

NEMA EESCTG 1-2019 NEMA Seismic Guideline 1—General Requirements for Seismic Qualification of Electrical Equipment for Commercial Building Codes

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1. Purpose

The purpose of this guide is to define the general requirements for seismic qualification of electrical equipment to conform with model building code provisions for earthquake resistance. The American Society of Civil Engineers design Standard ASCE/SEI 7 contains requirements for seismic qualification of electrical equipment. By reference to the ASCE/SEI 7, the International Building Code® (IBC) includes provisions for seismic design and certification of electrical equipment (i.e., nonstructural components). These provisions are intended to improve the performance of essential and non-essential electrical equipment and distribution systems subject to strong ground shaking. The electrical equipment seismic qualification requirements contained herein should be followed to establish seismic conformance to both IBC and ASCE/SEI 7 seismic design provisions.

2. Scope

This guide establishes general guidelines for seismic qualification of acceleration sensitive NEMA electrical equipment rigidly attached to the building structure or foundation. Equipment not rigidly attached to the building structure or attached with flexible mounts to the building structure is outside the scope of this guide. Equipment anchorage systems, supports, and attachments are beyond the scope of this document. Electrical equipment falls under the general category of nonstructural building components as defined in the IBC model code and ASCE/SEI 7 design Standard. The applicability of this guide for equipment not explicitly referenced in Appendix A has not been considered.