



PRODUCTIVE, RELIABLE, SAFE SOLUTIONS

**Chemical and Mechanical
Anchor Systems**



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CHEMICAL ANCHOR
SYSTEMS YOU
CAN TRUST

Hilti Chemical Anchor Systems

For a specifier or installer of anchoring connections, ensuring the safety and longevity of the build is paramount. That's why our products undergo extensive trials and technical assessments.


We offer a full suite of ETA assessed chemical anchoring solutions to suit every application from basic through to the most complex and challenging. Our wide range of injectable and capsule adhesive systems provide reliable solutions for fastening threaded rods, rebars and other elements to concrete, masonry and natural stone.

Our products are backed by an extensive array of technical resources including software, ETA documentation, technical data, installation instructions and videos.

CHEMICAL ANCHOR TECHNOLOGIES TO SUIT ALL NEEDS

The Hilti chemical anchor portfolio

ULTIMATE ●●●●●

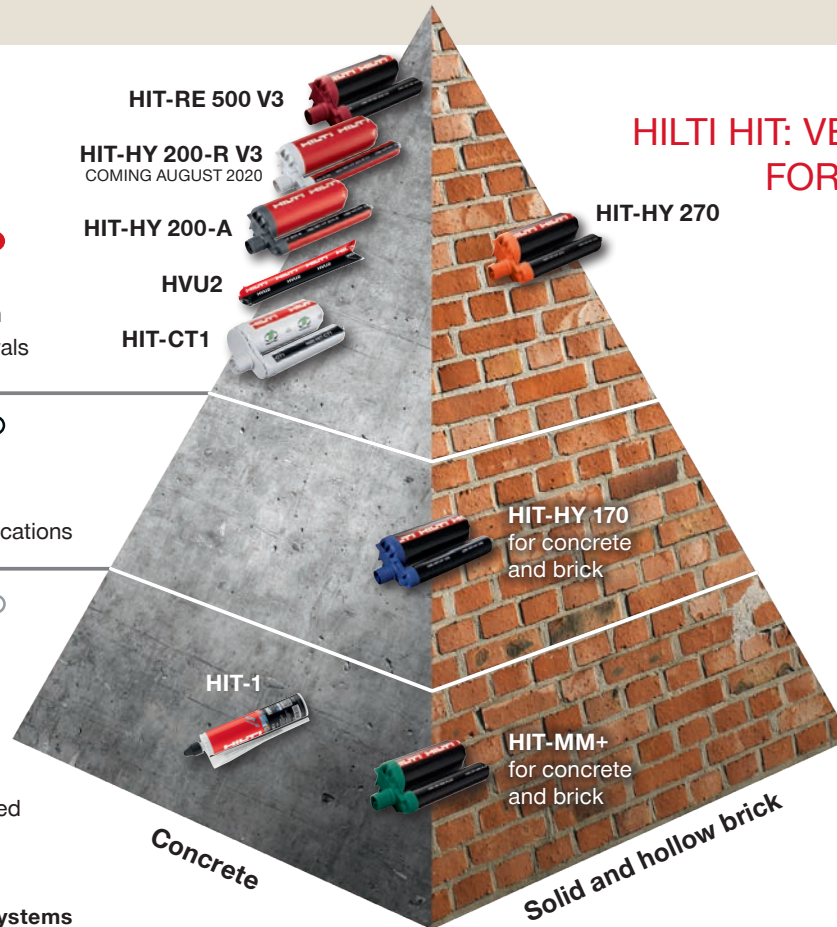
- ETA Approved 
- Ultimate bond strength
- Highest level of approvals

PREMIUM ●●●●○

- ETA Approved 
- Versatile all-rounder
- Ideal for “open” specifications

STANDARD ●●●○○

- Versatile all-rounder
- Non safety-critical applications
- Non-structural applications
- Applications not covered in design drawings



HILTI HIT: VERSATILE SOLUTIONS FOR EVERY APPLICATION

Hilti injection technology HIT

- Wide range of applications
- Light-duty through to heavy-duty solutions
- Allows flexible anchor design and installation
- Solutions for all base materials

CHEMICAL ANCHOR TECHNOLOGIES TO SUIT ALL NEEDS

The Hilti chemical
anchor portfolio








HILTI HVU2: SIMPLICITY IN A CAPSULE AND ROD SYSTEM

Hilti capsule technology HVU2





























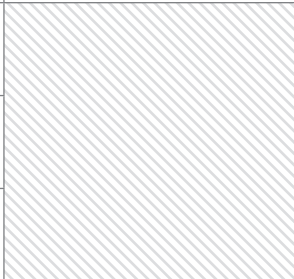




- Anchors can be loaded almost instantly – only 5 minutes curing time at 20°C and above
- High performance in cracked and uncracked concrete.
- Each capsule contains exactly the right amount of resin, for maximum efficiency and economy – no wastage and no need for complex calculations
- Tough and resilient soft foil capsule – no more risk of breakage, like with glass capsules



ALL BASES COVERED / Chemical anchors for all common base materials









Base material	Product
Concrete 	        <p>RE 500 V3* HY 200-R V3 HY 200-A HVV2* HIT-CT1 HY 170 HIT-MM+ HIT-1</p> <p>*Small edge distance and spacing</p>
Masonry 	    <p>HY 270 HY 170 HIT-MM+ HIT-1</p>
Natural Stone 	 <p>RE 500 V3</p>
Glass 	 <p>HY 270</p>

DIAMOND CORED OR WATER-FILLED HOLES? / No problem for our premium chemical anchors

Hammer drilled	Diamond cored	Dry concrete	Wet concrete (no standing water)	Submerged borehole in concrete	
					
 RE 500 V3	 RE 500 V3	 RE 500 V3	 RE 500 V3	 RE 500 V3	
 HY 200-A	 HY 200-A	 HY 200-A	 HY 200-A		
 HY 200-R V3	 HY 200-R V3	 HY 200-R V3	 HY 200-R V3		
 HY 170		 HY 170	 HY 170		
 HVU2		 HVU2	 HVU2		
 HIT-CT1		 HIT-CT1			
 HIT-MM+		 HIT-MM+			
 HIT-1		 HIT-1			

AN ADHESIVE FOR EVERY APPLICATION

/ From light-duty through to heavy-duty

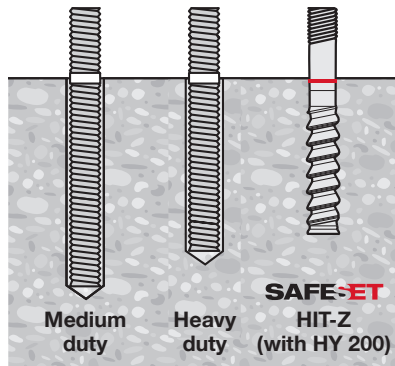
Product	Light Duty	Medium Duty	Heavy Duty
<div>Super fast cure capsule</div> <div></div> <div>HVU2</div>			
<div>Slow cure injection</div> <div></div> <div>RE 500 V3</div>			
<div></div> <div></div> <div>HY 200-R V3*</div>			
<div></div> <div></div> <div>HY 200-A</div>			
<div>Fast cure injection</div> <div></div> <div>HY 170</div>			
<div></div> <div></div> <div>HIT-CT1</div>			
<div></div> <div></div> <div>HIT-MM+</div>			
<div></div> <div></div> <div>HIT-1</div>			

AN ADHESIVE FOR EVERY APPLICATION /

From light-duty
through to heavy-duty

When time is money, choose SAFESET HY 200 + HIT-Z



















- Same load capacity
- Less mortar
- Less rebar hits
- Less drill time, less drill bits
- Shorter rod



Download the Volume Calculator
app from Google Play or the
App Store



Super Fast Cure	Fast Cure			Slow Cure
 0 min 5 min HVU2	 15 min 90 min HY 200-R V3	 9 min 60 min HY 200-A	 5 min 90 min HY 170	 30 min 7 hr RE 500 V3
	 4 min 75 min HIT-CT1	 5 min 45 min HIT-MM+		
	 4 min 30 min HY 270	 6 min 45 min HIT-1		
<p>Key</p> <p> Working time</p> <p> Curing time at 20° C</p>	Allows the most immediate loading after setting.			Allows longer working time for large diameters and deep embedment depths e.g. rebar.

Product	SAFEset Auto-cleaning with hollow drill bit	SAFESET features			ETA for cracked concrete	ETA for masonry	ETA for seismic	ETA beyond cast-In for rebar	Fire tested	NSF for potable water
		Zero cleaning with HIT-Z rod	Roughening tool for cored holes	ETA for uncracked concrete						
 HVI2				■	■		■		■	■
 RE 500 V3				■	■		■		■	■
 HY 200-R V3				■	■		■	■	■	■
 HY 200-A				■	■		■		■	■
 HY 170				■	■	■				■
 HIT-MM+										■
 HY 270						■			■	■
 HIT-CT1				■						■
 HIT-1										■

HIT-Z	HAS-U	HIS-N	Rebar*
 <p>SAFE-ET</p>			
<ul style="list-style-type: none"> • With HIT-HY 200 only 	<ul style="list-style-type: none"> • All injection adhesives (HIT) 	<ul style="list-style-type: none"> • Capsule system (HVU2) • All injection adhesives (HIT) 	<ul style="list-style-type: none"> • All injection adhesives (HIT)
<ul style="list-style-type: none"> • High end load performance • NO hole cleaning required for maximum time saving • Less embedment, less mortar 	<ul style="list-style-type: none"> • Variable diameters, lengths and steel grades • Flexible embedment depths • Head marking with length and steel grade for quality control • Chisel Point 	<ul style="list-style-type: none"> • Internal thread to allow bolting and reusability of fixing • Flush fixing finish • Chisel point 	<ul style="list-style-type: none"> • Higher bond strength than cast-in • Optimised embedment
<p>► Save time and money</p>	<p>► The allrounder</p>	<p>► Internal thread</p>	<p>► HIT rebar method</p>

* Rebar not supplied by Hilti

FASTER AND SAFER INSTALLATION /

Our dispensers speed up the job and make injecting easy and safe



HDE 500-A22 The battery dispenser

- Speedy dispensing without compromising safety
- Up to 3 times faster than manual dispensing with no dripping
- Performance : ~ 700ml/ min
- Suits 500ml and 330ml tubes

Work continuously without getting tired

Battery compatible with all Hilti 22 volt cordless tools.



HDM 500

The manual dispenser

- Robust and reliable
- Ergonomic design for easy handling
- Suits 500ml and 330ml tubes



HDM 330

The lightweight manual dispenser

- Where light weight is required or work space is limited
- Suits 330ml tubes



P 8000 D

The pneumatic dispenser

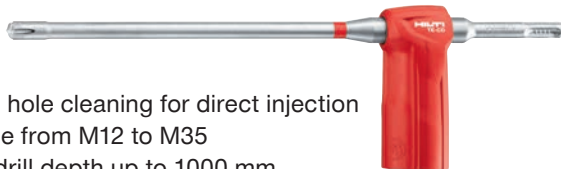
- For speedy dispensing in large diameter holes
- Performance ~ 20 sec for 1400ml tube



No hole cleaning

Dustless and reliable setting, using Hilti SAFESET auto-cleaning feature of the hollow drill bit.

SAFESET



- Automatic hole cleaning for direct injection
- Wide range from M12 to M35
- Available drill depth up to 1000 mm
- ETA compliant only with HVU2 capsule, RE 500 V3, HY 200, CT 1 and HY 170

Fast installation in cored holes

Roughen diamond cored holes for seismic conditions or cracked concrete.

SAFESET



- Faster installation thanks to less hole cleaning
- Achieve higher loads
- ETA compliant with RE 500 V3 and HY 200

Hole cleaning accessories

For manual and machine cleaning.



- ≤ Ø 55mm
- All hole depths

Secure injection

Total installer safety and reliable setting with Hilti piston plugs and drip guards for overhead anchoring.



- No air bubbles
- No mortar blow out
- Less mortar



- No dripping

MECHANICAL
ANCHOR SYSTEMS
YOU CAN TRUST

Hilti Mechanical Anchor Systems

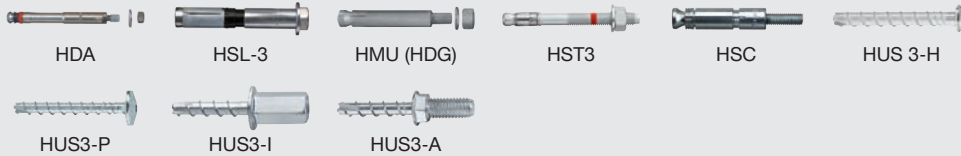
Our extensive range of mechanical anchors covers fixings for all kinds of base materials, from concrete and precast panels through to masonry and hollow blocks. We have fastening solutions for different environments and applications.

And for your peace of mind, our anchors are proven to provide the strongest solution for safety critical applications - fully backed by technical documentation, software and engineering services.

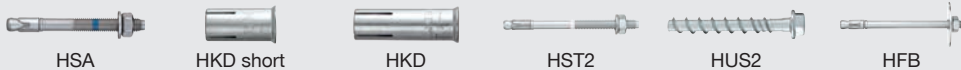
MECHANICAL ANCHORS TO SUIT ALL NEEDS /

The Hilti mechanical anchor portfolio

ULTIMATE ●●●●●



PREMIUM ●●●●○









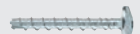









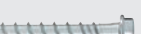



















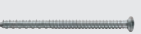








STANDARD ●●●○○

H























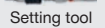




ALL BASES COVERED / A mechanical anchor for every base material












Base material	Product
Uncracked concrete 	ALL MECHANICAL ANCHORS Excluding anchors for use in plaster board
Cracked concrete* 	<div>       </div> <div>       </div> <div>       </div>
Masonry 	<div>       </div> <div>       </div>
Hollow brick 	<div>      </div>
Plasterboard / Drywall 	<div>      </div>

SOLUTIONS FOR SPECIAL CONDITIONS /

Diamond cored,
dustless or reusable

	Hammer drilled	Diamond cored	SAFE-ET	Reliable and fast setting system	Completely removable	Reusable anchor
ULTIMATE	ALL MECHANICAL ANCHORS	 HST3  HSL-3	 HST3  HUS 3-H	 HDA  HSC  HMU (HDG)  Setting tool  Stop drill bit	 HDA  HUS3-C  HUS3-P  HUS 3-H  HUS3-I  HUS3-A	
PREMIUM	ALL MECHANICAL ANCHORS	 HSA  HST2	 HSA  HST2	 HSA  Setting tools  HKD short  Setting tool	 HUS2	 HUS2
STANDARD	ALL MECHANICAL ANCHORS					

BEST IN CLASS / From economical to ultimate performance

Product		STANDARD ●●●○	PREMIUM ●●●●○	ULTIMATE ●●●●●
		Light Duty	Medium Duty	Heavy Duty
Undercut anchors				
				
				
Screw anchors				
				
Expansion anchors				
				
				
Plastic anchors				
				
				

THE APPROVED ADAPTIVE TORQUE SYSTEM / SI-AT-A22 impact wrench module

STUD ANCHOR SETTING
WITH SIW-6AT
IMPACT WRENCH



ADD THE SI-AT-A22 “BRAIN”
TO COMPLETE THE
SMART SYSTEM



SAFE-SET





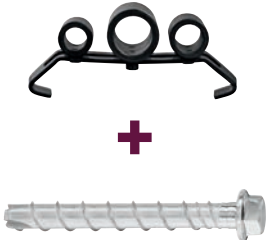

The SI-AT-A22 module guarantees a more productive and safe installation method.

EASY INSTALLATION
DOCUMENT DOWNLOAD



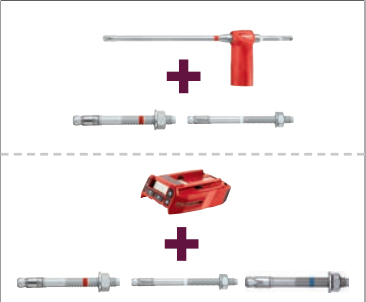




The installation documentation reports the actions performed.















FASTER INSTALLATION / Setting tools for greater productivity











Setting tool for HSA anchors	Setting tool for HKD anchors	Checking gauge for HUS anchors	Setting system for HUS anchors
			
<ul style="list-style-type: none"> • With stud anchors HSA, HSA-F & HSA-R • No over or under torquing • SIW impact wrench with torque bar for setting anchors quickly and reliably 	<ul style="list-style-type: none"> • With all the short HKD's • Reduces the risk of rebar hits when drilling • Drilling and setting with one tool • No need to change tools • Holes always drilled to the correct depth 	<ul style="list-style-type: none"> • With all the screw anchors > 6mm diameter • Verified reusability • Check anchor performance with HRG check gauge 	<ul style="list-style-type: none"> • With all the screw anchors • Fast Installation • Cutting edge geometry for superior setting
► Save time and money	► Safe and productive	► Safe	► Productive











FLAWLESS INSTALLATION / Installation tools for greater safety

Torque controlled HSL3-B	SafeSet system with HST3 and HST2	Disassembly tool for HDA	Setting tool for undercut anchors HDA, HSC & HMU-PF
 			
<ul style="list-style-type: none"> • With HSL3-B (Red cap) 	<ul style="list-style-type: none"> • With Stud anchor HST3, HST2 and HSA 	<ul style="list-style-type: none"> • With HDA anchor 	<ul style="list-style-type: none"> • With all undercut anchors
<ul style="list-style-type: none"> • Reduces the risk of wrong torque during installation • Visual check for correct setting (Red cap) 	<ul style="list-style-type: none"> • Dustless • Peace of mind 	<ul style="list-style-type: none"> • Easy and fast removal process • Anchor will be completely removed, no steel part left in the concrete 	<ul style="list-style-type: none"> • Achieves consistent drilled hole depth for proper installation of undercut anchors • Length and diameter matched to each anchor size for maximum confidence in every fastening point
<p>► Safe and productive</p>	<p>► Safe and fast</p>	<p>► Flexible</p>	<p>► Fast and accurate</p>



HDA	HSC	HSL-3	HMU	HST3	HUS3-H/C	HUS3-I/A/P
						
HDA-P, HDA-PF HDA-PR, HDA-TF (pre-setting) HDA-T, HDA-TR (through setting)	HSC-I, HSC-IR (internal thread) HSC-A, HSC-AR (external thread)	HSL-3-B, HSL-3-G, HSL-3-SK, HSL-3-R, HSL-3-GR, HSL-3-SKR	HMU-PF	HST3 HST3-R	HUS3-H, HUS3-HF, HUS-HR, HUS3-C, HUS-CR	HUS3-I HUS3-A HUS3-P
						
<ul style="list-style-type: none"> Heavy-duty fastenings for all dynamic loading (shock, seismic and fatigue) in cracked or uncracked concrete Self-undercutting facilitates fast and reliable installation Close spacing and small edge distance 	<ul style="list-style-type: none"> High loads at shallow embedment, small edge distances and close spacing Self-undercutting facilitates fast and reliable installation Excellent dynamic and shock load resistance 	<ul style="list-style-type: none"> Special safety red cap ensures the correct installation torque High variety of head configuration provides more flexibility Suitable for applications with high shear and tensile loads 	<ul style="list-style-type: none"> High performance undercut with a hot-dip galvanised coating for protection against corrosion Self-undercutting facilitates fast and reliable installation Simple verification of correct setting with red mark 	<ul style="list-style-type: none"> Highest tensile and shear load performance One solution for multiple conditions: new concrete to old structures, diamond core, dustless installation Greater flexibility with thin slabs due to two embedment depths Close to slab edge and smallest spacing 	<ul style="list-style-type: none"> Fast and easy installation Completely removable Adjustable Small spacing and edge distance Safety through verified reusability Nice head finish 	<ul style="list-style-type: none"> 50% faster than traditional flush anchors Shallow embedment depth and closer to edge Easy setting thanks to cutting edge Can be removed ETA approved for prestressed hollow core slabs

HUS2	HST2	HSA	HKD	HFB
				
HUS2	HST2	HSA, HSA-F, HSA-R	HKD, HKD-SR, HKD-D, HKD-ER	HFB
				
<ul style="list-style-type: none"> • High productivity - less drilling and fewer operations than with conventional anchors • Suitable for cracked and non-cracked concrete C20/25 • ETA approval for cracked and noncracked concrete • Technical data for reusability in fresh concrete (fck, cube = 10/15/20 Nmm²) for temporary applications • Two embedment depths for maximum design flexibility 	<ul style="list-style-type: none"> • Optimized expansion cone and wedge design combined with special steel and coatings • Suitable for non-cracked and cracked concrete • Product and length identification mark facilitates quality control and inspection 	<ul style="list-style-type: none"> • Safe and fast hammering with the HS-SC tool • The only stud anchor to be installed with impact wrench: fast, convenient and reliable torqueing with the torque bar • Best performance for uncracked concrete • 3 embedment depths offering maximum flexibility 	<ul style="list-style-type: none"> • Flared end for accurate setting flush with the surface, independent of the hole depth • Ideal for repetitive fastening with threaded rods of equal length • Anchor and setting tool provides faster installation • ETA approved for prestressed hollow core slabs (HKD short only) 	<ul style="list-style-type: none"> • System tests with several market leading boards • Keeps its place under static, dynamic and seismic (C1) conditions thereby minimizing economical impact • Faster and more reliable nail anchor for cracked concrete • Short embedment depth of 25 mm, 30 mm and 35 mm • No torque needed to set the anchor • Mesh clip for a quick and easy installation support when used with sprayed fire protection mortar

HRD-H/C	HPS	HTB	DBZ	HUS6
				
HRD-H, HRD-HF, HRD-HR, HRD-C, HRD-CR	HPS-1, HSP-1R	HTB, HTB-S	DBZ	HUS6
				
<ul style="list-style-type: none"> • Flexibility to use with many base materials • No spinning in the borehole • Flexible embedment depth • Wide range of fastening thickness • Double thread for high loads in hollow materials 	<ul style="list-style-type: none"> • For universal use on many materials, including perforated brick and block • The hammer-driven screw can be driven or unscrewed using a screwdriver • Quick impact installation using a hammer 	<ul style="list-style-type: none"> • Designed for hollow base material • Simple setting process • Flexible embedment depth • Removable screw: toggle stays in place 	<ul style="list-style-type: none"> • Simple and fast through-fastening • Impact expansion by hammering in, no setting tool is needed • Reliable setting thanks to the simple visual check 	<ul style="list-style-type: none"> • Wide range of lengths available • Quick and easy to set

HAT 28 E / HAT 28 M

Complete systems including accessories, packed in an impact resistant aluminium case

- Test load can be read directly from the gauge
- Suitable for testing anchors with various head forms and of various diameters
- Compact and easy-to-use



**HAT 28 Elevator
HAT 28 E**



Effective span of load-spreading bridge: 207 mm

**HAT 28 Master kit
HAT 28 M**



Effective span of load-spreading bridge: 118 mm



COMPARE OUR RANGE / Mechanical anchor quick comparison chart

Anchor type		Undercut anchors			Expansion anchors			
		HDA	HMU-PF	HSC	HSL-3	HST3	HST2	HSA
Anchor size		M10-M20	M8-M20	M6-M12	M8-M24	M8-M24	M8-M24	M6-M20
BASE MATERIAL	Cracked concrete	■	■	■	■	■	■	
	Non cracked concrete	■	■	■	■	■	■	■
	Lightweight concrete							
	Aerated concrete							
	Solid brick masonry							
	Hollow brick masonry							
APPROVALS	Drywall							
	Redundant fastening							
	European Technical approval (ETA)	■	■	■	■	■	■	■
	ETA seismic C1	■	■		■	■	■	
	ETA seismic C2**	■		■	■	■	■	
	Fatigue approval*	■			■			
SPECIFICATION	Shock approval*	■		■	■			
	Fire tested	■	■	■	■	■	■	■
	Steel, galvanised	■	■	■	■	■	■	■
	Steel, hot-dipped galvanised	■	■					■
	Stainless steel A2							■
	Stainless steel A4	■		■	■	■	■	■
SETTING	External thread	■	■	■	■	■	■	■
	Internal thread			■				
	Pre-setting	■	■	■	■	■	■	■
	Through-fastening	■			■	■	■	■
	Profis	■	■	■	■	■	■	■

*Local approvals

**Seismic C2 approval for M8 & M10 HSC-A anchor only

COMPARE OUR RANGE / Mechanical anchor quick comparison chart

Anchor type		Screw anchors					Flush anchors		
		HUS3	HUS3 REDUNDANT	HUS-HR HUS-CR	HUS2	HUS 6	HKD	HKD REDUNDANT	HKV
Anchor size		6, 8, 10, 14	6	HUS-HR: 6, 8, 10, 14 HUS-CR: 8, 10	8, 10	6	M6-M20	M6-M16	M16 x 65
BASE MATERIAL	Cracked concrete	■	■	■	■	■		■	
	Non cracked concrete	■	■	■	■	■	■	■	■
	Lightweight concrete								
	Aerated concrete	■	■	■		■			
	Solid brick masonry	■	■	■		■			
	Hollow brick masonry					■			
APPROVALS	Drywall								
	Redundant fastening		■			■		■	
	European Technical approval (ETA)	■	■	■	■		■	■	
	ETA seismic C1	■		■					
	ETA seismic C2	■							
	Fatigue approval*								
SPECIFICATION	Shock approval*								
	Fire tested	■	■	■		■		■	
	Steel, galvanised	■	■	■	■	■	■	■	
	Steel, hot-dipped galvanised	■							
	Stainless steel A2								
	Stainless steel A4			■			■	■	
SETTING	External thread	■	■						
	Internal thread	■	■			■	■	■	■
	Pre-setting						■	■	■
	Through-fastening	■	■	■	■	■			
	Profis	■		■			■		

COMPARE OUR RANGE / Mechanical anchor quick comparison chart

Anchor type		Plastic anchors					DBZ					
		HRD	HPS-1	HUD-1	HUD-L	HLD		HLC	HT	HHD-S	HSP/HFP	HTB
Anchor size		M8-M10	M4-M8	M5-M14	M6-M10	M10	M6	M5-M16	M8-M10	M4-M8	M4,5	M5-M6
BASE MATERIAL	Cracked concrete											
	Non cracked concrete	■	■	■	■	■	■	■	■			
	Lightweight concrete	■		■	■				■			
	Aerated concrete	■	■	■	■				■			
	Solid brick masonry	■	■	■	■	■		■	■			■
	Hollow brick masonry	■	■	■	■	■			■			■
	Drywall			■	■					■	■	■
APPROVALS	Redundant fastening	■					■					
	European Technical approval (ETA)	□					□					
	ETA seismic C1											
	ETA seismic C2											
	Fatigue approval*											
	Shock approval*											
SPECIFICATION	Fire tested	■					■	■	■			
	Steel, galvanised	■	■				■	■	■	■	■	
	Steel, hot-dipped galvanised	■										
	Stainless steel A2	■	■									
	Stainless steel A4											
	External thread							■				
SETTING	Internal thread									■		
	Pre-setting			■	■	■		■		■	■	■
	Through-fastening	■	■	■	■		■	■	■			

SERVICE AND SOFTWARE

Hilti Service and Software

We make your projects easier, safer and more productive by automating complex calculations and reducing the need for in-depth engineering expertise. Our design software solutions are based on tested and approved Hilti technologies and international codes to ensure you safely and reliably design applications.

Our team of engineers will work with you on-site and on the phone across Great Britain.



We provide expert advice, when and where you need it



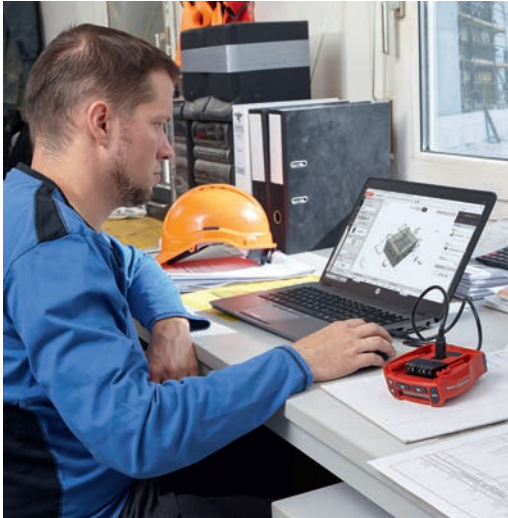
Our on-site anchor testing ensures the quality and safety of the end result



PROFIS solutions (Engineering, Rebar, Anchor and Channels) ensures the ideal solution for the application design



Our national team of engineers provides specialist support to ensure the job is done right



Our state of the art PROFIS Engineering assists planners and specifiers make the necessary calculations to design anchor and rebar connections with simplicity and certainty.

SIMPLICITY

- Easy to use visual software makes it easy to model your exact application
- Full access to Hilti's BIM/CAD objects integrated within the software
- Detailed design reports created automatically to provide your project documentation
- Automatic software updates ensure you are always working with the most current product approvals and latest design methods





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