

Part A

General

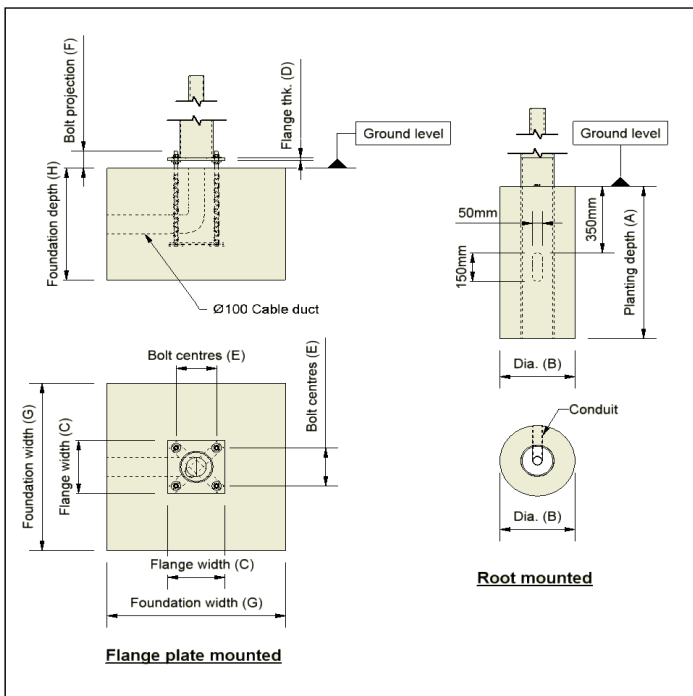
Column reference	DH10
Manufacturers drawing reference	RL200/2090/GA1
Column nominal height (m)	10.0
Terrain category defined in EN40-3-1	2
Column material	S355
Material design strength (N/mm ²)	355
Number of door openings	1
Door opening size height (mm)	420
Door opening size width (mm)	110
Cross section of base height (mm)	
Cross section of base width (mm)	188
Cross section of base depth (mm)	

Corrosion protection

Base system type	Galv.
------------------	--------------

Part B

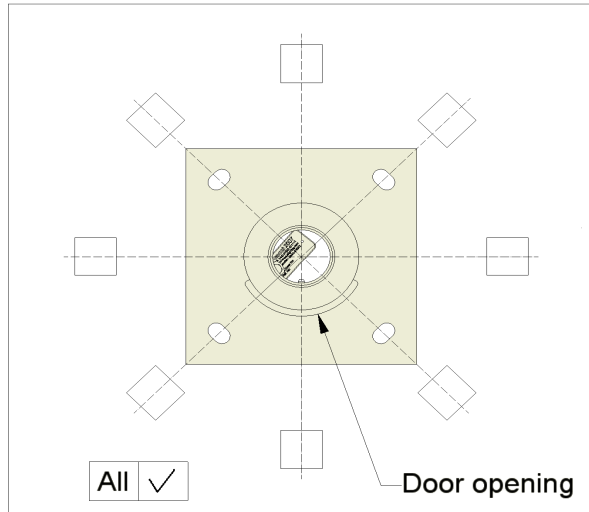
Foundation data



Flange plate and bolt details

Flange width (mm) Dim. (C)	400
Flange thk. (mm) Dim. (D)	20
Bolt centres (mm) Dim. (E)	300
Hole Dia or slot size (mm)	48x30
Unfactored design bolt load (N)	
Holding down bolts	M24
Bolt projection (mm) Dim. (F)	125

Acceptable positions of bracket arm(s) relative to door



Additional sacrificial thk. (mm)	0
----------------------------------	----------

Line of action of maximum moment relative to the door opening



Unfactored overturning moment (kNm)	25.000
Unfactored horizontal shear (kN)	4.000
Column weight root / flange (kg)	270.0

Root mounted

Planting depth (m) Dim. (A)	N/A
Min'm concrete dia. (m) for standard soil types Dim. (B)	
G=630	
G=390	
G=230	

Note 1. Foundation sizes shown above are determined in accordance with PD6547. In some instances the minimum concrete diameter is less than the planted tube of the column. In these circumstances it is permissible to install the column using compacted excavated material or material of better quality. Soil definitions are given in PD6547.

Flange mounted standard Abacus foundation details

Passive foundation ground bearing pressure 150KN/m²

Foundation width (m) Dim. (G)	1.200
Foundation depth (m) Dim. (H)	1.250

Non passive foundation ground bearing pressure 150KN/m²

Foundation width (m) Dim. (G)	1.700
Foundation depth (m) Dim. (H)	1.000

Non passive foundation ground bearing pressure 100KN/m²

Foundation width (m) Dim. (G)	1.700
Foundation depth (m) Dim. (H)	1.000

Non passive foundation ground bearing pressure 75KN/m²

Foundation width (m) Dim. (G)	1.700
Foundation depth (m) Dim. (H)	1.000

Note 2. For EN40 columns standard Abacus foundations can be selected from our Web site abacusiighting.com
For Highways Agency specification specialist advise is required

Details of attachments			
Area (m ²)		Coefficient	
Total area (m ²)			
Height (m)			
Offset (m)			

Data sheet reference:	DH10
Revision:	-
Page:	2
Date:	03/06/2014

Part C

Post top mounted

Lantern lever arm (mm)	
Due to weight of lantern	Due to wind on lantern
300	300

Lantern connection		Lantern	Rationalized wind loading factors (Rwf)			
Diameter (mm)	Length (mm)	Weight (kg)	396	429	466	576
Flange plate			1.70	1.56	1.41	1.10

Single arm bracket projection

Lantern lever arm (mm)	
Due to weight of lantern	Due to wind on lantern
300	300

* Max headload for mid-hinge operation

Bracket projection (m)	Bracket reference	Material grade	Design strength (N/mm ²)	Lantern spigot connection			Lantern	Rationalized wind loading factors (Rwf)			
				Fixing angle (deg.)	Diameter (mm)	Length (mm)	Weight (kg)	396	429	466	576
Maximum windage area (m ²) for rationalized wind loading factors											
0.50							10	1.56	1.43	1.30	1.01
1.00							10	1.28	1.16	1.05	0.81
1.50							10	1.05	0.95	0.86	0.65
2.00							10	0.75	0.69	0.63	0.48
0.50							15	1.53	1.40	1.27	0.98
1.00							15	1.26	1.14	1.03	0.80
1.50							15	1.02	0.93	0.84	0.64
2.00							15	0.72	0.66	0.60	0.47
0.50							20	1.51	1.38	1.24	0.96
1.00							20	1.23	1.12	1.02	0.78
1.50							20	0.99	0.91	0.82	0.62
2.00							20	0.70	0.64	0.58	0.45

Double arm bracket projection

Lantern lever arm (mm)	
Due to weight of lantern	Due to wind on lantern

Bracket projection (m)	Bracket reference	Material grade	Design strength (N/mm ²)	Lantern spigot connection			Lantern	Rationalized wind loading factors (Rwf)			
				Fixing angle (deg.)	Diameter (mm)	Length (mm)	Weight (kg)	396	429	466	576
Maximum windage area (m ²) for rationalized wind loading factors											

Part D

It is certified that the information given in this data sheet has been obtained in accordance with the requirements of BS EN 40