

GEW42-14

603.2, 603.2.1, 603.2.2, 603.2.3, 603.2.4, 603.2.5

Proponent: Brenda Thompson, Chair, representing Sustainability, Energy, and High Performance Code Action Committee (SEHPCAC@iccsafe.org)

Revise as follows:

603.2 Energy distribution design requirements and load type isolation in buildings. Energy distribution systems within, on or adjacent to and serving a building shall be designed such that each primary circuit, panel, feeder, piping system or supply mechanism supplies only one energy use type as ~~defined~~ specified in Sections 603.2.1 through 603.2.5 Table 603.2. The energy use type served by each distribution system shall be clearly designated on the energy distribution system with the use category served, and adequate space shall be provided for installation of metering equipment or other data collection devices, temporary or permanent, to measure their energy use. The energy distribution system shall be designed to facilitate the collection of data for each of the building energy use categories in Section 603.4 and for each of the end use categories ~~listed~~ specified in Sections 603.2.1 through 603.2.5. Table 603.2. Where there are multiple buildings on a building site, each building shall comply separately with the provisions of Section 603.

Exception: Buildings designed and constructed such that the total usage of each of the load types ~~described~~ specified in Sections 603.2.1 through 603.2.5 Table 603.2 shall be permitted to be measured through the use of installed sub-meters or other equivalent methods as *approved*.

**TABLE 603.2(1)
ENERGY USE CATEGORIES**

<u>Load Category</u>	<u>Description of energy use</u>
Total HVAC system	Heating, cooling and ventilation including, but not limited to fans, pumps, boilers, chillers and water heating.
Total lighting system	Interior and exterior lighting used in occupant spaces and common areas
Plug loads	Devices, appliances and equipment connected to convenience receptacle outlets
Process loads	Any single load of an activity within the building that exceeds 5 percent of the peak connected load of the whole building including, but not limited to data centers, manufacturing equipment and commercial kitchens
Building operations and other miscellaneous loads	Loads not included elsewhere in this table including, but not limited to, vertical transportation systems, automatic doors, motorized shading systems, ornamental fountains, ornamental fireplaces, swimming pools, in-ground spas, snow-melt systems and exterior lighting that is mounted on the building or used to illuminate building facades

~~**603.2.1 HVAC system total energy use.** The HVAC system total energy use category shall include all energy used to heat, cool, and provide ventilation to the building including, but not limited to, fans, pumps, boiler energy, chiller energy and hot water.~~

~~**603.2.2 Lighting system total energy use.** The lighting system total energy use category shall include all interior and exterior lighting used in occupant spaces and common areas.~~

~~**603.2.3 Plug loads.** The plug loads energy use category shall include all energy use by devices, appliances and equipment connected to convenience receptacle outlets.~~

~~**603.2.4 Process loads.** The process loads energy use category shall include the energy used by any single load associated with activities within the building, such as, but not limited to, data centers manufacturing equipment and commercial kitchens, that exceeds 5 percent of the peak connected load of the whole building.~~

~~**603.2.5 Energy used for building operations loads and other miscellaneous loads.** The category of energy used for building operations loads and other miscellaneous loads shall include all vertical transportation systems, automatic doors, motorized shading systems, ornamental fountains and fireplaces, swimming pools, inground spas, snow-melt systems, exterior lighting that is mounted on the building or used to illuminate building facades and the use of any miscellaneous loads in the building not specified in Sections 603.2.1 through 603.2.4.~~

Reason: The format of the section is inconsistent with typical I-Code format. The subsections 603.2.1 through 603.2.5 do not contain any regulations but are merely descriptors (definitions) of 5 energy use (load) categories. The regulation contained in Section 603.2 requires each type of load /energy use to be separately metered. This proposal turns Sections 603.2.1 through 603.2.5 into a table of energy use types/categories. It then revises the paragraph to refer to the table. It also provides consistency in the language used regarding 'load types' and 'categories'. There were various proposals submitted for consideration in the IECC in 2013. While none were successful, most used this format to 'define' the loads. In addition to reformatting the 5 sections into a table, Section 603.2 has been edited to provide a consistent method of referring to the 5 categories. Currently the section and exception says the categories are "defined", "listed" and "described". This proposal replaces all three of those with the phrase 'specified in Table'.

This proposal was submitted by the ICC Sustainability Energy and High Performance Code Action Committee (SEHPCAC). The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. In 2012 and 2013, the SEHPCAC has held six two-day open meetings and 50 workgroup calls, which included members of the SEHPCAC as well as any interested parties, to discuss and debate proposed changes and public comments. Related documentation and reports are posted on the SEHPCAC website at: <http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx>.

Cost Impact: Will not increase the cost of construction. The proposal is editorial in nature and does not change the actual regulation of any element.

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