December 13, 2012

DS 2012-081

Florida Building Commission
Request for Declaratory Statement (Amended)

Subject: Applicability of the FS553.844 (4) to Electrical Generator Set Enclosures.

Gentlemen,

Advanced Manufacturing & Power Systems (AMPS) is an approved Modular Building Manufacturer and also offers Florida Approved Product for use in High Velocity Hurricane Zones (HVHZ) in the State of Florida. The majority of these enclosures/buildings are to protect electrical generating sets from the elements, as well as to provide sound reduction. There is a great amount of confusion in the electrical generator community regarding the applicability of the Code to these enclosures.

FS553.844 (4) states “Notwithstanding the provisions of this section, exposed mechanical equipment or appliances fastened to a roof or installed on the ground in compliance with the code using rated stands, platforms, curbs, slabs, or other means are deemed to comply with the wind resistance requirements of the 2007 Florida Building Code, as amended. Further support or enclosure of such mechanical equipment or appliances is not required by a state or local official having authority to enforce the Florida Building Code. This subsection expires on the effective date of the 2013 Florida Building Code.”

FS553.844 (4) references 2007 of the Florida Building Code. Florida Building Code 2010 is now the controlling edition. Based on this I would like the following questions addressed as they apply to the situations listed below:

Situations:
1. A Client intends to install an electrical generator set in an enclosure to provide emergency backup power to a hospital in the event of a loss of utility power. There will be no other debris impact protection aside from the generator enclosure.

   According to FBC 419.4.2.9.6 “The emergency generator(s) shall be air or self-contained liquid cooled and it and other essential electrical equipment shall be installed in a protected area(s) designed and constructed to meet the structural requirements of the code and debris impact requirements of Sections 1626.2 through 1626.4”.

   a. Is the generator enclosure required to be tested and approved per Section 1626 of the 2010 Florida Building Code and bear either appropriate Florida Product Approval numbers or Miami-Dade Notice of Acceptance approval?
2. A Client intends to install an electrical generator set in an enclosure to provide emergency backup power to a Nursing Home in the event of a loss of utility power. There will be no other debris impact protection aside from the generator enclosure.

According to FBC 420.4.2.9.6 “The emergency generator(s) shall be air or self-contained liquid cooled and it and other essential electrical equipment shall be installed in a protected area(s) designed and constructed to meet the structural requirements of the code and debris impact requirements of Sections 1626.2 through 1626.4”.

a. Is the generator enclosure required to be tested and approved per Section 1626 of the 2010 Florida Building Code and bear either appropriate Florida Product Approval numbers or Miami-Dade Notice of Acceptance approval?

3. A Client intends to install an electrical generator set in an enclosure to provide emergency backup power to an Enhanced Hurricane Protection Area (EHHPA) as part of an Educational Facility Public Shelter in the event of a loss of utility power. There will be no other debris impact protection aside from the generator enclosure.

According to FBC 423.25.5 “When generators are installed, the facility housing the generator, permanent or portable, shall be an enclosed area designed to protect the generators from wind and missile impact. Air intakes and exhausts shall be designed and installed to meet the wind load and missile impact criteria. Generators hardened by the manufacturer to withstand the area’s design wind and missile impact criteria shall be exempt from the enclosed area criteria requirement.”

a. Is the generator enclosure required to be tested and approved per Section 1626 of the 2010 Florida Building Code and bear either appropriate Florida Product Approval numbers or Miami-Dade Notice of Acceptance approval?

4. A Client intends to install an electrical generator set in an enclosure to a commercial facility located in a High Velocity Hurricane Zone (HVHZ) to provide emergency backup power in the event of a loss of utility power. The generator Set and enclosure will be installed on the roof of the facility. There will be no other debris impact protection aside from the generator enclosure.

According to FBC 1601.1 “The provisions of this chapter shall govern the structural design of buildings, structures and portions thereof regulated by this code.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 1615 through 1626, and, as applicable in flood hazard areas, Section 1612.”

a. Is the generator enclosure required to be tested and approved per Section 1626 of the 2010 Florida Building Code?
Code and bear either appropriate Florida Product Approval numbers or Miami-Dade Notice of Acceptance approval?

5. A Client intends to install an electrical generator set in an enclosure to a commercial facility located in a High Velocity Hurricane Zone (HVHZ) to provide emergency backup power in the event of a loss of utility power. The generator Set and enclosure will be installed on the ground floor of the facility. There will be no other debris impact protection aside from the generator enclosure.

According to FBC 1601.1 “The provisions of this chapter shall govern the structural design of buildings, structures and portions thereof regulated by this code.

Exception: Buildings and structures located within the high-velocity hurricane zone shall comply with the provisions of Sections 1615 through 1626, and, as applicable in flood hazard areas, Section 1612.”

a. Is the generator enclosure required to be tested and approved per Section 1626 of the 2010 Florida Building Code and bear either appropriate Florida Product Approval numbers or Miami-Dade Notice of Acceptance approval?

Sincerely,

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