



Hilti HPS-1 Impact Anchor

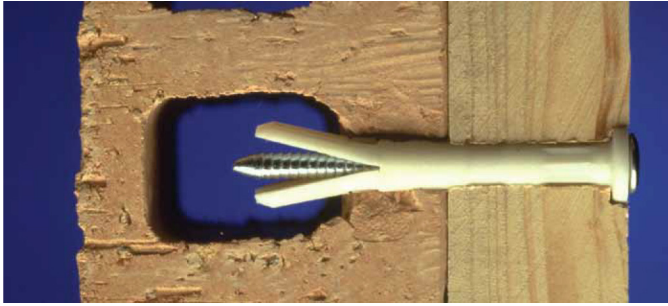
Submission Folder

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Impact anchor HPS

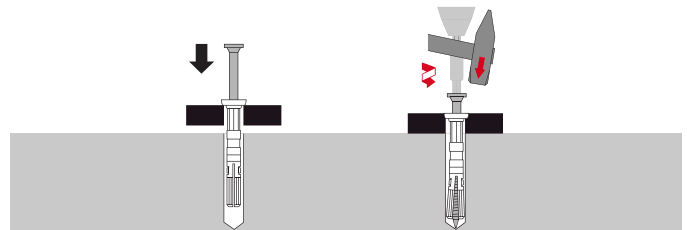


APPLICATIONS

- Anchoring concrete, brick ties and masonry
- Fastening components for electrical and plumbing installations
- Fastening trim strips, battens and components for electrical and plumbing installations

ADVANTAGES

- For universal use on many materials, including perforated brick and block
- The hammer-driven screw can also be driven or unscrewed using a screwdriver
- Quick impact installation using a hammer



These are abbreviated instructions which may vary according to the application.

Technical data	
Anchor type	Plastic anchor
Head configuration	Countersunk Phillips
Material composition	Body: polyamide, Screw: steel, zincplated (min. 5 µm) or stainless steel 304
Material, corrosion	Steel, zinc-plated
In-service temperature – range	-40 - 80 °C
Installation direction	All

Recommended load (kN), safety factor(γ)=5		4/10	5/10	5/5-5/15	6/10-6/25	6/30-6/40	8/10	8/10-8/60	8/100
HPS-1 at concrete 30 N/mm²	Tensile Load, Nrec	0.05	0.10	0.15	0.25	0.25	0.30	0.40	0.40
	Shear Load, Vrec	0.15	0.30	0.35	0.55	0.35	0.50	0.90	0.50
HPS-1 at AAC block²⁾	Tensile Load, Nrec	-	-	0.08	0.10	0.10	-	0.15	0.15
	Shear Load, Vrec	-	-	0.10	0.12	0.10	-	0.30	0.20

Remarks:
 1) All the data applies to no edge distance, spacing and other influences
 2) Holes must be produced by rotary drilling only
 3) For detail design method, please refer to Fastening Technology Manual

HPS-1 (With galvanized screw min. 5 µm)



Ordering designation	Anchor size	Anchor length	Drill bit diameter	Drilling depth	Fastening thickness	Sales pack quantity	Item number
HPS-1 4/0X20	M4	22 mm	4 mm	25 mm	2 mm	250 pc	260369 ¹⁾
HPS-1 5/0X20	M5	22 mm	5 mm	25 mm	2 mm	250 pc	260395 ¹⁾
HPS-1 5/5X25	M5	25 mm	5 mm	30 mm	5 mm	200 pc	260347 ¹⁾
HPS-1 5/10X30	M5	27 mm	5 mm	30 mm	10 mm	200 pc	230515
HPS-1 5/15X35	M5	37 mm	5 mm	30 mm	15 mm	200 pc	260348
HPS-1 6/0X25	M6	27 mm	6 mm	40 mm	2 mm	150 pc	238159 ¹⁾
HPS-1 6/5X30	M6	32 mm	6 mm	40 mm	5 mm	150 pc	260349 ¹⁾
HPS-1 6/10X35	M6	37 mm	6 mm	40 mm	10 mm	150 pc	230516
HPS-1 6/15X40	M6	42 mm	6 mm	40 mm	15 mm	150 pc	260350
HPS-1 6/25X50	M6	52 mm	6 mm	40 mm	25 mm	100 pc	260351
HPS-1 6/30X55	M6	57 mm	6 mm	40 mm	30 mm	100 pc	230517
HPS-1 6/40X65	M6	67 mm	6 mm	40 mm	40 mm	100 pc	260352
HPS-1 8/0X25	M8	33 mm	8 mm	50 mm	2 mm	100 pc	238160 ¹⁾
HPS-1 8/10X40	M8	43 mm	8 mm	50 mm	10 mm	100 pc	260353
HPS-1 8/20X50	M8	53 mm	8 mm	50 mm	20 mm	50 pc	230518
HPS-1 8/30X60	M8	63 mm	8 mm	50 mm	30 mm	50 pc	260354
HPS-1 8/40X70	M8	73 mm	8 mm	50 mm	40 mm	50 pc	230519
HPS-1 8/60X90	M8	93 mm	8 mm	50 mm	60 mm	50 pc	260355
HPS-1 8/80X110	M8	113 mm	8 mm	50 mm	80 mm	50 pc	260356 ¹⁾
HPS-1 8/100X130	M8	133 mm	8 mm	50 mm	100 mm	100 pc	260367 ¹⁾

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products
 Customer Hotline: Hong Kong 8228 8118, Macau 00800 8228 8118 Email: hksales@hilti.com

HPS-1 R (With stainless steel screw A2)



Order Now



Ordering designation	Anchor size	Anchor length	Drill bit diameter	Drilling depth	Fastening thickness	Sales pack quantity	Item number
HPS-1R 5/5X25	M5	27 mm	5 mm	30 mm	5 mm	200 pc	260357 ¹⁾
HPS-1R 5/10X30	M5	32 mm	5 mm	30 mm	10 mm	200 pc	230524
HPS-1R 5/15X35	M5	37 mm	5 mm	30 mm	15 mm	200 pc	260358 ¹⁾
HPS-1R 6/0X25	M6	27 mm	6 mm	40 mm	2 mm	150 pc	238161 ¹⁾
HPS-1R 6/5X30	M6	32 mm	6 mm	40 mm	5 mm	150 pc	260359 ¹⁾
HPS-1R 6/10X35	M6	37 mm	6 mm	40 mm	10 mm	150 pc	230525 ¹⁾
HPS-1R 6/15X40	M6	42 mm	6 mm	40 mm	15 mm	100 pc	260360
HPS-1R 6/25X50	M6	52 mm	6 mm	40 mm	25 mm	100 pc	260361 ¹⁾
HPS-1R 6/40X65	M6	67 mm	6 mm	40 mm	40 mm	100 pc	260362 ¹⁾
HPS-1R 8/10X40	M8	43 mm	8 mm	50 mm	10 mm	100 pc	260363 ¹⁾
HPS-1R 8/30X60	M8	63 mm	8 mm	50 mm	30 mm	50 pc	260364 ¹⁾
HPS-1R 8/60X90	M8	93 mm	8 mm	50 mm	60 mm	50 pc	260365 ¹⁾
HPS-1R 8/80X110	M8	113 mm	8 mm	50 mm	80 mm	50 pc	260366 ¹⁾

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

HPS-1 Plastic anchors

Economical plastic impact anchor

Anchor version



HPS-1
(M4-M8)

Benefits

- Impact anchor for light frames, battens and profiles
- Impact and temperature resistant
- High quality plastic
- Suitable for use in a wide range of base materials

Base material



Uncracked concrete



Solid brick



Hollow brick



Autoclaved aerated concrete

Basic loading data

All data in this section applies to:

- Correct setting (See setting instruction)
- No edge distance and spacing influence
- Base material as specified in the table
- Minimum base material thickness
- Loads shall be reduced if the temperature sustains above 40°C

Recommended loads ^{a)}

Anchor size ^{b)}		4/0	5/0	5/5- 5/15	6/0- 6/25	6/30- 6/40	8/0	8/10- 8/40	8/60- 8/100
		Concrete ≥ C16/20	N_{Rd} [kN]	0,05	0,10	0,15	0,25	0,25	0,30
	V_{Rd} [kN]	0,15	0,30	0,35	0,55	0,35	0,50	0,90	0,50
Engineering brick, 12 hole, class B	N_{Rd} [kN]	0,05	0,10	0,15	0,25	0,25	0,30	0,40	0,40
	V_{Rd} [kN]	0,15	0,30	0,35	0,55	0,35	0,50	0,90	0,50
Perforated brick 3 hole common	N_{Rd} [kN]	0,05	0,10	0,15	0,20	0,20	0,25	0,30	0,30
	V_{Rd} [kN]	0,15	0,30	0,35	0,55	0,35	0,50	0,90	0,55
Thermalite block, 7 N lightweights	N_{Rd} [kN]	-	-	0,08	0,15	0,15	0,20	0,25	0,25
	V_{Rd} [kN]	-	-	0,15	0,25	0,15	0,40	0,40	0,25
Thermalite block, 1/2 N lightweights	N_{Rd} [kN]	-	-	0,05	0,08	0,08	-	0,12	0,12
	V_{Rd} [kN]	-	-	0,10	0,15	0,10	-	0,25	0,15
Autoclaved aerated concrete AAC 4, ACC 6	N_{Rd} [kN]	-	-	0,08	0,10	0,10	-	0,15	0,15
	V_{Rd} [kN]	-	-	0,10	0,12	0,10	-	0,30	0,20
Extruded brick, Boral 10	N_{Rd} [kN]	0,05	0,10	0,15	0,20	0,20	0,25	0,35	0,35
	V_{Rd} [kN]	0,15	0,25	0,30	0,40	0,25	0,50	0,90	0,55

a) With overall global safety factor $\gamma = 5$ to the characteristic loads and a partial safety factor of $\gamma = 1,4$ to the design values

b) Please refer to the product catalogue on the Hilti Hong Kong website for standard portfolio

Materials
Material quality

Part	Material
Sleeve	Polyamide 6.6
Screw	Carbon steel, galvanised to min. 5µm
	Stainless steel, grade A2
	Stainless steel, grade A2, copper-plated

Setting information
Installation temperature

-10°C to +40°C

Service temperature range

Hilti HPS-1 impact anchor may be applied in the temperature range below.

Temperature range	Base material temperature	Max. long term base material temperature	Max. short term base material temperature
Temperature range	-40 °C to +80 °C	+50 °C	+80 °C

Max short term base material temperature

Short-term elevated base material temperatures are those that occur over brief intervals, e.g. as a result of diurnal cycling.

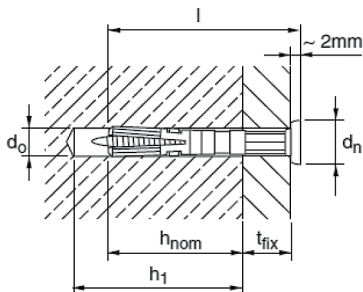
Max long term base material temperature

Long-term elevated base material temperatures are roughly constant over significant periods of time.

Setting details

Anchor		HPS-1 4	HPS-1 5	HPS-1 6	HPS-1 8
Nominal diameter of drill bit	d_o [mm]	4	5	6	8
Cutting diameter of drill bit	$d_{cut} \leq$ [mm]	4,35	5,35	6,4	8,45
Depth of drill hole	$h_1 \geq$ [mm]	25	30	40	50
Effective anchorage depth	h_{nom} [mm]	20	20	25	30
Anchor length ^{a)}	l [mm]	21,5	22 - 37	27 - 67	28,5 - 132,5
Max fixture thickness	t_{fix} [mm]	2	15	40	100

a) Please refer to the product catalogue on the Hilti Hong Kong website for standard portfolio

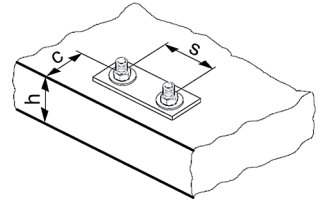


Installation equipment

Anchor	HPS-1 4	HPS-1 5	HPS-1 6	HPS-1 8
Rotary hammer	TE2 - TE16			
Other tools	Screwdriver			

Setting parameters HPS-1

Anchor	HPS-1 4	HPS-1 5	HPS-1 6	HPS-1 8	
Spacing	s [mm]	20	25	30	35
Edge distance	c [mm]	20	25	30	35

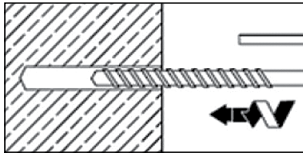


Setting instructions

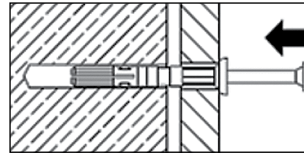
* For detailed information on installation see instruction for use given with the package of the product.

Setting instructions

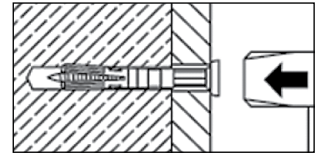
1. Drill hole with drill bit



2. Install anchor



3. Hammer in anchor



Attn. : To whom it may concern

Date : 26 September 2023
Ref. : 124/AM/DY/23

Subject : Country of Origin- Hilti HPS-1 Impact Anchor

Dear Sir / Madam,

Enclosed please find the information of Hilti HPS-1 Impact Anchor.

Brand Name : Hilti

Model Name : Hilti HPS-1/ HPS-1 R Impact Anchor

Manufacturer : Hilti Corporation

Address of Manufacturer : FL-9494, Principality of Liechtenstein.

Manufacturer Contact Person : Dennis Yeung

Supplier : Hilti (Hong Kong) Ltd

Address of Supplier : 701-704, 7/F, Tower A, Manulife Financial Centre,
223 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Supplier Contact Person : Dennis Yeung (+852 9723 4621)

Country of Origin : Taiwan

Should you have further questions, please do not hesitate to contact our Technical Representatives, Customer Service Hotline at 8228-8118, or email us at hksales@hilti.com.

Yours faithfully,



Dennis Yeung
Head of Product Leadership Strategy, F&P



Hilti HPS-1 Impact Anchor Job Reference

Year	Project Name	Customer Name	Project type
2022	CINGLEOT LOGISTICS CENTRE, AIRPORT - ALIBABA	HARVEST TIME FACADE LIMITED	Industrial
2022	WING HONG, WING MING, YU CHAU W ST	HIP SENG FACADE ENGINEERING	Office
2022	98 HOW MING ST	ENTASIS LIMITED	Office
2022	25-29 KOK CHEUNG ST - SQUARE MILE PH 4	POLYFAIR CONSTRUCTION & ENGINEERING	Residential
2022	TPTL 244, YAU KING LANE & POK YIN RD	KWAN KEE ENGINEERING & CONSTRUCTION	Residential
2022	91 KING LAM ST, NKIL 6505	WAH TUNG FACADE COMPANY LIMITED	Office
2022	11 MIDDLE RD - KIMPTON HONG KONG	JANGHO CURTAIN WALL ENGINEERING	Hospitality
2022	TUEN MUN AREA 55 (463) RES	KM INTERNATIONAL INDUSTRIES	Residential
2022	TUEN MUN AREA 54 HOUSING SITE 5	KONE ELEVATOR (HK) LIMITED	Residential
2022	KAI TAK AREA 4B, SITE 1, NKIL 6576	KM INTERNATIONAL INDUSTRIES	Residential
2023	TPTL 244, YAU KING LANE & POK YIN RD	KWAN KEE ENGINEERING & CONSTRUCTION	Residential
2023	11 MIDDLE RD - KIMPTON HONG KONG	JANGHO CURTAIN WALL ENGINEERING	Hospitality
2023	91 KING LAM ST, NKIL 6505	WAH TUNG FACADE COMPANY LIMITED	Office
2023	HKIA 3508 TERMINAL 2	ENTASIS LIMITED	Transport
2023	KAI TAK AREA 4A, SITE 2, NKIL 6554	KONE ELEVATOR (HK) LIMITED	Residential
2023	KAI TAK AREA 4B, SITE 1, NKIL 6576	KM INTERNATIONAL INDUSTRIES	Residential
2023	SHING KAI RD, KAI TAK NKIL 6607	G & M ENGINEERING COMPANY LIMITED	Hospitality
2023	TKO LOHAS PARK PH11 (SITE C2)	KM INTERNATIONAL INDUSTRIES	Residential
2023	HO MAN TIN STATION RES (PACKAGE 2)	WAH TUNG FACADE COMPANY LIMITED	Residential
2023	KWAI CHUNG HOSPITAL PH2 & 3	JANGHO CURTAIN WALL ENGINEERING	Health
2024	TKO GOVERNMENT OFFICES	HARVEST TIME FACADE LIMITED	Office
2024	11 MIDDLE RD - KIMPTON HONG KONG	JANGHO CURTAIN WALL ENGINEERING	Hospitality
2024	TKO LOHAS PARK PH11 (SITE C2)	KM INTERNATIONAL INDUSTRIES	Residential
2024	QUEEN MARY HOSPITAL PH 2	HARVEST TIME FACADE LIMITED	Health
2024	CYBERPORT PH5	ENTASIS LIMITED	Office
2024	HO MAN TIN STATION RES (PACKAGE 2)	WAH TUNG FACADE COMPANY LIMITED	Residential
2024	Site E, 23 - 37 Whampoa Street & 79-81 Baker Street Ap	KO SING ENGINEERING LIMITED	Residential
2024	TAI WAI STATION NW RES	WAH TUNG FACADE COMPANY LIMITED	Residential
2024	KWAI CHUNG HOSPITAL PH2 & 3	JANGHO CURTAIN WALL ENGINEERING	Health
2024	HKIA 3508 TERMINAL 2	GOLDENWALL ENGINEERING LIMITED	Transport