



# TENT

CONFERENCE



A decorative vertical bar on the left side of the slide, featuring a collage of architectural images. The top section shows a blue-tinted image of a building's exterior. The middle section is a green-tinted image of a building's interior, possibly a staircase or atrium. The bottom section is a purple-tinted image of a building's interior, showing a large, curved structure. The bar is divided into three distinct color sections: blue, green, and purple.

# Paul Armstrong, P.E., CBO

- Code Consultant
- Author of 2013, 2016 and 2019 CA CBC and CRC Significant Changes books
- Worked for 14 years at ICBO/ICC in Technical Services
- Ended my tenure there as the first Vice President of Architectural/Engineering Services
- Instrumental in the development of the ICC Code Development Process
- ATA Consultant

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## **A major revision will occur in the 2024 IBC.**

Temporary structures will have criteria for 180 days to 365 days!

COVID caused this shift in addressing temporary structures based on the length of time needed for these typically outdoor installations.

The change occurred only in the structural areas however but gives a reduction in loading for the various natural hazards from the full loads in ASCE 7.

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The revisions to the 2024 IBC did not affect changes in the IFC but should have. Currently underway in Group A.

It is the intent that temporary structures are allowed to extend up to 365 days however.

ASCE 7 does have a subcommittee that we are participating with, to address such reductions in load requirements and is supposed to be affecting the needed revisions in the IFC. I am now Vice Chair.



New Definition: **Public-Occupancy Temporary Structure (POTS)**

Any building or structure that is erected for one year or less that serves an Assembly occupancy or other public use.

IBC Section 3103 Temporary Structures has 2 new exceptions:

1. POTS complying with new Sec 3103.1.1 can remain for one year.
2. POTS within existing buildings do not have to comply with Sec 3103.6 (structural loading criteria)

New criteria, Section 3103.1.1 allows for the new extension of service based on 6 conditions:

1. Qualified person to inspect installation.
2. Follow-up inspections by a qualified person at intervals not more than 180 days
3. Registered design professional analysis of structural adequacy.
4. Relocation of structure requires a new permit.
5. Use sheltered or supported shall remain unchanged.
6. A request for extension shall include inspection records and examination results.

# Section 3103.6 Structural Load (new criteria)

## Section 3103.6.1.1 Snow loads

1. With controlled-occupancy procedures (Sec 3103.8) can use a reduction to 65% of ground snow load.
2. Without controlled-occupancy procedures in place, new Table 3103.6.1.1 allows reduced loads based on service life and Risk Category (up to a reduced load of 70%)
3. Where snow loads are not expected, need not consider such loads. If the install time extends into times where snows are expected, structural analysis and controlled-occupancy procedures are required.

## Section 3103.6.1.2 Wind Loads

1. With controlled-occupancy procedures can use a reduction to 65% of wind load.
2. Without the controlled-occupancy procedures in place, new Table 3103.6.1.2 allows reduced loads based on service life and Risk Category (up to a reduced load of 80%)
3. In hurricane-prone regions, new Table 3102.6.1.2 is used with given Risk Categories.

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### **Section 3103.6.1.3 Flood loads**

1. With controlled-occupancy procedures in place, flood loads are not a requirement.
2. Although the IBC doesn't say this, if the controlled-occupancy procedures are not in place then they would be applied.

### **Section 3103.6.1.4 Seismic loads**

1. In SDC C through F, seismic loads can be reduced to 75%
2. In SDC A and B, seismic loads are not required to be applied.

### **Section 3103.6.1.5 Ice loads**

Ice loads can be determined using a maximum thickness of ½ inch for all Risk Categories.

Where ice loads are not expected, such loading need not be considered unless the install time extends into such times.

### **Section 3103.6.1.6 Tsunami loads**

With controlled-occupancy procedures, these loads are not required.

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**This revision includes criteria for:**

Foundations

Installation and maintenance inspections

Durability

Serviceability

As well as the Controlled-Occupancy Procedures in Section 3103.8

Section 3103.8 requires the compliance with ANSI ES1.7 for the procedures and ANSI ES1.21 for an operations management plan.

**The operations management plan shall include:**

Mitigating ice accumulation

Wind speed monitoring

Occupant evacuation procedures for floods tsunamis

Occupant evacuation procedures shall be specified for each environmental hazard

Provisions for anchoring or removal of structure to mitigate hazard.

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# Future Temporary Structure Revisions in Process

ICC IFC Code Development Committee is hearing the companion code change to coordinate with the 2024 IBC revision. The first Committee Action Hearing (CAH) the committee action was for Disapproval. The second CAH this October will have further revisions to address comments.

## **Another future item:**

A code change proposal to apply to all Temporary Structures, not just POTS!

## **One last future item:**

A revision to ASCE 7 to bring in all these items to address the loading of all temporary structures! Then a subsequent ICC code change will be submitted to remove all the previous work based on a reference to ASCE 7 only in both the IBC and IFC.

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# Another revision for Structural Loading

ASCE 7-22 Snow Loads

ASCE 7 Mapping Tool changes

Based on the new methodology, snow loading will either increase or decrease (in some areas)

There is much concern across the U.S.

Areas such as Washington D.C. will have a significant increase,  
Minneapolis a decrease.



# Federal Legislation

## Awning Safety Act

Powered awnings would be required to have safety shutdown systems  
The legislation was based on a single accident. Could have required the Consumer Product Safety Commission (CPSC) to step in to develop regulations.

Stalled for this legislative session



# Questions?

## Thank you!

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