Procedure and Guidance for Temporary Demountable Structures
1. **Purpose and Scope**

This procedure and guidance explains [Leeds City Council’s]¹ arrangements for managing the use of Temporary Demountable Structures (TDS) and provides guidance covering a wide range of possible uses in varying locations.

[The Council] will consequently ensure compliance with the Health and Safety at Work etc. Act 1974 and the Management of Health and Safety at Work Regulations 1999 for the erection, use and dismantling of TDS for events organised by the authority.

Under CDM 2015 it is the Client and or the Event Organisers legal responsibility to ensure that a full & sufficient safety file & safety plan is produced for events, including the use of TDS.

2. **Definitions**

2.1 Temporary Demountable Structures.

Structures which are in place for a short time, generally no more than 28 days, that are designed to be erected and dismantled manually many times. They include:

- Grandstands;
- Platforms;
- Temporary seating;
- Stage structures;
- Tents;
- Marquees;
- Canopies;
- Barriers;
- Gazebos;
- structure that will carry advertising, scrim (material sheeting) or other displays;
- Inflatable structures such as bouncy castles;
- demountable market stalls; and
- Special ‘scaffold structures’ such as towers and ramps.

2.2 Risk Assessment

The process by which a competent person identifies the hazards associated with the design, construction or operation of a temporary demountable structure, determines the level of risk for people constructing or using the structure, and assesses the likelihood and consequences of an incident.

Please refer to the performance standard for risk assessment.

2.3 Event Organiser

This could be a service team, manager, supervisor or other individual. They can either appoint a person(s) to carry out the duties listed under 3.2 or fulfil those duties themselves.

---

¹ City Development and Environment and Housing have adopted this procedure and guidance as an interim measure in advance of the Council formally agreeing a suitable Performance Standard to cover the use of TDS.
2.4 Competent person

People shall be regarded as competent where they have sufficient skills, knowledge and experience to take responsibility for the identified task. It is important that they have a detailed knowledge of the type of structure, and particularly of those matters which are essential for its structural reliability. Competent persons will have an awareness of the limitations of their own experience, skills and knowledge.

3. Roles and Responsibilities

3.1 Chief Officers and Heads of Service are responsible for ensuring that:

- adequate resources are made available to ensure effective implementation of this procedure and guidance and that it is consistently applied throughout their service(s);
- the appropriate management arrangements are in place and the Event Organiser is identified and/or appointed;
- overall responsibilities are clearly understood by those who have those responsibilities including in particular the Event Organiser and Competent Person; and
- they provide any necessary support for action taken in adherence with this procedure by the designated officer(s) at the event.

3.2 Event Organisers are responsible for ensuring that:

- the appropriate person(s) and resources are identified and designated for each relevant task;
- appoint or identify the competent person who will be in place to take charge of the TDS;
- those with such designated responsibilities clearly understand their roles and are competent to complete them;
- the appropriate level of monitoring is identified and applied, and particularly that it is proportionate to the TDS being considered; and
- the guidance is understood, adopted and applied by any external contractors and designers who are hired to design, supply, build, manage and take down a TDS; furthermore, the contractor must be competent and have in place appropriate safety working procedures and weather plans.

3.3 Local Health and Safety teams will, when requested:

- advise on the application of the provisions of this procedure and guidance document;
- provide advice and guidance to LCC staff with responsibilities identified under this procedure;
- advise Event Organisers on the appropriate level of competencies required to undertake any specific or identified responsibilities within this guidance; and
- carry out appropriate audits to ensure compliance with this procedure and that it is being applied consistently; these may be either while the TDS is in place or at any other time deemed appropriate.

3.4 Employees are required to:

- Work in accordance with the identified risk control measures; and
- Make proper use of any training or equipment provided to eliminate or minimise risks identified.
4. **Key tasks for Event Organiser**

The following tasks will need to be considered and where appropriate, carried out for each individual TDS:

- The competent person will carry out an appropriate level of risk assessment taking into account all relevant factors related to the nature and location for the TDS;

- Competent persons are employed to design, supply, erect and inspect all temporary demountable structures. Evidence of their competence must be obtained and documented as appropriate;

- Preparation of a clear design specification for the required use of the TDS which will include the technical details required to enable an appropriate design to be undertaken;

- Provide TDS contractors / designers with relevant site information and/or allow them site access to carry out their own site risk assessments;

- Ensure that TDS contractor have a design prepared by a competent person, which takes account of the use and conditions in which it is to be installed.

- Where a structure is to carry advertising / scrim, include this requirement in any design concept, specification and structural assessment; and

- Bespoke or unusual structures may require additional testing by a TDS designer to demonstrate the integrity of the design.

The relevant designated person will also ensure:

- There are systems in place to monitor (and where appropriate record) local environmental conditions throughout the event (including construction and deconstruction of TDS);

- The limitations of use, defining performance limits under various environmental conditions, are clearly understood by those using and erecting the TDS;

- Structures are only used within their specified limitations of use and that there are systems in place to monitor and control the use of the structure in accordance with the specified limitations of use for the TDS;

- That an emergency plan for the TDS (which may be incorporated into the emergency plan for the site) is created before the construction phase and communicated to the relevant persons (i.e. stewards);

- When identified through the risk assessment that a competent person should remain on site throughout the event, this officer will monitor the TDS; and

- That where a full site risk assessment is appropriate, ensure that it takes into account the different factors which might affect construction on fields as opposed to residential/commercial areas and oversee that any suitable design changes to the TDS are implemented.

It should be noted that TDS used outdoors are susceptible to the effects of constantly changing climatic conditions and so the relevant designated person must ensure that appropriate weather management plans are in place to:

- monitor and measure the local weather conditions;

- deal with changes that can affect the structure and exceed the safe working parameters of the structure, e.g. changing ground conditions due to prolonged rain can significantly affect the resistance
offered by ground anchorages. In this case, the ground conditions and anchorages may need
reassessment by specialists; and

- a wind management plan will be constructed, taking into account wind tolerance of TDS.

Monitoring arrangements. This document covers an extremely wide range of TDS and recognises conditions
and locations will vary. The following monitoring arrangements will need to be considered for each individual
situation and applied with appropriate proportionality as determined by the relevant designated person.

The following monitoring procedures take into account all of the event production elements rather than just
the structure itself and should be implemented where appropriate as identified through the risk assessment
process for the specific TDS:

- When an anemometer is identified as required it must be installed as soon as practicable on site and
  must be monitored during the build-up, event and breakdown and constantly when conditions are
  likely to cause a hazard in accordance the wind/weather management plan;
- Those who use the anemometer are competent in its use;
- Each type of TDS to have its own specific wind management plan that can be integrated into the
  overall event safety plan taking into account site specific topography and seasonality. The event
  safety plan should identify what actions should be taken, when and by whom in relation to each
  specific structure;
- There should be monitoring of weather forecasts for the area at all times from beginning of
  construction until deconstruction is complete; and
- Other climatic conditions that can impact and therefore may require consideration when deploying or
  using a TDS include:
  - Rain and its effects on the ground and any anchorage;
  - Lightning and the affects of a strike on a TDS;
  - Snow and the impact of snow load on a TDS.

The appropriate wind and gust management plan will identify actions to be taken and should include where
applicable the following:

- Processes for obtaining detailed wind and gust speed forecasts for the location;
- Details of maximum wind and gust loadings for each structure on site;
- On site wind speed monitoring and arrangements for recording of data;
- An action plan for predetermined wind and gust speed thresholds;
- Securing loose furniture;
- Lowering temporary signage and branding;
- Reducing wind load upon structures;
- Closing down parts of the ground – marquees or temporary stands;
- Ability of external partners and stakeholders to respond to incidents if they are drawn to other
  locations;
- Revised traffic management plan if access routes are impacted;
- Arrangements for the abandonment, postponement, cancellation or delayed start of the event;
- Inspection regime after winds have subsided; and
- Recovery action plan to respond to any damage caused by wind.
5. **Understanding the effect of wind on structures**

It is important to recognise that it is wind pressure on a structure that poses an issue not merely wind speeds themselves. The relationship between pressure and wind is not linear. The applied pressure is proportional to the square of the wind speed.

6. **Building and dismantling the TDS**

In addition to the general responsibilities identified at 3.3, the event organiser will specifically ensure that:

- sufficient time and resources are available to build and dismantle the structure safely;
- competent staff are on site and have a suitable onsite operational management system in place to supervise and monitor safety compliance;
- a programme of works, including key safety checkpoints is in place as this can be helpful to communicate critical erection and dismantling stages to the site manager and operatives;
- the structure is built to the agreed design in accordance with a safe system of work; and
- arrangements are made for the structure to be checked to make sure that it has been built according to the design.

While TDS is in use, they will also ensure that:

- arrangements are in place to inspect the structure for deterioration during the time it is installed in line with a documented management plan and, if needed, arrange for remedial works; and
- any change in the proposed use of the structure or site conditions which may affect the structure’s suitability should trigger a design check for the new conditions. An example of this may be the requirement to add additional banners to a structure such as a PA tower. The organiser is responsible for ensuring this is done in a controlled manner so as not to impact on the structure stability.

7. **External Organisation leasing LCC sites for Events**

Event organisers wanting to use LCC sites to hold their own events must provide suitable assurances, to the leasing Council Service, that they have in place the appropriate measures for the safe use of TDS.
Appendix 1

Template for wind management plan.

Further guidance:

- Construction (Design and Management) Regulations 2015, Guidance on Regulations, L153, 2015;
- IStructE Temporary demountable structures Third edition, April 2007;
- MUTA’s Best Practice Guide, Safe Use and Operation of Temporary Demountable Fabric Structure, September 2014;
- BS EN 13200-6, Spectator facilities — Part 6 : Demountable (temporary) stands;
- BS EN 13782:2015 Temporary structure - Tents – Safety; and
- Guidance for the Management & Use of Stages and related temporary event structures.
- HSL- Identification of safety good practice in the construction and deconstruction of temporary demountable structures (ES/FE/11/01)
- HSL- Identification of safety good practice in the construction and deconstruction of temporary demountable structures. Annex A Suggested model for the safe management of temporary structures (ES/FE/11/01/A)