

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER **A-01-01-01**
SOURCE **Ontario**
CODE REFERENCE **Div. A/1.1.2.2.(6)**

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds a new Sentence 1.1.2.2.(1)(6) to Division A that applies a new Section 3.18 in Division B to demountable event structures.

EXISTING 2012 BUILDING CODE PROVISION(S)

1.1.2.2. Application of Parts 3, 4, 5 and 6

- (1) Subject to Articles 1.1.2.6. and 1.3.1.2., Parts 3, 5 and 6 of Division B apply to all *buildings*,
 - (a) used for *major occupancies* classified as,
 - (i) Group A, *assembly occupancies*,
 - (ii) Group B, *care or detention occupancies*,
 - (iii) Group F, Division 1, *high hazard industrial occupancies*, or
 - (b) exceeding 600 m² in *building area* or exceeding three *storeys* in *building height* and used for *major occupancies* classified as,
 - (i) Group C, *residential occupancies*,
 - (ii) Group D, *business and personal services occupancies*,
 - (iii) Group E, *mercantile occupancies*, or
 - (iv) Group F, Divisions 2 and 3, *medium hazard industrial occupancies* and *low hazard industrial occupancies*.
- (2) Subject to Articles 1.1.2.6. and 1.3.1.2., Part 4 of Division B applies to,
 - (a) *post-disaster buildings*,
 - (b) *buildings* described in Sentence (1),
 - (c) a retaining wall exceeding 1 000 mm in exposed height adjacent to,
 - (i) public property,
 - (ii) access to a *building*, or
 - (iii) private property to which the public is admitted,
 - (d) a pedestrian bridge appurtenant to a *building*,
 - (e) a crane runway,
 - (f) an exterior storage tank and its supporting structure that is not regulated by the *Technical Standards and Safety Act, 2000*,
 - (g) signs regulated by Section 3.15. of Division B that are not structurally supported by a *building*,
 - (h) a structure that supports a wind turbine generator having a rated output of more than 3 kW,
 - (i) an *outdoor pool* that has a water depth greater than 3.5 m at any point, and
 - (j) a *permanent solid nutrient storage facility* with supporting walls exceeding 1 000 mm in exposed height.
- (3) Section 3.11. of Division B applies to *public pools*.

- (4) Section 3.12. of Division B applies to *public spas*.
- (5) Section 3.15. of Division B applies to signs.

PROPOSED CODE CHANGE

Add new Sentence (6) to Article 1.1.2.2. of Division A as follows:

1.1.2.2. Application of Parts 3, 4, 5 and 6

- (1) Subject to Articles 1.1.2.6. and 1.3.1.2., Parts 3, 5 and 6 of Division B apply to all *buildings*,
 - (a) used for *major occupancies* classified as,
 - (i) Group A, *assembly occupancies*,
 - (ii) Group B, *care or detention occupancies*,
 - (iii) Group F, Division 1, *high hazard industrial occupancies*, or
 - (b) exceeding 600 m² in *building area* or exceeding three *storeys* in *building height* and used for *major occupancies* classified as,
 - (i) Group C, *residential occupancies*,
 - (ii) Group D, *business and personal services occupancies*,
 - (iii) Group E, *mercantile occupancies*, or
 - (iv) Group F, Divisions 2 and 3, *medium hazard industrial occupancies* and *low hazard industrial occupancies*.
- (2) Subject to Articles 1.1.2.6. and 1.3.1.2., Part 4 of Division B applies to,
 - (a) *post-disaster buildings*,
 - (b) *buildings* described in Sentence (1),
 - (c) a retaining wall exceeding 1 000 mm in exposed height adjacent to,
 - (i) public property,
 - (ii) access to a *building*, or
 - (iii) private property to which the public is admitted,
 - (d) a pedestrian bridge appurtenant to a *building*,
 - (e) a crane runway,
 - (f) an exterior storage tank and its supporting structure that is not regulated by the *Technical Standards and Safety Act, 2000*,
 - (g) signs regulated by Section 3.15. of Division B that are not structurally supported by a *building*,
 - (h) a structure that supports a wind turbine generator having a rated output of more than 3 kW,
 - (i) an *outdoor pool* that has a water depth greater than 3.5 m at any point, and
 - (j) a *permanent solid nutrient storage facility* with supporting walls exceeding 1 000 mm in exposed height.
- (3) Section 3.11. of Division B applies to *public pools*.
- (4) Section 3.12. of Division B applies to *public spas*.
- (5) Section 3.15. of Division B applies to signs.
- (6) Section 3.18. of Division B applies to *demountable event structures*.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa’s Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one person and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the “Expert Advisory Panel on Outdoor Temporary Stages” (“panel”). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

The panel recommended that the Building Code include provisions for “demountable event structures” as it was previously unclear if these structures were subject to provisions of the Code. The Building Code already addresses other demountable structures, like tents and bleachers, and includes safety requirements for these structures that could potentially be extended to demountable event structures. Importantly, the Building Code also relies on the extensive expertise of professionals for building design and municipal building officials for enforcement. Successfully performing both roles was deemed critical to the effective regulation of demountable event structures under the Building Code.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division A 1.1.2.2.	N/A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: A-01-03-01

SOURCE: Ontario

CODE REFERENCE: Division A 1.3.1.1.(1)(l)

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds a new Clause 1.3.1.1.(1)(l) to Division A that clarifies that demountable event structures are considered designated structures in the Building Code.

EXISTING 2012 BUILDING CODE PROVISION(S)

1.3.1.1. Designated Structures

- (1) The following structures are designated for the purposes of clause (d) of the definition of *building* in subsection 1(1) of the Act:
- (a) a retaining wall exceeding 1 000 mm in exposed height adjacent to,
 - (i) public property,
 - (ii) access to a *building*, or
 - (iii) private property to which the public is admitted,
 - (b) a pedestrian bridge appurtenant to a *building*,
 - (c) a crane runway,
 - (d) an exterior storage tank and its supporting structure that is not regulated by the *Technical Standards and Safety Act, 2000*,
 - (e) signs regulated by Section 3.15. of Division B that are not structurally supported by a *building*,
 - (f) a solar collector that is mounted on a *building* and has a face area equal to or greater than 5 m²,
 - (g) a structure that supports a wind turbine generator having a rated output of more than 3 kW,
 - (h) a dish antenna that is mounted on a *building* and has a face area equal to or greater than 5 m²,
 - (i) an *outdoor pool*,
 - (j) an outdoor *public spa*, and
 - (k) a *permanent solid nutrient storage facility* with supporting walls exceeding 1 000 mm in exposed height.

PROPOSED CODE CHANGE

Add new Clause 1.3.1.1.(1)(l) as follows:

1.3.1.1. Designated Structures

- (1) The following structures are designated for the purposes of clause (d) of the definition of *building* in subsection 1(1) of the Act:
- (a) a retaining wall exceeding 1 000 mm in exposed height adjacent to,
 - (i) public property,
 - (ii) access to a *building*, or
 - (iii) private property to which the public is admitted,
 - (b) a pedestrian bridge appurtenant to a *building*,

- (c) a crane runway,
- (d) an exterior storage tank and its supporting structure that is not regulated by the *Technical Standards and Safety Act, 2000*,
- (e) signs regulated by Section 3.15. of Division B that are not structurally supported by a *building*,
- (f) a solar collector that is mounted on a *building* and has a face area equal to or greater than 5 m²,
- (g) a structure that supports a wind turbine generator having a rated output of more than 3 kW,
- (h) a dish antenna that is mounted on a *building* and has a face area equal to or greater than 5 m²,
- (i) an *outdoor pool*,
- (j) an outdoor *public spa*, ~~and~~
- (k) a *permanent solid nutrient storage facility* with supporting walls exceeding 1 000 mm in exposed height, and
- (l) a demountable event structure regulated by Section 3.18 of Division B.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa’s Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one person and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the “Expert Advisory Panel on Outdoor Temporary Stages” (“panel”). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

The panel recommended that the Building Code include provisions for “demountable event structures” as it was previously unclear if these structures were subject to provisions of the Code. As these structures vary in size and configuration, they are best administered as designated structures with a set of requirements specific to their needs.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
1.3.1.1.(1)(l)	N / A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: A-01-4-06
SOURCE: Ontario
CODE REFERENCE: Division A 1.4.1.2.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds a definition for *demountable event structure*.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add a new defined term for *demountable event structure* to Sentence 1.4.1.2.(1) as follows:

Demountable event structure means a stage platform, together with walls and roofs related to the platform and any appurtenant (associated) structures capable of supporting banners, stage sets, props or sound, lighting or associated equipment, that are

- (a) intended to be erected, assembled or installed for a limited, specified time,
- (b) for one-time use or are capable of being dismantled at their location and moved to be reconstituted elsewhere,
- (c) intended primarily for occupancy by performers and workers and are intended for only limited public occupancy, and
- (d) intended to be used for public or private performances or events, other than those used in connection with movie or television productions.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one person and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Early in their deliberations, the panel was apprised of the variety of designs currently in use within the industry. In reviewing these designs, the panel concluded that term “outdoor temporary stages” does not accurately describe the structures that pose potential safety concerns and a different term was needed. It was agreed therefore that the term should be “demountable event structure”.

Designs included stages constructed within buildings such as arenas and sports grounds and so the word “outdoor” was not included within the new term. The panel was of the opinion that the word “temporary” provided an artificial distinction for safety that should be removed, that is, a poorly designed structure in use for 2 days could pose the same level of danger as one in operation for 32 days. To reflect the “set-up and take down” nature of these structures, the panel agreed to substitute the word “temporary” for “demountable” because, unlike the word “temporary”, “demountable” does not carry any timeframe related connotations.

Consistent with the panel’s desire to focus on structures that represent a real safety concern to members of the public, those used for television and movie productions were not recommended for regulation on the basis that members of the public are unlikely to be using them. As a result, the new term recognises that only structures used for performance “events” are within scope. Members also wished to remove the word “stages” from the description because the Building Code already includes requirements for “stages”, that is, structures with quick-change scenery and audience separation with a proscenium wall and curtain opening.

In addition, panel was clear that structures associated with the stage platform should also be regulated by Building Code where they pose a public safety hazard, such as speaker and lighting towers.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division A 1.4.1.2.	N / A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-01

SOURCE: Ontario

CODE REFERENCE: Division B / 3.18.1.1

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change introduces a new Section 3.18 that contains stand-alone provisions for demountable event structures. Article 3.18.1.1. defines the scope of these structures to which the provisions apply.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add a new Subsection 3.18.1. to Division B, Part 3 as follows:

Section 3.18. Demountable Event Structures

3.18.1. Scope

3.18.1.1. Application

3.18.1. Scope

3.18.1.1. Application

(1) Except as provided otherwise in Article 3.18.1.2., this Section applies to the design and construction of demountable event structures.

(2) Except as provided in this Section, demountable event structures are exempt from complying with the requirements of this Division.

3.18.1.2. Exception

(1) A demountable event structure is not subject to the provisions of this Section where,

(a) the aggregate area of all stage platforms is not more than 60 m² and there is no stage platform more than 3 m in height above adjacent ground level,

(b) the aggregate area of all stage platforms is not more than 225 m² and there is no roof, wall or associated structure more than 5 m in height above adjacent ground level, or

- (c) there is no associated structure that,
- (i) is more than 3 m in height above a stage platform or adjacent ground level,
- (ii) is designed to carry a superimposed specified load in excess of 115 kg, or
- (iii) would create a hazard to the public.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Subsection 3.18. contains stand-alone provisions for demountable event structures. Article 3.18.1.1. describes general provisions for these structures including the application of Section 3.18. "Demountable event structures", are defined under Division A. This Article exempts certain smaller structures, those that are low to the ground and those where no hazard is present. Flexibility is provided for special consideration for situations where a building permit would ordinarily be required. For example, construction of a speaker tower in a neighbouring field not occupied by event participants.

A building permit is required for a **stage platform** in any of the following situations:

1. It is more than 225 square meters in area.
2. Includes any element of the structure (e.g. wall, roof or floor) that is more than 5 meters above the adjacent ground.
3. It is more than 3 meters above the adjacent ground and more than 60 square meters in area.

A building permit is required for a **supporting structure** in any of the following situations:

1. It is more than 3 meters above the adjacent ground.
2. It supports a weight more than 115 kg.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.1.1.	
3.18.1.1.(1)	N/A
3.18.1.1.(2)	
Division B 3.18.1.2.	N/A
3.18.1.2.(1)	N/A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-02
SOURCE: Ontario
CODE REFERENCE: Division B / 3.18.2.1.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds a new Article that defines the occupant load for the demountable event structure.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add a new Article 3.18.2.1. as follows:

3.18.2. Construction

3.18.2.1. Occupant Load

(1) The stage platform of a demountable event structures shall be considered a floor area for the purpose of determining the occupant load in accordance with Article 3.1.17.1.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

The Building Code includes provisions for the determination of occupant loads which is necessary to calculate the number and width of egress facilities and for the purpose of structural design. Since this is a stand-alone section, a clarification is required in order that occupant loads may be determined.

As the Building Code provisions for the determination of occupant load include numerous occupancies, there is no need to provide new figures that are only applicable to demountable event structures.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.1.	
3.18.2.1.(1)	N/A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-03

SOURCE: Ontario

CODE REFERENCE: Division B / 3.18.2.2.

DESCRIPTION OF THE PROPOSED AMENDMENT

The Proposed change adds a new Article 3.18.2.2. to include provisions for means of egress.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Include new Article 3.18.2.2. as follows:

3.18.2.2. Means of Egress

(1) Except as provided in Sentences (2) and (8), access to at least two points of egress shall be provided from every level of a stage platform.

(2) A stage platform or a level on a stage platform, may be served by one point of egress where
(a) the *occupant load* of the platform or platforms is less than 60 persons, and
(b) (i) the platform or platforms have an aggregate area of less than 150 square meters or
(ii) the travel distance to the *point of egress* is less than 30 meters.

(3) Where at least two points of egress are required from a level on a performance platform, the maximum travel distance to a point of egress shall be not more than 45 m.

(4) Except as provided in Sentences (5) and (8), the least distance between two required points of egress on a level of a stage platform shall be one-half the maximum diagonal dimension of that level.

(5) Sentence (4) need not apply where points of egress are located at not more than 60 meters apart, measured along the perimeter of the level.

(6) Except as provided in Sentences (7) and (8) and unless it can be shown that the design does not present a hazard, stairs, ramps and handrails in means of egress shall conform to the dimensional and slip resistance requirements in Section 3.4.

(7) Except as provided in Sentence (8), the maximum slope of a fixed ramp serving a *dismountable event structure* shall be 1 in 6.

(8) Access from unoccupied catwalks, structures and mechanical spaces need to not conform to the requirements of this Article.

- “Points of egress” is prior art based on 3.3.1.3.(7)
- The stage platform does not have a *floor area* because it does not have enclosing walls. Since it does not have a *floor area*, it does not have *exits* and *means of egress*
- Points of egress may not be less than one-half the maximum diagonal dimension of the performance platform (one half aligns with the requirement for exits in 3.4.2.3.(1))
- A provision for a 1100 mm wide means of egress maybe added however in the case of stages, the means of egress is obstructed by items not subject to the building code.
- If a provision governing the min width of the means of egress is added then the clear height over the required width of the means of egress shall be 2100 mm

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa’s Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the “Expert Advisory Panel on Outdoor Temporary Stages” (“panel”). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Egress provisions are necessary to ensure that occupants are able to evacuate a demountable event structure in an emergency condition and thus are an important life safety consideration in the Code. The panel identified numerous uses, occupancies, sizes and configurations of demountable event structures. For this reason allowing for flexibility in determining egress requirements is appropriate.

Section 3.18 is a stand-alone Article and must contain appropriate egress provisions for occupants of demountable event structures.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.2. Means of Egress	
3.18.2.2.(1)	[F05, F06, F10, F12-OS3.7]
	[F06, F12-OP1.2]
	[F06, F12-OS1.2]
3.18.2.2.(2)	N / A
3.18.2.2.(3)	[F10-OS3.7]
3.18.2.2.(4)	[F05, F10-OS1.5]
3.18.2.2.(5)	N / A
3.18.2.2.(6)	N / A
3.18.2.2.(7)	[F30-OS3.1] [F10-OS3.7]
3.18.2.2.(8)	N / A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-04

SOURCE: Ontario

CODE REFERENCE: Division B / 3.18.2.3.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds requirements for guards applicable to demountable event structures

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add a new Article 3.18.2.3. as follows:

3.18.2.3. Guards

- (1) Unless it can be shown that the design does not present a hazard and except as provided in Sentences (2) and (3), a guard not less than 1 070 mm high shall be provided where the difference in elevation is more than 1 500 mm.
- (2) Sentence (1) need not apply at the edge of a demountable event structure that faces an audience.
- (3) The height of guards for stairs shall be not less than 920 mm measured vertically to the top of the guard from a line drawn through the outside edges of the stair nosings and 1 070 mm around landings.
- (4) Required guards shall be provided with a top rail and intermediate horizontal rail.
- (5) The intermediate rail required in Sentence (4) shall be located mid-way between the top rail and the top of the surface being protected or a toe board if provided.

Guard requirements are based on MOL requirements – refer to OHSA for construction projects. Section 26.3

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

The panel considered various uses, occupancies, sizes and configurations of demountable event structures and identified certain characteristics for which common guard requirements would be appropriate.

In most instances, demountable event structures consist of at least one raised performance surface. This exposes occupants to risk of falls and therefore, provisions for guards, are necessary to minimize risk of injury resulting from a fall.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.3.	
3.18.2.3.(1)	[F30-OS3.1]
3.18.2.3.(2)	N / A
3.18.2.3.(3)	[F30-OS3.1] [F10-OS3.7]
3.18.2.3.(4)	[F30-OS3.1]
3.18.2.3.(5)	[F30-OS3.1]

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-05
SOURCE: Ontario
CODE REFERENCE: Division B / 3.18.2.4.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds new provisions for clearances to other structures, applicable to demountable event structures.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add new Article 3.18.2.4. as follows:

3.18.2.4. Clearance to Other Structures

(1) Except as provided in Sentence (2) and unless erected within another structure, demountable event structures shall not be erected closer than 3 m to each other or other structures.

(2) Demountable event structures located on fair grounds or similar open spaces need not be separated from one another provided such closer spacing does not create a hazard to the public.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Section 3.18 is a stand-alone Section. Clearance to other structures are necessary to prevent fire spread and for firefighting purposes. For this reason these provisions must be included in this Section.

As is the case with other structures, clearances between structures are necessary in order to prevent fire spread, provide access for firefighting and in order to prevent structural collapse of one structure impacting another.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate public safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.4.	
3.18.2.4.(1)	[F03-OP3.1]
3.18.2.4.(2)	N / A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-06
SOURCE: Ontario
CODE REFERENCE: Division B / 3.18.2.5.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds a provision for the flame resistance of tarpaulins, decorative materials, fabrics and films used in connection with demountable event structures.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add new Article 3.18.2.5. as follows:

3.18.2.5. Flame Resistance

(1) Tarpaulins, decorative materials, fabrics and films used in connection with demountable event structures, shall be certified to CAN/ULC-S109, “Flame Tests of Flame-Resistant Fabrics and Films”, or NFPA 701, “Fire Tests for Flame Propagation of Textiles and Films”.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa’s Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the “Expert Advisory Panel on Outdoor Temporary Stages” (“panel”). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Many demountable event structures contain large amounts of fabric which may have a significant impact on the flammability of the structure.

Since Section 3.18 is a stand-alone Section provisions for the flame resistance of fabrics must be included in this section.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate public safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.5.	
3.18.2.5.(1)	[F01, F02-OP1.2]
	[F01, F02-OS1.2]

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B- 03-18-07
SOURCE: Ontario
CODE REFERENCE: Division B / 3.18.2.6.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds a provision for firefighting access applicable to demountable event structures.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add a new Article 3.18.2.6. and appendix note as follows:

3.18.2.6. Provision for Firefighting

(1) Access shall be provided to all *demountable event structures* for the purpose of firefighting. (See Appendix A)

A-3.18.2.6.(1) Provisions for Firefighting

Firefighting capabilities vary from municipality to municipality. The provisions in Subsection 3.2.5. are intended to apply to permanent buildings and may not be appropriate to demountable event structures. For this reason, firefighting access should be developed in consultation with local authorities.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to

government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Demountable event structures may be erected on urban or green field sites. In both instances, consideration must be given to access for firefighting equipment and other emergency vehicles.

Without proper fire routes and staging areas, efficient firefighting and emergency operations will not be possible. Site properties and local firefighting capabilities vary and for these reasons firefighting access should be developed in consultation with local authorities.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate public safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.6.	
3.18.2.6.(1)	[F12-OP1.2]
	[F12-OS1.2]

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-08
SOURCE: Ontario
CODE REFERENCE: Division B / 3.18.2.7.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change adds a provision for electrical installations related to demountable event structures that are not covered under the Ontario Electrical Safety Code.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add new Article 3.18.2.7. as follows:

3.18.2.7. Electrical Systems

- (1) The electrical system and equipment in and associated with a demountable event structure, including electrical fuses and switches, shall be inaccessible to the public.
- (2) Cables on the ground in areas used by the public adjacent to a demountable event structures shall be placed in trenches or protected by covers to prevent damage from traffic.
- (3) Clearance to electrical conductors shall conform to Article 3.1.19.1.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Demountable event structures may include complex electrical installations for lighting, sound and other purposes.

Protection from hazards due to shock must be provided for demountable event structures.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate public safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.7.	
3.18.2.7.(1)	[F34-OP1.1]
	[F34-OS1.1]
	[F34-OS3.3]
3.18.2.7.(2)	[F81-OP1.1]
	[F81-OS1.1]
3.18.2.7.(3)	N /A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-09

SOURCE: Ontario

CODE REFERENCE: Division B / 3.18.2.8.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change introduces specific structural provisions for demountable event structures.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

Add new Article 3.18.2.8. as follows:

3.18.2.8. Structural Provisions

- (1) Except as provided in Sentence (2), demountable event structures and their structural members shall be designed, constructed and installed in conformance with Division B Part 4 or good engineering practice appropriate to the circumstances such as described in ANSI E1.21 “Entertainment Technology Temporary Ground-Supported Overhead Structures Used to Cover the Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events”.
- (2) Winds loads used in Sentence (1) shall be based on the 1/50 wind loads as determined in SB-1 with a 2.5 gust factor.
- (3) In accordance with Table 4.1.2.1.B, demountable event structures shall be assigned an Importance Category of “Low”.
- (4) Unless a soil test confirms otherwise, the size of footings shall be designed in accordance with Section 4.2 using a soil bearing pressure
 - (a) determined from Part 9, or
 - (b) of 50 kPa

ANSI E1.21 to be included in Division B, Table 1.3.1.2.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

The panel recognized that more than one basis for the structural design of demountable event structures exists. These are acknowledged in Sentence 3.18.2.8.(1).

ANSI E1.21-2006 includes an "Operations Management Plan" (OMP) that describes actions to be taken under certain weather conditions, particularly with respect to wind loads. For example, the use of anemometers to measure wind speed to indicate when wind walls need to be released or other elements of the structure taken down. Some members recognized that these actions would help event organisers better monitor weather impacts on demountable and avoid them from being "over-designed" for conditions unlikely to be encountered.

The Building Code requires buildings to comply with wind loads based on their geographical location and does not allow for a reduction in those wind loads. As events move from one town or city to the next, demountable event structures designed under Part 4 of the Building Code may need to be re-engineered i.e. additional ballasting etc., to meet wind loads specific to that particular location.

Members were in unanimous agreement that it should be the professional engineer's role to make sure that demountable event structures have been designed and constructed in accordance with applicable standards. The building official's role would be to verify that this process has been completed, not to undertake it themselves.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.X

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.8.	
3.18.2.8.(1)	N / A
3.18.2.8.(2)	[F20-OS2.1]
	[F20-OP2.1] [F22-OP2.4]
	[F22-OH4]
3.18.2.8.(3)	N / A
3.18.2.8.(4)	[F20-OS2.1]
	[F20-OP2.1]
	[F20-OH4] Applies to footings that support floors and other elements that support floors.
	[F20-OS3.1] Applies to footings that support floors and other elements that support floors.
	[F20-OS3.7] Applies to footings that access to egress facilities.

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: B-03-18-10

SOURCE: Ontario

CODE REFERENCE: Division B / 3.18.2.9.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change introduces specific barrier-free design provisions for demountable event structures.

EXISTING 2012 BUILDING CODE PROVISION(S)

None

PROPOSED CODE CHANGE

3.18.2.9. Barrier-Free Design

(1) Except as provided in Sentence (2), a demountable event structure shall conform to the provisions of Section 3.8. where members of the public are intended to be permitted to access the structure.

(2) Sentence (1) need not apply to level of a stage platform where similar amenities and uses are provided on an accessible level.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

After much discussion, the panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Some demountable event structures may be intended to allow for limited access by the public. Where the public is intended to access the stage, barrier-free requirements would apply.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate public safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organisers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division B 3.18.2.9.	
3.18.2.9.(1)	N/A
3.18.2.9.(2)	N/A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: C-01-02-02

SOURCE: Ontario

CODE REFERENCE: Division C / 1.2.2.1.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change would require that the construction and installation of a demountable event structure be reviewed by a professional engineer.

EXISTING 2012 BUILDING CODE PROVISION(S)

None.

PROPOSED CODE CHANGE

1.2.2. General Review

1.2.2.1. General Review by Architect or Professional Engineer (See Appendix A.)

- (1) The *construction*, including, for greater certainty, enlargement or alteration, of every *building* or part of it described in Table 1.2.2.1. shall be reviewed by an *architect*, *professional engineer* or both.
- (2) A person who intends to *construct* or have constructed a *building* or part of it required by Sentences (1) and (4) to (9) to be reviewed by an *architect*, *professional engineer* or both, shall ensure that an *architect*, *professional engineer* or both are retained to undertake the general review of the *construction* of the *building* in accordance with the performance standards of the Ontario Association of Architects or the Association of Professional Engineers of Ontario, as applicable, to determine whether the *construction* is in general conformity with the plans, sketches, drawings, graphic representations, specifications and other documents that form the basis for the issuance of a permit under section 8 of the Act or any changes to it authorized by the *chief building official*.
- (3) The *architect*, *professional engineer* or both who have been retained to undertake the general review of the *construction* of a *building*, shall forward copies of written reports arising out of the general review to the *chief building official* or *registered code agency*, as the case may be.
- (4) Where the *foundations* of a *building* are to be *constructed* below the level of the footings of an adjacent *building* and within the angle of repose of the *soil*, as drawn from the bottom of the footings, the *construction* of the *foundations* shall be reviewed by a *professional engineer*.
- (5) The *construction* of a sprinkler protected glazed wall assembly described in Article 3.1.8.18. of Division B shall be reviewed by a *professional engineer*.

(6) The *construction* of a shelf and rack storage system described in Section 3.16. of Division B shall be reviewed by a *professional engineer*.

(7) The construction of a supporting framing structure and anchorage system for a tent occupying an area greater than 225 m² shall be reviewed by a professional engineer.

(8) The *construction* of a sign structure shall be reviewed by an *architect, professional engineer* or both, where the sign is,

(a) a ground sign that exceeds 7.5 m in height above the adjacent finished ground,

(b) a projecting sign that weighs more than 115 kg, or

(c) a roof sign that has any face that is more than 10 m².

(9) The *construction* of a projecting sign attached or fastened in any manner to a parapet wall shall be reviewed by an *architect, professional engineer* or both.

(10) The *construction* of a demountable event structure regulated by Section 3.18 of Division B shall be reviewed by a professional engineer.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa's Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the "Expert Advisory Panel on Outdoor Temporary Stages" ("panel"). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

The panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Proposal for construction and installation of demountable event structures to be reviewed by a professional engineer, along with a limited design review, will provide assurance that these structures are suitably designed and constructed according to local climatic and seismic data. This would help alleviate liability and safety concerns with set-up in jurisdictions subject to markedly different weather conditions.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to help ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organizers, manufacturers and the public.

Objective Based Analysis

N/A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: C-01-03-02

SOURCE: Ontario

CODE REFERENCE: Division C / 1.3.1.1.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change would exempt certain demountable event structures from the requirement to obtain a building permit.

EXISTING 2012 BUILDING CODE PROVISION(S)

None.

PROPOSED CODE CHANGE

Add new Sentence (6) to Division C Article 1.3.1.1. as follows:

Section 1.3. Permits and Inspections

1.3.1. Permits

1.3.1.1. Requirement for Permits

- (1) A person is exempt from the requirement to obtain a permit under section 8 of the Act,
 - (a) for the *demolition* of a *farm building* located on a farm,
 - (b) subject to Sentence (2), for the *construction* or *demolition* of a *building* in territory without municipal organization, or
 - (c) for the *construction* of a Class 1 *sewage system*.
- (2) The exemption in Clause (1)(b) from the requirement to obtain a permit does not apply to the *construction* of a *sewage system* in territory without municipal organization.
- (3) The application for a permit respecting the *demolition* of a *building* to which Sentence 1.2.2.3.(1) applies shall include descriptions of the structural design characteristics of the *building* and the method of *demolition* of the *building*.
- (4) No person shall commence *demolition* of a *building* or any part of a *building* before the *building* has been vacated by the occupants except where the safety of the occupants is not affected.

- (5) A tent or group of tents is exempt from the requirement to obtain a permit under section 8 of the Act and is exempt from compliance with the Code provided that the tent or group of tents are,
- (a) not more than 60 m² in aggregate ground area,
 - (b) not attached to a *building*, and
 - (c) constructed more than 3 m from other structures.

(6) Demountable event structures not regulated by Division B Section 3.18 are exempt from the requirement to obtain a permit under section 8 of the Act and are exempt from compliance with the Code.

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa’s Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the “Expert Advisory Panel on Outdoor Temporary Stages” (“panel”). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

The panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations developed by the panel.

Justification/Explanation

Cognizant of the regulatory burden to industry, the panel proposed an exemption for structures that do not fall within the scope of the demountable event structure definition. The intent is to allow smaller, less complicated structures that do not pose a significant safety risk to be constructed without a building permit. For example, a structure that is 40 square meters in area and has a platform that is only 2 meters above ground level.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to help ensure adequate public safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organizers, manufacturers and the public

Objective Based Analysis

N/A

OTHER SUPPORTING MATERIALS

PROPOSED CHANGE TO THE 2012 BUILDING CODE O. REG. 332/12 AS AMENDED

CHANGE NUMBER: C-01-03-03

SOURCE: Ontario

CODE REFERENCE: Division C / 1.3.1.3.

DESCRIPTION OF THE PROPOSED AMENDMENT

The proposed change includes a provision that specifies the period within which a permit must be granted or refused for designated structures.

EXISTING 2012 BUILDING CODE PROVISION(S)

None.

PROPOSED CODE CHANGE

Revise Table 1.3.1.3. as follows:

1.3.1.3. Period Within Which a Permit is Issued or Refused

- (1) Subject to Sentences (2) and (3) and unless the circumstances set out in Sentence (6) exist, if an application for a permit under subsection 8(1) of the Act that meets the requirements of Sentence (5) is submitted to a *chief building official*, the *chief building official* shall, within the time period set out in Column 2 of Table 1.3.1.3. corresponding to the class of *building* described in Column 1 of Table 1.3.1.3. for which the application is made,
- (a) issue the permit, or
 - (b) refuse to issue the permit and provide in writing all of the reasons for the refusal.
- (2) If an application for a permit under subsection 8(1) of the Act proposes *construction* or *demolition* of two or more *buildings* of different classes described in Column 1 of Table 1.3.1.3. that have different time periods in Column 2 of Table 1.3.1.3., the longer of the time periods shall be the time period for the purposes of Sentence (1).
- (3) If an application for a permit under subsection 8(1) of the Act proposes *construction* or *demolition* of a *building* described in Sentence (4), the time period for the purposes of Sentence (1) shall be the longer of,
- (a) 10 days, and
 - (b) the time period corresponding to the class of the *building* described in Column 1 of Table 1.3.1.3. that the *building* described in Sentence (4) serves, if any.
- (4) A *building* referred to in Sentence (3) is,
- (a) a structure occupying an area of 10 m² or less that contains *plumbing*, including the *plumbing* appurtenant to it,
 - (b) *plumbing* not located in a structure,
 - (c) a *sewage system*, or
 - (d) a structure designated in Article 1.3.1.1. of Division A.

- (5) The requirements that an application for a permit under subsection 8(1) of the Act must meet for the purposes of Sentence (1) are,
- (a) that the application is made in the form described in Sentence 1.3.1.2.(2),
 - (b) that the applicant for the permit is a person described in Clause 1.3.1.2.(1)(a) or (b),
 - (c) that all applicable fields on the application form and required schedules are completed,
 - (d) that all required schedules are submitted with the application,
 - (e) that payment is made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the Act, to be paid when the application is made, and
 - (f) that the applicant has declared in writing that,
 - (i) the application meets all the requirements set out in Clauses (a) to (e),
 - (ii) the application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the Act,
 - (iii) the application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the Act which enable the *chief building official* to determine whether the proposed *building, construction* or *demolition* will contravene any *applicable law*, and
 - (iv) the proposed *building, construction* or *demolition* will not contravene any *applicable law*.
- (6) The *chief building official* is not required to make a decision within the time period required by Sentence (1) with respect to an application that meets the requirements of Sentence (5) if the *chief building official*,
- (a) determines that,
 - (i) the application is not accompanied by the plans, specifications, information and documents referred to in Subclauses (5)(f)(ii) and (iii), or
 - (ii) the proposed *building, construction* or *demolition* will contravene any *applicable law*, and
 - (b) advises the applicant of his or her determination and provides in writing the reasons for the determination within two days.
- (7) Subject to Sentences (9) and (10), the time period described in Sentences (1) to (3) and in Clause (6)(b) shall begin on the day following the day on which an application that meets the requirements of Sentence (5) is submitted to the *chief building official*.
- (8) The time periods described in Column 2 of Table 1.3.1.3. and in Clause (6)(b) shall not include Saturdays, holidays and all other days when the offices of the *principal authority* are not open for the transaction of business with the public.
- (9) The time period in Sentence (10) applies where,
- (a) an application is made for the *construction* of a *building* that is served by a *sewage system*,
 - (b) *construction* is proposed in respect of the *sewage system* that serves the *building*, and
 - (c) a board of health, conservation authority, planning board or the council of an upper-tier municipality is responsible for the enforcement of the provisions of the Act and this Code related to the *sewage system* under section 3.1 of the Act or pursuant to an agreement under section 6.2 of the Act.
- (10) The time period described in Sentences (1) to (3) and in Clause (6)(b) for an application referred to in Clause (9)(a) shall begin on the day following the later of,
- (a) the day on which an application that meets the requirements of Sentence (5) is submitted to the *chief building official*, and
 - (b) the day on which a permit for the *construction* of the *sewage system* referred to in Clause (9)(b) is issued.

Table 1.3.1.3.
Period Within Which Permit Shall be Issued or Refused
 Forming Part of Article 1.3.1.3.

Item	Class of <i>Building</i>	Time Period
1	(a) A detached house, semi-detached house, townhouse, or row house where no <i>dwelling unit</i> is located above another <i>dwelling unit</i> . (b) A detached structure that serves a <i>building</i> described in Clause (a) and does not exceed 55 m ² in <i>building area</i> . (c) A tent to which Section 3.14. of Division B applies. (d) A sign to which Section 3.15. of Division B applies. (e) A <i>demountable event structure</i> to which Section 3.18 of Division B applies.	10 days
2	(a) <i>Buildings</i> described in Clause 1.1.2.4.(1)(a), (b) or (c) of Division A, other than <i>buildings</i> described in Column 1 of any of Items 1 and 4 of this Table. (b) <i>Farm buildings</i> that do not exceed 600 m ² in <i>building area</i> .	15 days
3	(a) <i>Buildings</i> described in Clause 1.1.2.2.(1)(a) or (b) of Division A, other than <i>buildings</i> described in Column 1 of any of Items 1 and 4 of this Table. (b) <i>Farm buildings</i> exceeding 600 m ² in <i>building area</i> .	20 days
4	(a) <i>Post-disaster buildings</i> . (b) <i>Buildings</i> to which Subsection 3.2.6. of Division B or any provision in Articles 3.2.8.3. to 3.2.8.11. of Division B applies.	30 days
	Column 1	2

RATIONALE FOR CHANGE

Problem/General Background

In July 2011, a temporary outdoor stage at Ottawa’s Bluesfest collapsed due to sudden wind loads. The collapse resulted in three individuals being injured. In June 2012, the rear scaffolding of a stage at Downsview Park in Toronto collapsed. The collapse resulted in the death of one stagehand and injury to another. As a result of these incidents and temporary stage failures in other jurisdictions, concerns have been raised about the structural design and construction of stages and their operational management.

In October 2013, the Ministry of Municipal Affairs and Housing (MMAH) established the “Expert Advisory Panel on Outdoor Temporary Stages” (“panel”). The mandate of the panel was to make recommendations to government on whether and how to regulate the design and construction of temporary stages. Members of the panel included engineering consultants, stage builders/operators and municipal building departments.

The panel agreed that requirements for design of temporary outdoor stages should be developed for regulation in the Building Code. This Code Change Proposal captures one of the recommendations.

Justification/Explanation

To address the quick “set-up and tear down” practice within the live performance industry, the panel recommended a 10 day timeline for responding to permit applications for these structures. It was anticipated that this would allow sufficient time for an event organizer to apply for a building permit prior to most events and sufficient time for a building department to review and respond to the application. The panel also accepted that unique circumstances may transpire that exert pressure on these timelines that could be resolved on a case-by-case basis.

Cost/Benefit Implications

The intent of these provisions is to harmonize the enforcement of the design and construction of demountable event structures and to ensure adequate safety.

Enforcement Implications

Harmonization of enforcement across Ontario.

Who is Affected

Building officials, designers, event organizers, manufacturers and the public.

Objective Based Analysis

Provision	Objective/Functional Statement
Division C 1.3.1.3.	N/A

OTHER SUPPORTING MATERIALS