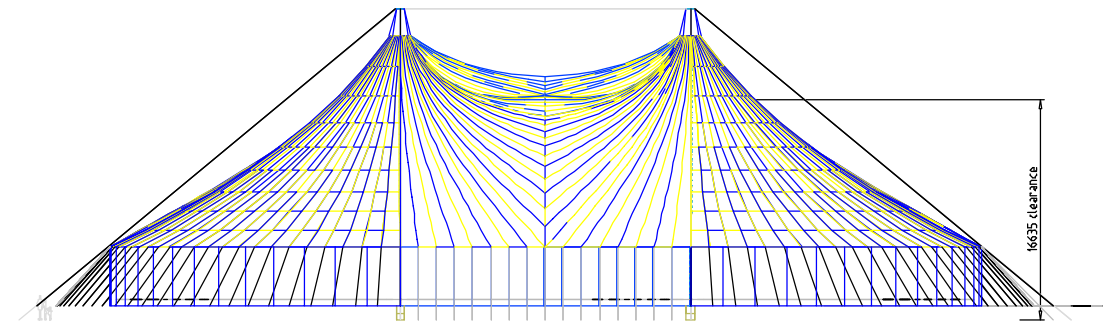
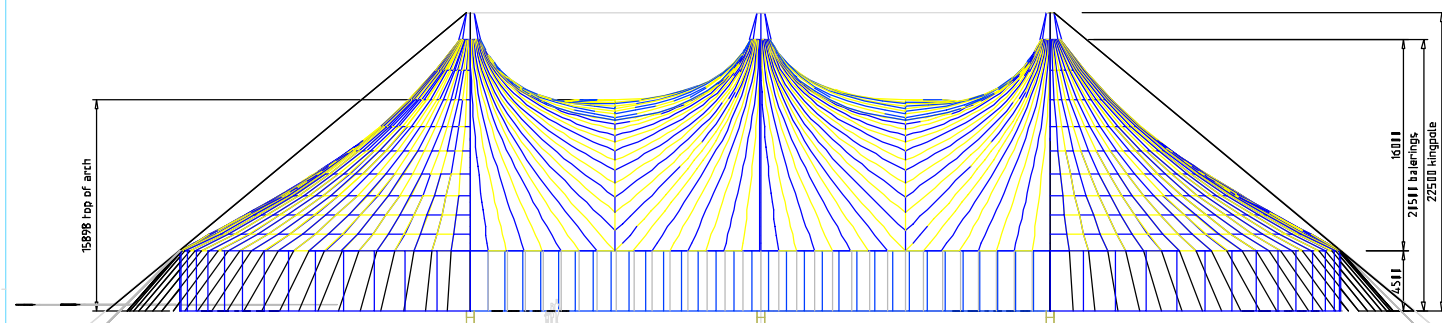
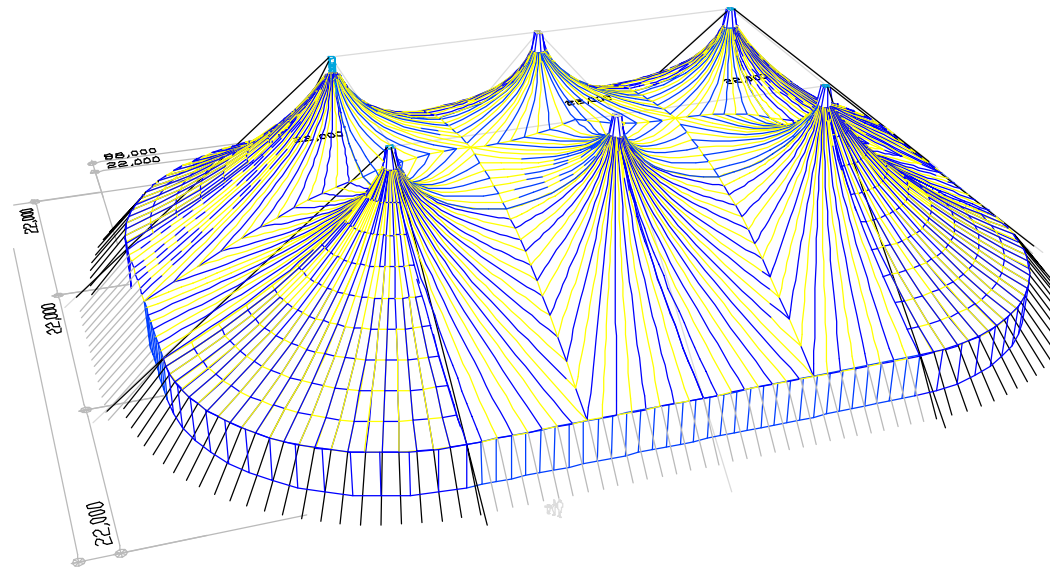
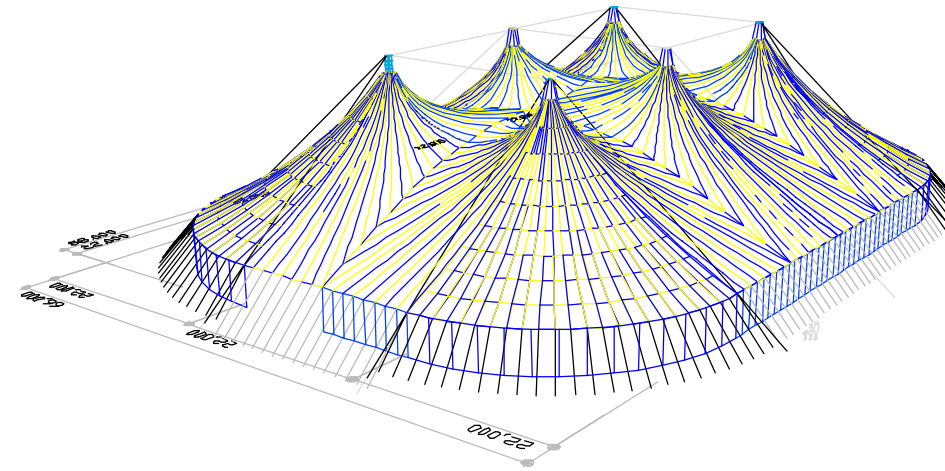
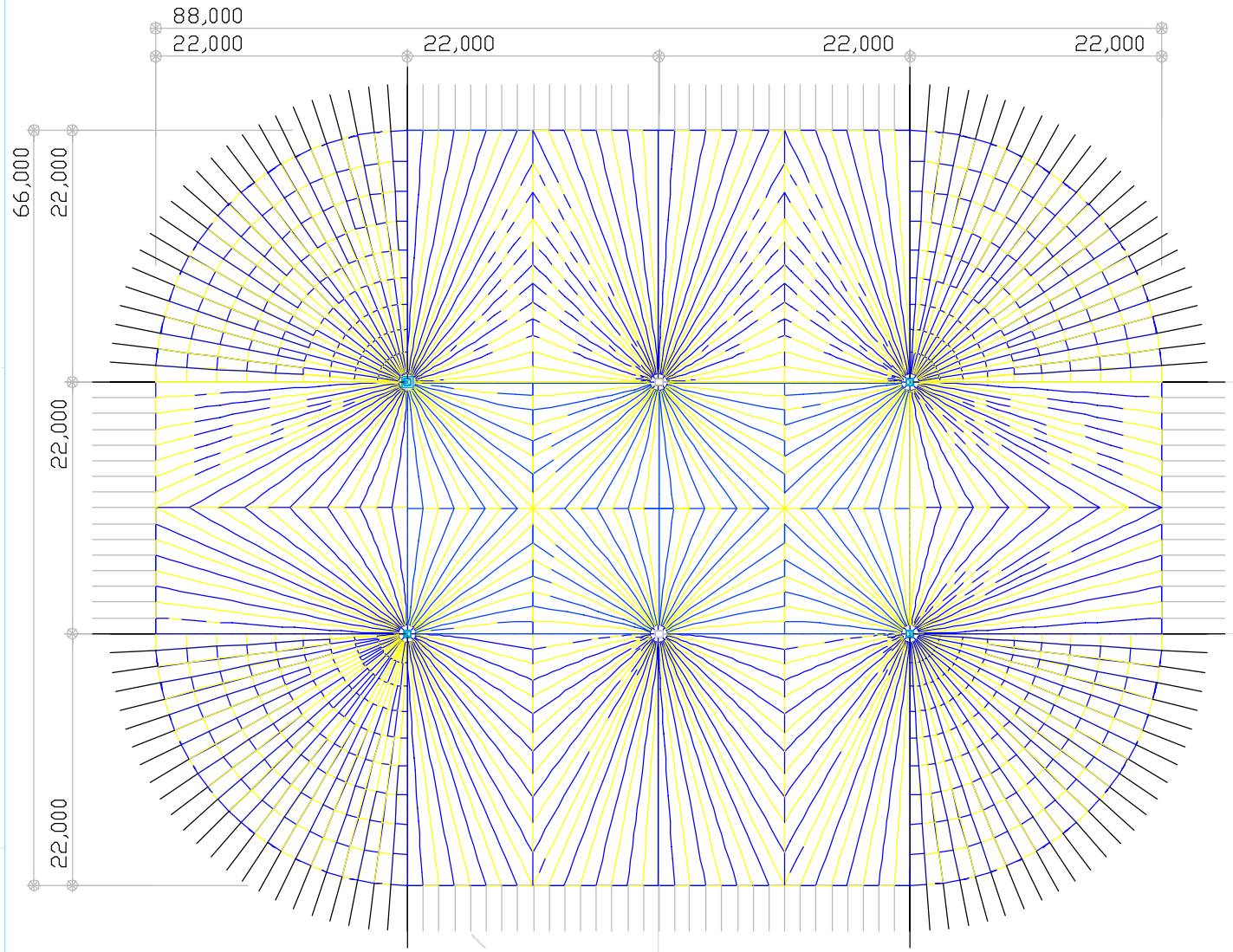


Design copyright © 2008 Rudi Enos Design - Special Structures Lab. Do not scale from this drawing. All dimensions in millimetres unless otherwise stated.  
 Testing in accordance with Table 1 Acceptance Table 2.- heights of structure roof depend upon installation variables - do not scale from drawing



DESIGN PARAMETERS - MT66 - 2

Performance Criteria

The structure is designed for the following applied loads:  
 Wind load in accordance with British Standard - CP3 Chapter V Part 2 1972. Taking due account of period of exposure  
 Wind speed = 42 m/s.  
 Wind load = 15 kN/m<sup>2</sup>

No snow load has been calculated for this structure.  
 Large distributed and point loads can be suspended within the structure. Dominant openings are not allowed for.  
 Refer to Rudi Enos Design 1179 510729.  
 Ground conditions may require extra staking, raftering or anchoring.

All wind loadings in this scope are based upon British Standard - CP3 Chapter V part 2, 1972 and a basic wind speed of 42 m/s (REF fig 1 page 8). This wind speed is factored to give a design wind speed factored as follows (clause 5 pages 9 and 11)

- 1/ Factor S1 - A topography factor to account for cliffs and escarpments, the effects of hills and the sheltering in valleys - normally 1.1.
- 2/ Factor S2 - A factor to account for ground roughness, building height and size. A factor of 1.63 is used for open countryside with scattered wind breaks, on a structure more than 50m in width or length. (CP3 Table 3, factor S2, p.11).
- 3/ Factor S3 - A statistical factor. This is taken as 1.77 which is based on the structure being temporary and subject to a wind likely to occur every 2 years. (CP3 Fig 2, factor S3, p.12).

BS 4130 - The Structural Use of Aluminium  
 BS 5481 Part 1: 1985 Structural Steelwork  
 BS 5480 - Parts 2a & 2b - Floor Reinforcement

Fabric Technical data: Specification of Fabric Used:  
 FR 781 Universal - PVC coated polyester fabric.

1. Base fabric of High Tenacity Branded Polyester. (DN 48 081)
2. PVC coated on both sides
3. High gloss lacquer surface
4. 30% tear strength
5. Easy to clean
6. Dimensionally stable
7. Resistant to cold up to -38 degrees Celsius (DN 53 M4)
8. Flame retardant (see below)
9. Mildew inhibitor biocidally treated
10. Weather resistant
11. Good resistance against ultra-violet rays
12. Light fast colours (DN 56 184)

ENGINEERED STRUCTURAL FABRICS  
 Fabrics used for engineering application are usually polyester or glass fibre coated with a variety of chemical compounds. The woven base cloth carries most of the tensile forces while the coating protects the cloth against external environmental effects of ultra violet and pollution. An additional coating of clear lacquer is also applied for additional protection. These lacquers can be acrylic, PVDF, fluorine as in ren stick fraying sand, or Tedlar.

There are many different combinations of base cloth/coating/lacquer. The correct specification is chosen from experience, and technical and commercial considerations.

TYPE 1 STRUCTURAL FABRIC

Support cloth	DN 48 081	PES
Endo/pack	DN 53 053	9/9
Yarn	DN 53 081	110
Weave	DN 61 018	LV1
Grey cloth weight	DN 58 054	210
Type of coating	PVC	
Tensile weight	DN 53 053	110
Tensile strength warp/weft	DN 53 054	3416/3416
Tear resistance warp/weft	DN 53 063	310/350
Adhesion	DN 53 063	10

Typical Flame referency ----

British	BS5867 TYPE B
Italian	Class 2
French	Classification M2
German	DN 412 01
US	NFPA 701 small and large scale

Cold crack ----- -48 degrees Celsius (DN 53 061)  
 Flexing strength ---- no cracking after of 10,000 flexes (DN 53 053)  
 Weather test ----- various

COLOUR  
 Most prime colours are available as standard. Special colours are subject to minimum ordering quantities.

LACQUER  
 Various lacquers are available for different applications, such as PVDF, PTFE, Acrylic, Silican.

Blackout cloths are available to special order.  
 The above data are averages from production. Fire certification for most countries available. Product descriptions and suggested uses are general and subject to trial for the intended end use. Production is subject to change. EMOE

Welding and fabrication to be undertaken in accordance with the national steelwork specification.

Rev	Description	Date

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# Mobile Structures

**Mobile Stadiums**  
 World Leaders in  
 Stage Hubs  
 Tented Seating  
 Big Top Hubs  
 161 164

Filename: Mobile Stadiums MT66 66m x 88m round  
 Title 1: Seaton Park 65 Deep Lane Sheffield S5 0DU - UK tel: +44 (0)114 257 7755  
 Title 2: layout and views  
 Drawn by: RE  
 Date: 01-08-08  
 Project: 027  
 Scale: nts  
 Drawing No.: 027