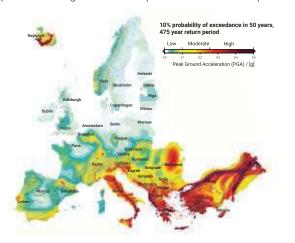
nVent CADDY Seismic Cable **Bracing Solutions**



FOR HVAC INSTALL ATIONS

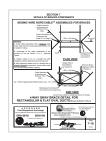
The international building codes (the IBC, the EUROCODES, the Italian NTC, etc.) require that a building's structural and non-structural elements be protected in zones that the local authorities map in their seismic zonation.

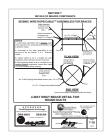
The bracing requirements of each component are defined by the hazard to human life that the failure of this component would induce, by the building's occupancy category, its content, soil and overall characteristics. For instance, bracing requirements of electrical components will be highest in hospitals, data centers and public buildings that must operate after an earthquake.



ASCE 19, standard for structural applications of steel cables for buildings, and ASTM A1023, standard specification for stranded carbon steel wire ropes, lay out the requirements for bracing with cable. They are referenced by the International Building Code and ASCE 7, Minimum Design Loads and Associated Criteria for Buildings and Other Structures, the compliant standard that lays out the guidelines to protect HVACR ductwork components, equipment, fans, air conditioning units, boilers, furnaces, chillers, water heaters, heat exchangers and other mechanical components. The laws and codes mandate the calculation of the maximum selected seismic load to ensure that the bracing solution is capable of supporting duct and HVAC equipment during a seismic event.

Good practice is to use products and bracing assemblies tested and certified by a third party laboratory for this application, making product selection simple.





	Occupancy Category	Peak Ground Acceleration	
		High Risk	Low Risk
T	Low hazard to human life in the event of a failure	Bracing recommended	Bracing not required
Ш	Most buildings, incl. individual housing	Bracing required	Bracing recommended
Ш	Buildings that represent substantial hazard to human life in the event of failure (High occupancy, containing hazardous material, power generation)	Bracing required	Bracing recommended
IV	Essential, first response facilities (Hospitals, police and fire stations, schools, data centers)	Bracing required	Bracing required



International seismic standards accept the use of both cable and rigid bracing. Cable bracing has the advantages of being versatile, lightweight and easily transportable.

To prevent damage to electrical installations:

- · Anchor floor/wall mounted equipment against sliding or overturning
- · Brace suspended objects against swaying and colliding
- · Provide flexibility in elected locations

nVent CADDY Seismic Bracing Solutions are manufactured according to ASCE19 (required by ASCE 7 and IBC) and have been tested by UL, as required by NFPA 13.



The nVent CADDY product offering includes the cable and all the accessories required for bracing installation:

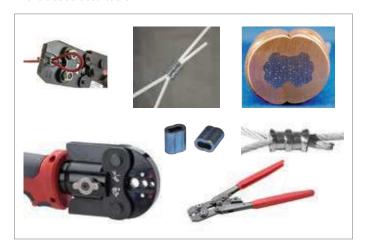
· UL listed wire/cable bracing



· Structural elements



 Oval sleeves to swage on the cable (do not reduce the breaking strength of the cable, nor loosen over time) and the associated tools



· Rod stiffeners



