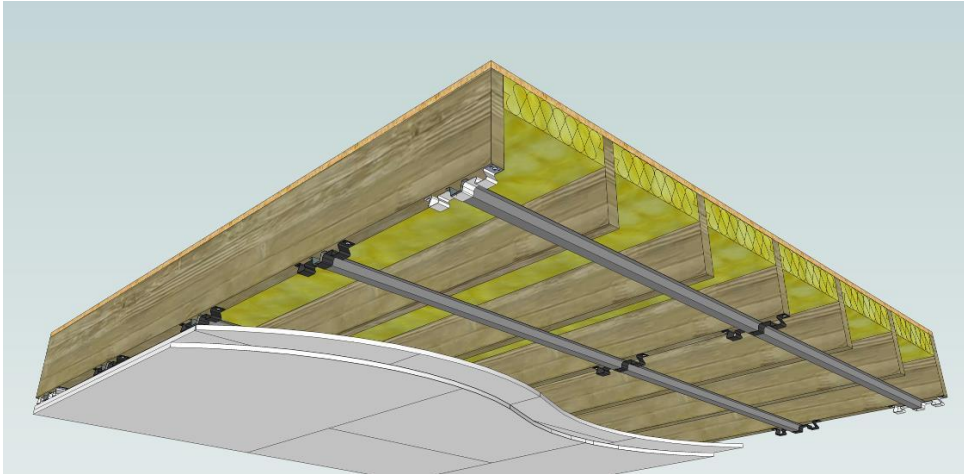


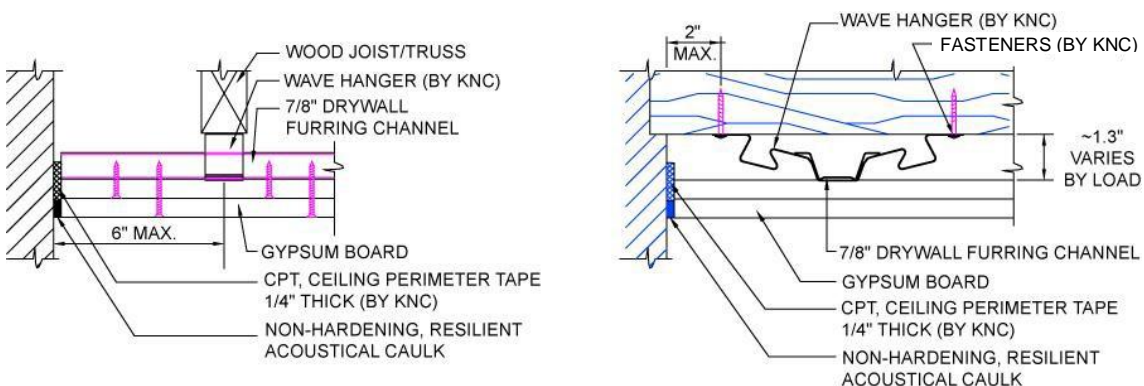
NOISE CONTROL RESILIENT CEILING  
**WAVE HANGER**  
*Patent No. 8,549,809*  
 INSTALLATION GUIDELINES



**Suggested Materials and Tools:**

- WAVE 44 (Black) and WAVE 22 (Silver)
- Kinetics CPT (Ceiling Perimeter Tape)
- 0.875" tall 20-ga (minimum) drywall furring channel
- No. 18 SWG double strand galvanized steel tie wires
- 0.625" Type X (Type C for ESR-3207) Drywall
- No. 10 x 1-1/2-in. Round Washer Recex Lo Root Lubricized Screws (Fastenal #139966, supplied by KINETICS with WAVE Hanger order)
- Hardened Phillips-Square Combo Bit #PSD2-2 (available at local hardware store or supply house)
- No. 7x2-in. fine thread drywall screws
- Non-hardening, resilient acoustical caulk
- Powered screwdriver
- Pliers

**Typical Perimeter Details**  
 (each direction)



## Detailed Installation Guidelines:

WAVE Hangers are typically used for noise-control isolated ceilings with two (2) layers of 5/8" gypsum board. Use the table below to select the WAVE Hanger model for the appropriate load condition under this or any other ceiling construction.

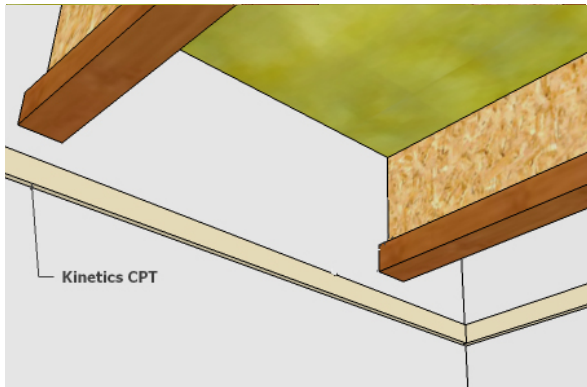
**IMPORTANT NOTE:** Although the graphics and descriptions in this document show specific hangers at perimeter locations, the weight of the ceiling area at the hanger location (see tables below) should determine the correct WAVE Hanger model.

Hanger Selection Guide			
Model	Color	Max Load	Min Load
WAVE 44	Black	44 lbs.	22 lbs.
WAVE 22	Silver	22 lbs.	11 lbs.*

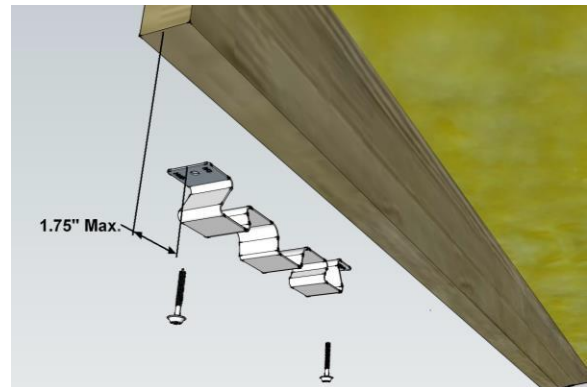
Contributory Area for 2 layers of 5/8" Drywall	
Max	Min area
8 sq ft	4.2 sq ft
4 sq ft	2.2 sq ft**

\*Shimming may be required for level ceilings less than 11 lbs.

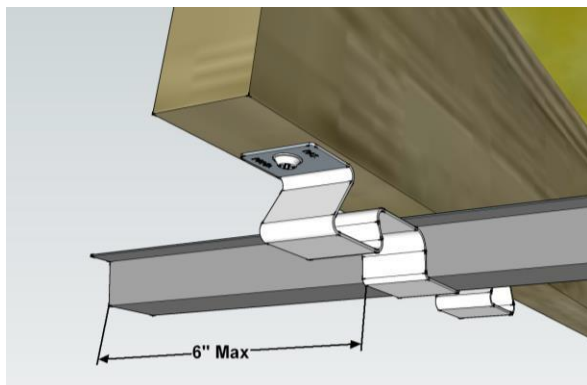
\*\*Shimming may be required if min area is less than 2.2 sq ft



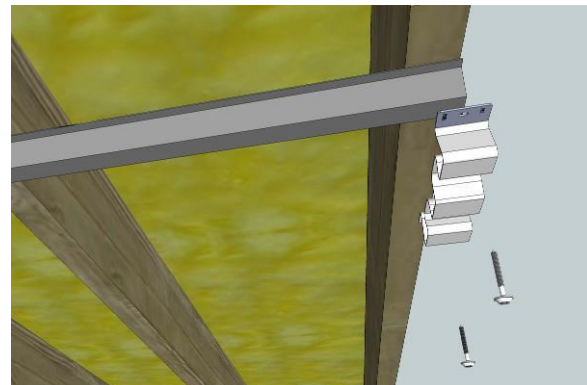
**Step 1:** Install a strip of CPT around the perimeter of the room with the top of the strip 0.30" below the bottom of the joists. (Option: leave 1/4" wide gap at ceiling perimeter, insert resilient backer rod, seal with caulk after drywall is installed)



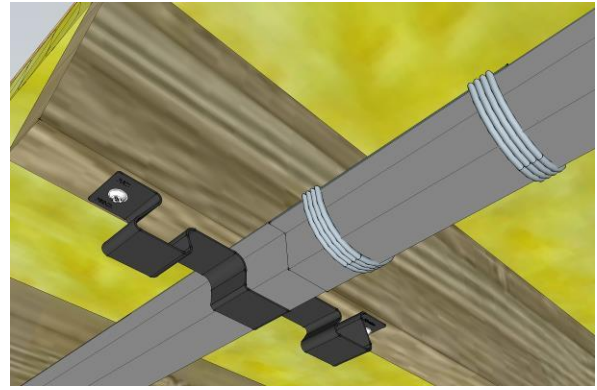
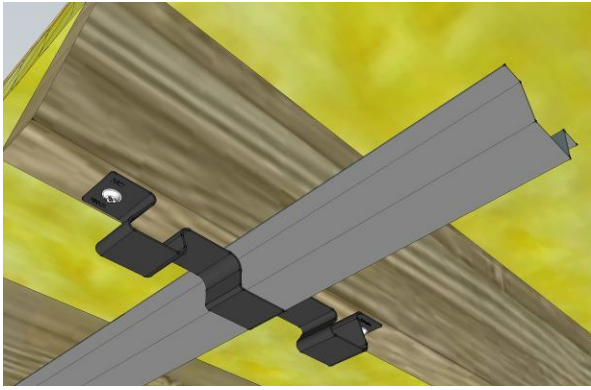
**Step 2:** Starting in one corner, use supplied screws to install a WAVE Hanger 22 (silver finish). Do not install WAVE Hanger with edge more than 1.75" from end of joist.



**Step 3:** Slide drywall furring channel into center section of WAVE Hanger. Do not allow drywall furring channel to touch the wall. Refer to Step 1 for application of CPT.



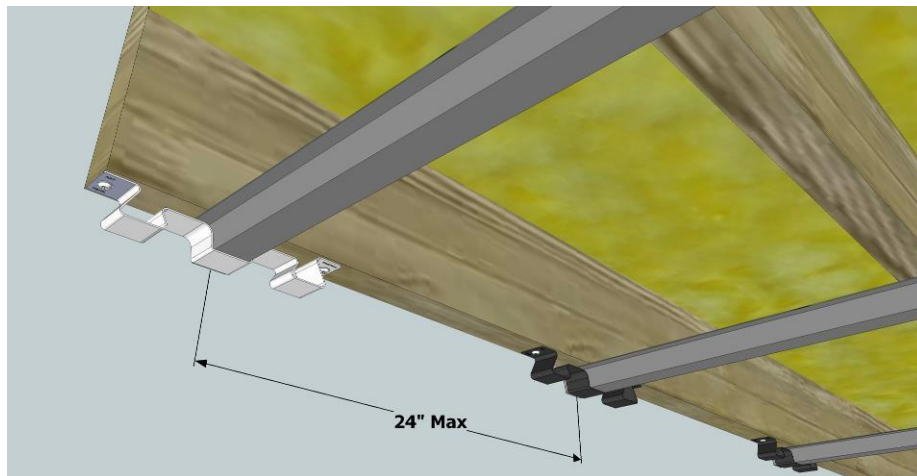
**Step 4:** With supplied screws, install WAVE Hanger 22 (silver finish) on the other end of the ceiling. Do not allow drywall furring channel to touch the wall. Refer to Step 1 for application of CPT.



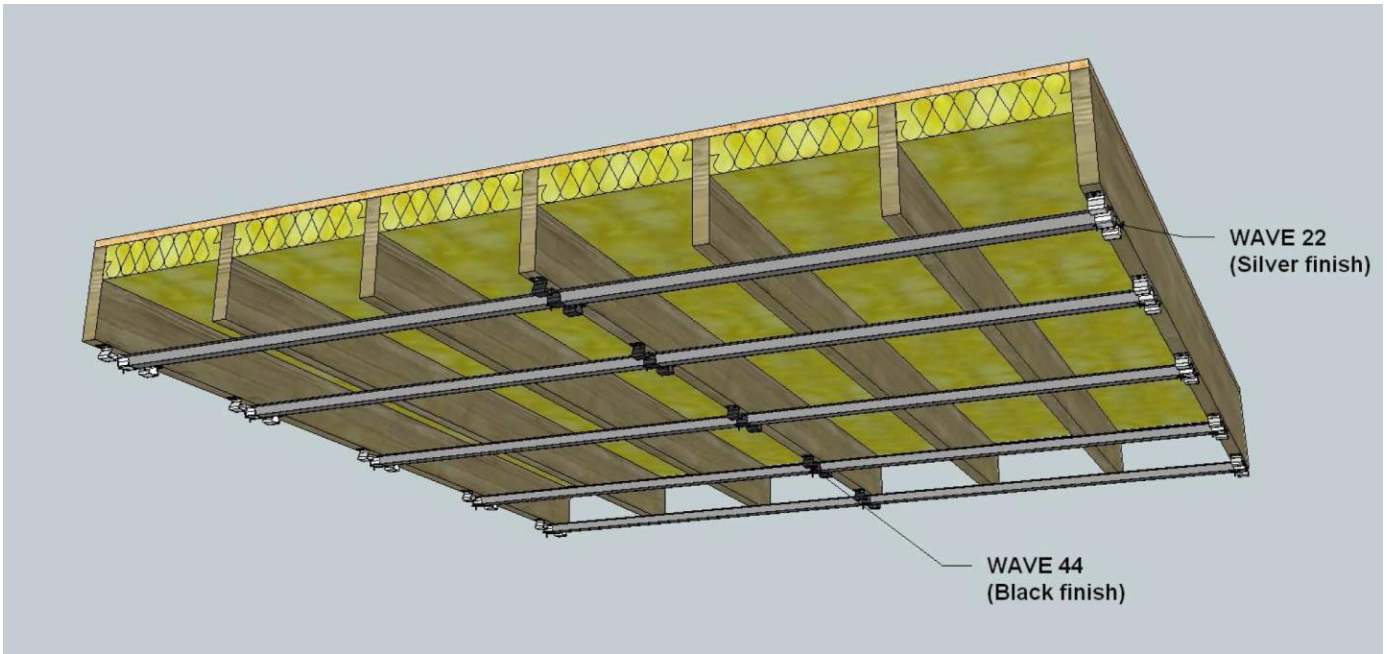
**Step 5:** If the ceiling is longer than the length of standard drywall furring channel, tie two channels together with No. 18 SWG double strand galvanized steel tie wires using standard construction techniques.



**Step 6:** Install *WAVE* Hangers along drywall furring channel so that no two *WAVE* Hangers are more than 48" apart. Use *WAVE 44* everywhere that the hanger supports more than 4-1/2 sq. ft. (approx. 22.5 lbs.) of drywall. In smaller areas, use the lower capacity *WAVE 22* (silver finish).

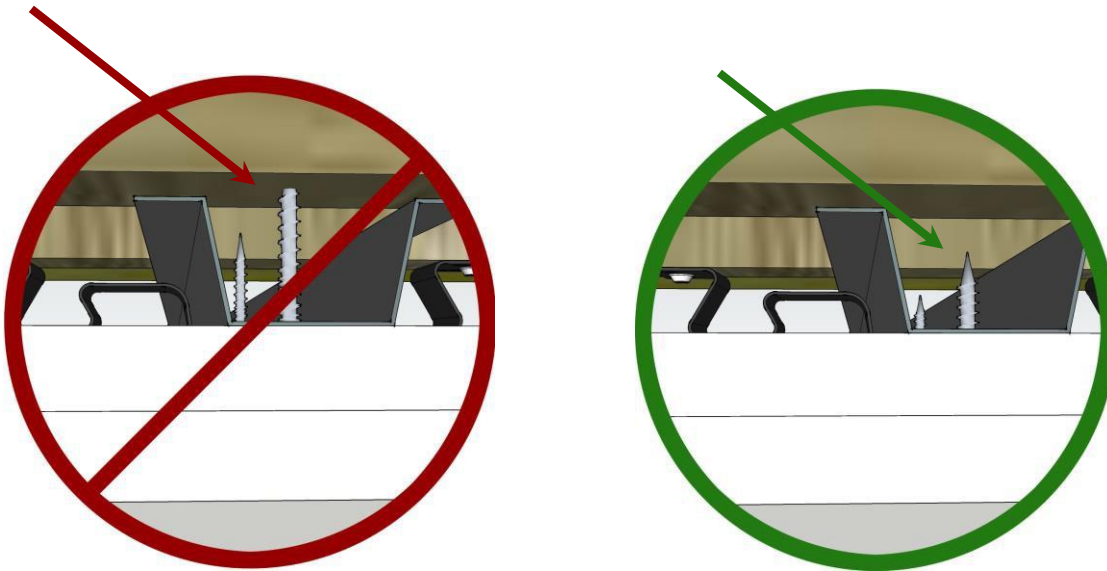


**Step 7:** Install additional hangers so that no two rows of drywall furring channel are more than 24" apart. Use *WAVE 44* everywhere that the hanger supports more than 4-1/2 sq. ft. (approx. 22.5 lbs.) of drywall. In smaller areas, use the lower capacity *WAVE 22* (silver finish).



**Step 8:** Completed Ceiling with *WAVE* Hanger 22 (silver finish) in the corners and areas carrying less than 4-1/2 sq. ft. *WAVE* Hanger 44 (black finish) everywhere else.

### Notes on Drywall Installation:



**Do not screw drywall to joists**

Install drywall to drywall furring channel using accepted practices for drywall installation and for meeting local building code requirements.

NOISE CONTROL RESILIENT CEILING  
**WAVE HANGER**

Patent No. 8,549,809

Appendix A: Seismic Installation

Seismic Zone A:

- No special installation needed

Seismic Zones B-F:

- Individual pieces of drywall furring channel shall be no more than 14 ft long.
- Install one Seismic Restraint Plate (Figure 1) per individual piece of drywall furring channel.
- The Seismic Restraint Plate shall be placed outside of *WAVE* Hanger and attached to the drywall furring channel with #10 -3/4" long hex head self-drilling screws.
- Holes are located on the Seismic Restraint Plate so that a screw will be on either side of the *WAVE* Hanger.
- Do not fasten Seismic Restraint Plate through *WAVE* Hanger

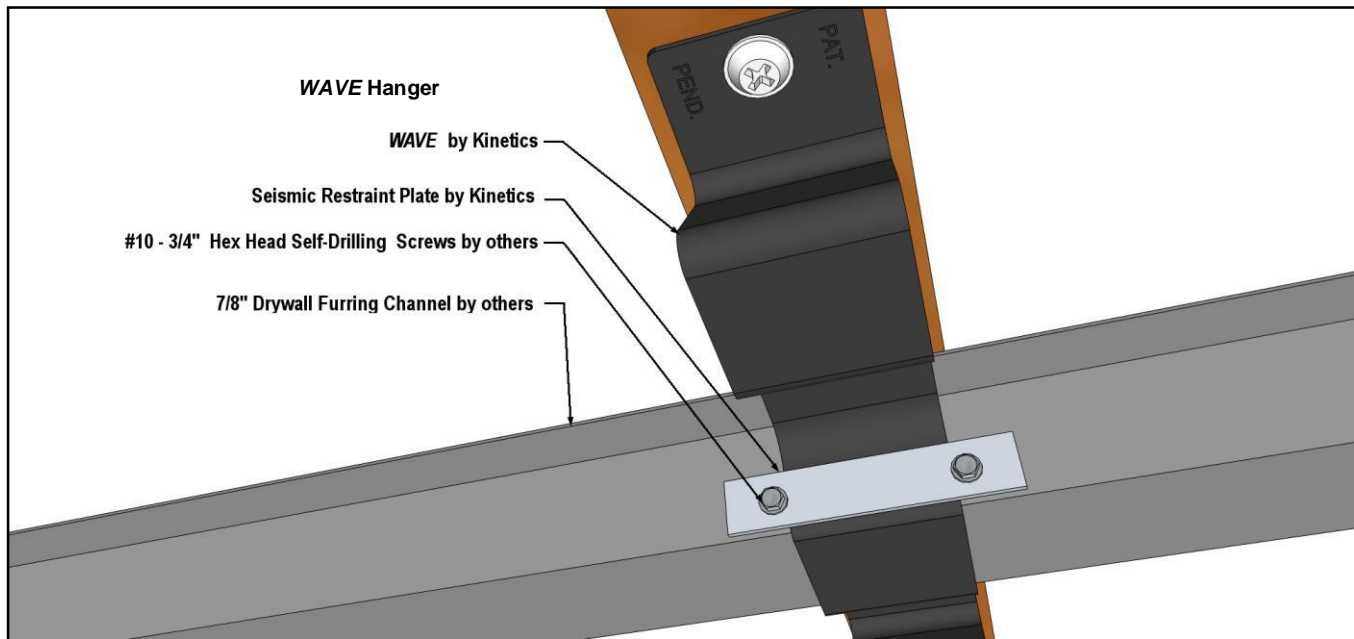


Figure 1: Seismic Restraint Plate Installation for *WAVE* Hanger in seismic zones B-F

**Disclaimer**

*These installation guidelines represent generally accepted procedures for successful installation of Kinetics Noise Control *WAVE* Hanger. These suggestions may be followed, modified, or rejected by the owner, engineer, contractor, and/or their respective representative(s) since they, not Kinetics Noise Control, are responsible for planning and executing procedures appropriate to a specific application. Kinetics Noise Control reserves the right to alter these suggestions and encourages contact with the factory or its representatives to review any possible modification to these installation guidelines prior to commencing installation.*