

Anchor selection guide

	Section number	Base material ^{1, 2}								Installation [*]						
HIT-HY 200 Adhesive (Type A or R) 	3.2.2	■	■	■		■				A: 7/45 min R: 15/90 min	■ w/HDB only		■			■
HIT-HY 200 Adhesive (Type A or R) with HIT-Z(-R) 	3.2.2	■	■	■		■				A: 7/45 min R: 15/90 min	■	■	■			■
HIT-RE 500 V3 Epoxy 	3.2.3	■	■	■						15 min/ 6.5 hrs	■ w/ HDB or TE-YRT	■	■	■	■	■
HIT-HY 100 Adhesive 	online	■	■	■		■				5 min/ 30 min	■ w/HDB only		■			■
HIT-RE 100 Epoxy 	online	■	■	■						30 min/ 12 hrs			■	■	■	■
HIT-ICE Adhesive 	3.2.4	■	■	■		■				4 min/ 1 hrs	■ w/HDB only		■			■
HIT-HY 270 	3.2.5				■	■	■	■	■	4 min/ 1.5 hrs	■ w/HDB only					□
HVU Capsule 	3.2.6	■		□						8 min/ 20 min			□			■
HIT-HY 10 PLUS 	online	■		□		■	■	■		5 min/ 45 min			□			■
HIT-1 	online	■		■		■	■	■		5 min/ 40 min						■
HIT-RE 10 Transportation Epoxy 	online	■		□						20 min/ 24 hrs			■	□		■

■ Suitable. Technical data is available for this application. Refer to related sections within this technical guide.

□ May be suitable. Anchor system may function properly for this application. However, no substantiating data is available.

* Indicates suitability for the stated condition alone. If multiple conditions apply simultaneously, see product specific details within this technical guide or contact Hilti Technical Services.


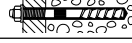
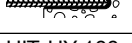

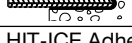
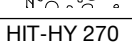

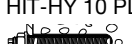
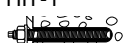

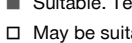
¹ Base material may vary widely. Site specific anchor testing may be required.

² Unless otherwise stated, testing is performed in normal weight concrete. Lightweight concrete may be available. See product specific details within this technical guide or consult the relevant building codes (ACI 318, IBC, etc.).

³ Refer to Section 2.1.2 for definition of cracked concrete.

⁴ Diamond coring is applicable where noted, however, it can be restricted to certain base materials, installation conditions and applications, certain Hilti tools, or have associated load reduction. See product specific details within this technical guide.

Anchor selection guide

	Approvals					Features*					Element Type			Corrosion resistance ²			Size ³		
	ICC-ES/EAPMO UES	ACI 355.4	COLA / LABC Supplement	FLORIDA BUILDING CODE	NSF 61	Seismic	In-place (through) fastening	High cycle fatigue ¹	Shock / impact load ¹	High temperature resistance	Threaded rod	Internally threaded insert	Rebar	Electro / mechanically zinc plated	Hot dip galvanized	Stainless steel	Minimum size (diameter)	Maximum size (diameter)	
HIT-HY 200 Adhesive (Type A or R) 	AC308 AC58	■	■	■ w/ HVHZ	■	■	■	□		□	■	■	■	■	■	304/ 316	3/8"	1-1/4"	3.2.2
HIT-HY 200 Adhesive (Type A or R) HIT-Z(-R) 	AC308 AC58	■	■	■ w/ HVHZ	■	■	■	□		□	■			■		316	3/8"	3/4"	3.2.2
HIT-RE 500 V3 Epoxy 	AC308	■	■	■ w/ HVHZ	■	■	■	□	□	□	■	■	■	■	■	304/ 316	3/8"	1-1/4"	3.2.3
HIT-HY 100 Adhesive 	AC308 AC 58	■		■ w/ HVHZ	■		■			□	■	■	■	■	■	304/ 316	3/8"	1-1/4"	
HIT-RE 100 Epoxy 	AC308	■	■	■ w/ HVHZ	■	■	■	□	□	□	■		■	■	■	304/ 316	3/8"	1-1/4"	
HIT-ICE Adhesive 		■					■			□	■	■	■	■	■	304/ 316	3/8"	1-1/4"	3.2.4
HIT-HY 270 	AC58 AC60		■	■		■	□				■	■	■	■		304/ 316	1/4"	3/4"	3.2.5
HVU Capsule 						□	■			□	■	■	■	■	■	304/ 316	3/8"	1-1/4"	3.2.6
HIT-HY 10 PLUS 						□	■				■		■	■			3/8"	3/4"	
HIT-1 							■				■	■		■		304/ 316	3/8"	1-1/4"	
HIT-RE 10 Transportation Epoxy 						□	■				■		■	■	■	304/ 316	3/8"	1-1/4"	

■ Suitable. Technical data is available for this application. Refer to related sections within this technical guide.

□ May be suitable. Anchor system may function properly for this application. However, no substantiating data is available.










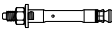
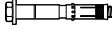
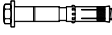


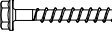
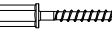

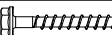
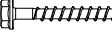
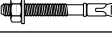

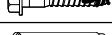
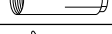
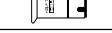
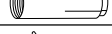
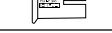



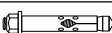
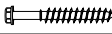
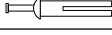
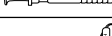

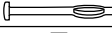


* Indicates suitability for the stated condition alone. If multiple conditions apply simultaneously, see product specific details within this technical guide or contact Hilti Technical Services.

¹ High cycle fatigue and shock/impact loading reference data is only available based on European testing and guidelines.

² Refer to Section 2.3 for a more detailed discussion on corrosion and corrosion resistance.

³ Listed diameters are those with published load data. Larger diameter elements may be used with some adhesive anchor systems. Contact Hilti for more information.

Anchor selection guide

		Section number	Base material ^{1,2}										Features			
																
			Uncracked concrete	Cracked concrete ³	Lightweight concrete	Concrete over metal deck	Hollow-core concrete	Grout-filled concrete block	Hollow concrete block	Hollow clay brick	Unreinforced Multi-wythe brick	Seismic	In-place (through) fastening	High cycle –fatigue ⁴	Shock / impact load ⁴	
HDA Undercut Anchor		3.3.1	■	■	■							■	■	□	□	
HSL-3 Heavy-duty Expansion Anchor		3.3.2	■	■	■							■*	■	□	□	
HSL-GR Heavy-duty Expansion Anchor		3.3.3	■		□							□	■	□	□	
HSL-I Internally Threaded Exp. Anchor		3.3.4	■		□							□	■	□	□	
KWIK Bolt TZ Expansion Anchor		3.3.5	■	■	■	■		■				■	■			
KWIK HUS-EZ Screw Anchor		3.3.6	■	■	■	■		■				■	■			
KWIK HUS-EZ I Screw Anchor w/coupler		3.3.7	■	■	■	■	■					■	■			
KWIK Bolt 3 Expansion Anchor		3.3.8	■		■	■		■				□	■			
KWIK HUS Screw Anchor		3.3.9	■		■	■		■				□	■			
HUS-HR/CR Screw Anchor		3.3.10	■	■	■							■	■			
KB-VTZExpansion Anchor		online	■	■	■	■						■	■			
KBV Expansion Anchor		online	■		■			■					■			
HCA Coil Anchor		3.3.11	■										■			
HDI+/HDI-L+/HDI/HDI-L Drop-In Anchor		3.3.12	■		■	■		□								
HDI-P TZ Drop-in Anchor		3.3.13	■	■	■		□					■				
HDV Drop-In Anchor		online	■		■	■		□								
HDI-P Drop-In Anchor		3.3.14	■		□		■	□								
KCM-WF/PD Cast-in Anchor		3.3.15	■	■	■							■				
KCM-MD Cast-in Anchor		3.3.16	■	■	■							■				
KCS-WF		3.3.17	■	■	■	■						■				
HLC Sleeve Anchor		3.3.18	■		□	□	□	□	■	□	■		■			
KWIK CON II+ Screw Anchor		3.3.19	■		□	□	□	□	■	■	■		■			
Metal HIT Anchor		online	■		□	□	□	□	■	□	■		■			
HPS-1 Impact Anchor		online	■		□		□	□	■	□	■		■			
HTB-2		online							■				□			
HSH Split Bolt		online	■										■			
HLD KWIK-Tog		online	□		□		□	□	■	□	□					
IDP Insulation Anchor		online	■		■		□	□	□	□	■		■			

■ Suitable. Technical data is available for this application. Refer to related sections within this technical guide.

□ May be suitable. Anchor system may function properly for this application. However, no substantiating data is available.

* No diamond cored holes

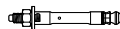

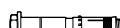

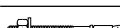
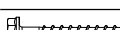



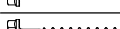











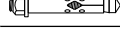
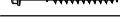
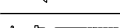

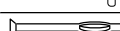
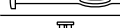

¹ Base material may vary widely. Site specific anchor testing may be required.

² Unless otherwise stated, testing is performed in normal weight concrete. Lightweight concrete may be available. See product specific details within this technical guide or consult the relevant building codes (ACI 318, IBC, etc.).

³ Refer to Section 2.1.2 for definition of cracked concrete.

⁴ High cycle fatigue and shock/impact loading reference data is only available based on European testing and guidelines.

Anchor selection guide

		Approvals						Head type				Corrosion resistance ¹				Size ²		
		ICC-ES/APMO UES	ACI 355.2	FM	UL	COLA/LABC Supplement	Florida Building Code High Velocity Hurricane Zone	Stud (Externally threaded)	Flush (Internally threaded)	Hex bolt	Round / mushroom	Electro / mechanically zinc plated	Hot dip galvanized	Sheradized carbo steel	Stainless steel	Minimum size (diameter)	Maximum size (diameter)	
HDA Undercut Anchor		AC193	■			■		■				■		■	316	M10	M20	3.3.1
HSL-3 Heavy duty Expansion Anchor		AC193	■			■		■	■	■		■				M8	M24	3.3.2
HSL-GR Heavy duty Expansion Anchor								■	■						316	M10	M20	3.3.3
HSL-I Internally Threaded Exp. Anchor								■	■			■				M12	M12	3.3.4
KWIK Bolt TZ Expansion Anchor		AC01 AC193	■	■	■	■		■				■			304/ 316	3/8"	3/4"	3.3.5
KWIK HUS-EZ Screw Anchor		AC193 AC106	■			■	■			■		■				1/4"	3/4"	3.3.6
KWIK HUS-EZ I Screw Anchor w/coupler		AC193	■	■		■	■		■			■				1/4"	3/8"	3.3.7
KWIK Bolt 3 Expansion Anchor		AC01 AC193	■	■	■	■	■	■				■	■		304/ 316	1/4"	1"	3.3.8
KWIK HUS Screw Anchor			■							■		■				3/8"	3/4"	3.3.9
HUS-HR/CR Screw Anchor										■					316	M6	M14	3.3.10
KB-VTZ Expansion Anchor		AC193	■	■	■	■		■				■				3/8"	3/4"	
KBV Expansion Anchor					■			■				■				1/4"	3/4"	
HCA Coil Anchor										■		■				1/4"	3/4"	3.3.11
HDI+/HDI-L+/HDI/HDI-L Drop-In Anchor				■	■				■			■			303	1/4"	3/4"	3.3.12
HDI-P TZ Drop-in Anchor		AC193	■	■	■	■			■			■				3/8"	3/8"	3.3.13
HDV Drop-In Anchor				■	■				■			■			303	1/4"	1/2"	
HDI-P Drop-In Anchor				■					■			■				3/8"	3/8"	3.3.14
KCM-WF/PD Cast-in Anchor		AC446		■	■	■			■			■				1/4"	3/4"	3.3.15
KCM-MD Cast-in Anchor		AC446		■	■	■			■			■				1/4"	3/4"	3.3.16
KCS-WF		AC446		■	■	■			■			■				1/4"	3/4"	3.3.17
HLC Sleeve Anchor					■						■	■			304	1/4"	3/4"	3.3.18
KWIK CON II+ Screw Anchor							■					■			410	3/16"	1/4"	3.3.19
Metal HIT Anchor												■			304	3/16"	1/4"	
HPS-1 Impact Anchor												■			304	3/16"	5/16"	
HTB-2												■				3/16"	1/2"	
HSH Split Bolt											■	■				1/4"	1/4"	
HLD KWIK-Tog																#8	#10	
IDP Insulation Anchor																		

■ Suitable. Technical data is available for this application. Refer to related sections within this technical guide.

□ May be suitable. Anchor system may function properly for this application. However, no substantiating data is available.

* No diamond cored holes

¹ Refer to Section 2.3 for a more detailed discussion on corrosion and corrosion resistance.

² Listed diameters are those with published load data.