SIGN POST DIAMETERS AND FOUNDATIONS

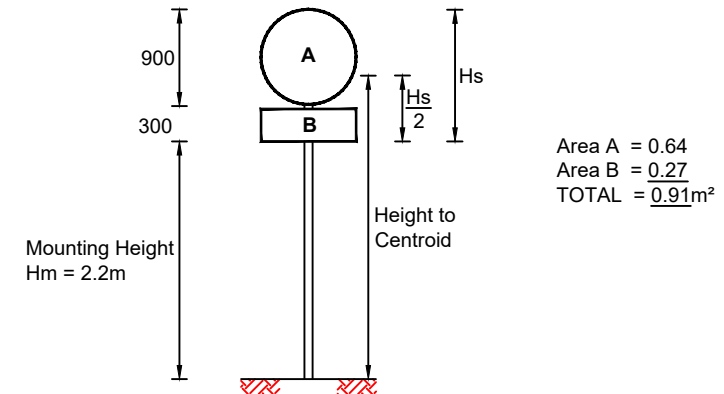NOTES (To be read in conjunction with Drg Nos SD/1200/2 - 15)

1. All dimensions are in millimetres unless otherwise stated.

2. Drawing Nos SD/1200/2 - 6 provide guidance on mounting heights and lateral clearances and also provide some advice on 'Dos' and 'Don'ts' into sign locations/assemblies.

3. Charts are provided for determining post sizes and foundation types on Drawing Nos SD/1200/8 - 9. They are suitable for rural areas but should not be used for signs in very exposed areas. In these locations calculations from first principles or suitable sign design software should be used.

4. For signs having a Area/Height greater than the limits provided on the Charts, appropriate sign design software should be used.

5. The Charts assume the foundations will be in a stiff, well compacted clay soil, allowances should be made for soils that are in new made-up ground such as embankments.

6. The Charts assume that the fpost centres are equally spaced on sign assemblies with 2 or more posts.

7. On signs requiring illumination in accordance with 'The Traffic Signs and General Directions 2002', large base posts are required as per Drawing No SD/1200/15.

8. Non-illuminated signs requiring 2 or more posts should be erected in socketed foundations as per Drawing No SD/1200/15.

9. For signs on 2 or more posts where it is impractical to use individual post foundations then a continuous foundation should be used as per Drawing No SD/1200/13.

10. Charts should not be used to determine and/ or design passively safe signposts.

11. Subject to sign location, design speed and necessary LCC approvals, sign posts 89mm and greater shall be passively safe.

EXAMPLE ON USING CHARTS ON DRAWING NOS SD/1200/8 & 9

1. DESIGN THE SIGNS REQUIRED IN THE ASSEMBLY

Example shown below:-

900
300
A
B
H_s
$\frac{H_s}{2}$
Mounting Height
Hm = 2.2m
Height to Centroid

Area A = 0.64
Area B = 0.27
TOTAL = 0.91m²

2. CALCULATE THE HEIGHT OF ALL THE SIGNS ON THE POST

H_s = Height of Sign A + Height of Sign B (Including the gap between signs)

900mm + 300mm

= 1200mm = 1.2m

(If there is just one sign on the post, Hs = height of the one sign)

3. DETERMINE THE HEIGHT TO CENTROID

Height to Centroids = Mounting Height + $\frac{H_s}{2}$

$= 2.2m + \frac{1.2m}{2} = 2.8m$

Using the Chart on Drawing No SD/1200/8 and the appropriate row and column, determine post size alternatives.

From the Chart you have a choice of:-

one 114mm diameter post or 2 x 76 diameter posts

OR

if it is an illuminated sign one 89mm large base post

4. DETERMINE FOUNDATION SIZE USE CHART ON SD/1200/8 or 9 AND SD/1200/15

Leicestershire County Council	TITLE:	TRAFFIC SIGNS	DRAWING NUMBER SD/1200/01	DATE APRIL 2024	
ENVIRONMENT AND TRANSPORT DEPARTMENT	SIGN POST AND FOUNDATIONS	NOTES	AUTOCAD REF K:\GENERAL\D9997STDDRG\STD DRGS 2015	SCALE NOT TO SCALE	0 Rev / 01.04.2024 Date / Supersedes Dwg. SD/12/1 - September 2002 / Notes on Revision