HDI-P Drop-in Anchor 3.3.10

3.3.10.1 Product Description

The Hilti HDI-P Drop-In anchor is an internally threaded, flush mounted expansion anchor for solid and hollow concrete.

Product Features

- Optimized anchor length to allow reliable fastenings in hollow core panels, precast plank and post tensioned slabs
- Shallow drilling enables fast installation
- Lip provides flush installation, consistent anchor depth and easy rod alignment
- Setting tool leaves mark on flange when anchor is set properly to enable inspection and verification of proper expansion

Guide Specifications

Expansion Anchor Expansion anchors shall be flush or shell type and zinc plated in accordance with ASTM B633, SC 1, Type III. Anchors shall be Hilti HDI-P anchors as supplied by Hilti.

Installation Install shell or flush type anchors in holes drilled with Hilti carbide tipped drill bits. Install anchors in accordance with manufacturer's instructions.

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3.3.10.2 Material Specifications

The HDI-P is manufactured from mild carbon steel, which is zinc plated for corrosion protection in accordance with ASTM B633, SC 1, Type III

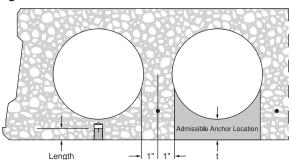
3.3.10.3 Technical Data

Table 1 - HDI-P Loads in Normal-Weight Concrete and Hollow Core Concrete Panels

			Ultimate Loads, lb (kN)								Allowable Loads, lb (kN) ³								
	Length in. (mm)		Bit Size	4000 psi Concrete (27.6 Mpa)				Hollow Core ^{1,2}				4000 psi Concrete (27.6 Mpa)				Hollow Core ^{1,2}			
Desc.			in.	Tension Shear		Tension		Shear		Tension		Shear		Tension		Shear			
HDI-P 1/4	5/8	(15.9)	3/8	1,430	(6.4)	1,870	(8.3)	1,550	(6.9)	2,275	(10.1)	285	(1.3)	375	(1.7)	310	(1.4)	455	(2.0)
HDI-P 3/8	3/4	(19.1)	1/2	1,900	(8.5)	3,000	(13.3)	2,100	(9.3)	4,000	(17.8)	380	(1.7)	600	(2.7)	420	(1.9)	800	(3.6)
HDI-P 1/2	1	(25.4)	5/8	3,000	(13.3)	6,075	(27.0)	3,110	(13.8)	5,495	(24.5)	600	(2.7)	1215	(5.4)	620	(2.8)	1,100	(4.9)

- 1 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.
- 2 Minimum compressive strength of hollow core panels is 7,000 psi at the time of installation. The minimum thickness "t" is 1 3/8 inches.
- 3 Allowable loads calculated with a 5 to 1 factor-of-safety.

Figure 1 - Installation of HDI-P in Hollow Core Concrete



3.3.10.5 Ordering Information

HDI-P Anchor

Description	Bit Diameter	Box Quantity				
HDI-P 1/4	3/8	100				
HDI-P 3/8	1/2	100				
HDI-P 1/2	5/8	50				

Setting Tools for HDI-P Anchors

Description

HST-P 1/4 Hand Setting Tool
HST-P 3/8 Hand Setting Tool
HSD-G 3/8 Hand Setting Tool with hand guard
HST-P 1/2 Hand Setting Tool