MATMORSR	185
MATMORSS	185
MATPERC	185
MIAMI/S-10-MURO	185
MIAMI/S-15-MURO	185
MIAMI-10-MURO	185
MIAMI-15-MURO	185
MIAMI-PL4X1000	185
MIAMI-PL5X1000	60
MIAMI-PL5X1000	67
MIAMI-PL6+6X1000	67
MIAMI-PL6X1000	60
MIAMI-PL7+7X1500	60
MIAMI-PL7X1500	67
MIAMI-PL7X1500+5X200	67
MIAMI-PL8+8X1500	189
MIAMI-PL8X1500	189
MIAMI-PL8X1500+5X200	189
MIAMI-PL9X1500	189
MONTECARLO-MURO	189
MONTECARLO-PL10	189

ARTICLE	PAG.
PARIGI-PL6+6X1000	189
PARIGI-PL6X1000	189
PARIGI-PL7+7X1500	189
PARIGI-PL7X1500	189
PARIGI-PL7X1500+5X200	189
PARIGI-PL8+8X1500	189
PARIGI-PL8X1500	189
PARIGI-PL8X1500+5X200	189
PARIGI-PL9X1500	189
PIAST200	92
PIAST250	92
PIAST300	92
PIAST350	92
PIAST400	92
PIGNA60	222
PP100X100X100/10,5	97
PP50X70X50/4	94
PP70X104X80/6,5	95
PP70X104X80/7	95
PP80X80X80/7	96
PUNT1000	220
PUNT200	220
PUNT600	220
PUNTBLU300LED	221
PUNTBLU600LED	221
PUNTGRE600LED	221
PUNTRED600LED	221
PUNTWHI600LED	221
R1146Z	25
R1147Z	25
R1148Z	25
R12710Z	25
R1276Z	25
R1277Z	25
R1278Z	25
R1279Z	25
R13910Z	26
R13910Z/3	25
R13911Z	26
R13911Z/3	25
R1397Z	26
R1397Z/3	25
R1398Z	26
R1398Z/3	25
R1399Z	26
R1399Z/3	25
R15210Z	26
R15211Z	26
R15212Z	26
R1527Z	26
R1527Z/FV	42
R1528Z	26
R1528Z/FV	42
R1529Z	26
R16810Z	26
R16811Z	26
R16812Z	26
R1685Z/SF	35
R1687Z	26
R1687Z/FV	42
R1688Z	26
R1688Z/FV	42
R1689Z	26
R186M	98
R186M/2	98
R186P	98

ARTICLE	PAG.
R19310Z	26
R19311Z	26
R19312Z	26
R19313Z	26
R1935Z/SF	35
R1937Z	26
R1937Z/FV	42
R1938Z	26
R1938Z/FV	42
R1938ZTL	39
R1939Z	26
R21910Z	26
R21911Z	26
R21912Z	26
R21913Z	26
R21913Z/2T	26
R21914Z/2T	26
R21915Z/2T	26
R21916Z/2T	26
R2195Z/SF	35
R2197Z	26
R2198Z	26
R2199Z	26
R7635Z	25
R763Z	25
R764Z	25
R8945Z	25
R894Z	25
R8955Z	25
R895Z	25
RABAT-15-MURO	193
RABAT-PL5+5X1500	193
RABAT-PL5X1500	193
RABAT-PL6+6X1500	193
RABAT-PL6X1500	193
RABAT-PL7+7X1500	193
RABAT-PL7X1500	193
RABAT-PL7X1500+5X1500	193
RABAT-PL8+8X1500	193
RABAT-PL8X1500	193
RABAT-PL8X1500+5X1500	193
RABAT-PL9X1500	193
RD102/60Z	85
RD102/60ZIN	85
RD114/60Z	85
RD114/60ZIN	85
RD127/60Z	85
RD127/60ZIN	85
RD60/60ZIN	85
RD76/60ZIN	85
RD89/60Z	85
RD89/60ZIN	85
RL10260Z	63
RL11460Z	63
RL127100Z	63
RL12770Z	63
RL12780Z	63
RL12790Z	63
RL139100Z	63
RL139110Z	63
RL13970Z	63
RL13980Z	63
RL13990Z	63
RL152100Z	63
RL152110Z	63
RL152120Z	63

ARTICLE	PAG.
RL15280Z	63
RL15290Z	63
RL168100Z	63
RL168110Z	63
RL168120Z	63
RL168130Z	63
RL16880Z	63
RL16890Z	63
RL8940Z	63
RL8945Z	63
RL8950Z	63
RL8960Z	63
ROMA-08-MURO	197
ROMA-10-MURO	197
ROMA-15-MURO	197
ROMA-PL4X800	197
ROMA-PL5+5X1000	197
ROMA-PL5X1000	197
ROMA-PL6+6X1000	197
ROMA-PL6X1000	197
ROMA-PL7+7X1500	197
ROMA-PL7X1500	197
ROMA-PL7X1500+5X200	197
ROMA-PL8+8X1500	197
ROMA-PL8X1500	197
ROMA-PL8X1500+5X200	197
ROMA-PL9X1500	197
SEM3163Z	60
SEM4163Z	60
SEML127103Z	67
SEML139103Z	67
SFER/ALL60	222
SFER100	222
SFER120	222
SFER60	222
SN-BDZ	85
SN-BQZ	85
SN-BTZ	85
SOFIA-15-MURO-VA	201
SOFIA-15-MURO-VB	201
SOFIA-PL5+5X1400	201
SOFIA-PL5X1400	201
SOFIA-PL6+4X1400	201
SOFIA-PL6+6X1400	201
SOFIA-PL6X1400	201
SOFIA-PL7+5X1400	201
SOFIA-PL7+7X1400	201
SOFIA-PL7X1400	201
SOFIA-PL8+6X1400	201
SOFIA-PL8+8X1400	201
SOFIA-PL8X1400	201
ST05Z	89
ST15Z	89
ST1Z	89
ST2Z	89
STC10Z	89
STC12Z	89
STC14Z	89
STESZ	89
STOTTZ	89
STPTZ	89
STQZ	89
STRTZ	89
STTRZ	89
TAIPEI-PL4	205
TAIPEI-PL5	205

ARTICLE	PAG.
TAIPEI-PL6	205
TAIPEI-PL6+4	205
TAIPEI-PL7	205
TAIPEI-PL7+5	205
TAIPEI-PL8	205
TAIPEI-PL8+6	205
TAP102	98
TAP114	98
TAP120	98
TAP127	98
TAP139	98
TAP152	98
TAP16	98
TAP32	98
TAP42	98
TAP48	98
TAP60	98
TAP60BOMB	98
TAP60CROM	98
TAP70	98
TAP76	98
TAP89	98
TIRANA-PL10+10X2000	209
TIRANA-PL10X2000	209
TIRANA-PL8+8X2000	209
TIRANA-PL8X2000	209
TIRANA-PL9X2000	209
TIRANA-PL9X9X2000	209
UCCMER	222
UMB3163Z	60
UMB4163Z	60
UML127103Z	67
VIENNA-12-MURO	213
VIENNA-PL4X850	213
VIENNA-PL5+5X850	213
VIENNA-PL5X850	213
VIENNA-PL6+6X850	213
VIENNA-PL6X850	213
VIENNA-PL7+5X850	213
VIENNA-PL7+7X850	213
VIENNA-PL7X850	213
VIENNA-PL8+5X850	213
VIENNA-PL8+8X850	213
VIENNA-PL8X850	213
VIENNA-PL9+9X850	213
VIENNA-PL9X850	213
VILNIUS-10-MURO	217
VILNIUS-15-MURO	217
VILNIUS-PL5+5X1500	217
VILNIUS-PL5X1500	217
VILNIUS-PL6+6X1500	217
VILNIUS-PL6X1500	217
VILNIUS-PL7+7X1500	217
VILNIUS-PL7X1500	217
VILNIUS-PL8+8X1500	217
VILNIUS-PL8X1500	217
Z132M	98
Z132M/2	98
Z132P	98
Z186M	98
Z186M/2	98
Z186P	98



In 2019 Carpal srl celebrates its first twenty-five year.

A quarter of a century lived in the name of constant and gradual improvement of our company.

We thank all our customers, our suppliers and all those who have supported and allowed us to write our first five lustres of history.

We thank our dads, Alberto and Bruno, because it is only thanks to their work if today we are here, because they have offered us the means to improve every day and because every single day, tirelessly, they are at our side, they support us and spur us on in our daily challenges.

Fortunato, Emanuele, Lucia, Marco and Luca





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