

## Design Information in Hollow Core Concrete Per Allowable Stress Design

**Table 34. Hilti KH-EZ, KH-EZ P, KH-EZ PM, KH-EZ PL, KH-EZ C and KH-EZ CRC allowable stress design values for installations into hollow core concrete panels<sup>1,2</sup>**

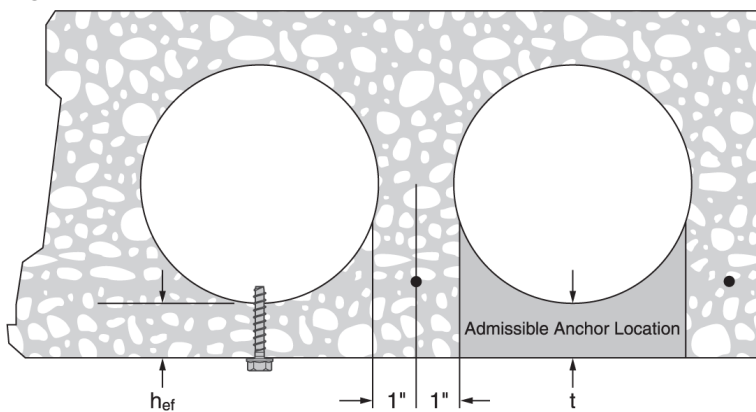
Anchor diameter (in.)	Min. effective embedment $h_{ef}$ (in.)	Allowable load <sup>3</sup>		Ultimate load	
		Tension	Shear	Tension	Shear
1/4	1-1/8	400	610	1600	2440
	1-3/8	455	755	1810	3025
3/8	1-1/8	435	890	1740	3560
	1-3/8	590 (2.6)	1405 (6.3)	2360 (10.5)	5620 (25.0)

<sup>1</sup>The admissible anchor location must be established to prevent damage to the prestressed cable during the drilling process. Verify the location and height of the cable with the hollow core plank supplier to confirm admissible anchor location.

<sup>2</sup>Minimum compressive strength of prestressed concrete is 7,000 psi. Published ultimate loads represent the average results conducted in local base materials. Due to variations in materials and dimensional configurations, on-site testing is required to determine the actual performance.

<sup>3</sup>Allowable loads calculated with a factor of safety of 4.

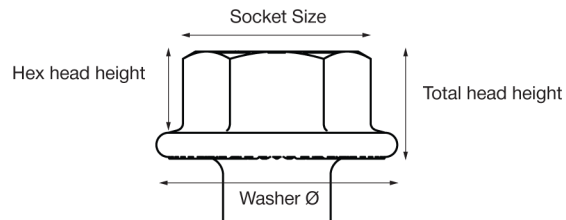
**Figure 8. Installation of Hilti KH-EZ, KH-EZ P, KH-EZ PM, KH-EZ PL, KH-EZ C and KH-EZ CRC in hollow core concrete**



**Table 35. KH-EZ (CRC)<sup>1</sup>**

KH-EZ Ø	Socket Size	Washer Ø	Total head height	Hex head height
1/4"	7/16"	0.65"	0.24"	0.16"
3/8"	9/16"	0.78"	0.35"	0.26"
1/2"	3/4"	1.03"	0.49"	0.35"
5/8"	15/16"	1.28"	0.57"	0.43"
3/4"	1-1/8"	1.48"	0.70"	0.53"

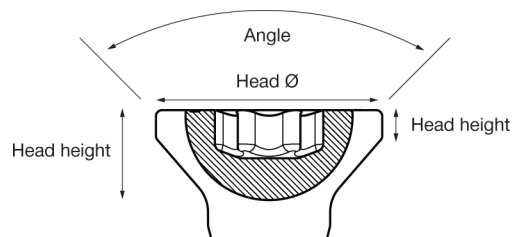
<sup>1</sup>KH-EZ CRC does not come in 1/4" diameter.  
Ø= diameter



**Table 36. KH-EZ C<sup>1</sup>**

KH-EZ Ø	Torx Size	Head Ø	Head height	Flat height	Angle
1/4"	TX30	0.47"	0.16"	0.04"	82°
3/8"	TX50	0.74"	0.28"	0.09"	82°

<sup>1</sup>Ø= diameter



**Table 37. KH-EZ P/PM/PL<sup>1</sup>**

Pan Size	Torx Size	Head Ø= diameter	Head height
P	TX30	0.52"	0.13"
PM	TX30	0.69"	0.13"
PL	TX30	0.86"	0.18"

<sup>1</sup>Ø= diameter

