# What Does HVAC Equipment Have To Do with Earthquakes or Special Seismic Compliance?

Hospitals, schools, governments, emergency shelters, public places, etc. across the country are being required to comply with special seismic requirements. This seismic requirement includes the equipment in the building, not just the structure to achieve special seismic certification.

## What Changed?

Previously, manufacturers would provide calculations as proof that equipment would maintain operation after a seismic event. Newer codes require equipment must be tested on a "shake table" in a lab.

## What Agency or Code regulates this testing?

ICC Evaluation Service, Inc., a non-profit organization has developed a test plan known as AC156 – Acceptance Criteria for Special Seismic Qualification by Shake Table Testing of Nonstructural Components and Systems which is acceptable to IBC, UBC and other local building code governing agencies.

## **SEISMICOMPLIANT\***

\*Meets IBC 2006, ASCE-7-05, CBC 2007 and OSHPD seismic requirements.

Carrier's water-cooled chillers (19XR(V), 23XRV, 30HX and 30MP), air-cooled chillers (30XA, 30RB, 30RAP, 30XV) and split systems (38AP/09DP) product families are special seismic compliant.

# Seismically Certified Products (Water-Cooled Chillers)



AquaEdge® 19XR(V) OSP-0026-10¹ Two-Stage Water-Cooled Centrifugal Chillers



AquaEdge® 19XR(V) OSP-0026-10 Single-Stage Water-Cooled Centrifugal Chillers



AquaEdge® OSP-0406-10 23XRV Water-Cooled Screw Chillers



AquaForce® OSP-0161-10 30HX Water-Cooled Screw Chillers



AquaSnap<sup>®</sup> OSP-0184-10<sup>1</sup> 30MP Water-Cooled Scroll Chillers

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#### **Features**

- Products tested on a shake table, simulating seismic effects as per AC-156 requirements as required by ICC Evaluation Service, Inc.
- Certificate of Compliance or OSHPD pre-approval documents are available at the time of specification and submittals
- Seismic kit is provided along with the equipment for ground or roof installation
- Consultant and Owner know that the equipment was certified for seismic events by an independent third party

# How can I guarantee that the equipment meets AC-156 Seismic Qualification? You can specify the following:

- Manufacturer shall provide pre-approved documentation from OSHPD
- Manufacturer shall provide seismic certificate of compliance
- Manufacturer shall have performed seismic testing (shake table test) of specified model family as per ICC-ES AC-156 by recognized/accredited third party approving agency

For your next project requiring special seismic certification, contact your local Carrier expert for more information.

Seismically Certified Products (Air-Cooled Chillers and Split Systems)	
AquaForce® 30XA Air-Cooled Screw Chillers	OSP-0184-10
AquaSnap® 30RB Air-Cooled Scroll Chillers	OSP-0135-10
AquaSnap® 30RAP Air-Cooled Scroll Chillers with or with Greenspeed Intelligence	OSP-0184-10
AquaForce® 30XV Air-Cooled Screw Chillers	OSP-0184-10
AquaSnap® 30RB Air-Cooled Scroll Chillers with Greenspeed® Intelligence	OSP-0135-10 OSP-0383-10
Gemini® Select 38AP / 09DP Split Systems	OSP-0184-10

<sup>&</sup>lt;sup>1</sup>Certain models only at this time. OSP stands for OSHPD Special Seismic Certification Pre-approval.