



CEILING SEISMIC PLATE

TECHNICAL BULLETIN
Vol. 11.9
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Latest editions of the building codes recognize that seismic events occur throughout the United States. Every building should be designed to resist seismic loading.

Metl-Span provides Insulated Metal Panels (IMPs) for ceiling applications. The IMP ceiling panels may be required to resist the horizontal moments as a result of such things as seismic events, wind events, and/or live loads. Our seismic plates have been designed to safely transfer the lateral loads from the ceiling into the surrounding building framing.

Seismic plates may not be required if the surrounding walls have a shear capacity greater than the lateral load imposed on those walls. If incorporating our seismic plates into the ceiling and building design is required, the quantity required is a function of the lateral loads and supporting rod angles. Each ceiling analysis should be reviewed on a job to job basis by the engineer of record.

We are providing this bulletin to project engineers as a tool to help with their seismic bracing requirements.

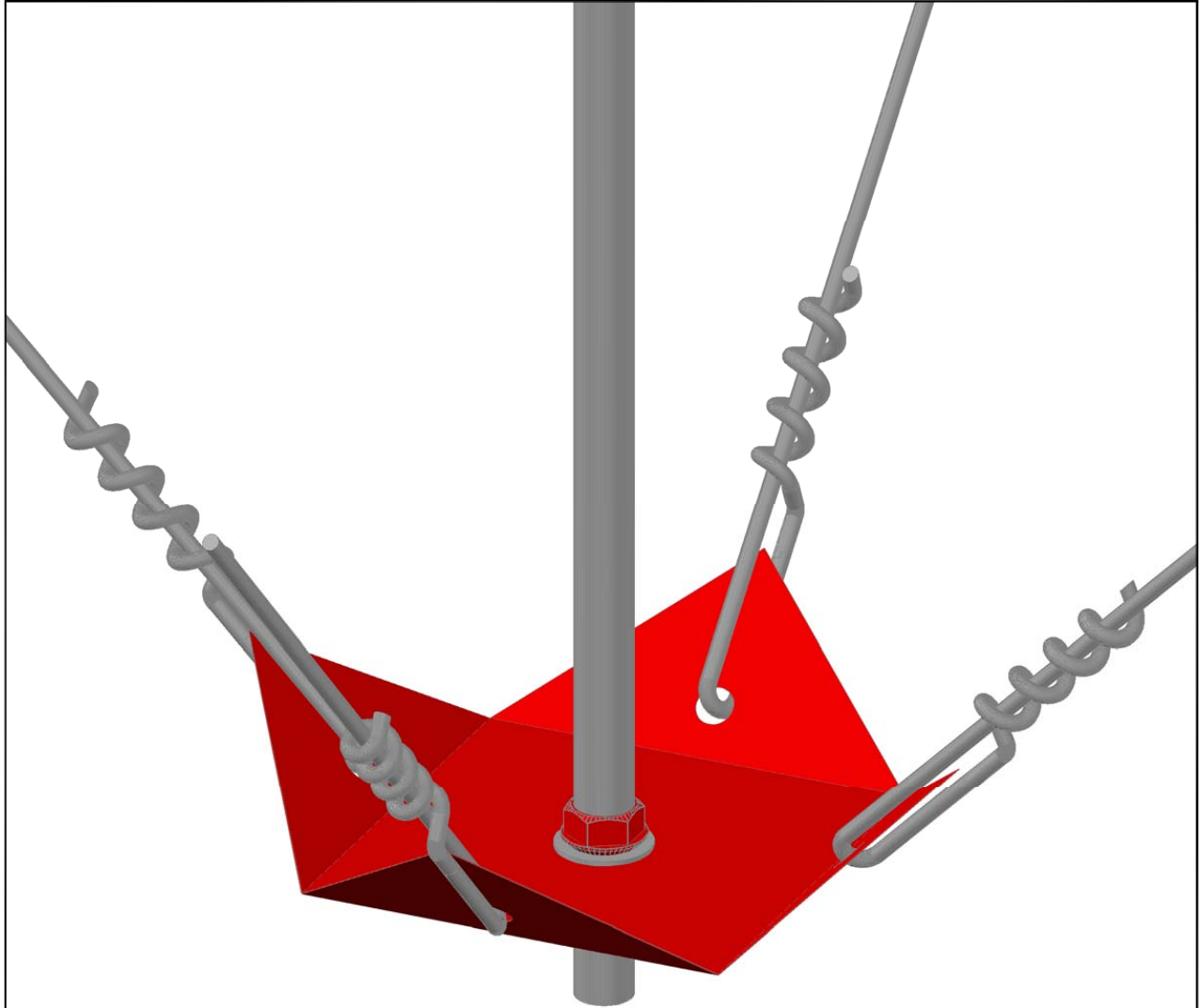
General Notes:

1. Each seismic plate is fastened to the roof supports with (4) wires.
2. The wire is inserted through a wire hole and the wire end wrapped securely around itself with four complete turns.
3. At the supports, the wire end must be wrapped securely around itself with four complete turns or connection with equal connection strength.
4. The wires are min 12 ga. galvanized, soft-annealed steel wire manufactured in accordance with ASTM A641.
5. The wire connection strength was determined from load test and is reported in ENCON Test Report dated October 29, 2013.
6. $V @ \frac{1}{2} \sin \theta \leq \frac{1}{2} A_s \sin \theta \leq \frac{1}{2} A_s \sin \theta$

Allowable Horizontal Load (lb) on Seismic Plate

Wire Diameter	Allowable load on Wire (lb)	Angle of Wire Wire Degree	Allowable load on plate (lb)
12 ga (0.095")	261.15	30	184.7
		35	211.8
		40	237.4
		45	261.2
		50	282.9
		55	302.5
		60	319.8

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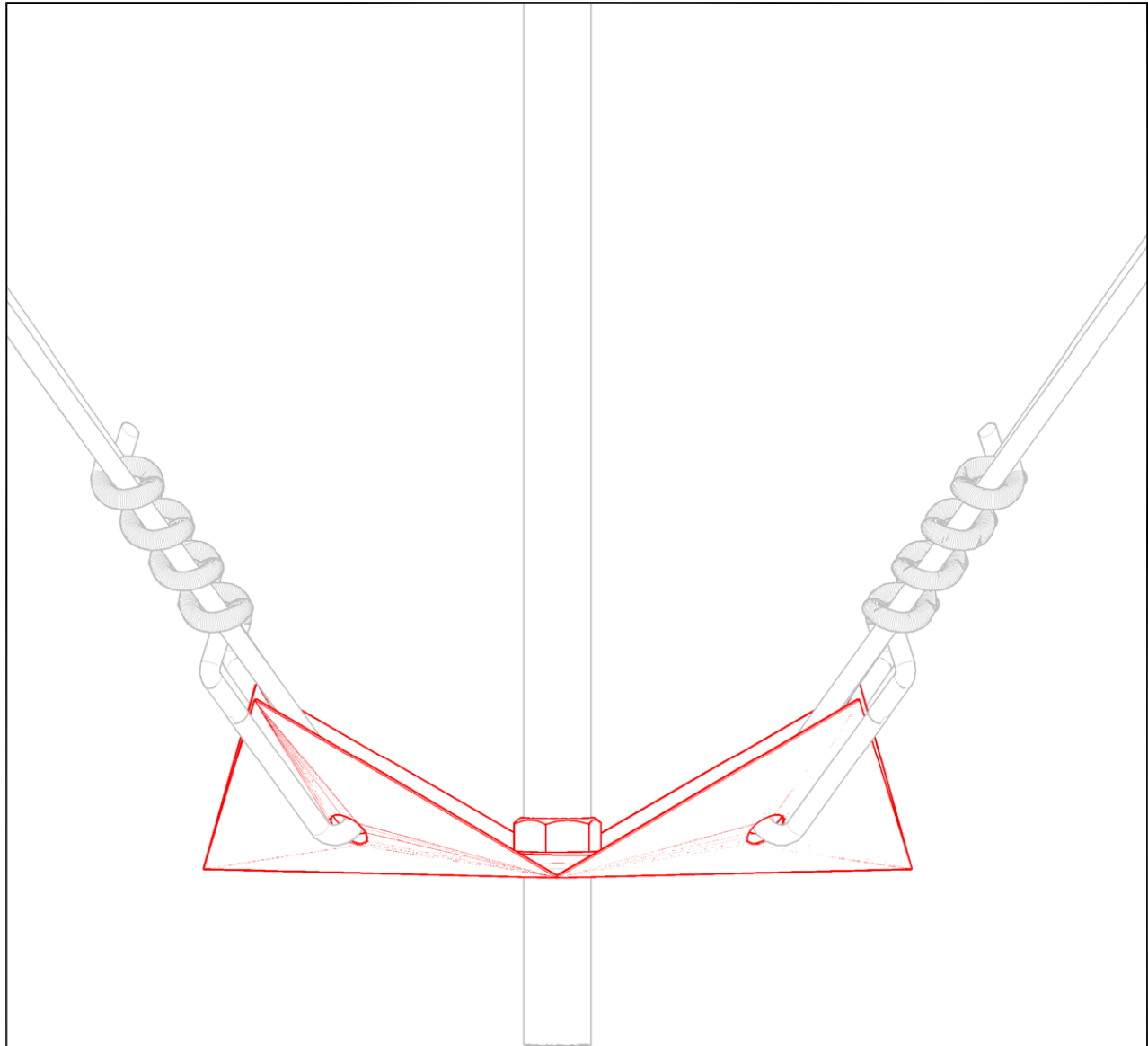


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CEILING SUPPORT
14 GA GALV
SEISMIC PLATE

DRAWN BY:	DATE:	
KDCHILDS	11/25/13	SK-1

CEILING SEISMIC PLATE

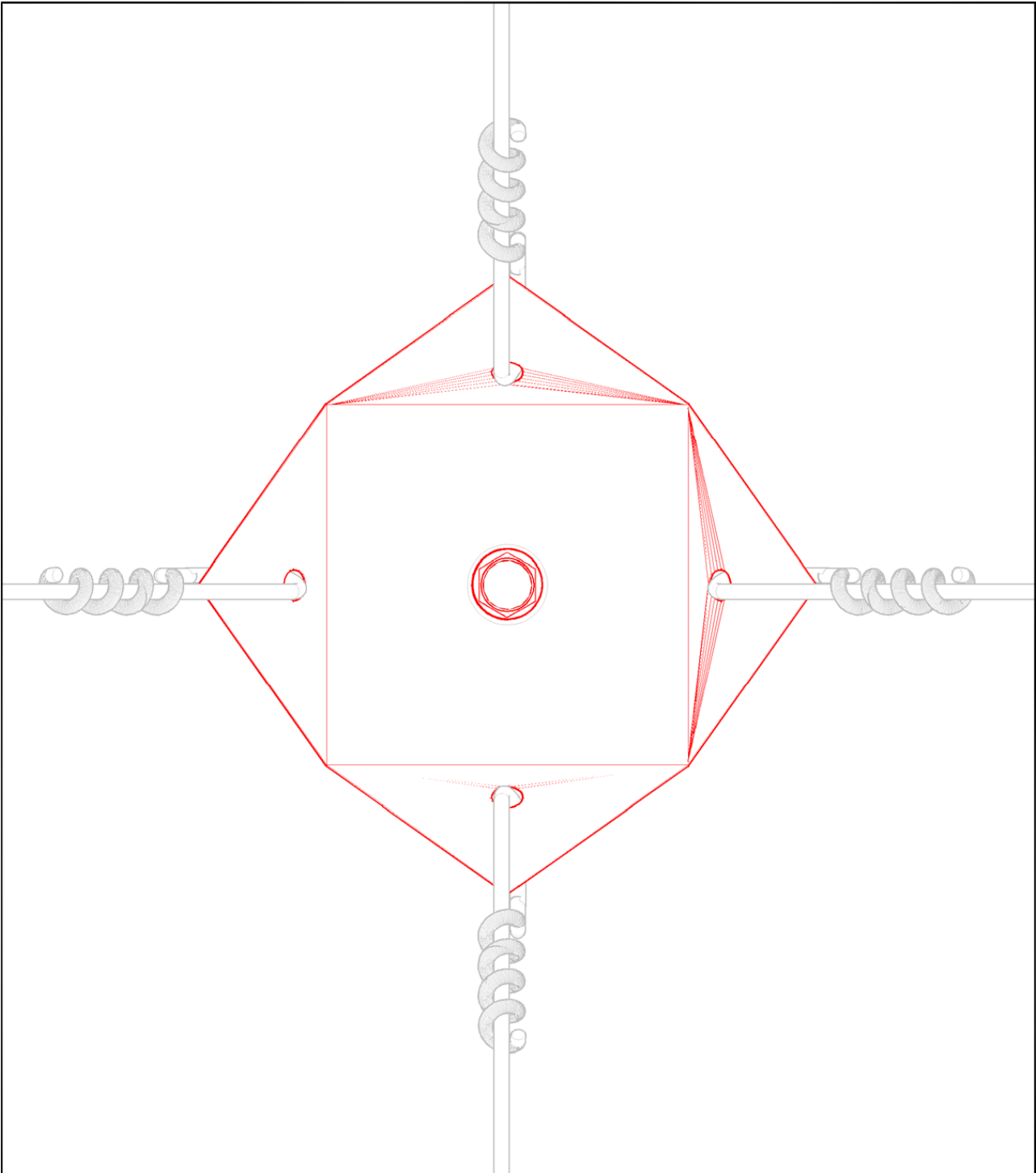


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