

Venue Specific Instructions

Venue Specific Instructions for Work at Height at Stockholm Live Venues

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1 Introduction

1.1 This Code of Practice shall govern all work at the Stockholm Live venues:

- Avicii Arena
- Annexet
- Hovet
- 3Arena
- Strawberry Arena

as well as outside on our premises.

1.2 A working place is considered as working from height when there is a risk of injury by falling, even at ground level.

Duty holders shall:

- Avoid working at height
- Use work equipment or other measures to prevent falls where they cannot avoid working at height.
- Where they cannot eliminate the risk of a fall, use work equipment or other measures to minimize the distance and consequences of a fall should one occur.

1.3 Stockholm Live serves the right to inspect all rigging, working methods and/or equipment and to refuse to allow its use if considered to be unsafe, unstable, unfit for use or not complying with this Code of Practice

1.4 Working alone at height is not permitted, and should be supervised in an appropriate way. If working alone and if a significant risk of injury is possible, it must be possible to render aid immediately.

1.5 A responsible individual, eg. a head rigger, must supervise all rigging taking place. He or she must be competent with practical and theoretical knowledge and experience and have the qualities to be capable of predicting potential hazards and have the authority to take action to eliminate such hazards.

1.6 Before rigging work begins, a risk assessment and method statement must be prepared, and in cases where work at height is performed, a rescue plan must be in place. These should be reviewed with all personnel at the start of each work shift before work begins (so-called "toolbox talk").

It is also strongly recommended to hold a brief debriefing after each work shift to discuss any problems that arose during the shift and how these can be avoided in the future.

It is the responsibility of the head rigger that these documents are prepared and updated ahead of time.

1.7 It is the responsibility of the head rigger to ensure that the information provided to Stockholm Live is accurate.

1.8 It is the responsibility of the head rigger to ensure that the assembly during lifting is carried out according to an approved drawing ("rigging overlay") from Stockholm Live.

Any deviations from the approved drawing must be approved by the Stockholm Live Technical Supervisor before the lifting operation begins.

1.9 A repeated disregard towards the content of this document might result in suspension from working in the venues or suspended access to technical levels.

2 General Safety

- 2.1 There are three different levels of securing the arenas from the risk of crew and others entering a potential danger zone whilst rigging and working at a height.

When work at height is in progress a strobe light will be turned on in all entrances.

- Close off the entire arena.
- Close off part of the arena.
- One designated crew member at ground level eg. "ground rigger", wearing hardhat and a Hi-Viz vest, must prevent people from entering a potential danger zone.

Even though the arena is closed off entirely a "ground rigger" should supervise.

A ground rigger has to be wearing a hardhat and a red high visibility vest marked "Ground rigger".

- 2.2 Hard hats must be worn at all times when rigging and dismantling or whenever there is a risk of being hit by falling objects. This applies to every person that is situated in the arena.

Hard hat must be worn until all rigging is completed and the trusses are on trim height.

The hard hat must be CE approved as industrial safety helmet according to norm (EN 397).

Stockholm Live Technical Supervisor determines when rigging/dismantling has started and when it has ended. Signs will be placed at every entrance and strobe light will be turned on when hard hat is mandatory.

- 2.3 No person should walk or work under a suspended load whilst it is being installed or is moving up or down.

- 2.4 Tools or equipment shall never be carried aloft by way of vertical access ladders, it should be hoisted up by the means of rope.

Particular care must be taken not to leave any tools or equipment at high levels or on trusses being rigged.

- 2.5 It is imperative that all work at height and rigging is completed within its designated time frame, in order not to hinder other operations in the arena.

- 2.6 Collective protective equipment (railings, floor gratings or similar) that must be temporarily removed to facilitate work must immediately be restored when work is completed. The work area may under no circumstances be left unattended before the safety measures are restored.

It is punishable by law and may lead to fines for a worker to temporarily remove or disable a safety device without valid reason.

3 Personal Fall Protective Equipment (PPE)

- 3.1 PPE shall be used in accordance to health and safety legislation and the manufacturers instructions.

Generally, this means PPE must consist of a full body harness, hard hat, energy absorber with two connectors attached to the harness by the shortest possible lanyard.

- 3.2 If there is a risk of falling a complete PPE must be worn.

- 3.3 A sit harness is **NOT** approved as PPE.

- 3.4 Solely static sling or rope is **NOT** allowed.

- 3.5 All protective equipment must be CE approved according to applicable standards.

- 3.6 All protective equipment must be used in accordance to the manufacturer's instructions.

4 Suspension Capacities

- 4.1 The suspension points at Stockholm Live venues vary depending on the arena. Contact Stockholm Live for specific information about each venue.

5 Lifting Equipment

- 5.1 Stockholm Live reserves the right to inspect all working methods and lifting equipment and to refuse to allow its use if considered to be unsafe, unstable, unfit for use or not complying with this Code of Practice.
- 5.2 No item shall be used for any purpose other than constructed and intended for.
- 5.3 If wire terminations are used they should be approved for lifting.
- 5.4 Hoist chains are required to be lubricated according to the manufacturer's specification.
- 5.5 Chain bags must be rigged correctly to prevent any risk on chain spillage.

6 Truss Systems

- 6.1 When trusses are connected the manufacturers R-clips must be used. They may never be replaced by PVC tape.
- 6.2 Care must be taken not to leave any tools or equipment on trusses being rigged.
- 6.3 If any trusses are to be moving during the show, Stockholm Live require to be informed in advance. Such lifting operations must be preceded by a special risk analysis where necessary safety functions are defined.
- 6.4 If any lifts are performed with people as part of the load (eg performer flying) Stockholm Live require to be informed in advance.
- 6.5 Electrically powered hoists must be cut off from the power supply once hoisting procedures are completed or when on "trim".
- 6.6 Operators of the hoisting control system are for safety reason required to make sure that an unauthorized personnel cannot run the system.
- 6.7 Prior to final hoisting of a truss, a check of the system is to be made at ground level by the headrigger.
- 6.8 Every piece of equipment on a truss must be secured by safety wire.

7 Rope Access Work

- 7.1 All rope access work shall be carried out in accordance to current practice and Swedish health and safety regulations.
- 7.2 The rope system must consist of at least two independently anchored ropes, one for descending and/or work positioning, the second as a safety.
- 7.3 The person in question must wear a full body harness and this harness must be attached to the safety rope as well as the work rope.
- 7.4 The person in question must be attached to the work rope with devices for descending as well as ascending the rope, and equipped with a system that automatically locks, if he/she for some reason loses the control of the rope. The safety rope shall be equipped with a mobile device that prevents a fall if loss of control occurs, and that moves with him/her.
- 7.5 The tools and other equipment to be used by the person in question must be secured to the harness.
- 7.6 The work must be supervised by another qualified person, not working on the rope himself. The work must be planned so that the person on the ropes can be assisted at once if emergency occurs.
- 7.7 The person in question must have undergone a special education regarding rope access, especially in reference to rescue operation.
- 7.8 The person in question must wear a hard hat. In addition the PPE must be used if needed.
- 7.9 Rope access is to be done in consultation with the Stockholm Live Technical Supervisor on duty.

8 Technical Levels & Technical Bridges

8.1 General Guidelines

8.1.1 In order to gain access to technical levels & technical bridges in Stockholm Live venues we require that you read, sign and follow the guidelines in this document.

8.1.2 Access to the technical levels and/or technical bridges is only allowed after approval by the Stockholm Live Technical Supervisor on duty or by the real estate representative.

This applies for every individual occasion.

8.1.3 Doors or stairs must be kept closed and locked.

8.1.4 It is **NOT** allowed to enter the technical bridge without meeting the criteria outlined in section 2 above.

8.1.5 **When working at the technical bridge or elsewhere at height the responsibility is on you to guarantee that other people beneath you are not in any risk or danger.**

8.1.6 The communication between riggers aloft and ground crew must be secured by radio/walkie talkie. Enough radios must be available for ground riggers and riggers as well as the Technical Supervisor.

Mobile cell phone is not allowed as a replacement to a radio.

8.1.7 Access to the technical bridges is generally not allowed when the public are in attendance. If deemed necessary, a risk assessment need to be done in advance.

8.1.8 The technical bridges are to be kept clear of obstructions and equipment.

8.1.9 If any equipment is to be brought out on the technical decks it must be authorized by the Stockholm Live Technical Supervisor on duty prior to entering the technical bridges.

8.1.10 When working on the technical decks, tools and/or equipment brought out on the technical bridges must be kept to an absolute minimum. Only items necessary for the work to be carried out shall be brought out.

Make sure that pockets are empty!

Tools that are to be brought out must either be attached to the harness or placed in a storage box or similar.

We recommend that you use a blanket or carpet to protect any tools and/or equipment from falling through the grid at the point of work.

- 8.1.11 Tools and/or equipment cannot be left unattended on walkways or similar surfaces. All items must be secured if you leave the work area, temporarily or for a longer period.
- 8.1.12 The work area may need to be closed off depending on the work and its time-frame.
- 8.1.13 Photography from rigging decks and beams requires a special approval by a Technical Supervisor. Any photography equipment must be secured appropriately. This includes any mobile phones that may be used.

Mobile phones that are used must always be secured with a suitable strap or similar equipment.

- 8.1.14 If the rigging situation demands climbing down below and under the technical bridge, this work is deemed as rope access and the work must be planned so that the person can be assisted at once in an emergency situation.
- 8.1.15 If cables are to be hoisted up and tied off at the technical bridge, this work need to be supervised by a competent rigger. Avoid connectors in mid-air.
- 8.1.16 It is strictly prohibited to move or refocus armatures on the technical levels and technical bridges.
- 8.1.17 Lights and/or other equipment may be hung from railings only after approval by a Technical Supervisor
- 8.1.18 Smoking is **NOT** allowed in any of our venues.
- 8.1.19 Beverages are **NOT** allowed on the technical bridges.
- 8.1.20 It is **NOT** allowed to put any equipment of any kind in the boxes for our flags.
- 8.1.21 Any item brought to the technical levels or technical bridges are to be brought back down by the end of the day.
- 8.1.22 Hot works or any other fire hazardous work are not to be carried out unless planned and risk assessed in advance together with a Technical Supervisor.

8.2 Specific Guidelines: Avicii Arena

These specific guidelines apply to work at the technical bridges in Avicii Arena **in addition to** the guidelines previously described in this document.

- 8.2.1 It is **NOT** allowed (without explicit permission from a Technical Supervisor) to enter the technical level before the show has finished.
- 8.2.2 At most 30 people are allowed on to the “rigging net” at any one time.
- 8.2.3 At most 3 people are allowed onto each mesh section at any one time. Jumping or otherwise making the mesh oscillate is not allowed. No items may be left on the mesh, or otherwise be attached to the mesh.
- 8.2.4 If a floor hatch is opened on the rigging net it is to be closed as soon as the work permits.

If a hatch must be left unattended or open for a long time, the area must be clearly cordoned off and blocked for passage.
- 8.2.5 Personal fall protection equipment must be worn by anyone opening or working near hatches where there is a risk of falling. These hatches are specifically marked.
- 8.2.6 Access to the spreader frame is only allowed after explicit permission by a Stockholm Live Technical Supervisor. This is due to the crushing hazard when remotely operating the lifting equipment on the platform.

8.3 Specific Guidelines: Strawberry Arena

These specific guidelines apply to work at the technical bridges in Strawberry Arena **in addition to** the guidelines previously described in this document.

8.3.1 Access during events is approved by Technical Supervisor. Access during other times is approved by ABS Fastighetsbolaget.

8.3.2 The person who takes down the ladder is responsible for the ladder being closed after each access or when the work at hand is done in order to prevent unauthorized access.

Under no circumstances should the ladder be left unattended in the down position.

8.3.3 For event related rigging work in the roof the Technical Supervisor will approve a card to the ladder as well as access to the roof.

8.3.4 For real estate related work in the roof, a 24 hour in advance booking procedure is needed.

Contact ebbe.andersson@swedenarena.se for specific guidelines regarding this type of work.

In exceptional cases access can be granted in case of emergency. This can be approved by Strawberry Arena Facility Engineer: +46 76-720 65 10.