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Phone I Fax:	|	E-Mail:	
Design:	Concrete - Jan 16, 2024	Date:	1/16/2024
Fastening point:			

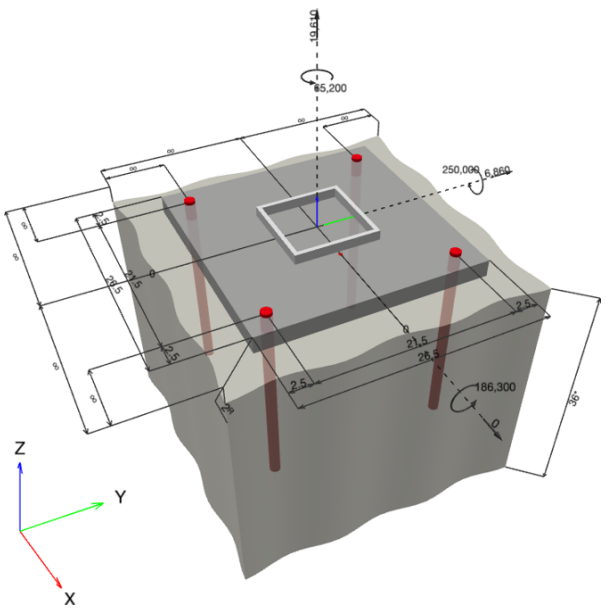
Specifier's comments:

1 Input data

Anchor type and diameter:	**Heavy Hex Head ASTM F 1554 GR. 36 1 1/4**
Item number:	not available
Effective embedment depth:	h_{ef} = 21.370 in.
Material:	ASTM F 1554
Evaluation Service Report:	Hilti Technical Data
Issued I Valid:	- | -
Proof:	Design Method ACI 318-19 / CIP
Stand-off installation:	e_b = 0.000 in. (no stand-off); t = 2.000 in.
Anchor plate[R]:	l_x x l_y x t = 26.500 in. x 26.500 in. x 2.000 in.; (Recommended plate thickness: not calculated)
Profile:	Square HSS (AISC), HSS10X10X.500; (L x W x T) = 10.000 in. x 10.000 in. x 0.500 in.
Base material:	cracked concrete, Custom, f_c' = 4,500 psi; h = 36.000 in.
Reinforcement:	tension: not present, shear: not present; edge reinforcement: none or < No. 4 bar
Seismic loads (cat. C, D, E, or F)	Tension load: yes (17.10.5.3 (a)) Shear load: yes (17.10.6.3 (a))

[R] - The anchor calculation is based on a rigid anchor plate assumption.

Geometry [in.] & Loading [lb, in.lb]



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1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	N = 19,610; V_x = 0; V_y = 6,860; M_x = 186,300; M_y = 250,000; M_z = 65,200;	yes	33

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2 Proof I Utilization (Governing Cases)

		Design values [lb]		Utilization	
Loading	**Proof**	**Load**	**Capacity**	**β_N / β_V [%]**	**Status**
Tension	Pullout Strength	13,706	42,279	33 / -	OK
Shear	Steel Strength	2,587	21,919	- / 12	OK

Loading	**β_N**	**β_V**	**ζ**	**Utilization $\beta_{N,V}$ [%]**	**Status**
Combined tension and shear loads	0.325	0.118	5/3	19	OK

3 Warnings

- Please consider all details and hints/warnings given in the detailed report!

Fastening meets the design criteria!

4 Remarks; Your Cooperation Duties

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