



**Planning, Development & Transportation Services**  
Community Development & Neighborhood Services

**To:** Residential Stakeholders

**From:** Marcus Coldiron, CBO  
Chief Building Official

**Date:** August 21<sup>st</sup>, 2023

**File:** Residential Code Interpretation

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**Title:** Energy storage systems marking requirements

**Code Edition:** 2021 International Residential Code (IRC)

**Sections:** **R202 Definitions**  
**R328 Energy Storage Systems**  
**R328.1 General**

**Purpose:** To provide clarification on how and where an ESS must be marked to qualify for the exception in section R328.1.

**Definitions:**

**APPROVED.** Acceptable to the *building official*.

**LABELED.** Equipment, materials or products to which have been affixed a *label*, seal, symbol or other identifying *mark* of a nationally recognized testing laboratory, *approved* agency or other organization concerned with product evaluation that maintains periodic inspection of the production of such *labeled* items and whose labeling indicates either that the *equipment*, material or product meets identified standards or has been tested and found suitable for a specified purpose.

**LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of *listed equipment* or materials or periodic evaluation of services and whose listing states either that the *equipment*, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.



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**Code requirements:**

**R328.1General.** *Energy storage systems (ESS)* shall comply with the provisions of this section.

**Exceptions:**

1. *ESS listed and labeled* in accordance with UL 9540 and marked "For use in residential dwelling units" where installed in accordance with the manufacturer's instructions and NFPA 70.
2. *ESS less than 1 kWh (3.6 megajoules).*

**Code interpretation:**

Energy storage systems installed in a residential application must comply with all sections within section R328 of the 21' International Residential Code. These provisions detail the minimum life safety requirements for the installation of an ESS including, but not limited to, listings, spacing, locations, fire detection, ventilation.

An ESS may be exempted from these requirements if it meets one of the following:

1. *ESS listed and labeled* in accordance with UL 9540 and marked "For use in residential dwelling units" where installed in accordance with the manufacturer's instructions and NFPA 70.
2. *ESS less than 1 kWh (3.6 megajoules).*

"Marked" is not defined in the IRC, therefore, it shall be acceptable if it is marked on the ESS itself or marked in the manufacturer's installation instructions as "for use in residential dwelling units".

It is important to note that an ESS unit that is marked "for residential use" will not be accepted as the ESS must be marked "for use in residential dwelling units." Additionally, the ESS must meet all requirements of section R328.1, exception #1 to be exempt from the requirements specified in section R328.

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