

Inspection Focus 3: Safe Buildings and Structures

SPECIFIC TO PERFORMING ARTS & LIVE EVENT TEMPORARY/DEMOUNTABLE STRUCTURES

WorkSafeBC will be focusing on regulation [4.2 Safe Buildings and Structures](#) related to stages and other temporary/demountable structures. Many performing arts and live event workplaces require temporary/demountable structures such as stages (custom and mobile), grandstands, VIP/Accessibility platforms, scaffold, tents and roof structures with added complexity from rigging audio, visual and other performance equipment.

SUMMARY OHSR 4.2

It is important to review the Workers Compensation Act (WCA) and Occupational Health and Safety Regulation (OHSR) for a full understanding of requirements for compliance and ensuring a safe workplace. In summary, OHSR 4.2 requires ensuring that these structures are capable of withstanding stresses and forces that it may be exposed to (i.e. weather, live/dynamic loads, static/dead loads). Requirements will vary based on the specific structure, but generally speaking and in accordance with "ANSI ES1.19-2020, Safety Requirements for Special Event Structures" the following are required and recommended to demonstrate safety and due diligence with respect to safe buildings and structures specifically related to stages and other temporary/demountable structures used in performing arts and live event workplaces.

ANSI ES1.19-2020 explains that it is essential to design and erect structures to suit the specific intended purpose.

KEY TO THE SAFETY OF THESE STRUCTURES IS LARGELY IN THE:

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| Choice of appropriate design and materials | Consultation with design professionals | Correct positioning | Proper planning and control of work practices | Careful inspection of the finished product |
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APPENDIX C OF ANSI ES1.19-2020

Appendix C of ANSI ES1.19-2020 provides a list of examples, in conjunction with the specific requirements in the standard, along with ensuring any municipal and provincial requirements specific to the structure are in place. These examples include, but are not limited to:

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| Structure assembly and engineering drawings | Stamped engineering calculations | Rigged component list with description | Rigging plot overlay on structure |
| Site plan layout drawing | Permits (i.e. Municipal, Provincial, Building etc.) | Inspection records of components | Operations Management Plan (OMP) |
| Responsible individuals identified | Pre-event meeting reviewing OMP | Completion certificate of structure | Risk register and risk assessment |

AUTHORITY HAVING JURISDICTION (AHJ) PERMITS AND REQUIREMENTS


Ensure any municipal and provincial permits and requirements specific to the structure, venue and location are in place.

EACH SITE PLAN LAYOUT SHOULD IDENTIFY A MINIMUM OF:


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|  <p>Structures identified and correctly keyed to site plan</p> |  <p>Emergency vehicle access is shown and marked</p> |  <p>Exits and egress pathways are shown and marked</p> |  <p>Proper clearances shown between structures, where required</p> |  <p>Proper safety zones, limited or restricted access zones shown and marked</p> |
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EACH STAGE AND TEMPORARY/DEMOUNTABLE STRUCTURE SHOULD HAVE:

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|--|---|--|--|
| <p>Limits of use (including maximum occupancy capacity, if applicable)</p> | <p>Allowable gravity (ancillary) load maximum capacity, if structure is capable of load bearing</p> | <p>Structural description</p> | <p>Guy wire, anchorage connection details and capacities for Lateral Force Resisting System (LFRS)</p> |
| <p>Notation that structure is not load bearing, if applicable</p> | <p>Structure self-weight</p> | <p>Foundation/cribbing capacity and requirements</p> | |

 It is advised to review “ANSI ES1.19-2020, Safety Requirements for Special Event Structures” and “ANSI ES1.18-2022, Event Safety - Rigging” to assist in complying with **4.2 Safe Buildings and Structures** and engaging a professional engineer.

Work involved with the load-in/build/set-up along with load-out/strike/tear-down must be performed in accordance with the requirements outlined in the WCA and OHSR for workers and all individual's safety.

 The **Event Safety Alliance** provides the above referenced ANSI standards (at no cost) and other resources under the “Guidance” tab and additional resources can also be found through:

- [The Event Safety Guide](#)
- [Event Safety Alliance Canada](#)
- [Working in Live Performance Theatre](#)
- [Resources on Live Events](#)

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