

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
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3rd Party Listing Requirement for Generator Clearance Reduction

Code: 2018 Fuel Gas Code,

Date: August 5, 2019

Section: 301.3ⁱ, 616.1ⁱⁱ

Code: 2018 Residential Code

Section: G2404.3, G2455.1

Question:

Regarding UL 2200 listed generator sets (genset), would the clearance reduction requirement tests of NFPA 37 4.1.4(2)ⁱⁱⁱ be subject to NC GS 66-25^{iv}, thereby requiring the listing company to be on the NC Building Code Council approved list of 3rd party listing^v companies?

Answer:

Yes.

The Engineering Department's opinion for the applicability of statute GS 66-25 is that the weather protection cover and its required testing for safety cannot be separated from the required testing of the genset. Therefore, if a weather proof cover of the genset is claimed to protect the combustibles surrounding it from a fire within, the entity providing the testing for clearances to combustibles is subject to the requirements of NC GS 66-25.

Although the UL 2200 listing of the genset is separate and distinct from the NFPA 37 full-scale fire test, the enclosure and genset are dependent on each other and therefore subject to NC GS 66-25.

Keyword: none

ⁱ **301.3 Listed and labeled.** Appliances regulated by this code shall be *listed* and *labeled* for the application in which they are used unless otherwise *approved* in accordance with Section 105 of the NC Administrative Code. The approval of unlisted appliances in accordance with Section 105 shall be based upon *approved* engineering evaluation.

ii **616.1 Powered equipment.** Permanently installed *equipment* powered by internal combustion engines and turbines shall be installed in accordance with the manufacturer's installation instructions and NFPA 37. Stationary engine generator assemblies shall meet the requirements of UL 2200.

iii **Reprint of NFPA 37**

4.1.4 Engines Located Outdoors. Engines and their weatherproof housings if provided, that are installed outdoors shall be located at least 5 ft from opening in walls and at least 5 ft from structures having combustible walls. A minimum separation shall not be required where the following conditions exist:

- (1) The adjacent wall of the structure has a fire resistance rating of at least 1 hr.
- (2) The weatherproof enclosure is constructed of noncombustible materials and it has been demonstrated that a fire within the enclosure will not ignite combustible materials outside the enclosure.

A.4.1.4(2) Means of demonstrating compliance are by means of full-scale fire tests or by calculation procedures, such as those given in NFPA 555, Guide on Methods for Evaluating Potential for Room Flashover.

iv NC Link to General Statute NC GS 66-25

https://www.ncleg.net/enactedlegislation/statutes/html/bychapter/chapter_66.html

v NC 3rd Party listing agencies

[http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code Enforcement - Third Party Testing Agencies&user=Code Enforcement Resources](http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code_Enforcement_-_Third_Party_Testing_Agencies&user=Code_Enforcement_Resources)