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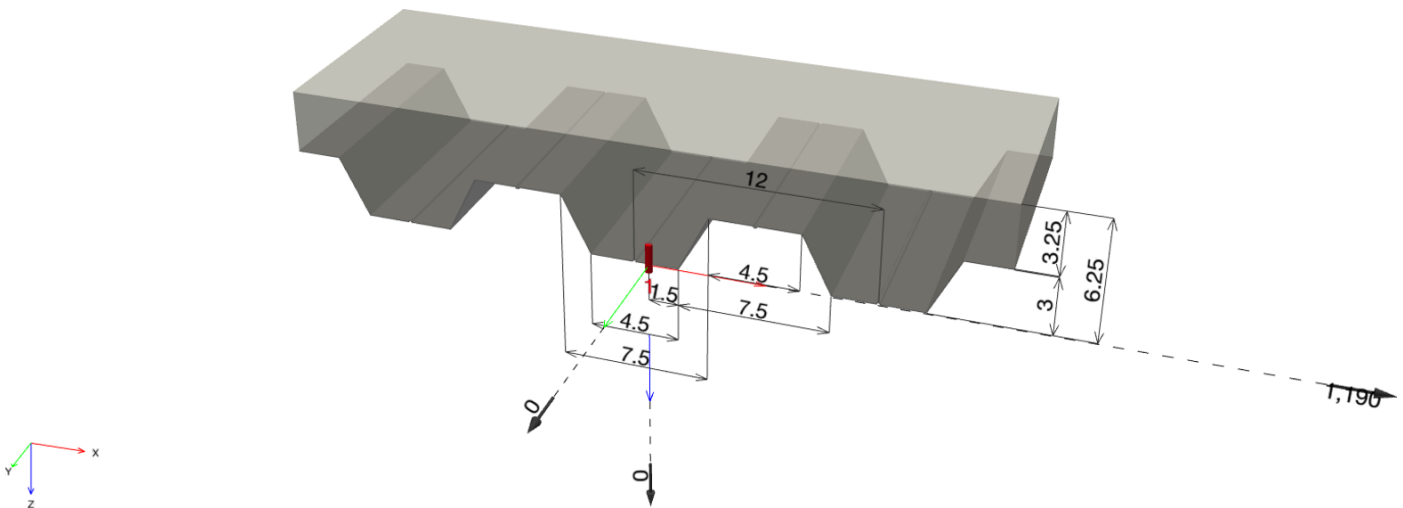
Company:	kpff	Page:	1
Address:		Specifier:	
Phone Fax:		E-Mail:	
Design:	Drafts_Metal deck - May 31, 2023 (3)	Date:	6/2/2023
Fastening point:			

Specifier's comments:

1 Input data

Metal deck:	3 7/8 W Deck	
Metal deck type:	W2	
Anchor installation:	In the lower flute of concrete-filled metal deck	
Anchor type and diameter:	KWIK HUS-EZ (KH-EZ) 3/8 (1 5/8)	
Item number:	418055 KH-EZ 3/8"x1 7/8"	
Effective embedment depth:	$h_{ef,act} = 1.110$ in., $h_{nom} = 1.625$ in.	
Material:	Carbon Steel	
Evaluation Service Report:	ESR-3027	
Issued Valid:	4/1/2022 12/1/2023	
Proof:	Design Method ACI 318-19 / Mech in concrete over metal deck installation	
Stand-off installation:		
Profile:		
Base material:	cracked lightweight concrete, 4000, $f'_c = 4,000$ psi; $h = 3.250$ in.	
Installation:	hammer drilled hole, Installation condition: Dry	

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 = 0; V _x = 1,190; V _y = 0; M _x = 0; M _y = 0; M _z = 0;	no	132

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2 Proof I Utilization (Governing Cases)

Loading	Proof	Design values [lb]		Utilization	Status
		Load	Capacity	β_N / β_V [%]	
Tension	-	-	-	- / -	N/A
Shear	Steel Strength	1,190	906	- / 132	not recommended

Loading	β_N	β_V	ζ	Utilization $\beta_{N,V}$ [%]	Status
Combined tension and shear loads	-	-	-	-	N/A

3 Warnings

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

Fastening does not meet the design criteria!



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4 Remarks; Your Cooperation Duties

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