

VARIANCE FEES

MGO \$50.00
COMM \$490.00
Priority -- Double above

PETITION FOR VARIANCE APPLICATION

City of Madison Building
Inspection Division
215 Martin Luther King Jr Blvd
Suite 017 Madison, WI 53703
(608) 266-4568

Amount Paid

Name of Owner Carolyn Clow	Project Description Trade show tent on the Alliant Energy Center grounds during World Dairy Expo installed each year.	Agent, architect, or engineering firm McGinnis & Associates
Company (if applies) Alliant Energy Center of Dane County		No. & Street 1110 Westmark Drive
No. & Street 1919 Alliant Energy Center Way	Tenant name (if any) World Dairy Expo	City, State, Zip Code St. Louis, MO 63131
City, State, Zip Code Madison, WI 53713	Building Address 1919 Alliant Energy Center Way	Phone 314-835-1224
Phone 608-267-3985		Name of Contact Person Daniel W. McGinnis
e-mail clow.carolyn@alliantenergycenter.com		e-mail

1. The rule being petitioned reads as follows: (Cite the specific rule number and language. Also, indicate the nonconforming conditions for your project.)

Please see the attached document "Section #1 Code Requirements"

2. The rule being petitioned cannot be entirely satisfied because:

Please see document "Section #2 Why We Cannot"

3. The following alternatives and supporting information are proposed as a means of providing an equivalent degree of health, safety, and welfare as addressed by the rule:

Please see document "Section #3 Equivalent Level of Safety"

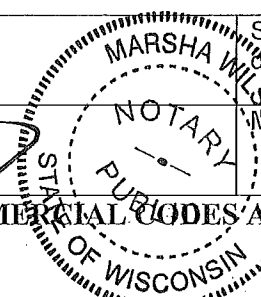
Note: Please attach any pictures, plans, or required position statements.

VERIFICATION BY OWNER – PETITION IS VALID ONLY IF NOTARIZED AND ACCOMPANIED BY A REVIEW FEE AND ANY REQUIRED POSITION STATEMENTS.

Note: Petitioner must be the owner of the building. Tenants, agents, contractors, attorneys, etc. may not sign the petition unless a Power of Attorney is submitted with the Petition for Variance Application.

Carolyn A. Clow, being duly sworn, I state as petitioner that I have read the foregoing
Print name of owner
petition, that I believe it to be true, and I have significant ownership rights in the subject building or project.

Signature of owner <i>Carolyn Clow</i>	Subscribed and sworn to before me this date: <u>12/7/2021</u>
Notary public <i>Marsha Wilson</i>	My commission expires: <u>6/22/2025</u>



NOTE: ONLY VARIANCES FOR COMMERCIAL CODES ARE REQUIRED TO BE NOTARIZED.

1. Code Requirements

The Alliant Energy Center is seeking an approval for a variance in reference to the 2015 edition of the International Building Code (IBC), section 903.2.1.3 Group A-3, which requires that automatic fire sprinklers in a structure that has over 12,000 square feet and that have a capacity of more than 300 individuals. In addition to that, we are also seeking variance regarding Section 907.2.1. Group A requires a manual fire alarm system be installed in an occupancy that has an occupant load of 300 or more. The following is the text as it appears in the referenced code.

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more, or where the Group A occupant load is more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy

The temporary structure that we are looking to erect is approximately 65,000 square feet. This temporary structure would be home to the "Trade Center" during future World Dairy Expo (WDE) events. The need for this temporary structure is due to the WDE outgrowing the spaces contained in the current buildings on our property. Because of this the WDE has requested this temporary structure to house additional exhibitors during their event.

The World Dairy Expo is the premier event for the global dairy industry, welcoming more than 60,000 dairy enthusiasts to Madison each fall. Trade Show booth fees are the primary source of income for Expo, a 501C3 organization with a 55-year history at the Alliant Energy Center. WDE's Trade Show has outgrown the footprint offered by permanent buildings at AEC, with the Trade Center structure providing necessary "Class A" exhibition space for WDE commercial exhibitors to showcase their products and services.

The process of erecting the structure will take approximately 28 days. Once completed there will be approximately 5 days to load in all the exhibitors. The structure will be under "normal operations" for 4 days. It is expected that the load out of exhibitors will take 2 days, and the deconstruction of the structure will take 15 days. A more detailed version of this information is available under point number 3.

The temporary structure will also be subject to all other aspects found in the IBC/IFC. The abovementioned two requirements are two of the main reasons that we are seeking a variance.

2. Why We Cannot

There are numerous reasons for us that we are not able to meet the requirements of this code.

The World Dairy Expo event has outgrown the capacities of the current buildings at the Alliant Energy Center. The Trade Center offers an adequate venue for up to 296 companies from around the world to exhibit, as well as a venue for the event's forage competition and education space. It is important to have a structure of this size and quality to offer both exhibitors and attendees a top-notch experience. The size of the Trade Center allows for housing these booths in a single structure that is easy for attendees to find and navigate, while also permitting ease of construction and exhibitor ingress and egress that is also cost-effective for the event.

The main reason that we are not able to meet these requirements is due to the sprinkler and fire alarm requirements are quite costly. Each system costs between \$1 and \$3 dollars per square foot for them to be installed. This combined expense alone (could be up to \$300,000 for a 65,000 ft² structure) is cost prohibitive.

Neither the Aliant Energy Center nor any of the organizations can allocate these kinds of funds for a system that would be installed in a temporary structure for a few weeks, just for it to be removed from the structure before it is taken down. Each fire sprinkler system and fire alarm system are custom built for the structure that it will be installed in.

For the WDE or Alliant Energy Center to raise the funding necessary to implement these requirements, both organizations would need to raise the fees that are charge to the point that WDE would loose many of its exhibitors; and the WDE would need to find another facility that could host their event. Ultimately, this would affect the City of Madison and Dane County, as the revenue from this event would leave Madison and Dane County and move to another part of the State.

We are sure you would agree that the use of finances to install such system for a short period of time is illogical.

3. Equivalent Level of Safety

The maximum occupancy is 5,552. During the peak hours of the event, it is expected to have approximately 2,500 persons in the temporary structure at one time. We are expecting approximately:

- 1,500 attendees of the WDE in the structure at any one time
- 600 exhibitors
- 400 individuals as a buffer for higher attendance of the WDE, catering and/or Alliant Energy Center staff.

The expected capacity during peak hours is nearly half of what is allowed by code. We feel that this is one of the main ways that we have shown an equivalent level of safety.

The following outlines the hours of operations for the Trade Center structure. As you can see, the following explains the timeline of construction to destruction and included what will be happening

during each phase, in addition to providing the time of day and expected occupancy number of each respective time.

- Timeline:

- September 8 – 28, 2022 – Construction phase
 - Building of the structure, installation of electrical, flooring, pipe and drape, and exhibitor services
 - 7 a.m. to 7 p.m. daily
 - Anticipated Occupancy: Less than 30 people
- September 29 – October 3, 2022 – Ingress phase
 - 7 a.m. to 5 p.m. daily
 - Exhibiting company representatives are constructing exhibitor booths, moving in equipment and booth materials
 - Anticipated Occupancy: less than 600 people
 - 5 p.m. to 7 a.m. daily
 - Facility cleaning/freight crews present
 - Anticipated Occupancy: less than 10 people
- October 4-7, 2022 – Event phase
 - 7:30 – 9:00 a.m. daily
 - Exhibiting company representatives permitted access to prepare for the day, Facility ushers and WDE staff present
 - Anticipated Occupancy: less than 600 people
 - 9:00 a.m. – 5:00 p.m. daily
 - Trade Center is open
 - Anticipated Occupancy: less than 1,500 people
 - 5:00 – 5:30 p.m.
 - Trade Center is closed and people are ushered out
 - Anticipated Occupancy: reduced to zero
 - 5:30 p.m. – 7:30 a.m.
 - Facility cleaning/garbage crews present
 - Anticipated Occupancy: less than 10 people

- October 7 (4 p.m.) – October 8 – Egress phase
 - 4 p.m. Oct. 7 – 5 p.m. Oct. 8
 - Exhibiting company representatives are constructing exhibitor booths, moving in equipment and booth materials
 - Anticipated Occupancy: less than 600 people
- October 9 – 23, 2022 – Deconstruction phase
 - Removal of the structure, electrical, flooring, pipe and drape, and exhibitor services
 - 7 a.m. to 7 p.m. daily
 - Anticipated Occupancy: Less than 30 people

The maximum travel distance to an exit 153 feet in the structure as designed. Originally there were only 8 service doors that served as an exit from the building. Since our first look at the plans, an additional 4 service doors have been added. This means that there is now a total of 12 service doors in the building that serve as an exit from the building, which is more than what is required due to the occupant load. With the addition of these 4 exits, we have been able to reduce the maximum travel distance to nearly 90 feet, which is almost half of the maximum exit distance.

The exits are placed in the end or immediately adjacent to the end of the aisleways that are placed in an East/West direction. There are also exits placed in each of the corners of the structure. One of the other items to be noted it that all aisle ways are a minimum of 10 feet wide. All the short aisleways, are at least 15 feet wide (except the far South end of the building), as these aisleways are where two or more aisleways converge.

This temporary structure also provides numerous other features that are not available when using other membrane tents. In addition to the aesthetic reason provided, the temporary structure is also able to provide a safer structure for those that are attending the events. This temporary structure is rated for 90 mile an hour wind. This structure is also engineered and constructed to withstand snow loading.

We could take the opportunity to erect membrane tents and accomplish our goals, however, it would not be as safe. If we were to utilize tents, we would not need to comply with the same fire and life safety requirements that we are required to comply with when utilizing temporary structure. The temporary structure proved a much more secure building, both from the weather and structurally.

Security at our events also is also a high priority for us. Due to this, WDE Show Security and Dane County Sherriff's Deputies provide 24/7 security and oversight on the AEC campus. This is monitoring of all permanent and temporary structures. Multiple fire extinguishers are provided and strategically placed, as well as lighted exit signs above each exit by the structure builder in alignment with their trade association and industry standards.

In addition to the above-mentioned reasons, we will have/establish the following which is required by the IBC/IFC respectfully:

- our event/plans approved by the fire code official.
- approved means of fire apparatus access shall be provided; to include unobstructed access to fire hydrants and other fire protection features
- The number and location of emergency egress and escape routes shall be approved by the fire code official. Maintain emergency egress and escape routes.
- An established an occupant load for the event site.
- Public safety plan for gatherings and will submit it to the fire code official with the application for an operational permit as required by Section 3106.2.2.
- A Weather monitoring person, who is a qualified individual, to continuously monitor local weather reports, forecasts, and conditions. Said person shall be responsible for initiating weather-related event mitigation activities, ordering the suspension or cancellation of the outdoor assembly event, and issuing the evacuation signal in accordance with the approved public safety plan.
- Trained crowd managers will be present at during the use and operation of the building.
- Approved portable fire extinguishers complying with Section 906 shall be provided and placed in locations approved by the fire code official.
- Smoking shall be permitted only in designated areas. Other areas shall have approved "No Smoking" signs conspicuously posted and maintained in accordance with Section 310.
- All combustible vegetation that could create a fire hazard shall be removed from the outdoor assembly event area.
- Combustible refuse shall be removed from the event site at regular intervals to prevent an unsafe accumulation within the event site.
- Cooking appliances or devices will only be used in applicable areas. They will not be used inside the structure.
- All electrical applications will be established per the National Electrical Code (NFPA 70).