

6770000 EQUIPMENT SHELTER  
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comment: (12-12-13 – Internal Review)

Numerous locations where there are extra periods: 677-2.1, etc.

Response: Changes made.

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Larry Ritchie  
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Comment: (1-10-14)

“Equipment” is already defined in the Standard Specifications so the title of this section should be changed to address the specific traffic control equipment that is supposed to be housed in this shelter. As it is written now, an equipment shelter could be required for any kind of equipment found on a construction project.

Response:

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Sean Masters  
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Comment: (1-10-14)

In the re-written spec 677-232 Shelter Floor and Foundation: “...Concrete is to be Type II, Class I and in accordance with Section 346.”

In 346, concrete is not Type II, it is the cement that is Type II. (See Spec 346-2.2) I recommend it say “... Concrete is to be Class I for Extremely Aggressive Environment and in accordance with Section 346”

Honestly, it would be simplest to remain silent on the cement type. Almost all cement is Type I/II now. (It saves on plant storage so that you only need one silo of cement). The environmental classification / resistance has no relationship to the strength. Unless there is going to be a lot of salt water/acids spilt on the floor, it will not matter.

Response:

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Dean Perkins  
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Comment: (1-13-14)

677-2.1, second paragraph: Please make the highlighted changes below.

~~and Health Standards for Construction. ¶~~  
~~→ → → Provide an equipment shelter capable of designed to withstand loads as~~  
~~following minimum loads as follows the following: wind: 150 MPH; floor: 200 lbs. per square~~  
~~foot; slab: 200 lbs. per square foot; roof: 100 lbs. per square foot. Provide design drawings that~~  
~~meet all minimum design standards and are signed and sealed by an Architect or registered~~  
~~Professional Engineer registered in the State of Florida indicating the shelter meets these~~  
~~minimum values. ¶~~

This is a building that will be used for human occupancy as well as equipment operation.

Response: (As per Dan (1-13-14) Comment on 677 – I am going to ‘respond’ to Dean on it, but need to record it as a comment). Response is as follows:

The buildings outlined in 677 are not ‘habitable or occupiable spaces’ – they are intended solely to house equipment and will not be ‘staffed’ or ‘habitable’ by humans other than for service calls on such equipment.

With that understanding, per the Building Official’s Guide to the Professional Practice of Architects & Engineers in Florida (endorsed by AIA Florida and FES), “The designs of structures that are not intended for human occupation are not legally required to be completed by an architect; however, a team approach may still be more appropriate for engineering multiple systems exceeding statutory limitations. Engineers - Professional engineers are responsible for the engineering design of multiple aspects of a building project. Professional engineers practice based upon their training, knowledge and expertise and are not licensed by any specific discipline.”

Therefore – I do not think it is appropriate to indicate that an Architect Licensed in Florida is permitted to sign and seal the structural detail sheets for these shelters. The main requirement is not related to human habitation of the building, but the structural integrity of the overall structure. These buildings have a singular purpose, to store equipment in a controlled and secure environment.

Please see attached that has relevant references to the subject at hand. It is from 2011 – so I may not be up to speed on current allowable practices of Architects, if you have more current information, please feel free to share it.



03012011 Publish -  
Building\_Officials\_Guid

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Peter Nissen  
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Comment: (1-21-14)

Have reviewed, only comment is that there needs to be some provision for lightening protection that could be included if needed; for example, if the structure was to be used to house tolling equipment.

Response:

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Eddy Scott  
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Comment: (1-22-14)

A couple of questions concerning the Performance Period (PP) in 677-4.5.

1. Can the PP be after Final Acceptance and fall into the Contractor's 90-day warranty period? Mention is made of "the operational test period for the project". I've probably overlooked it but I'm unaware of any such period.

Response:

2. Suggest rewording to consolidate portions that state "Following the completion of all acceptance testing and inspections..." and "Upon acceptance of the test criteria, the 20-day performance period shall begin."

Response:

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D3  
Barbara Strickland  
850-330-1206

Comment: (2-7-14)

District Three has reviewed the subject Industry Review and have the following to offer at this time. Please let me know if you need anything else.

**1. 677-2.8:** Provide an IP addressable thermostat which provides a secure web based interface (HTTP) that displays the current environmental conditions including temperature, humidity, and thermostat settings including "set" temperature. The thermostat should allow remote adjustments to temperature and the ability to turn a fan.

Provide a HVAC cut off in the event of a fire alarm via the thermostat (break the 24VAC thermostat circuit /low voltage cut off).

Please Note: Most shelters have some form of communication infrastructure, providing camera or other security devices (including motion sensor lighting). This could be a theft deterrent. If there are shelters, the next section is suggested.

Response:

**2. 677-2.12:** Provide a surface or flush mounted weatherproof wiring box with stainless cover on each exterior side of the shelter which could be used for security CCTV mounting. Provide ½" cable conduit from the electrical box to the inside of the shelter so as to allow wiring to CCTV or

other security devices/lighting. The electrical box should provide a stable mounting attachment for bullet or other types of CCTV cameras.

**Response:**

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