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Company:	Bedford Reinforced Plastics	Page:	1
Address:	One Corporate Dr. Suite 106, Bedford, PA 15522	Specifier:	
Phone   Fax:		E-Mail:	
Design:	Advantic-Standard Platforms-Item 2-Stair Stringer Ba	Date:	5/31/2022
Fastening point:			

**Specifier's comments:**

**1 Input data**

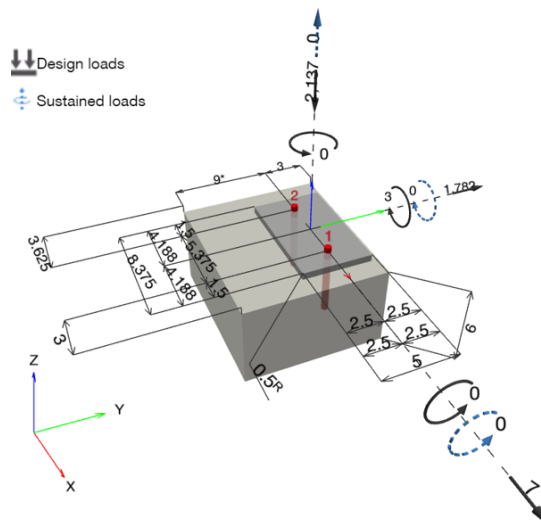
<b>Anchor type and diameter:</b>	<b>HIT-HY 200 + HAS-R 304/316 SS 1/2</b>
Item number:	2045003 HAS-R 316 SS 1/2"x6 1/2" (element) / 2022791 HIT-HY 200-A (adhesive)
Effective embedment depth:	$h_{ef,act} = 4.500$ in. ( $h_{ef,limit} = -$ in.)
Material:	ASTM F 593
Evaluation Service Report:	ESR-3187
Issued   Valid:	5/1/2021   3/1/2022
Proof:	Design Method ACI 318-14 / Chem
Stand-off installation:	$e_b = 0.000$ in. (no stand-off); $t = 0.500$ in.
Anchor plate <sup>R</sup> :	$l_x \times l_y \times t = 8.375$ in. x $5.000$ in. x $0.500$ in.; (Recommended plate thickness: not calculated)
Profile:	no profile
Base material:	cracked concrete, 4000, $f'_c = 4,000$ psi; $h = 6.000$ in., Temp. short/long: 32/32 °F
<b>Installation:</b>	<b>hammer drilled hole, Installation condition: Dry</b>
Reinforcement:	tension: condition B, shear: condition B; no supplemental splitting reinforcement present edge reinforcement: none or < No. 4 bar



Note: the HIT-HY 200 + HAS-R 304/316 SS anchor is in the process of phase-out. As a result, there is limited/no inventory available. Application also possible with HIT-HY 200 V3 + HAS-R 304/316 SS under the selected boundary conditions.

<sup>R</sup> - The anchor calculation is based on a rigid anchor plate assumption.

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





## Hilti PROFIS Engineering 3.0.78

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### 1.1 Design results

Case	Description	Forces [lb] / Moments [in.lb]	Seismic	Max. Util. Anchor [%]
1	Combination 1	$N = -2,137; V_x = 7; V_y = 1,782;$ $M_x = 0; M_y = 3; M_z = 0;$ $N_{sus} = 0; M_{x,sus} = 0; M_{y,sus} = 0;$	no	138



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### 2 Proof I Utilization (Governing Cases)

Loading	Proof	Design values [lb]		Utilization	Status
		Load	Capacity	$\beta_N / \beta_V$ [%]	
Tension	-	-	-	- / -	N/A
Shear	Concrete edge failure in direction x+	1,782	1,294	- / 138	not recommended

Loading	$\beta_N$	$\beta_V$	$\zeta$	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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