



MODEL ICW WOOD-FRAME CEILING HANGER

SELECTION GUIDELINES

IMPORTANT! PLEASE READ FIRST:

These suggested selection guidelines represent generally accepted procedures for properly selecting Kinetics Noise Control Model ICW Wood-Frame Ceiling Hanger for ceiling system isolation. 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 suggested guidelines prior to commencing selection.

1. Define ceiling area being isolated and sketch a layout showing the ceiling hanger locations per the following criteria (refer to layout diagram):
 - A. Isolators installed at the perimeter must be located not more than 16" from the edge of the isolated ceiling; maintain at least a three-inch clearance from the perimeter.
 - B. Isolators may be located up to 48" along the perimeter of the isolated ceiling.
 - C. Isolators mounted mid-room (i.e., those isolators not at the perimeter) may be located up to 48" on center each way (o.c.e.w.).
 - D. When ceiling height is to be maximized, it is important to be aware of which direction the joists supporting the structural floor above run. The grid must be oriented so that the cold-rolled steel channel member that is supported directly by the isolators runs parallel to these. Please note this can affect the basic arrangement of the isolators and thus their size and quantity.
 - E. Many room configurations will require non-conventional placement of isolation hangers to support the gypsum board ceiling (i.e., every isolated ceiling cannot be laid out in even rows in each direction). Consideration must be given to supporting the gypsum board ceiling adequately; this may require unique spacing arrangements to accommodate installation of the ceiling grid.
2. Once spacing of the ceiling hangers is determined and sketched, three (3) general areas of the ceiling require load calculations: mid-room, along the perimeter, and in the corners. The total number of calculations required depends on how varied the spacing of the hangers is in each of these areas.
3. Determine the total weight of the layers of gypsum wallboard and ceiling grid components being supported by the isolation hangers. The chart at the top of the next page is useful in determining common weights for materials used in isolated ceiling construction:



Building Material	Weight (psf)
R11 (3-1/2" Fiberglass)	0.50
1-1/2" CRC and 7/8" DWF	0.50
1/2" Gypsum Board (Type X)	1.90
5/8" Gypsum Board (Type X)	2.33

- Additional items such as lights or a lay-in tile ceiling may be suspended from the gypsum board/ceiling grid assembly. The weight of these items needs to be considered when determining the appropriate number/capacity of hangers required.
- Calculate load at each hanger location:

$$\text{_____ lbs/hanger} = \text{Total PSF of ceiling materials} \times \text{SF area carried by hanger}$$

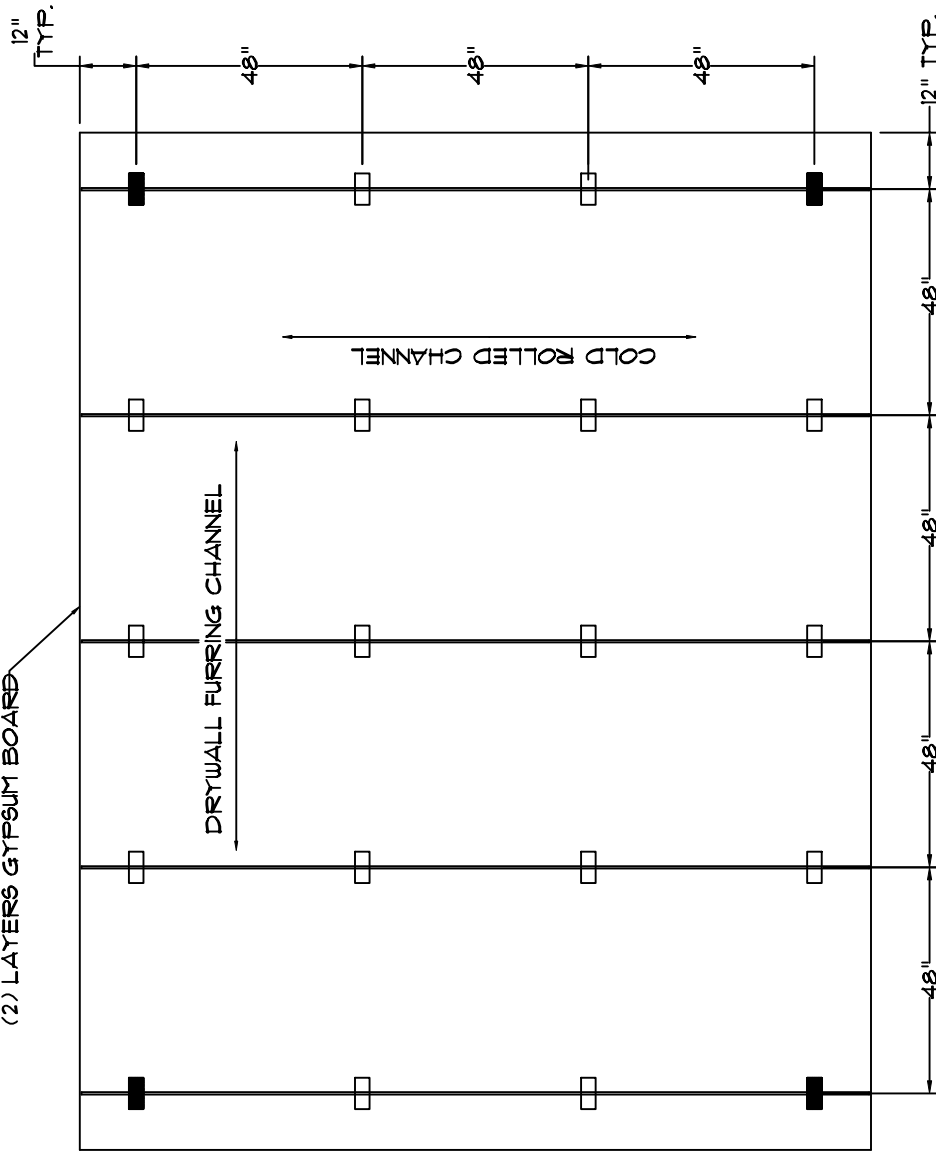
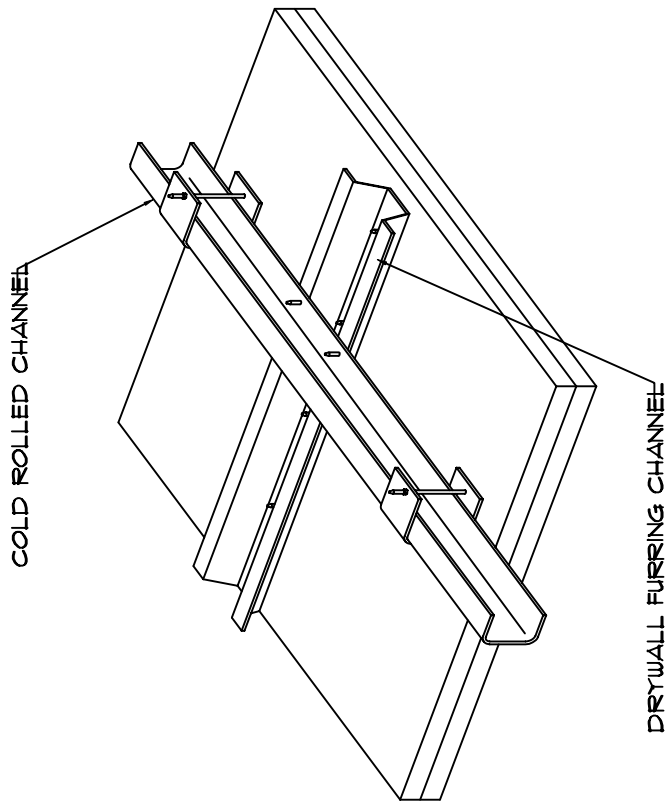
Where, PSF = pounds per square foot
 SF = square feet

- Select appropriate hanger for each location from chart below. Designated model numbers indicate the load at which the isolator deflects one-inch (1") nominal. Every hanger has at least a 50% overload capacity; it is possible to slightly exceed the maximum capacity shown in the chart below:

Model ICW	Spring Color	Capacity Range (lbs.)	Deflection Range (in.)
24	Blue	12-24	0.50-1.00
50	Green	25-50	0.50-1.00
100	Gray	50-100	0.50-1.00
210	Brown	105-210	0.50-1.00



(2) LAYERS GYPSUM BOARD



DRAWING KEY

- - MODEL ICW-50
- - MODEL ICW-100

NOTES:

- 1.) NO CHANNEL SHALL CONTACT PERIMETER AND CREATE A SHORT-CIRCUIT.
- 2.) ATTACH TWO (2) LAYERS OF 5/8" THICK TYPE "X" GYPSUM BOARD TO DUF.
- 3.) SEAL EDGES W/ RESILIENT NON-HARDENING CAULK
- 4.) ISOLATED CEILING CANNOT BE RIGIDLY ATTACHED TO ANY NON-ISOLATED STRUCTURE.

TITLE TYPICAL CEILING HANGER LAYOUT MODEL ICW (1" DEFL.)

LAST DATE REVISED 10/31/03

DRAWN BY TEF

DRAWING NO.

DIAGRAM "A"

