

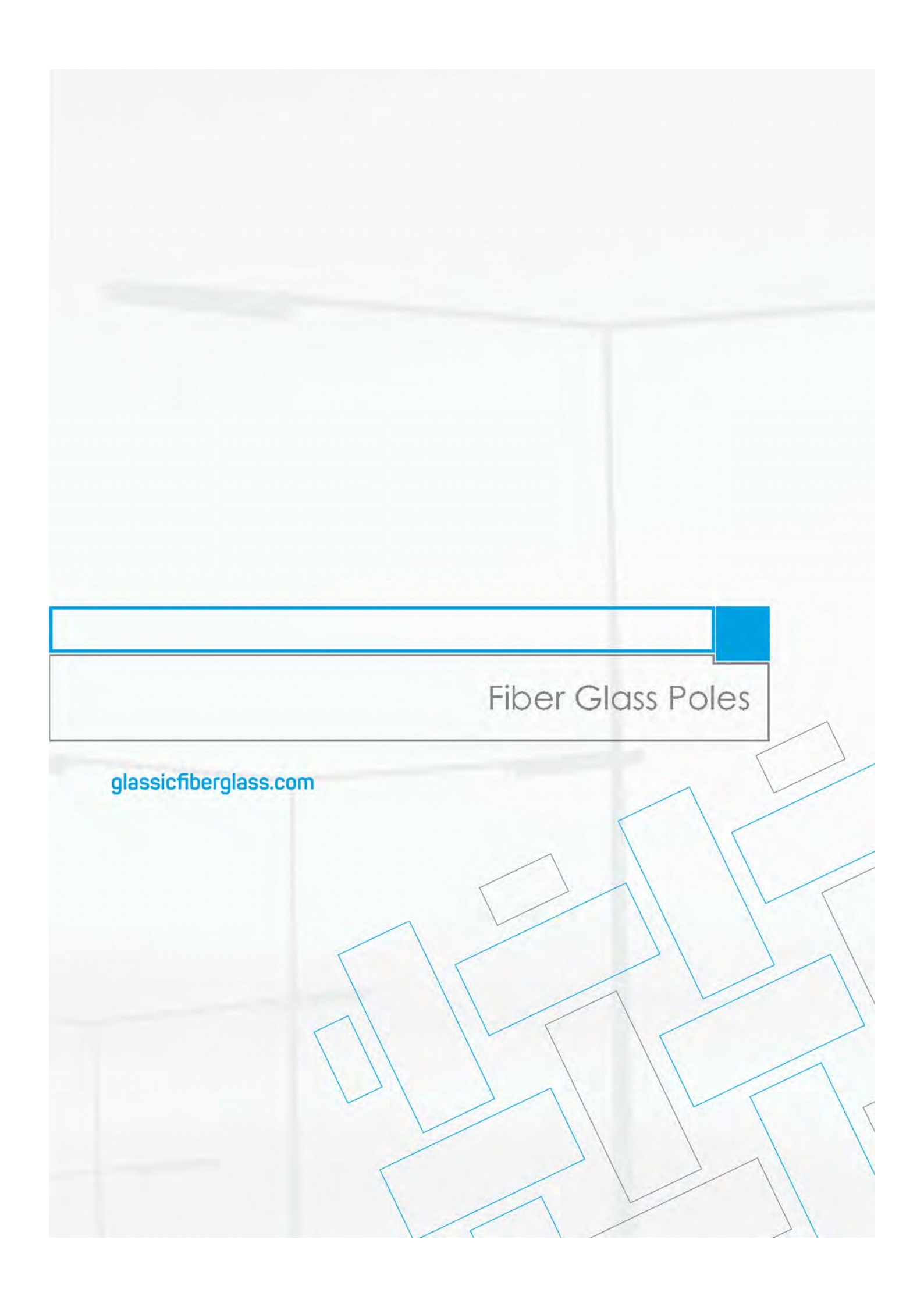


Glassic is a safe light

glassicfiberglass.com



GLASSIC
Fiberglass Innovation

The background of the advertisement is a blurred photograph of a white building with a grid-like structure of windows and doors. In the foreground, several rectangular poles of varying lengths and widths are scattered across the lower half of the image. These poles are outlined in a light blue color, and some have a solid blue fill. The overall composition is clean and modern, emphasizing the product being advertised.

Fiber Glass Poles

glassicfiberglass.com

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Applications

GLASSIC Fiber builds fiber Glass Poles up to 14m height and for all the applications, such as Street Lighting Poles, Decorative & Garden Lighting Poles, Wide areas Pole, Traffic Signs Poles, Signal Carrier Poles, Flag Poles, Crossroads Poles and Over Head Transmission Poles (11K.V).

يمكن إستخدام أعمدة الفايبر جلاس في كثير من التطبيقات :



Street Lighting Poles

أعمدة إنارة طرق وشوارع



Decorative & Garden Lighting Poles

أعمدة إنارة الحدائق



Wide Areas Poles

أعمدة ملاعب صغيرة



Traffic Sign Poles

أعمدة الإشارات الضوئية الخاصة بالمروور



Signal Carrier Poles

أعمدة اللافتات التي تشير إلى الاتجاهات



Flag Poles

أعمدة الأعلام



Crossroads Poles

أعمدة ميادين



Over Head Transmission Poles (11.k.V.)

أعمدة تعليق لنقل الطاقة الكهربائية على شبكات الجهد المتوسط

Advantages & Features

Advantages of the Fiber Glass Poles

- High corrosion resistance
- Safe in Accident Cases
- Less weight
- No Installation equipments needed
- No maintenance needed (painting)
- Fast and easy installation
- Safe (non conductive electrically)
- Various and stable colors
- Multi usage designs
- Smooth surface
- High dynamic strength 160 km/1 hr wind speed resistance
- Direct burial
- Various and attractive decorative designs
- Environmentally safe
- Low harmonic vibrations

المميزات الخاصة بأعمدة اثاره القيرجلاس

- مقاومه عالية للتاكل خاصة في المناطق الساحلية
- امنة في حالة الحوادث
- خفيف الوزن
- لا يحتاج الى اى معدات في التركيب
- لا يحتاج الى صيانه (دهانات)
- سهوله وسرعه التركيب
- معزول كهربائيا
- ألوان ثابتة ومتعددة
- تصميمات متعددة الاستخدام
- سطح أملس
- قوة احتمال ديناميكية عالية (يتحمل سرعة رياح ١٦٠ كم / ساعة)
- دفن مباشر (بدون الحاجة الى قاعدة تثبيت)
- تصميمات بيكورية جذابة ومتنوعة
- مواصفات امنة للبيئة
- يمتص الاهتزازات والرنين المغناطيسى

Features of the Fiber Glass Poles

1- Resistant to deflection & bending

Classic Fiber poles are designed to meet all criteria regarding static and total deflection. Static deflection is due to the weight of the arm and fixture only while total deflection is due to full wind acting on structure. In fact, **Classic Fiber** glass poles are designed to withstand highly strict static deflection criteria. In summary, whether the application includes a meter mask arm, banner or other hardware, **Classic Fiber** poles will be designed to meet or exceed all industry specifications.

will vibrate at almost half the frequency of steel poles. It is also evidence that fiber glass poles have excellent dampening characteristics and do not require secondary dampening devices as it is the case with aluminum poles. Any pole with vibrate, but fiber glass poles with vibrate slow enough to dampen the vibration and promote a longer lamp life than steel or aluminum poles.

4- Resistant to chemicals & corrosive reactions

One benefit of using **Classic Fiber** glass poles is that they are ideal in corrosive areas or areas subjected to chemicals. Unlike metal, fiber glass poles are not susceptible to chemicals that poles may be subjected to underground or in the atmosphere.

5- Easily drilled

Simply use the same drill you would use on wood or other poles and a bit intended for steel material. Drilling a fiber glass poles is easy and should not take any longer to drill than any other type of pole.

2- Resistant to UV radiation

Classic Fiber poles have a 0.57mm thick surface veil so if it get scratched , only the polyester veil is exposed which will not degrade. Fading is another issue associated with UV radiation. As will happen to any painted product, a fiber glass poles will fade as well. However, **Classic Fiber** glass poles now have perfect pigmented urethane coating, that even after subjected to the sun ultra radiations, no fading would occur.

3- Resistant to vibrations

Classic Fiber glass poles vibrate at 2.0 hertz compared to steel which vibrates at 3.5 hertz. This means that fiber glass poles

Fiber Glass Poles Specifications

1- Direct Burial Fiber Glass Pole

Fiber Glass Poles Dimensions (Direct Burial Type)

L (mm)	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	8500	9000	10000	10000	10500	11000	11500	12000	12500	13000	13500	14000
H (mm)	2550	3050	3550	4050	4500	4950	5400	5850	6300	6750	7200	1650	1650	8100	9000	9000	9450	9900	10350	10800	11250	11700	12150	12000
E (mm)	450	450	450	450	500	550	600	650	700	750	800	850	850	900	1000	1000	1050	1100	1150	1200	1250	1300	1350	2000
D1 (mm)	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
D2 (mm)	121	130	139	148	157	166	173	181.3	189.4	197.5	205.6	213.7	213.7	221.8	229.9	238	252.4	246.4	253.3	261	265	274	292	292
D3 (mm)	130	139	148	157	166	175	184	193	202	211	220	229	229	238	247	256	265	274	283	292	301	310	319	328
R (mm)	200	200	200	200	250	250	300	325	350	375	400	425	425	450	475	500	525	550	550	600	625	650	675	1000
S (mm)	250	250	250	250	250	300	300	325	350	375	400	425	425	450	475	500	525	550	600	600	625	650	675	1000
T (mm)	40	40	40	40	40	40	40	40	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
N (mm)	400	400	400	600	600	600	600	900	900	900	900	1200	1200	1200	1200	1200	1500	1500	1500	1500	1500	1500	1500	1500
M (mm)	180	180	180	210	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300

Key

L (mm) Total Length of the Pole H+E

H (mm) Upper Part Above the Ground

E (mm) Lower Part under the Ground

D1 (mm) Top Diameter

D2 (mm) Earth Diameter

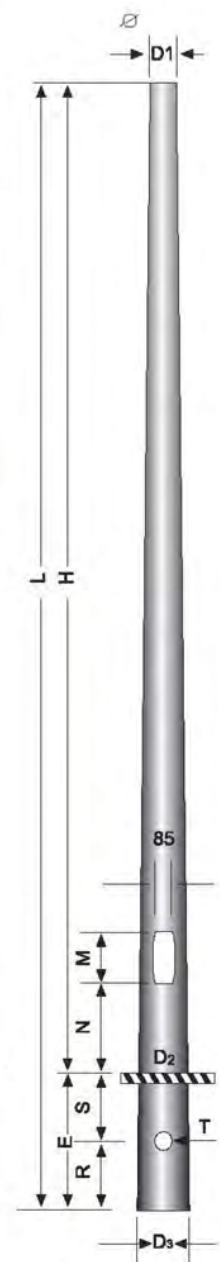
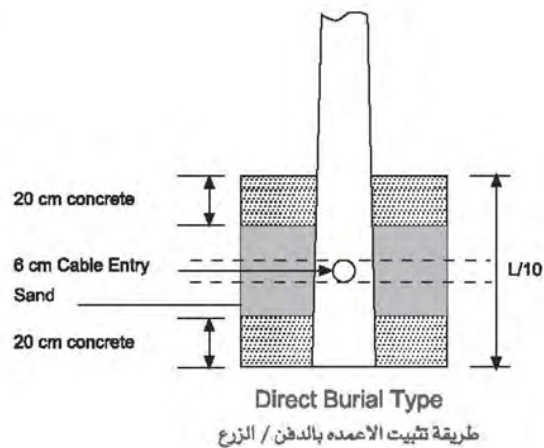
D3 (mm) Bottom Diameter

E S+R

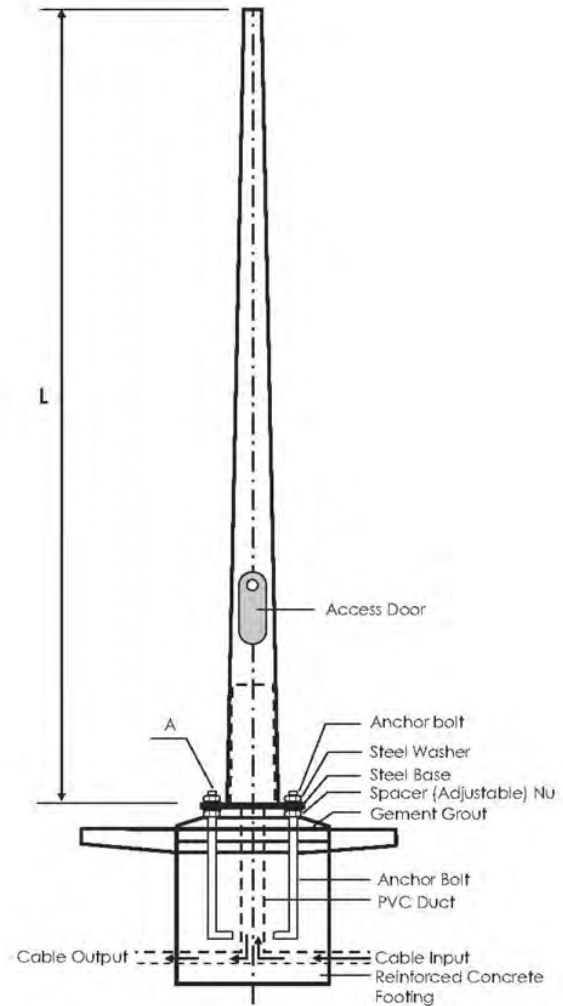
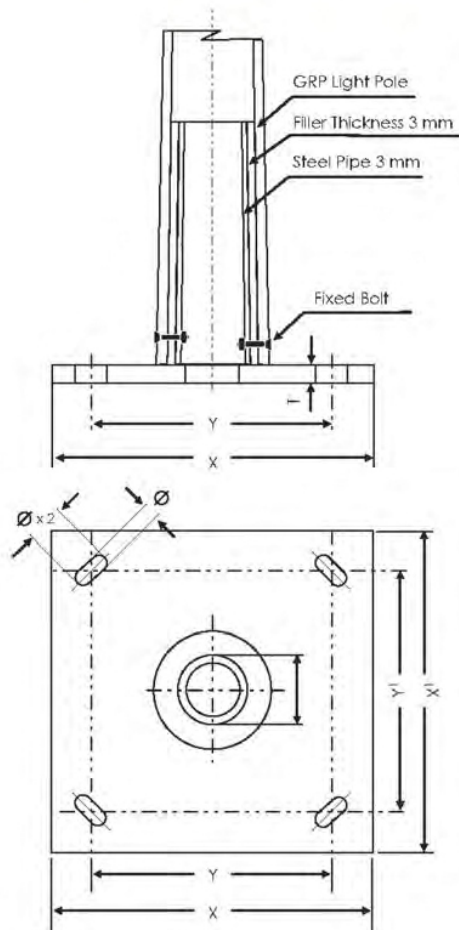
Color

White Aluminum

Other Colors upon Customer Request



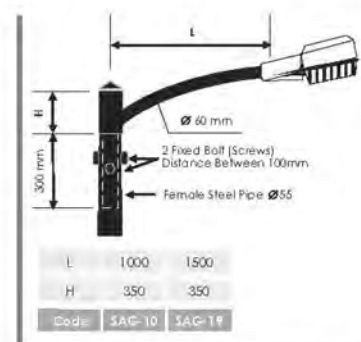
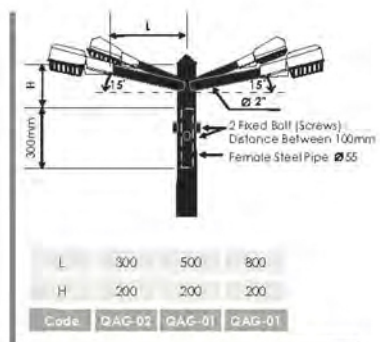
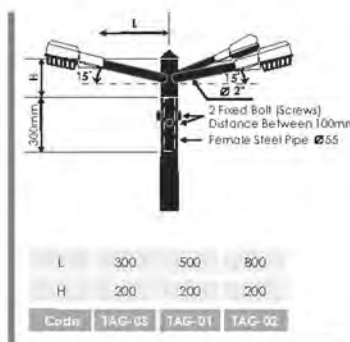
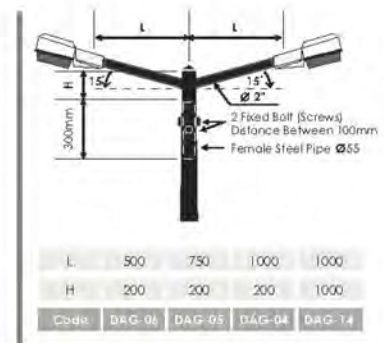
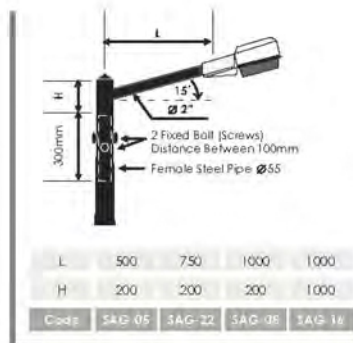
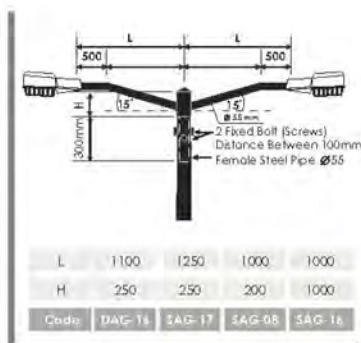
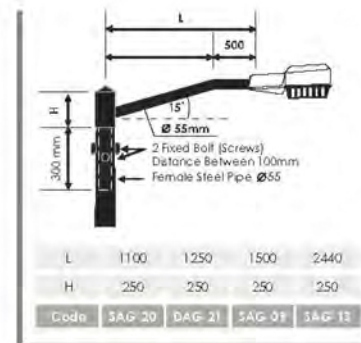
Anchor Base Fiber Glass Poles

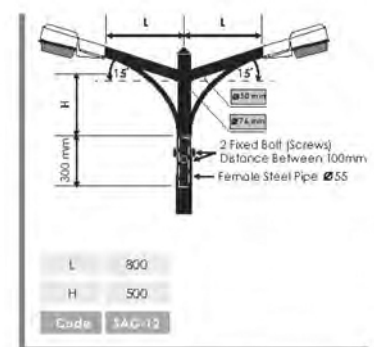
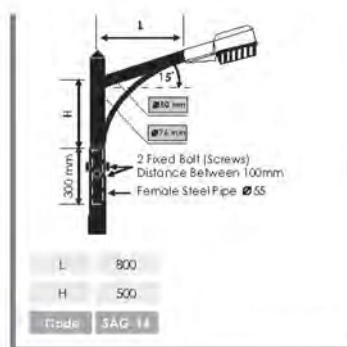
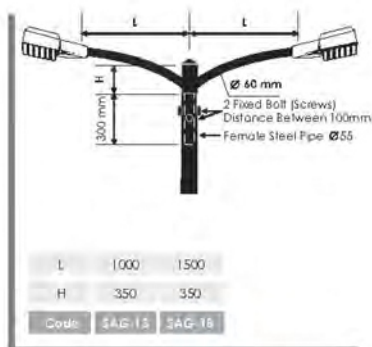


Galvanized Steel Base (All Dimensions mm)

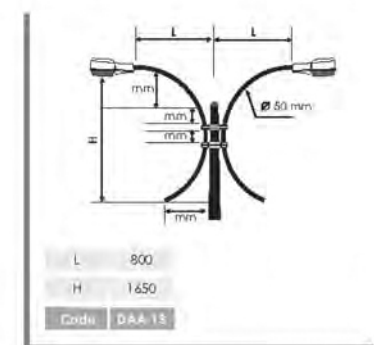
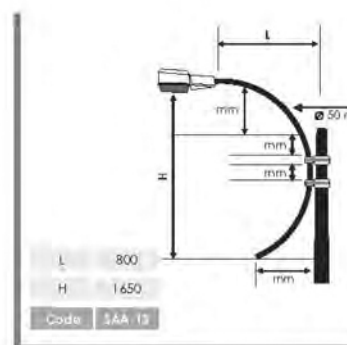
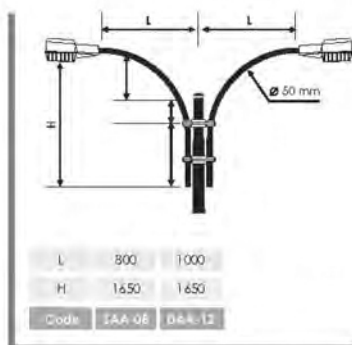
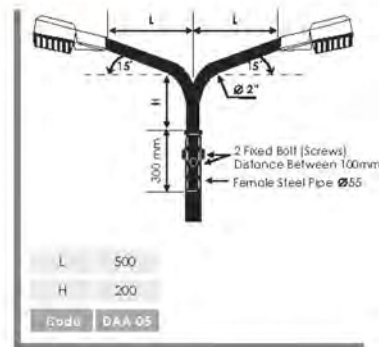
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X	250	250	300	300	350	350	350	350	400	400	400	400	400	400	400	400	400	400	400
X'	250	250	300	300	350	350	350	350	400	400	400	400	400	400	400	400	400	400	400
Y	200	200	250	250	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
Y'	200	200	250	250	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
I	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

Galvanized Steel Arms for Street Lighting Poles





Aluminum Arms for Street Lighting Poles



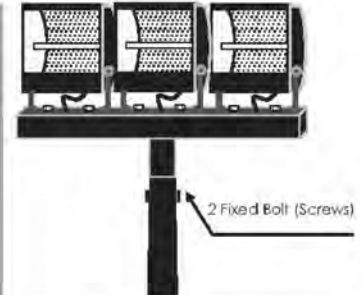
Forming Arms



FA14-04



FA14-01



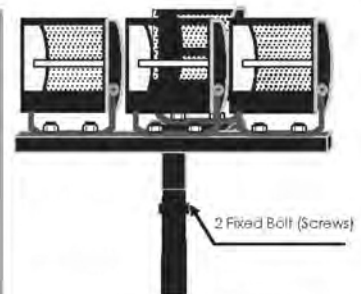
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FA64-02



FA64-03



FA64-04



FA14-10



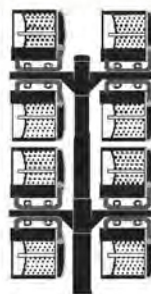
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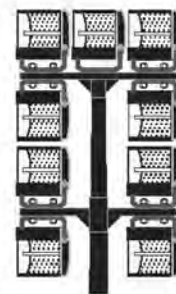
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FA16-01



FA53-01



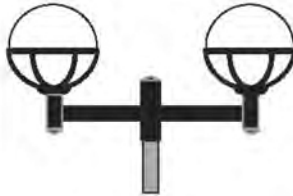
FA52-01



Forming Arms



FA04-02



FA27-01



FA41-01



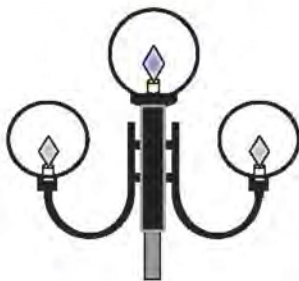
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FA30-02



FA10-01



FA54-01



FA63-01



FA43-01



FA42-01



FA62-01



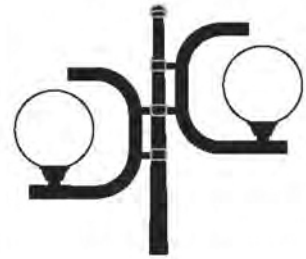
FA13-01



FA09-01



FA11-01



FA20-01



FA44-01



FA45-01



FA46-01



FA12-01



FA47-01



FA22-01



FA50-01

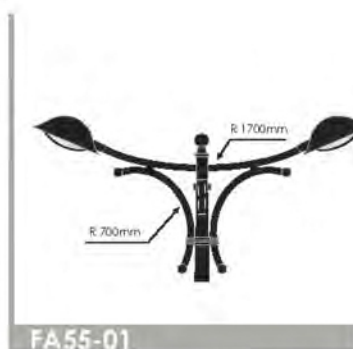


FA32-01



FA34-01

Forming Arms

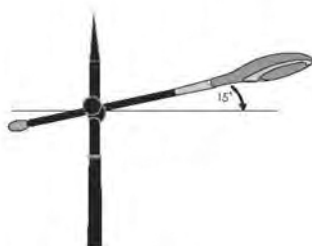




Forming arms



FA56-01



FA57-01



FA58-01



16-LL-07



16-LL-09



16-LL-10

Luminaries



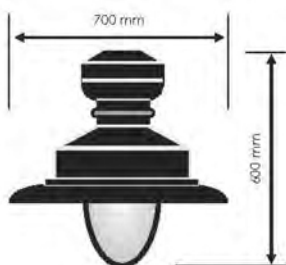
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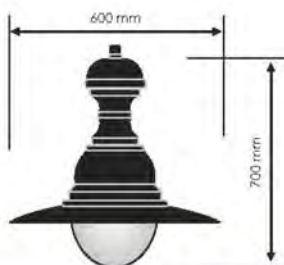
LL-08-1



LL-08-2



LS-01-3



LS-01-4

Optional Designs

Road Lighting Poles



Decorative Poles



Forming Bases



FB01



FB02



FB03



FB04



FB05



FB06



FB07



FB08



FB10



FB12



FB16



FB18



FB13



FB15



FB11

Code	Pole Length (mm)															Base Dim. (mm)	
	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9600	10000	11000	12000	H	W
FB01																550	500
FB02																550	500
FB03																600	450
FB04																600	450
FB05																600	450
FB06																600	450
FB07																1000	550
FB08																1250	450
FB10																800	450
FB01																200	650
FB12																1200	650
FB13																900	500
FB15																1200	500
																1200	550
																1500	600
FB16																1200	500
FB18																2250	2250

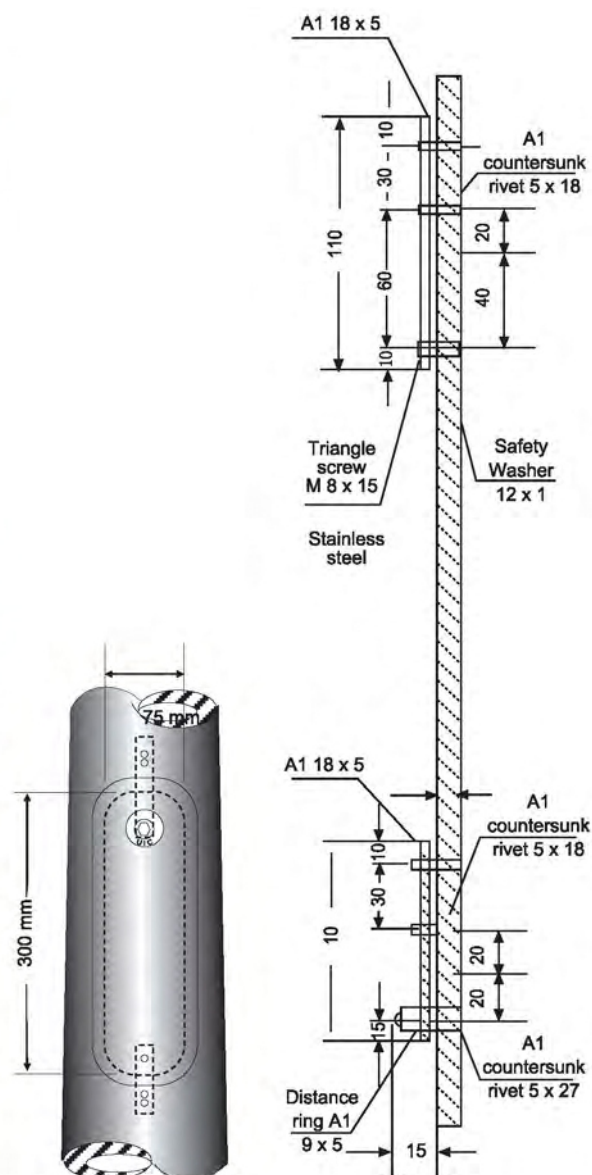
Accessories - Electric Door

The door is designed and shaped to be one body within the pole in order to prevent any water or any liquid penetration inside the pole body to the fuse box.

For maintenance purposes, the door can only be opened by using the appropriate tool {L-key) in order to insure security.

A metallic chain is hanged at the bottom of the door cover, connecting it to the pole body, in order not to loose it during maintenance procedures.

The door is made from the same pole material (fiber glass).
The door is tamper proof and all rivets are plastic covered.



Pole Types Comparison

S/N	Criteria	Painted Steel Poles	Galvanized Steel Poles	Aluminum Poles	Fiber Glass Poles
1	Resistance to environmental conditions & pollution	Very low	Relatively high	Relatively high	Very high
2	Color stability & painting needed	Needs painting once annually to protect it from corrosion resulted from environmental conditions and pollution, specially in coastal regions with average cost 30 L.E /year.	Its bright color turns to dark grey color after a very small period .	Needs painting once annually to protect it from corrosion resulted from environmental conditions and pollution, specially in coastal regions with average cost 30 L.E/year.	Has various stable colors do not change or affected by sun rays as UV material used in its production protect the colours from any change may happen due to sun rays for more than 10 years, so it doesn't need any painting . -UV material percentage could be controlled and increased according to customer requirements
3	Pole Surface	Non smooth surface permits the dust to adhere on the pole surface	Smooth surface in the beginning but it turns to non smooth surface just after rust happens due to environmental conditions & pollution.	Smooth surface in the beginning but it turns to non smooth surface just after wear happens due to environmental condition & pollution	Smooth surface, dose not rust or affected by environmental conditions or pollution (because it is not a metal) so it doesn't give chance for dust to adhere on pole surface
4	Pole weight	Heavy weight	Heavy weight	Light weight	Very light weight
5	Installation and transportation cost	High	High	Moderate	Very low
6	Life time	3 – 5 years	10 – 12 years	10 – 12 years	More than 40 years
7	Conductivity of Electricity	High	High	High	Non conductive of electricity as it is not a metal so it is very safe.
8	Lighting poles designs	Traditional street lighting poles only	Traditional street lighting poles only	Decorative gardens lighting poles only (till 4m height only)	Street lighting poles up to 14m height. Decorative street lighting poles up to 14m height. Decorative gardens lighting poles.

Tests & Properties for Fiber Glass Poles

Tests

• General Outdoor Lighting pole specs..	A.S.T.M - D4923-01
• Tensile Strength	BS EN ISO 527-4 α 5
• Elongation	BS EN ISO 527-4 α 5
• Flexural Test. (Bending)	BS EN ISO 14125
• Impact Bending Test	A.S.T.M - D256
• Rate of Burning	A.S.T.M - D635-06
• D.C Resistance	A.S.T.M - D257-99
• Outdoor Weathering	A.S.T.M - C131-03

Mechanical Properties

• Tensile Strength	BS EN ISO 527-4 α
• Elongation at break	BS EN ISO 527-4 α
• Bending Strength	BS EN ISO 14125
• E-modulus	BS EN ISO 14125
• Impact Strength	A.S.T.M - D256
• Temperature Stability	A.S.T.M - D1349-99



Bending Strength Test

Electrical Properties

• Surface Resistivity	A.S.T.M - D257-99
• Volume Resistance	A.S.T.M - D257-99

Chemical Properties

- Surface corrosion resistant above and below earth temperature
- Ageing and weathering resistant

Certificates

شهادة المركز القومي للبحوث

تم إجراء الاختبارات على الأعمدة الفيبر جلاس طبقا للمواصفات القياسية الألمانية والأمريكية

DIN EN 527	١- اختبار قوة التحمل للشد
DIN 53390	٢- اختبار قوة التحمل للثني
DIN 53453	٣- اختبار قوة التحمل للصدمات
DIN EN ISO 527	٤- اختبار الاستطالة
DIN 53390	٥- اختبار معامل المرونة للثني
ASTM D635-03	٦- اختبار قابلية الاشتعال
DIN-EN ISO 75	٧- اختبار تأثير الحرارة
ASTM D4923-01	٨- اختبار نسبة الفيبر جلاس
DIN IEC 60093	٩- اختبار المقاومة السطحية (العزل الكهربى)

شهادة كلية الهندسة - جامعة القاهرة

تم إجراء الاختبارات على الأعمدة الفيبر جلاس طبقا للمواصفات القياسية الأمريكية رقم : (ASTM 4923-01)

ASTM 2584	١- اختبار تحديد نسب التكوين
ASTM 5083	٢- اختبار قوة التحمل للشد
ASTM 790	٣- اختبار قوة التحمل للثني
ASTM 256	٤- اختبار قوة التحمل للصدمات
ASTM E84	٥- اختبار مقنومة الحريق (سرعة انتشار اللهب)
ASTM 621	٦- اختبار الجساءة
ASTM 257	٧- اختبار العزل الكهربائى

إختبارات المعهد القومى للقياس والمعايرة

تم إجراء الإختبارات على الأعمدة الفيبر جلاس طبقا للمواصفات القياسية الإنجليزية والأمريكية

Tensile strength (MPa)	BSEN ISO 527 - 4α 5	١- اختبار قياس قوة الشد
Impact Strength KJ/m2	ASTM-D-256	٢- اختبار قياس قوة الضغط
Bending Strength (MPa)	BS EN ISO 14125	٣- اختبار قياس قوة الثني
Elongation %	BS EN ISO 527 - 4α 5	٤- اختبار قياس قوة الاستطالة
Rat of Burning	ASTMD 635-06	٥- اختبار الحريق

References



طريق القاهرة الأسكندرية الصحراوي



محافظة الأقصر



طريق السلام - شرم الشيخ



نادي القطامية - القاهرة الجديدة



طريق القاهرة الأسكندرية الصحراوي



ميناء الملك عبد العزيز - السعودية



القرية الذكية



منتجع العروبة - الساحل الشمالي



مدخل مدينة الإسماعيلية



طريق القاهرة الغردقة الصحراوي



حديقة الأزهر



جامعة فاروس - الإسكندرية

References



مشروع تطوير كورنيش الإسكندرية



كورنيش المعمورة



المستشفى الجوى - القاهرة الجديدة



قرية مارينا - الساحل الشمالى



قلعة قايتباى بالأسكندرية



طريق زنجبار - اليمن



مدينة فاس - المغرب



قرية بيت الحمام - شرم الشيخ

RAL Standard Color Range



RAL 5005 **Signal Blue**



RAL 5015 **Sky Blue**



RAL 5007 **Brilliant Blue**



RAL 5002 **Ultramarine Blue**



RAL 5018 **Turquoise Blue**



RAL 6019 **Pastel Green**



RAL 6029 **Mint Green**



RAL 6036 **Pearl Opal Green**



RAL 6033 **Mint Turquoise**



RAL 6027 **Light Green**



RAL 6010 **Grass Green**



RAL 5024 **Pastel Blue**



RAL 1016 **Sulfur Yellow**



RAL 1001 **Beige**



RAL 1018 **Zinc Yellow**



RAL 1021 **Rape Yellow**



RAL 7003 **Moss Grey**



RAL 8002 **Signal Brown**



RAL 2010 **Signal Orange**



RAL 1017 **Saffron Yellow**



RAL 1015 **Light Ivory**



RAL 1028 **Melon Yellow**



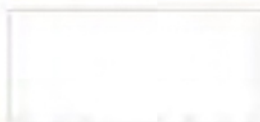
RAL 8023 **Orange Brown**



RAL 7008 **Khaki Grey**



RAL 2012 **Salmon Orange**



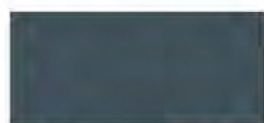
RAL 9016 **Traffic White**



RAL 9006 **White Aluminium**



RAL 9005 **Jet Black**



RAL 7015 **Slate Grey**



RAL 7035 **Light Grey**



RAL 7044 **Silk Grey**



RAL 8024 **Beige Brown**

* Other colors can be provided on customer's request.

Order Form

Pole Height: طول العمود	
Decorative Arm Type طراز الزراع الديكوري	
Decorative Base Type طراز القاعدة الديكورية	
Fixation Type طريقة التثبيت	
Pole Color لون العمود المطلوب	
No. Of Poles عدد الاعمدة المطلوبة	
Payment Method طريقة السداد	
Delivery Period مدة التوريد	
Project Name اسم المشروع	
Project Location مكان المشروع	
Delivery Location مكان التسليم	
Delivery Date ميعاد الاستلام	
Suggestions اقتراحات أخرى	
Company Name اسم الشركة	
Contact Person اسم الشخص المسئول	
Address العنوان	
Tel/Fax No. رقم التليفون - الفاكس	
Date التاريخ	

Fiber Glass Poles

glassicfiberglass.com



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