

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 & System which is acceptable to IBC, UBC and other local building code governing agencies.

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

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 documentations 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 sales engineer for more information.

SEISMICOMPLIANT*

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

Seismically Certified Products (Water-Cooled Chillers)	OSP Number	Seismically Certified Products (Air-Cooled Chillers and Split Systems)	OSP Number
 AquaEdge® 19XR(V) Two-Stage Water-Cooled Centrifugal Chillers	OSP-0026-10*	 AquaForce® 30XA Air-Cooled Screw Chillers	OSP-0184-10
 AquaEdge® 19XR(V) Single-Stage Water-Cooled Centrifugal Chillers	OSP-0026-10	 AquaSnap® 30RB Air-Cooled Scroll Chillers	OSP-0135-10
 AquaEdge® 23XR(V) Water-Cooled Screw Chillers	OSP-0406-10	 AquaSnap® 30RAP Air-Cooled Scroll Chillers	OSP-0184-10
 AquaForce® 30HX Water-Cooled Screw Chillers	OSP-0161-10	 AquaForce® 30XA Air-Cooled Screw Chillers with Greenspeed® Intelligence	OSP-0184-10
 AquaSnap® 30MP Water-Cooled Scroll 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

*Certain models only at this time.