

This document created by the Florida Department of Business and Professional Regulation - 850-487-1824

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TAC: Mechanical

Total Mods for Mechanical in Approved as Submitted: 1

Total Mods for report: 1

Sub Code: Residential

M	1	0	0	69

Date Submitted 02/09/2022 Section 19 Proponent Timothy de Carion Chapter 19 Affects HVHZ Yes Attachments Yes

TAC Recommendation Approved as Submitted Commission Action Pending Review

Comments

General Comments Yes

Alternate Language Yes

Related Modifications

Summary of Modification

This modification will provide new code requirements for the installation of residential stand-by generators. Current code does not have requirements.

Rationale

The current code does not address installation standards for standby residential generators. This section will provide uniform standards for installation. These new sections will provide additional saftey requirements to protect homeowners from carbon monoxide sickness and even death.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

Residential generators are already permited and inspected. No additional inspections will be required.

Impact to building and property owners relative to cost of compliance with code

An additional carbon monoxide detector would be required.

Impact to industry relative to the cost of compliance with code

An additional carbon monoxide detector would be required.

Impact to small business relative to the cost of compliance with code

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

These new sections will provide additional saftey requirements to protect homeowners from carbon monoxide sickness and even death.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

Yes, these new sections will provide additional saftey requirements to protect homeowners from carbon monoxide sickness and even death.

1

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

No, many products available.

Does not degrade the effectiveness of the code

No, improves uniformity.

Alternate Language

2nd Comment Period

Proponent Joseph Belcher Submitted 8/25/2022 3:23:00 PM Attachments Ye

Rationale:

The change to add the phrase "permanently installed" is intended to prevent misapplication to portable generators.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

No impact.

Impact to building and property owners relative to cost of compliance with code

No impact.

Impact to industry relative to the cost of compliance with code

No impact.

Impact to small business relative to the cost of compliance with code

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public.

The change has a reasonable connection with the welfare of the general public by clarifying the application of the new section and forestalling misapplication.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

The change strengthens the code by clarifying the application of the new section and forestalling misapplication.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

The change does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

Does not degrade the effectiveness of the code

The change improves the effectiveness of the code.

2nd Comment Period

Proponent Alan Gremillion Submitted 8/8/2022 3:00:44 PM Attachments No

Comment:

\$150 = Cost to add (1) carbon monoxide detector

2nd Comment Period

Proponent Alan Gremillion - Submitted 8/10/2022 10:43:38 AM Attachments No

RCCIW

Comment:

\$150 = Cost (1) additional carbon monoxide detector (applies to exception)

<u>1st Comment Period History</u>

Proponent

Bryan Holland

Submitted

3/28/2022 9:28:14 AM Attachments

Yes

Comment:

NEMA strongly supports this proposed modification and urges the TAC(s) and Commission to approve this modification that will improve the safe installation and operation of standby generators.

1st Comment Period History

Proponent

Rebecca Quinn obo FL Submitted

4/14/2022 1:44:07 PM Attachments

No

Div Emerg Mgnt

Comment:

On behalf of Conn Cole, State Floodplain Manage with FDEM Office of Floodplain Management, FDEM supports this proposal. When stand-by generators are elevated and flooding occurs up to the elevation required by R322.1.6, the generators will not need to be replaced or have major repairs performed before they're ready to provide power until service is restored.

CHAPTER19

SPECIAL APPLIANCES, EQUIPMENT AND SYSTEMS

SECTION M1905 RESIDENTIAL PERMANENTLY INSTALLED STAND-BY GENERATORS.

M1905.1 Listed and labeled.

<u>Permanently installed</u> <u>Sstand-by generators regulated by this code shall be listed and labeled for the application in which they are installed and used.</u>

M1905.2 Installation.

Installation of <u>permanently installed</u> stand-by generators shall comply with manufacturer's installation instructions and listing conditions.

M1905.2.1 Electrical installation.

Electrical installation of <u>permanently installed</u> stand-by generators shall comply with the applicable provisions of NFPA 70, National Electrical Code, manufacturer's installation instructions, and conditions of the listing.

M1905.2.2 Flood hazard.

In flood hazard areas as established by Table R301.2(1), <u>Permanently installed</u> stand-by generators shall be located or installed in accordance with Section R322.1.6.

M1905.2.3 Fuel installation.

M1905.2.3.1 Fuel gas.

Fuel gas installation for permanently installed stand-by generators shall comply with the applicable provisions of Chapter 24 of this code.

M1905.2.3.2 Liquid fuel.

Liquid fuel installation for <u>permanently installed</u> stand-by generators shall comply with the applicable provisions of NFPA-30.

M1905.2.4 (301.10) Wind resistance.

<u>Permanently installed S</u> stand-by generators that are exposed to wind shall be designed and installed to resist the wind pressures determined in accordance with this code.

M1905.2.5 Exhaust Location.

Permanently installed residential standby generator's exhaust shall be located to not create a nuisance. Exhaust termination shall be a minimum of 10 feet from any openings that could allow fumes into the building (doors, operable windows, eave vents, etc.) or air intakes.

Exception: The generator exhaust can be located a minimum of 5 feet from any such openings (doors, operable windows, eave vents, etc.) or in compliance with generator manufacturer installation requirements and listing, whichever is more restrictive, if all of the following is complied with:

- 1. A carbon monoxide (CO) alarm(s) is installed in the residency within 10 feet of each room used for sleeping purposes, or per the alarm's manufacturer installation requirements and listing, whichever is more restrictive.
- 2. An additional carbon monoxide (CO) alarm is installed in the residency as close as possible to the building's exterior opening nearest to the generator exhaust.
- 3. The carbon monoxide (CO) alarms mentioned above shall be of the types required by sections R315.1.1 or R315.1.2 of this code.

CHAPTER19

SPECIAL APPLIANCES, EQUIPMENT AND SYSTEMS

SECTION M1905 RESIDENTIAL STAND-BY GENERATORS.

M1905.1 Listed and labeled.

Stand-by generators regulated by this code shall be listed and labeled for the application in which they are installed and used.

M1905.2 Installation.

Installation of stand-by generators shall comply with manufacturer's installation instructions and listing conditions.

M1905.2.1 Electrical installation.

Electrical installation of stand-by generators shall comply with the applicable provisions of NFPA 70, National Electrical Code, manufacturer's installation instructions, and conditions of the listing.

M1905.2.2 Flood hazard.

In flood hazard areas as established by Table R301.2(1), stand-by generators shall be located or installed in accordance with Section R322.1.6.

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Stand-by generators that are exposed to wind shall be designed and installed to resist the wind pressures determined in accordance with this code.

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- 3. The carbon monoxide (CO) alarms mentioned above shall be of the types required by sections R315.1.1 or R315.1.2 of this code.

When used properly, portable and standby generators are a great option to provide backup power during brownouts or blackouts. Learn how to use generators safely with the following tips:

GENERATORS



20_{ft}

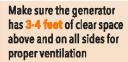


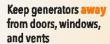


Always keep generators at least 20 feet away from your home



Never operate a generator in an enclosed space





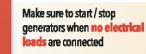
Always direct exhaust away from your home



Always use grounded cords and inspect cords for damage prior to use

Use the proper cord for the wattage being used





Keep generators dry, do not operate when wet, and refuel when cool

Do not overload generators

Do not plug a generator directly into your home, connect items being powered directly to the generator







Transfer switches, whether manual or automatic, allow you to choose between utility power or backup generator power



Transfer switches are the only way to safely power your home's electrical system



Using a transfer switch prevents backfeeding. This occurs when your generator becomes a power source for the surrounding area and can damage your home, your neighbor's homes, and injure workers trying to restore power

CARBON MONOXIDE (CO) POISONING PREVENTION



Improper use and installation of generators could cause CO poisoning



Make sure your home has carbon monoxide alarms outside each sleeping area and on every level of the home



CO can kill in as little as 5 minutes

Symptoms of CO poisoning









Nausea **Tiredness**



If you experience CO poisoning symptoms, get fresh air, do not reenter areas, and call 911.

Please share this free resource to save lives



f www.facebook.com/ESFI.org



www.twitter.com/ESFldotorg



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 $20 \pm$

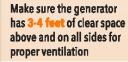


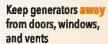






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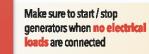
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Tiredness Nausea



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Please share this free resource to save lives



f www.facebook.com/ESFI.org



www.twitter.com/ESFldotorg



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