



Scottish Exhibition Centre Ltd ~ Safe use of Lasers

1.0 Purpose

The purpose of this document is to inform Concert Promoters/ Event Organisers and their appointed contractors of the legal requirement for the use of lasers. This procedure applies to everyone who intends to use lasers within the Scottish Exhibition and Conference Centre.

2.0 References

- Control of Artificial Optical Radiation at Work Regulations 2010.
- HS (G) 95 The Laser Safety of Lasers used for Display Purposes.
- The Health and Safety at Work Act 1974.
- The Management of Health and Safety at Work Regulations 1999.
- The Provision and Use of Work Equipment Regulations 1992.
- The Personal Protective at Work Regulations 1992 (amended 2002).

3.0 Responsibilities

Concert Promoters and Event Organisers are responsible for:

- Appointing a Laser Safety Officer (LSO) who is experienced in the evaluation and control of laser hazards and capable of implementing the safety precautions specified by the supplier. The LSO should have full responsibility for the Management, operation and maintenance of the display installation.
- Assessing the risks caused by the use of the lasers display including risk to employees and members of the public. Having done so they must introduce measures to control these risks so far as reasonably practicable. The work equipment which is provided must be suitable for the purpose without posing a threat to the health and safety of others.
- Advising the Planner of the event at the earliest convenience possible in order that an installation Safety Assessment can be completed by the user and /or installer. This assessment must be recorded and a copy provided for the SECC Planner. A Laser Safety Questionnaire supplied by the SECC Event Planner must also be completed.
- Ensuring the operation of display laser installations at the SECC is supervised by authorised trained operators. Operators should be in position to respond quickly should there be any equipment failure, audience problems or other unsafe conditions in order that the display can be stopped.

Note: For lasers with a classification of 3R, 3B, or 4 a demonstration will be required prior to the concert/ event opening. The laser display company will arrange the demonstration, ensuring the Laser operator is present throughout the open period of the event. If the laser classification is 1 or 2 a demonstration will only be required on request from the Local Authority.

Laser Operators are responsible for:

- Supplying a detailed risk assessment, stating control measures in place, Laser type's, laser classes, and stage plan showing both front and side elevations showing vertical separation distance, (this list is not exhaustive).

Note: The Local Authority will only permit audience scanning on the proviso that the Laser Safety Officer (LSO) can measure and demonstrate that the Minimum Permitted Exposure (MPE) will not be exceeded.

4.0 Installation Guidance

A well planned installation that follows the guidance set out in HSE's HSG 95 will go a long way to being a safe installation that will reduce the risk of placing workers and members of the public in harms way. It has to be accepted that in a live touring environment sometimes the best laid planning have to be altered at a late stage due to changes in the production, but at no time should safety be compromised. Better Laser Safety Management should include:

- Identifying venue specific risks.
- Pre-installation checks.
- Pre-show checks.
- Performance time.
- Identifying deviations and near misses.
- Learning lessons and reporting.
- Having an emergency plan.

5.0 Vertical Separation Distance

HSG 95 recommends that there is a separation distance of at least 3 metres from the highest point that somebody can gain access in the venue, and any laser effect that is above the MPE. As long as there are no reflective hazards or personnel such as follow spot operators in the area above the 3 metres, the emission levels can exceed the MPE. This is how most laser installations take place in venues where there is laser safety awareness.

6.0 Training

Authorised Persons required to perform Laser operation should receive adequate training in the system. All training shall be recorded in hard copy with training records maintained.