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 instalation variables - do not scale from drawing DESIGN PARAMETERS - MT44 Tiered Seating Big Top Hire Performance Criteria 22000 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. 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. Talk to Rudi Enos Design 0114 257 7755. Ground conditions may require extra staking, fastening, or anchorages. All wind loadings in this example 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 Iclause 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 - nominally 1.1. 2/ Factor S2 :- A factor to account for ground roughness, building height and size. A factor of 0.63 is used for open countryside with scattered wind breaks, on a structure more than 51m in width or length. | Cp 3 Table 3 , factor S2. p 111. 3/ Factor \$3 :- 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. | Cp. 3 Fig 2. factor S3. p. 12 |. BS 8118: The Structural Use of Aluminium BS 5951: Part 1:1985 Structural Steelwork BS 5438: Parts 2a & 2b: Flame Retardancy. Fabric Technical data: Specification of Fabric Used: FR 711 Universal - PVC coated polyester fabric. 1. Base fabric of High Tenacity Branded Polyester. IDIN 60 0011 2.PVC coated on both sides 3. High gloss lacquer surface 4. Dirt repellent 5. Easy to clean 6. Dimensionally stable 6. Unmensionally stable
7. Resistant to cold up to -30 degrees Celcius | IDIN 53 361|
8. Flame retardant I see below!
9. Mildew inhibitant biocidally treated
10. Weather resistant
11. Good resistante against ultra-violet rays
12. Light fast colours | IDIN 54 104| ENGINEERED STRUCTURAL FABRICS Fabrics used for engineering application are usually polyester or glass fibre coated with a variety of chemical compounds. The waven base cloth carries most of the tensile forces while the coating protects the cloth against external environmental effects of ultraviolet and pollution. An additional coating of clear lacquer is also applied for additional protection. These lacquers can be acrylic, PVDF (fluorine as in non stick frying pans), 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 IDIN 538531 Ends/picks Yarn IDIN 538311 IDIN 61101 IDIN 538541 Grey cloth-weight PVC Type of coating Total weight IDIN 53352I 901 IDIN 53354 3100/3110 |DIN 53363| Tear resistance warp/wef IDIN 53363I Adhesion Typical Flame retardancy BSS867 TYPE B Class 2 Classment M 2 DIN 4112 B1 NFPA 701 small and large scale British Italian French German US -41 degrees Celsius (DIN 5336' no cracking after at 111,110 flexes (DIN 53359) various Cold crack . IDIN 53361 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, Silicon. Blackout cloths are available to special order. The above data are averages from production. Fire certificates for most countries available. Product descriptions and suggested and uses are general and subject to trial for the intended end use. Production is subject to change. E&GE Mobile Structures Welding and fabrication to be undertaken in accordance with the national steelwork specification. Buti Eman Mobile Stadiums Ltd Designers RED-MT66-2009-001A-44m-round-GA.dwg Death The Showground Technology Park Engineers Cramfit Road, , North Anston, South Yorkshire, S25 4AJ info@rudienosdesign.com www.rudienasdesign.com Tel: +44 (0) 1909 562111 - Fax: +44 (0) 1909 563222 nfo@specialstructures.com email: sales@mobilestadiums.com - website: www.mobilestadiums.com www.specialstructures.com