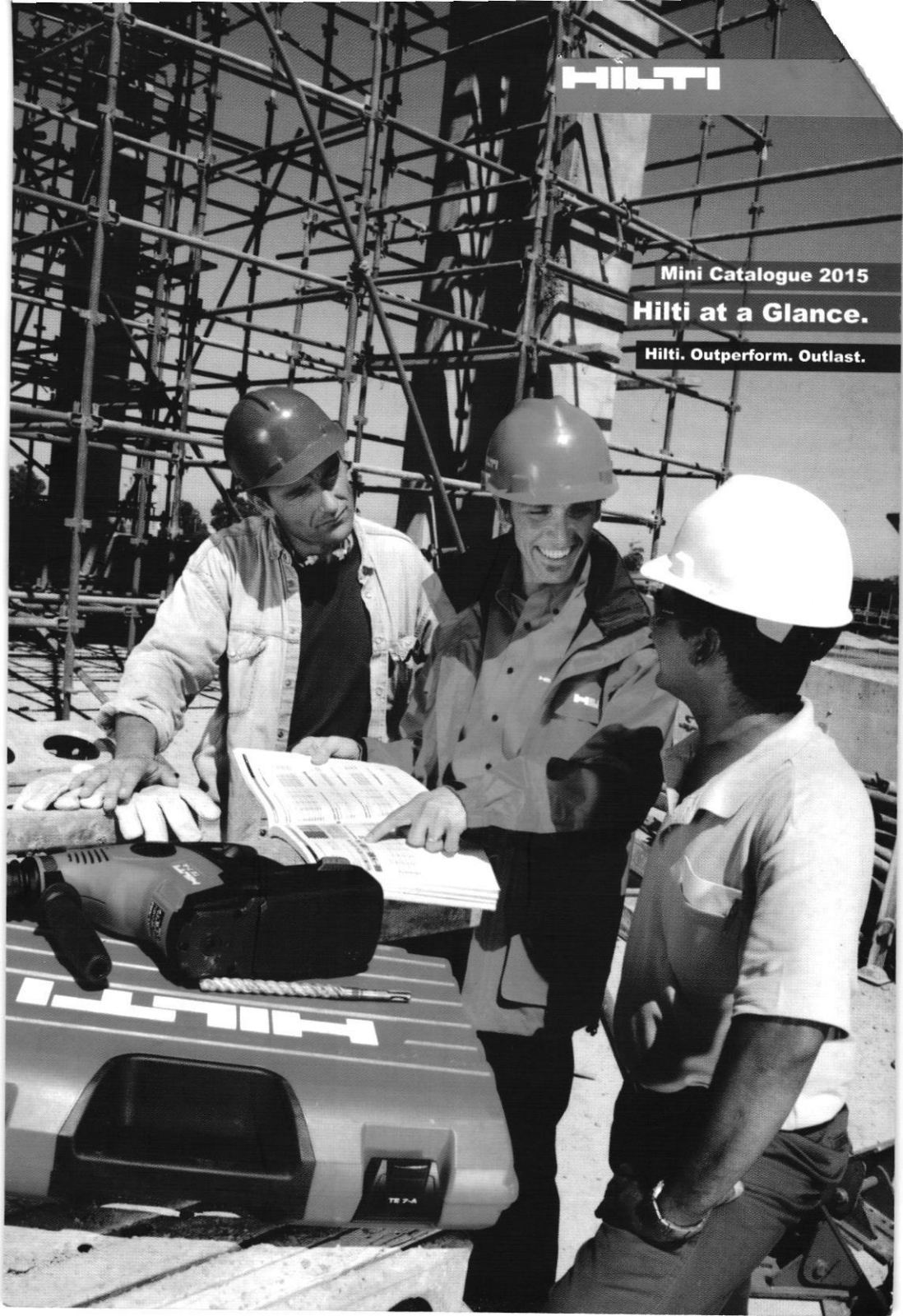




HILTI

Mini Catalogue 2015

Hilti at a Glance.

Hilti. Outperform. Outlast.



Hilti welcomes you to the world of innovative products and quality services.

Hilti Group: 1941 | 2014

A history of creating enthusiastic customers.

The Hilti group is a worldwide supplier of system solution in the field of measuring, drilling, demolition, cutting, fastening and construction chemicals. Based in Europe, Hilti offers outstanding products & quality services to construction professionals around the world. Our technologically leading products and systems increase the productivity of our customers. They benefit from our innovation, comprehensive technical advice and a proven professional service.

The Hilti Group was founded in 1941 by Martin & Eugen Hilti. Today, Hilti is a strong team of over 21,000 employees with operation in more than 120 countries. The Hilti culture, which is founded on four pillars of integrity, courage, team work and commitment, is reflected in every employee across all functions.

Apart from upholding the interest of customers and employees, Hilti actively honours its social and ecological responsibility and hence creates the foundation of trust that makes the long-term success possible for the company.

Hilti India: 1997 | 2014

Bringing the world at your door step.

Hilti India is an ISO 9001 company which started its direct operations in India in 1997 and is now a strong team of over 400 people.

With Head Office in New Delhi, over 27 sales offices / service centers and more than 300 technical sales personal in the field, we have made our presence felt in almost all the projects in India.

Everyday we meet about 1200 customers across various locations in India to understand their needs and provide solutions to fit their requirement.

We constantly strive to change the way construction is done in India by bringing world-class state-of-art technology at your door step & by providing sound technical advice.

We are also known to be a different company because of our culture and unmatched spirit. By always putting people first, we have been ranked in the 'Top 50 companies to work at' for five consecutive years (2008, 2009, 2010, 2011 & 2012).

Products & Services



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Direct Fastening Systems Page 22-23



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Firestop & Foam Systems Page 27-36

Top 20 reasons to buy Hilti:



MARKET REACH

- **Direct sales:** Experience direct sales service provided by a highly qualified technical sales team backed by various support functions, making about 1,200 customers contacts in India every day.
- **Pan India coverage:** Wherever may be your project or office, Hilti service is only a phone call away.
- **Concern for the environment:** We take special steps to ensure that our products and manufacturing facility are safe for the environment.

SERVICES

- **Widest range of products:** Get complete solution for your measuring, drilling, cutting, fastening, fire sealing & demolition requirement covering all trades pertaining to construction and maintenance work.
- **Warranty*:** Get upto 1 year warranty against manufacturing defects. For details on exclusion and inclusion, please refer to warranty policy.
- **Technical advice:** Get free technical advice from our engineers for your various applications and requirements.
- **Demonstration:** See the performance of our products at your job-site before its purchase.
- **Training at site and office:** Free training to your operator to obtain higher productivity and better tool life. Also, call us for presentations and seminars on the latest technology to make construction simpler and faster.
- **Unique sales offers*:** Trade your old tool for a brand new Hilti tool at attractive terms; rate contracts for repeat & volume purchases... and many more.
- **One-stop toll-free number:** Dial 1800-102-6400 to get immediate response to your enquiries, complaints and avail free pick-up of your tools incase of breakdown.
- **Anchor design:** Get free anchor design service for your fastening applications.
- **Fire-sealing estimation:** Get free advice for your fire sealing requirements and appropriate estimation for your building.
- **Approvals and certification:** Get the most valued approvals & certifications for Hilti products.
- **Anchor pull-out test:** See the performance of the anchor at your job-site for free.
- **Technical literature:** Get proper technical literature to aid you in your decisions and product usage.
- **Tool pick-up and delivery:** Free pick-up and delivery of Hilti Tools from site for repairs, exclusions will be specifically stated during sale. eg Angle grinder
- **World-class products:** Get the best products in the world with the latest technology to make your work more safe and efficient.

REPAIR

- **ISO certified repair centers:** Get your tool repaired at more than 20 Hilti owned service centers to ensure fair repair cost and use of genuine spare-parts.
- **Repair cost limit*:** Within the defined life time of the tool, the one-time repair cost will never exceed 20-30% of the list price of the tool. For details, please refer to Repair Cost Limit policy.
- **Calibration facility:** Get your measuring tools calibrated by professionals to ensure accurate measurements at site.

*Conditions apply. Please contact Hilti sales person for latest service offerings.

Hilti system solution

Application	Technical Advice & Specification	Measuring	Drilling & Demolition	Cordless & Cutting	Diamonds	Fastening	Insulation & Protection	Installation	Professional Services
	Expert advice Anchor design Specification Technical data Demonstration Testing Training	Measuring Inspecting Sensing Leveling Aligning	Drilling Chiseling Breaking Roughening	Cutting Grinding Sanding	Coring Cutting Sawing	Anchoring Screw fixing Direct fixing Installation	Fire Stopping Sealing Insulating	Modular Support System	Repair Top-stop Warranty Calibration Trade-in Delivery & pick-up

Direct professional assistance.

We bring our services to you

Our Hilti representative is at your service on your job-sites, bringing experience that helps you stay a step ahead, providing application know-how, helping you select the optimum product for the job, providing solutions for complex situations and giving on-site demonstrations of innovative products.

Specification Stage:

Our technical team shall understand your application requirement and recommend the right product with the correct specification text and drawings. A highly accurate anchor design with product approvals shall be submitted for your future reference.

Tendering Stage:

Our experienced team will help you in planning & quoting for a tender by providing you with the right technical information and supporting document. For your measuring, fastening, drilling, demolition, cutting or fire sealing job, we will help you with the selection of appropriate products, related estimates, product guidelines, etc to ensure smooth execution of your work at site.

Product Procurement Stage:

Our technical person will conduct product demonstration at your site or product-show at your office to help you take the right decision. After the product to be purchased is decided, we will understand your procurement schedule and make all efforts to meet it on time. Proper error free quote shall be provided & the order process shall be customized to suit your business needs.

Execution Stage:

Hilti will provide free training on the usage of Hilti products at your job-site. This training is aimed to improve productivity of both the tools & your installers while make the operation much safer.

Even for the most difficult jobs, we have a team of specialists to help you in solving problems faced at site.

After Sales Service:

Get professional repair service for your Hilti tools at the nearest Hilti service center. Feel free to interact with our service engineer directly for better understanding of the tool repair requirement.

Please make use of our complaint cell to give us feedback for even the most trivial problem faced by you.

Measuring systems

Application

Product



- Measuring distances from 0.2 to 70 m quickly and accurately
- Measuring heights where alternative measuring methods fail
- Measuring quickly and safely in places where access is difficult

PD 5



- Measuring heights from floors to ceilings in a one-man operation.
- Determining the surface area of walls, ceilings and floor for painting etc.
- Volume calculations for planning ventilation and heating systems
- Measuring the lengths of cables and pipes.

PD-I



- Measuring heights from floor to ceilings in a one-man operation.
- Measuring surface areas for quotations in renovation work.
- Easy measurement of roof lengths using the trapezoid function.
- Measuring long distances using outdoor mode.

PD-E



Technical Data

Accuracy	±1.5 mm
Laser	635 nm, Class II
Measuring range	0.2 m - 70 m
Measuring functions	Single and continuous measurement
IP protection class	IP55
Battery type	2 x AAA, Alkaline
Operation time with Alkaline battery	8000 measurements
Dimensions (LxWxH)	164 x 33 x 21 mm

Advantages

- Simple and intuitive to use
- Single-button operation
- New compact design that fits in every pocket
- Waterproof and dust tight
- Rugged and durable
- Ergonomic design for unique operating convenience

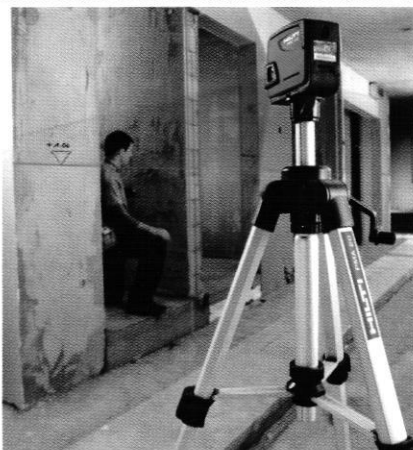
Tripod thread diameter	1/4 in
Measuring range	0m -100m
Accuracy	± 1mm
Measuring functions	Single and continuous measurement, Digital level
Data memory	Last 30 measurements/ calculation result with graphics
Calculation functions	Addition, Subtraction, Area, Volume, Painters area, Setting out, min/max, Timer, Offset, Memory(30x), Trapezoid(2x), Pythagoras(3x), Indirect measurement(3x)
Laser class	<1 mW, 635nm, Class2 (IEC 608251:2007), Class II (FDA CFR 21 art. 1040)
IP protection class	IP 65 (EN 60529)
Battery type	2 x 1.5 V (AAA)
Automatic switch-off	Yes

- No minimum distances when measuring very short distances
- LEDs provide clear identification of the measuring reference and thus help avoid errors.
- Built-in-360° sensor for various application possibilities
- Extremely ruggedly built to withstand hard jobsite use.
- Measuring quickly and safely in places where access is difficult
- Quick, reliable measurement

Tripod thread diameter	1/4 in
Measuring range	0m -200m
Accuracy	± 1mm
Measuring functions	Single and continuous measurement, Outdoor mode, Digital level
Data memory	Last 30 measurements/ calculation result with graphics
Calculation functions	Addition, Subtraction, Area, Volume, Painters area, Setting out, min/max, Timer, Offset, Memory(30x), Trapezoid(2x), Pythagoras(3x), Indirect measurement(3x)
Laser class	<1 mW, 635nm, Class2 (IEC 608251:2007), Class II (FDA CFR 21 art. 1040)
IP protection class	IP 65 (EN 60529)
Battery type	2 x 1.5 V (AAA)
Automatic switch-off	Yes

- Measuring up to 200m even under the toughest outdoor conditions.
- The outdoor display is readable even in very bright sunlight.
- LEDs provide clear identification of the measuring reference and thus help avoid errors.
- Built-in 360° tilt sensor for various application possibilities.
- Built-in optical view finder for outdoor measurement
- Measuring quickly and safely in places where access is difficult.

Measuring systems



Application

- Transferring reference heights
- Vertical alignment of pipes
- Leveling electrical sockets, cable trays and pipe installations
- Leveling and aligning doors and windows
- Setting out drywalls for partitioning
- Transferring fastening points from floors to ceilings

Product

PMC 46



- Leveling (transferring heights, pouring concrete, excavation)
- Aligning (transferring building lines, aligning columns and walls)
- Slopes (ramps, parking lots, pipes)
- Squaring (walls, partitions)

PR 3



Technical Data

Range	30m (Points), 10m (Lines)
Accuracy at 24° C	±3mm @ 10m, ±1.5mm @ 10m (Length of the line)
Laser	635nm, Class 2 (EN 60825-3:2007/IEC 60825-3:2007); Class II (CFR 21 § 1040 FDA)
Self-leveling range	±5°
Battery life	20hrs with alkaline batteries
Operating temperature	-10° C to +50° C
Weight	413 g
Dust and sprayed water protection	IP54 as per IEC 529 standard

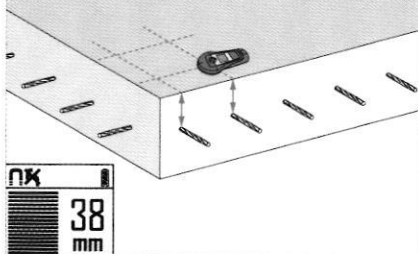
Advantages

- A universal tool with practical accessories - for a wide range of applications including leveling, aligning, plumbing and squaring in one toolbox
- Complete with a compact tripod and an innovative universal adaptor for placing or mounting the tool wherever needed
- New IPS impact protection system, with rugged inner pendulum housing
- Leveling, aligning, plumbing and squaring - all with one tool
- Laser receiver PMA31, an accessory for localization of line laser while working in exteriors

Range	± 0.75mm to 10m
Battery type	Li-ion
Dimension (LxWxH)	252x252x201mm
IP Protection class	IP 56(IEC 529)
Laser functionality	Horizontal levelling, Vertical aligning, One 90° laser beam, Manual slope
Max. operating distance with laser received (diameter)	300m
Operating distance range of remote control (diameter)	1 - 60m
Operating range with laser receiver (diameter)	1 - 300m
Operating temperature range	-20 to -50°C
Operating time with Li-on battery	30h

- Versatile rotating laser for leveling, aligning, slopes and squaring - indoors and outdoors
- Digital measurement - read offsets from the PRA 31 laser re-celver (optional accessory)
- Remote control for operation by one person
- High speed of rotation for a very stable line
- Built for jobsite conditions - water protected (IP 56)
- Easy power management with rechargeable Li-ion battery pack

Detection systems



Application

- Locating reinforcement, copper or aluminium pipes in concrete
- Locating copper or aluminium pipes in brick walls
- Determining the position and depth of existing rebars for post-installed rebar connections
- Checking concrete cover over reinforcement for trouble-free anchor setting

Product

PS 35



- Rebar verification and analysis
- Checking concrete cover over large areas for acceptance inspection and structural repair work

PS 250 Ferrosan



- Non-destructive inspection and detection of concealed objects in steel-reinforced and prestressed concrete structures
- Detecting metal or plastic pipes and electric cables to avoid damage when drilling
- Locating rebars for post-installed rebar connections

PS 1000 X-Scan



Technical Data

Max. detection depth for rebar and cover measurement	120mm
Max. detection depth for non-ferrous metal objects (e.g. copper, aluminum)	80mm
Localization accuracy	±10mm
Accuracy of depth measurement for rebar	±3 mm – ±11mm
Batteries	4 x 1.5 V AAA
Dimensions (LxWxH)	23 x 10 x 4.5 cm
Operating temperature	-15°C to 50°C
Weight incl. batteries	450 g

Advantages

Work without trial and error -mark the position accurately before starting drilling.

- Avoids damage to rebar, copper and aluminium pipes when drilling
- Avoiding hitting rebar increases drill bit lifetime
- High depth measurement precision for rebar
- Simple, user-friendly operation
- Clear indication of detection with red /green LED
- Ruggedly built for jobsite use

Detection Range	max. 160mm
Location accuracy	± 3mm
Depth measurement accuracy	± 1mm
IP protection class	IP 54
Operating temperature range	-10 to + 50°C
Battery life, scanner / monitor	8h with NiMH / 2h with Li-on battery pack
Dimensions / weight, scanner	260x132x132 mm / 1.4 Kg
Dimensions / weight, monitor	290x208x65 mm / 2.3Kg

- Scans large area of concrete quickly and easily
- Provides accurate depth of cover measurements for reinforcement at depths up to 100 mm.
- Records scan data automatically over lengths of up to 30 meters
- Display a clear 2D image of the reinforcement on the monitor for on-the-spot structural analysis and depth of cover assessment.

Detection Range	max. 300mm
Location accuracy	±0mm
Depth measurement accuracy	±0mm
IP protection class	IP 54
Operating temperature range	-10 to + 50°C
Battery life, scanner / monitor	4h / 2h with Li-on battery pack
Dimensions / weight, scanner	318x190x143 mm / 2.5 Kg
Dimensions / weight, monitor	292x208x65 mm / 2.3Kg

- Locate objects of various kinds in concrete structures, even beneath reinforcing mesh
- Display a clear, real time 2D image directly on the Hilti PS 1000 display
- Processed 2D and 3D plan view or cross-sectional images are displayed in color on the PSA 100 monitor unit for further on-the spot evaluation of the data or printing

Tool Selector Chart (Drilling Application)

Diameter of application (Primary Usage) in mm													Base Material					Technical Parameters					Connection end	Hilti Tools	Tool Type			
4	6	8	10	12	14	16	18	20	22	24	26	30	40	Primary Usage	Occasional usage				Tool Parameters			Operator comfort				Weight/Design		
														Concrete/Masonry	Drilling Wood	Drilling metal	Drilling Drywall	Mixing paint	coming in masonry	Breaking	Input power		Impact energy	RPM	BPM			
														✓							650W	1.6J	930	4550	2.4kg	Pistol grip	TE 1	Rotary Hammer
														✓				✓			650W	1.8J	930	4600	2.7kg	Pistol grip	TE 2	
														✓				✓			650W	1.5J	1050	5040	2.7kg	Pistol grip	TE 2A	
														✓				✓			650W	1.8J	930/2500	4600	2.8kg	Pistol grip	TE 2M	
														✓							710W	1.8J	1050	4980	2.8kg	Angular	TE 7	Cordless Rotary Hammer (Li-Ion, battery operated)
														✓				✓			30V/8.3 Ah	1.5J	930	5000	3.8kg	Angular	TE 6A	
														✓						✓	720W	2.6J	740	4020	3.4kg	Angular	TE 7C	C combi Hammer
														✓						850W	3.3J	750	4080	4kg	Angular	TE 30	Rotary Hammer	
														✓						✓	1010W	4.9J	550	3180	5.9kg	Angular		TE 40
														✓						✓	1050W	5.2J	550	3180	5.4kg	Angular	TE 50	Y combi Hammer
														✓						✓	1800W	11.5J	360	2760	8.3kg	Angular	TE 70 AVR	
														✓						✓	1800W	11.5J	360	2760	8.3kg	Angular	TE 70D / AVR	Y combi Hammer

Best performance & Lifetime

Possible

Tool under-utilized

Tool Selector Chart (Hammering application)

Application						Technical Parameters							Conne- ction end	Hilti Tools	Tool Type
						Operator comfort				Tool parameters					
Breaking/ chipping Concrete	Breaking/ chipping Masonry	Roughening concrete	Scrapping surfaces	Tamping	Direction of application	Design	Weight	Vibration	Contact Pressure	BPM	Impact energy	Input power			
					 Above waist	Angular	3.4 kg	17 m/s ²	60 N	4020	2.6 J	720W	 TE C 10	 TE 7C	Combi
					 Above waist	Angular	5.5 Kg	16.3 m/s ²	95 N	3180	4.9 J	1010W	 TE C 10	 TE 40	
					 Above waist	Angular	5.4 Kg	16.1 m/s ²	110N	3180	5.25 J	1050W	 TE C 10	 TE 50	
					 Above waist	Angular	8.3 Kg	10 m/s ²	220 N	2760	11.5J	1800W	 TE Y 18	 TE 70AVR	
					 Above waist	Angular	5.6 Kg	12.1 m/s ²	150 N	3180	7.5 J	1100W	 TE Y 18	 TE 500	
					 Above waist	Angular	7.9 Kg	6.5 m/s ²	150 N	2760/2520	11.5/8.3J	1300 W	 TE Y 18	 TE 700 AVR	Breakers
					 Waist level and below	In Line	12.5 Kg	5 m/s ²	150 N	1950	26J/21J	1750W	 TE S 22	 TE 1000	

Best performance & Lifetime

Possible but for occasional usage

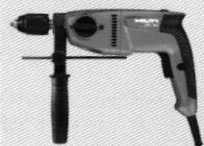
Cordless & Cutting Tools

Application

Product



- Drilling in steel and sheet metal
- Drilling in wood with auger bits, paddle bits and Forstner bits
- Driving large-diameter wood screws
- Various screwdriving jobs

**Hilti UD 30
electric drill**

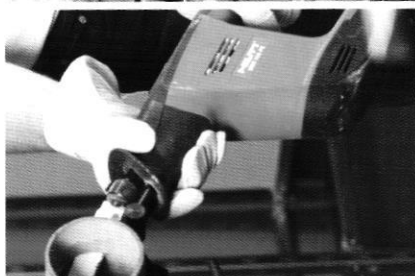
- Drilling in steel with bits up to 10 mm dia.
- Hole sawing in diameters up to 68 mm.
- Wood drilling with auger bits up to 20 mm dia.
- Driving screws up to 4.8 mm dia. in steel & upto 6 mm in wood.
- Driving anchor screws.

**SFC 14-A
Cordless compact
drill driver**

- Driving large-diameter wood screws
- Drilling in wood with auger, spade and Forstner bits
- Using hole saws to cut throughholes in wood and metal
- High-speed drilling in sheet metal

**Hilti SF 144-A
cordless
drill / driver**

- Tightening and releasing M12 to M24 bolts, machine screws and nuts.
- Assembling steel profiles, timber or pre-cast concrete components.
- Installing HRD frame anchors, HSL-B, HUS anchors.
- Driving wood screws up to 12 mm dia.

**SIW22T-A
Cordless impact
Wrench**

- Fast cutting through metal pipes
- Precise cutting of pipes using the pipe clamp adapter
- Ideal for wood demolition
- Flush cutting, cutting metal close to edges

**WSR900-PE
Reciprocating
saw**

Technical Data

Rated power input (W)	650 (6.5 amps)
Speed under no load: 1st gear (r.p.m.)	1200
2nd gear (r.p.m.)	3300
Max. torque: 1st gear (Nm)	51
2nd gear (Nm)	18.5
Keyless chuck (mm)	Ø 1.5–13
Spindle collar (European standard)(mm)	Ø 43
Weight without side handle (kg)	2.3

Voltage	14.4 V
Battery capacity (option of 2 batteries)	1.6 Ah or 3.3 Ah
Dimensions (LxWxH)mm	192 x 80 x 225
Weight (as per EPTA)	1.5 kg
No-load rpm.(1st / 2nd gear)	0-500 / 1700
Max. torque (Soft / Flexible joint)	24 Nm
Max. torque (hard / rigid joint)	45 Nm
Torque settings (15 increments)	1.5 - 10 Nm

Voltage/battery capacity	14.4 V/2.6 Ah Li-Ion
No-load speeds (gears)	380/1440 U/min. (2)
Max. screwdriving torque – soft joint/hard joint	33/70 Nm
Torque regulation	2 to 12 Nm in 15 steps
Keyless chuck	Steel jaws 1.5 to 13 mm
Weight(incl. battery and chuck)	2.2 kg

Battery type (V)	Li-Ion / 21.6
Battery capacity (Ah) / (Wh)	2.6 / 56.16
No-load running speed (min.)	2000
Impact speed (/min.)	2500
Torque (Nm)	450
Dimensions, L x W x H (mm)	232 x 94 x 258
Weight incl. battery & charger	2.95 (kg)
Standard bolt range	M12 – M24
High tensile bolt range	M8 – M16
Chuck / Socket connection	½" Square

Power rating:	900 W
Stroke rate (6 setting adjustable):	900–2700 min–1
Stroke:	32 mm
Blade holder:	Keyless 1/2" system for standard blades
Weight of machine:	3.26 kg
Dimensions (LxWxH):	442x88x221 mm
Stroke rate regulation:	Constant-speed electronics, variable stroke rate, 6 settings
Counter balance anti vibration system:	yes
Vibration absorbing grips:	yes
Orbital action:	yes

Advantages

- Low weight for unique working comfort
 - Keyless chuck with spindle lock for single hand operation
 - Sturdy side handle, pivotable through 360°, for a secure hold
 - 43 mm spindle collar (European standard) for drill stands
 - Very reliable thanks to extremely rugged casing and robust motor
 - Stepless electronic speed control for smooth, gentle starting and screwdriving
-
- Very compact design for best-possible access in tight corners.
 - Perfect balance and low weight make the tool less tiring to use.
 - Precise drilling and screwdriving speed up to 1,700 /min.
 - Shadowless illumination provided by LED lamp built into the grip base.
 - Best-in-class power-to-weight ratio.
 - Long lasting battery - CPC technology
 - State of charge display LED.
 - Protection from deep discharging.
 - Overload protection.
 - Temperature & Power monitoring.
-
- Powerful, high-torque motor delivers superior performance
 - Excellent balance for all-day working comfort thanks to Li-Ion battery technology
 - All-metal gearing and impact-resistant glass-fiber reinforced housing
-
- Tool is a replacement for handheld bolting M24 dia - min. efforts and time.
 - ½" square drive with heavy-duty ball notch retention for security and quick socket changes.
 - High power to weight ratio.
 - Compact design with excellent balance for precise handling.
 - Long lasting battery - CPC technology
 - State of charge display LED.
 - Protection from deep discharging.
 - Overload protection.
 - Temperature & Power monitoring.
-
- Anti vibration system reduces vibrations by up to 80%.
 - More power for greater cutting performance: constant speed electronics assure consistent cutting performance even under heavy load.
 - Keyless blade clamp with reversing position assure fast easy blade changing.
 - Keyless adjustable blade shoe for optimum use of saw blade length.
 - Orbital cutting action for faster cutting in wood.
 - Six stroke rate settings for optimum cutting performance in all materials.

Angle grinder selection chart

For concrete and metal application



Technical Data	AG 100-8S	AG 100-8D	DAG 125-S	DCG 125-S	DCG 180-P	DCG 230-D
Cutting disc diameter (mm)	100	100	125	125	180	230
Depth of cut (mm)	25	25	35	35	40	60
Rated power (W)	850	850	1100	1400	2200	2600
Rated Current (Amps)	3.4	3.4	5.0	6.4	10.0	12.0
Speed under no load (rpm)	11500	11500	11000	11000	8500	6500
Weight as per EPTA 1/2003 (kg)	1.9	1.9	2.2	2.4	4.6	5.4
Arbour thread	M14	M14	M14	M14	M14	M14

Application						
Metal cutting & grinding	✓	✓	✓	✓	✓	✓
Concrete cutting & grinding	✓	✓	x	✓	✓	✓

Unique features						
Smart power	x	x	✓	✓	✓	✓
ATC	x	x	✓	✓	✓	✓
Restart interlock	x	x	✓	✓	✓	✓
Epoxy Coated motor winding	✓	✓	✓	✓	✓	✓
Motor overload cut-out	✓	✓	✓	✓	✓	✓
AVR	✓	x	x	x	✓	✓
Back grip	fixed	fixed	fixed	fixed	rotatable at 90°	rotatable at 90°
Soft rubber grip	x	x	✓	✓	✓	✓
Switch type	side switch	deadman switch	side switch	side switch	multi finger switch	multi finger switch
Low gear profile	✓	✓	✓	✓	✓	✓

Accessories						
Concrete cutting dust hood	x	x	x	✓	x	✓
Concrete grinding dust hood	✓	✓	x	✓**	x	x
Concrete slitting dust hood	x	x	x	✓	x	x
Slitting adaptor	x	x	x	✓	x	x

Consumables

Concrete cutting & grinding disc.						
Concrete cutting disc	DC-D 100/20/GP	DC-D 100/20/GP	x	DC-D 125/22.2/GP	DC-D 180/22.2/GP	DC-D 230/22.2/GP
Grinding cup wheel	DC-C 100/20/SR	DC-C 100/20/SR	x	DG-CW 125/22.2/SR	DG-CW 180/22.2/SR	DG-CW 230/22.2/SR
Abrasive disc - All metal including stainless steel						
INOX- for S.S. sheet metal	1.0 mm	1.0 mm	1.0 mm	1.0 mm	1.5 mm	1.8 mm
Metal cutting	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm	2.5 mm
Grinding disc	6.4 mm	6.4 mm	6.4 mm	6.4 mm	6.4 mm	6.4 mm

SmartPower
Smart Power: 1. Electronic Starting current Limitation
Starting current drawn by motor is limited to prevent the electric supply fuse blowing. This also prevents tool starting with a jolt.

2. Constant speed electronics: Electronic control system keeps running speed almost constant under all conditions between idling and full-load. This constant speed ensures maximum working efficiency.

3. Overheating prevention: Current input and motor temperature are monitored to prevent the tool overheating. Power output is reduced noticeably or the tool may stop completely when excessive pressure is applied to it.



The ATC (Active Torque Control): Electronics detect an impending situation that may cause the disc to stick. The electronics then switch the tool off, preventing further rotation of the spindle (this reduces but does not fully prevent kickback). The switch must then be released and pressed again to restart the tool.



Restart Interlock:

When the switch of the tool is locked, the tool does not restart of its own accord when the power returns after a power cut or interruption. The switch must be released and then pressed again to restart the tool, this eliminates the risk of unexpected starting, even when the switch is locked in the "on" position, e.g. after a power cut or when the tool is unplugged and then plugged in again.

Grinder Consumables
Application
Product


Premium line - High performance diamond cutting Disc
(delivers high cutting speed and life)

Each disc meant for cutting specific base material:

- Concrete
- Masonry
- Natural stone & Synthetic stone

Premium line - 5" Diamond cutting Disc


DC-D 125/C1 : Medium / soft concrete
DC-D 125/C2 : Hard concrete
DC-D 125/M1 : Masonry
DC-D 125/M2 : Natural stone & synthetic stone



Classic line - Multi purpose diamond cutting Disc for cutting all base material like:

- Concrete
- Masonry
- Natural stone & Synthetic stone

DC-D Classic line - 4", 5", 7", 9" Diamond cutting Disc


DC-D 100/20/GP: for 4" angle grinder
DC-D 125/22.2/GP: for 5" angle grinder
DC-D 180/22.2/GP: for 7" angle grinder
DC-D 230/22.2/GP: for 9" angle grinder



Classic line - Multi purpose diamond cup wheel for concrete grinding disc for grinding:

- Bulging of concrete columns and beams
- Leveling of water slops
- Industrial flooring
- Concrete suturing joints

DG-CW classic line - 4", 5", 7" Diamond Diamond cupwheel


DG-CW 100/20/SR: for 4" angle grinder
DG-CW 125/22.2/SR: for 5" angle grinder
DG-CW 180/22.2/SR: for 7" angle grinder



• Cutting Steel and other metals, Suitable for use with all angle grinder and cutters, wide range of cutting applications

AC-D metal cutting disc - 4", 5", 7", 9" Abrasive disc


- Inox disc: Extra thin cutting disc (1 to 1.8 mm thickness) - cutting sheet metal and stainless steel
- 2.5 mm thick cutting disc: cutting all metal including stainless steel



• High performance grinding disc for Steel and other metals, Suitable for use with all angle grinder and cutters, wide range of cutting applications

AG-D metal grinding disc - 4", 5", 7", 9" Abrasive disc


- 3.2 mm thick disc: comes only 4" diameter for both cutting and grinding application
- 6.4 mm thick disc: abrasive grinding disc

Diamond Drilling & Cutting	Application	Product
	• Installing pipes for sanitary, heating and air conditioning • Installing water supply and waste water pipes • Making openings for cable trays • Setting large-diameter anchors and reinforcing bars • Installing railings and barriers	DD-120 
	Wet coring, making penetrations in concrete, for example, for: • Heating pipes and ventilation ducts • Water supply or waste water pipes • Cables and cable trays Drilling anchor holes for: • Large-diameter anchors and post installed rebars • Installation of hand rails, railings or barriers	DD-160 
	• Drilling penetrations, e.g. for plumbing/ heating pipes or ventilation ducts • Drilling corner holes for wall sawing door and window openings • Large-diameter holes, e.g. for shafts • Stitch drilling, e.g. creating openings for cable trays • Angular drilling & blind holes	DD-200 
	• Penetrations up to 600 mm diameter in reinforced concrete and all types of stone • Penetrations, installation of pipes and cables, e.g. ventilation ducts • Deep-hole coring, anchors foundations / repair work • Coring applications in highly reinforced concrete e.g. atomic power stations / bridges	DD-350 
	• Cutting of materials such as reinforced concrete, granite curbstones, slabs, brick and masonry blocks • Cutting metal beams, steel pipes and reinforcing bars • Preliminary cuts for controlled demolition • Cutting and extending openings for windows, doors and shafts	DCH-300 
	Removes waste material of all kinds in drilling, slitting, sanding, cutting or core drilling applications	VC-20-U wet/dry vacuum cleaner 

Technical Data

Voltage(V):	230
Drilling Range(mm):	Rig-based wet:16-162
Max. drilling depth(mm):	430
Rotation speed gear 1 under no load(rpm):	650
Dimensions(LxWxH):	830x147x330
Weight of complete system(kg):	11
Wall accessibility(mm):	41
Chuck type:	BI+
A-weighted emission sound pressure level(A):	89 db
Fixation of drill stand:	Anchor

Voltage (V):	230
Nominal Power (W):	2200
Nominal Current (A):	10.3
Drilling Diameter Range (mm):	25 – 202 (optimum: 52 – 162)
No. of gears:	Three
No load speed (rpm):	420/700/1570
Chuck Type:	BI+
Drill Stand:	DD-ST 160 SFL
Weight as per EPTA 01/2003 (kg) with SFL drill Stand:	16.3

Voltage (V):	230
Rated power (W):	2600
Rated current (A):	12.3
Drilling diameter range (mm):	25-400 (optimum: 52 – 250)
No. of gears:	Three
Speed under load (rpm):	211 / 435 / 890
Torque under load (Nm):	92 / 45 / 21
Chuck Type:	BL
Weight of motor unit as per EPTA 1/2003 (kg):	13.9
Drill Stand:	DD-HD 30
Weight of drill stand as per EPTA 1/2003 (kg):	20.1

Voltage (V):	230
Rated power (W):	3500
Rated current (A):	16
Drilling diameter range (mm):	52 – 500
Gears:	10 gears, electronic
Chuck Type:	BL
Weight of motor unit as per EPTA 1/2003 (kg):	14.4
Drill Stand:	DD-HD 30
Weight of drill stand as per EPTA 1/2003 (kg):	20.1

Disc diameter (mm):	305
Maximum cutting depth (mm):	120
Rated power (W):	2300
Electronic idling speed limitation (r.p.m.):	4900
Speed control Smart Power :	Smart Power
Dimensions, L x B x H (mm):	705 x 240 x 235
Weight as per EPTA 1/2003 (kg):	9.4

Voltage (V):	230
Power rating (W):	1200
Max. suction rating (l/sec.):	61
Container volume (l):	15
Dust capacity (kg):	25
Automatic filter cleaning (sec.):	every 15
Dust class:	L
Maximum load of to electric tool if fitted (W):	2400
Protection class:	IPX4, splash-proof
Built-in power outlet:	yes

Advantages

- Exceptionally user-friendly thanks to self-explanatory features and controls
- Compact, lightweight unit for extremely easy handling
- Easy to transport and set up
- Two-speed gearing for optimum speed and torque
- More reliable and lower repair costs
- The power control LED helps new users to achieve the optimum rate of drilling progress and maximum core bit life

- Exceptionally user-friendly thanks to self-explanatory design
- Compact design and low weight for easy handling
- Easy to transport and set up
- 2.2 KW HPD Uni motor to increase performance on large diameters
- Optimum speeds for each application
- Less downtime: the service indicator reminds users in good time when servicing is due

- Optimized drive unit with higher torque for even higher performance
- LED Power Controls help inexperienced users achieve maximum efficiency
- Quick and easy to use: new keyless BL chuck and connection end system for fast bit changes
- Service indicator warns in good time when servicing is due – for less down time and lower maintenance costs

- Powerful high-frequency motor with 10 electronic speeds (E-gears)
- Iron Boost function for higher performance when drilling into rebars
- User-friendly Power Controls indicate optimum pressing force
- Range of core bits up to 600 mm diameter
- Superior system performance for maximum profitability
- IP 55 design provides protection from water splashes

- Cuts can be made at up to twice the depth possible with conventional angle grinders
- Greater safety: the tool is guided away from the operator's body
- Oil-bath gearing optimized for cutting work
- Overheating and overloading protection
- Exact cutting depth adjustment with depth gauge (optional)
- Cutting discs and accessories perfectly matched to the tool

- New filter concept allows full use of the container capacity and virtually dustless emptying
- Use of a dust removal system extends the life of power tools
- Easy to operate and ruggedly built to withstand hard use
- Large wheels for easy on-site transport
- Hilti airboost filter technology for constantly high suction performance. This new system cleans the filter automatically every 15 seconds by briefly reversing the air flow inside the vacuum cleaner.

Diamond Saws system

Application

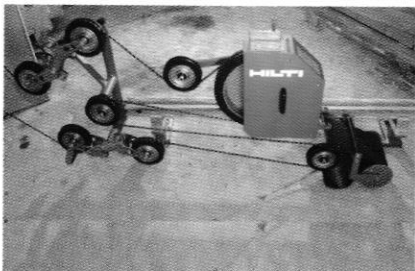
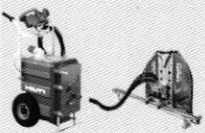
Product



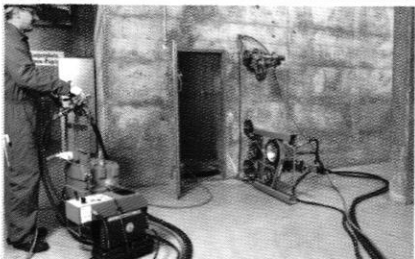
- Hydraulic Diamond Coring for diameter 52-600mm
- Versatile in use, underwater application
- Used for heavy duty coring jobs
- Extra long deep coring also

DD-750
hydraulic coring tool


- Cutouts and breaches for doors, windows, ducts and shafts
- Controlled demolition and renovation
- Wall sawing, wire sawing and large diameter hydraulic coring

D-LP 32 / DS TS32
hydraulic wall saw system:


- Cutting large openings of all kinds in thick structural components
- Technical demolition, cutting away foundations, chimneys, supports, etc.
- Sawing heavily-reinforced concrete, thick masonry, etc.
- Underwater applications, low-noise sawing

Hilti DS-WSS 30
diamond wire saw system:


- Cutting through extremely thick components
- Cutting openings without over cutting (doors, windows and shafts etc.)
- Small structural modifications (cutting through columns and beams)
- Sawing with a minimum of noise
- Underwater applications (DS WS10)

Hilti DS-WS 10 Hydraulic / DS-WS 10-E Electric
wire saw system


- Automatically induced twist ensures even rate of wear and long diamond wire life
- Very simple, quickly - rigged wire storage system
- Saws through components with a thickness of 4 meters in one operation.
- The quickly adjustable, high-grade pivoting wire guide pulleys ensure extremely quiet, precise running.

DS-WS 15E
diamond wire saw system


Technical Data

Drilling diameter range (mm): 52-600
Power output Max. (KW): 11
Chuck: DD-BU

Power unit:
Either Hydraulic power pack D-LP 15 or D-LP 32 can be used

Power unit:
Rated power input at 63 A: 43 kW
Nominal power: 32 kW
Nominal voltage: 400V-50Hz 3P+PE
Fuse rating min./max.: 32 A / 63 A
Max. operating pressure: 200 bar
Oil flow rate: 40-100 l/min.

Saw head:
Hilti motor: DS TS32
Max. operating pressure: 54 cm3
Max. oil flow rate: 200 bar
Saw blade diameter: 100 l/min.
Max. cutting depth: Ø 800-1600 mm
73 cm

Rated power input at 63 A: 43 kW
Nominal power output: 32 kW
Nominal voltage: 400 V ~ 50 Hz 3 P+PE
Fuse rating, min.: 32 A
Fuse rating, max.: 63 A
Max. operating pressure: 210 bar
Oil flow rate: 30-100 l/min.
Drive wheel dia.: 500 mm
Guide pulley dia.: 200 mm
Speed: approx. 800 r.p.m.
Cutting speed: approx. 20 m/sec.
Wire store capacity: 8 m diamond wire
Diamond wire length: 10-30 m

Electric version
Electric supply: DS WS10-E 400V
400 V ~ 50/60 Hz
Fuse rating: 32 A
Motor protection class: IP 65
Wire storage capacity / with extension: 4.5 m / 7.3 m
Rated power input: 11 kW
Wire speed: 0 - 24 m/s

Hydraulic version
Hydraulic unit: DS WS10
Hilti D-LP15 / D-LP32
Oil flow rate: 36 - 50 l/min
Oil pressure: max. 210 bar
Wire storage capacity / with extension: 4.5 m / 7.3 m
Wire speed: 0 - 27 m/s

DS-WS 15E drive unit
Drive wheels: 2 x 280 mm dia.
Nominal power: P1 = 2x7.5 kW continuous power rating (= 15 kW)
Wire speed: Infinitely adjustable, 0 - 27 m/s
Wire storage: Max. 9.2 m
Protection class: IP 65 (protection against water jets)
Length of cable between system units: 7 m

DS-WS15E control unit
Nominal voltage: 400 V ~ 50/60Hz 3P+N+PE oder 3P+PE
Nominal current: 25 amps
Min. fuse rating: 16 amps
Protection class: IP 44 (protection against splashing water)
Generator operation: Min. 40 kVA

Advantages

- Hydraulic coring machine proves to have immense power for any kind of Job
- Hydraulic drilling head is separate then the drive unit so drilling can be done at any critical job site condition.
- Heavy duty coring resulting from heavy reinforcement, extra long depth of drilling, heavy diameters can be done at with ease.

- Rugged and durable saw system based on well-proven technology
- Tested and certified for maximum safety
- Outstanding sawing performance with a 63 amp supply thanks to automatic, electronically-controlled advance
- Becomes a universal system for heavy concrete cutting, coring and demolition applications when used in conjunction with the DS-WSS30 wire saw kit and DD-750HY hydraulic coring rig
- Traction Control (TC) calculates the optimal advance speed, making it possible to take full advantage of the available power.

- Quick, modular adaptation of the powerful Hilti D-LP32 (LP30) / DS-TS32 (TS30) wall saw The drive unit does not have to be aligned with the cutting line, i.e. it can be set up in the most convenient position.
- Very smooth and easy starting using the infinitely adjustable electric remote control unit Automatic sawing advance control
- Integrated wire store system

- Automatic wire tensioning for ease of operation. Quick system response maintains even tension at all times while cutting is in progress.
- Fewer wire breakages and longer wire life thanks to pneumatic tension buffering.
- Undesired effects such as cutting too slowly at less than peak efficiency or, at the other extreme, stalling the saw.
- Rugged and durable saw system with well-proven components
- Tested and certified to meet safety requirements
- Quickly set up and made ready for use Pulleys with guide cage to prevent wire derailment
- High cutting performance
- Pneumatically-controlled advance

- Automatically induced twist ensures even rate of wear and long diamond wire life
- Pneumatic control for smooth saw advance - easy on the wire and, once set the Hilti DS-WS 15 saws automatically
- Very simple, quickly - rigged wire storage system
- Saws through components with a thickness of 4 meters in one operation.
- The quickly adjustable, high-grade pivoting wire guide pulleys ensure extremely quiet, precise running.

Screw Fastening

Application

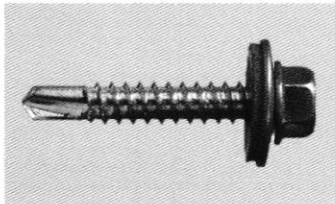
Technical Data



- Fixing of sheet metal to sheet metal/wood/steel members
- Fibre-cement sheets to steel and wood structures
- Composite / sandwich panels to steel structures
- Excellent for screw fastenings requiring torque setting
- Depth gage for controlled pressure on EPDM washer to achieve proper fixing

ST 1800

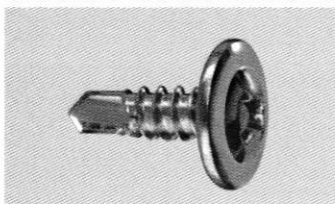
Voltage:	230V
Nominal power:	600W
Nominal current:	2.8 A on 230 V
No-load speed:	0-1900 r.p.m
Torque range:	1-22 Nm
Weight:	1.8 kg
Chuck type:	1/4" hexagon socket with ball-notch retention



- Construction screws for metal decking application
- Fixing of sheet metal to purlins (steel members)
- Corrosion resistant and water proof fixing
- Self drilling and tapping in metal base

S-MD 03 K/S & washer

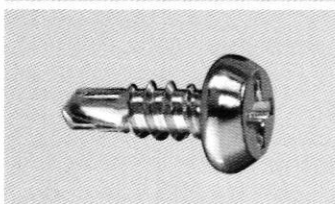
- Full threaded shank for higher fixability in fixing (various lengths available)
- Drill point for self drilling up to 5.5mm
- Kaitex coating for excellent resistance against corrosion (1000 hours of salt spray test). SS version also available
- Stainless steel bonded EPDM washer for a lasting water-tight sealing with maximum resistance against corrosion



- Metal connection to metal studs of thickness 0.7 to max. 2.5 mm
- Fastening wire lathing
- Wafer head for higher pull over values

S-DD 03 Z

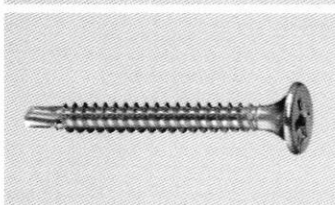
- Thread version ISO 1478/DIN 7970
- Nominal screw diameter 4.2 mm
- Wafer head diameter 10.5 mm
- Single lead fine thread
- Optimal system ST-1800 screwgun and S-BH450m with PH2 Bit



- Drywall stud to stud fixing application
- Fastening sheet steel from 0.7 mm to studs up to max. 2.0 mm thick

S-DD 02 Z

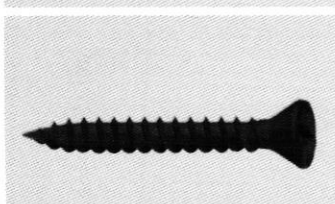
- Thread version ISO 1478/DIN7970
- Nominal screw diameter 3.9mm
- Pan head diameter 7.5mm
- Single lead fine thread
- Optimal system ST-1800 screwgun and S-BH450m with PH2 Bit



- Fastening drywall panels to metal studs 0.88 mm to max. 2.25 mm thick or to timber frames

S-DD 01

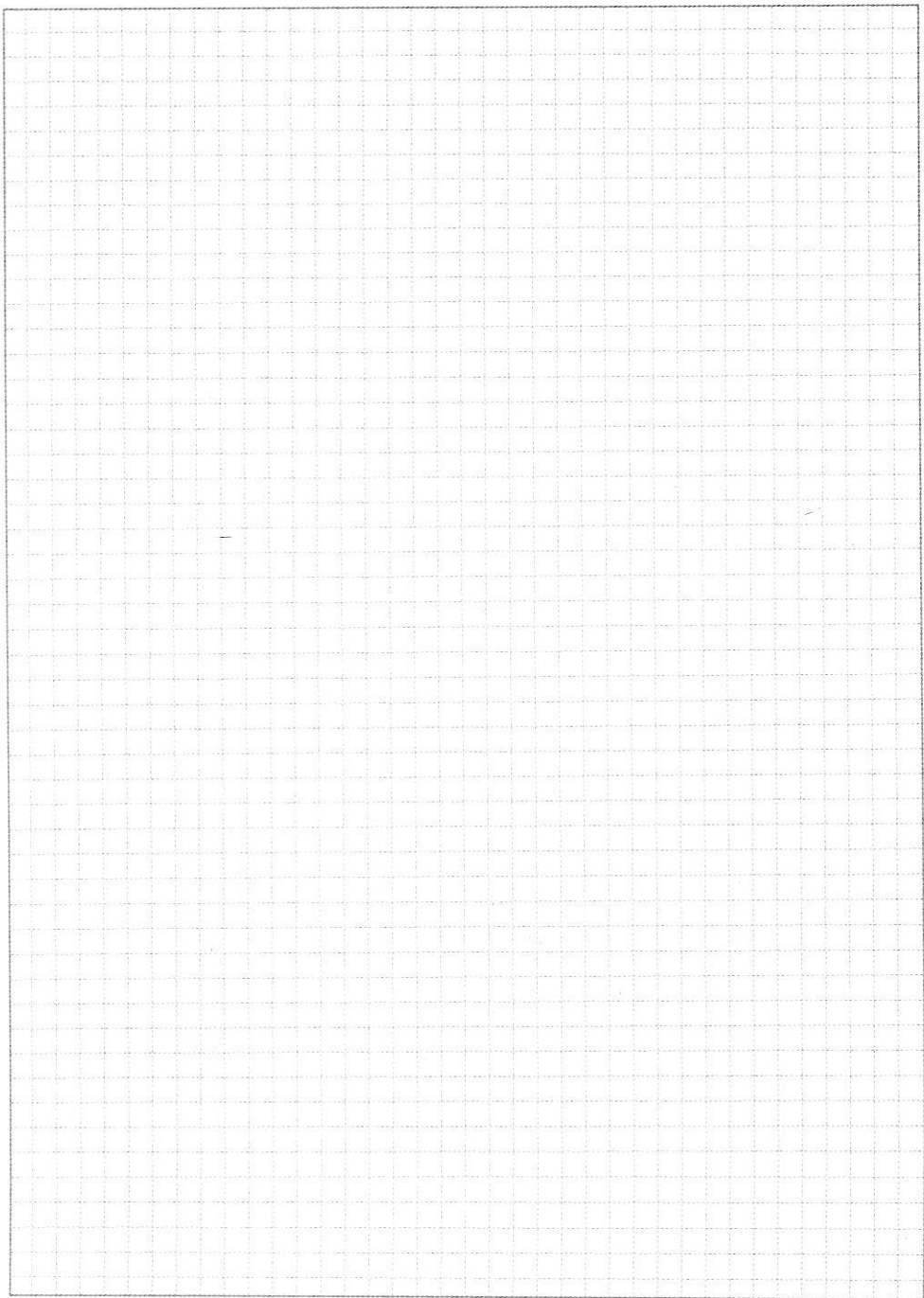
- Similar to DIN 18 182 part 2, form TB
- Nominal screw diameter: 3.5 mm
- Bugle-head diameter: 8 mm
- Single-lead fine thread with drill point
- Optimal system: ST-1800 screwgun and S-BH450m with PH2 Bit



- Fastening drywall panels to metal studs max. 0.88 mm thick or to timber frames

S-DS 01

- Similar to DIN 18 82 part 2, form TN
- Nominal screw diameter: 3.5 mm or 4.0 mm
- Bugle-head diameter: 8 mm double lead fine thread or single-lead coarse thread
- Optimal system: ST-1800 screwgun and S-BH450m with PH2 Bit



Direct Fastening

Application

Product



- Fastening to concrete, plastered masonry, sand-lime block, concrete block and steel
- Versatile fastening system for the drywall installation trade - no battery to charge.
- Column starter fixing - wooden planks to concrete
- Mesh/Membrane fixing on concrete/shortcrete/ masonry/ steel
- Conduiting/Junction box fixing on concrete/ masonry / steel
- Fixing of GI sheet in spandrel area

Gas-actuated fastening tool GX 120


- Fastening on high strength steel
- Fastening on coated or painted steel to avoid corrosion and through penetration
- Grating Fixing
- Electrical and instrumentation fixing

Powder-actuated tool DX 351-BTG


- Chemical and oil industries
- Offshore and shipbuilding
- Industrial construction
- Warehouses
- Steel industry
- Power plants

Powder-actuated tool DX 460-GR


- Fastening grating in corrosive environments like marine, offshore, petrochemical, power plants, etc.

Hilti X-BT stud and X-FCM-R disc


Technical Data

Power (max.)	100J
Fastener intake	40 nails
Fastener length range	14-39 mm
Weight	3.9 Kg
Automatic piston return	Yes
Noise (powder) level : LWA, 1s	105 db (A)
Dimension(LxWxH)	431 x 134 x 392 mm

Advantages

- High fastening rate for high productivity and maximum efficiency
- Magazine holds 40 nails: very fast when used for repetitive fastening
- No battery to charge so no need for a charger
- Wide range of nails: the right nails for fastening to a wide variety of materials
- World's first tool of its kind with a gas gauge to help avoid run-ning out of gas unexpectedly
- Drives 750 fasteners with a single gas can

Cartridge Type	.27 calibre short
Power (max.)	85J
Fastener intake	Threaded intake
Fastener length range	12-21 mm
Weight	2.36 Kg
Automatic piston return	Yes
Noise (powder) level : LWA, 1s	109 db (A)
Dimension(LxWxH)	431 x 56 x 164 mm

- A quick, easy and reliable fastening solution that eliminates the need for subsequent steel finishing
- Ideal for use on high-strength coated steel 8 mm or thicker
- Requires no external power source letting you work very efficiently
- Resistant to stress corrosion cracking and hydrogen embrittlement

Cartridge Type	6.8/11 M10
Cartridge color/level	Black, Red/5, Yellow
Fastener types	X-CRM8, X-GR RU
Dimensions (LxWxH)	18.8 x 2.8 x 7.1 in
Weight	8.5 lb
Piston type	X-460-P8
Power (max.)	325 J

- Fast, economical and convenient: up to 120 grating fastenings per hour by one user
- Total mobility and complete independence from electrical power supplies (no cables)
- Grating discs available Duplex coated, (hot-dipped galvanized) and A4 stainless steel for any situation

Material Specification	X-BT and X-FCM-R disc A4 stud and disc
Application environment	Off-shore use
Recommended tensile loads(N _{req})	1.0 kN
Grating heights	25-50 mm
Tightening torque	T = 5-8 Nm
Recommended DX tool	DX 351-BTG
Recommended cartridge	brown high precision

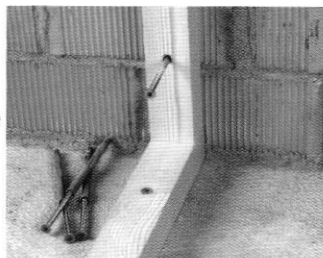
- Stainless steel disc
- Locking tabs on the disc help prevent loosening or spinning
- Non-slip disc surface
- No rework of base steel: steel corrosion protection remain intact.
- Suitable for use on most standard and high strength construction steels.
- Corrosion resistance makes it suitable for most marine, offshore and petrochemical and power plant applications
- Fast & ideal for fastening directly to coated steel

Hilti Anchor Fastening Technology

With more than 25 years of experience in anchoring technology and extensive research in development of new fastening systems for various applications, Hilti offers you **safe and economical solutions** for your fastening requirements.

Through out the world, Hilti is known as an anchor specialist and is trusted to bring continuous innovation in anchor fastening technology.

Hilti Anchor Advantages:



International brand with years of experience and reputation in fastening technology

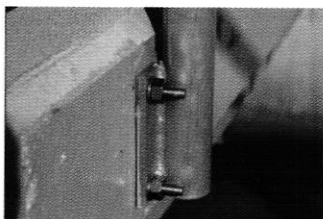
Customer's benefit: High level of assurance and reliability

Huge investment in R&D resulting into the most technologically advanced anchors

Customer's benefit: Best anchors making fixings highly safe and long lasting

Direct sales and technical support by highly trained Hilti Engineers

Customer's benefit: Correct advice on the selection of anchors



Various international approvals & test certificates

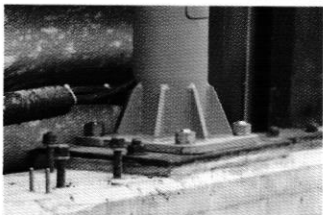
Customer's benefit: Validation of the anchor's performance to improve confidence on the fixing

Anchor design service

Customer's benefit: Customized solution for any type of fixing problem. Saves money by avoiding over-design & also prevents failure by avoiding under-design of Anchors

Site demonstration & training to the installers

Customer's benefit: Prevents failure due to improper fixing & improves productivity



Anchor pull-out test service provided at site by trained engineers

Customer's benefit: Gives a clear picture of anchor performance in site conditions and validates the anchor design

Availability of a variety of anchor versions and dimensions

Customer's benefit: Convenient since ready solution available for any type of fixing

Use of superior quality material

Customer's benefit: Higher load bearing capacity, better corrosion resistance and long life achieved from even a smaller size anchor or less number of fixings. Also, the coating on Hilti anchors is environment friendly (RoHS compliance)



Anchor stock available in abundance at various locations in India

Customer's benefit: Meets your demand even at short notices

Along with the anchor, Hilti provides compatible drill machines, drill-bits, setting tools, etc

Customer's benefit: Complete solution is just a phone call away

Anchor Selection Chart

Working principle Load indication	Base Material	Application	Special Features
Chemical anchors	Concrete	Insert plates on columns, beams, machinery fixing	Flexible foil capsule. No stresses in base material, small edge distance & small anchor spacing, fire tested, suitable for dynamic loads, ETAG approved SEC2 tested
	Cracked Concrete	Installation of crash barriers, equipment fixing, centrifugal pumps, turbines	Approved for cracked concrete, seismic condition (performance category C1) and diamond drilled rebar installation as per TR023 and TR029
	Hard natural stones	Rebar / anchor for structural connections till 40 diameter/M 80, under water fixings, diamond core fixings, deeper embedment depth fixings jacketing applications	Tested for creep behavior, large diameter fixings, rebar corrosion resistance and rock anchoring applications, approved for automatic cleaning with hollow drill bit for rebar applications
	Solid brick	Rebar / anchor fixing for structural connections till 32 diameter/M 30, cracked concrete applications	Approved for automatic cleaning with hollow drill bit and HIT-Z rods, high loading, excellent handling and fast curing
	Cavity block	Rebar / Anchor fixing for structural connections till 25diameter/ M24, insert plate fixings	Fast Curing, No stresses in base material, small edge & spacing
	Aerated Concrete	fixing anchor in solid brick, hollow brick, elevator shaft bracket, fixing	dBt tested for applications in masonry, fire tested, scooter corrosion tested
	Drywall / Plaster	Fixing rebar or anchor for non-critical applications like lintel fixings, till 12 diameter/M 12	Tested for small diameter in uncracked concrete, vinyl ester
Metal anchors	Concrete	Anchor fastening for high loads e.g. in steel construction and plant construction	Suitable for shock, fatigue, seismic loads, high shear loads, self undercutting, removable anchor, fire tested, ETAG approval high load capacity & approval for dynamic load
	Cracked Concrete	Fastening heavy loads e.g. From columns, high racks, Machines	Different head versions available, force-controlled stresses, fire tested, ETAG approval, suitable for shock fatigue & seismic loads
	Hard natural stones	Safety relevant fastening at Facades and ceilings where Short embedment depth is required	Shallow embedment depth, self undercut anchor fire tested, small edge distance, anchor spacing suitable for shock loads fire tested
	Solid brick	Fastening through in place parts e.g. angles, tracks, channels wooden beams, etc.	Cold formed, stainless steel 3 way stressed sleeve fire tested, ETAG approved, quick and simple setting operation, setting mark, safety wedge for certain follow up expansion & suitable for shock loads, fire tested
	Cavity block	Fastening base plates, railings and hand railings, structural steel and temporary applications	Screw driven straight into base material, higher productivity, approval for reusability in fresh concrete, approval for adjustability
	Aerated Concrete	Curtain wall applications hand rail fixings, industrial application load fixing in chimney & cooling tower	Cold formed, fire tested, ETAG approved, three setting depths, setting mark, extremely ductile steel for high bending capacity
	Drywall / Plaster	Fastening through in place parts hand rail fixing, guide rail fixing, HVAC, AHUS	Quick and simple setting operation cold format, two embedment depth
	Concrete	Temporary fastenings in concrete (e.g. form work), fastening in base material of low density, cable tray fixing	Short setting and removing operation, good loads in green concrete, bridging of gaps
	Cracked Concrete	Fastening with threaded rods for pipe suspension, air ducts, suspended ceilings	Visual verification of full stresses, small setting depth
	Hard natural stones	Fastening with threaded rods for pipe suspension, air ducts, suspended ceilings	Visual verification of full stresses, small setting depth
	Solid brick	Fastening light channels, brackets, interior paneling or cladding, door and window frames	Screw driven straight into base material, small bit diameter, matched system of screw anchor and screw driver
	Cavity block	Redundant fastening only	For suspended ceilings and other items from concrete ceilings
	Aerated Concrete	Redundant fastening only	Suspension from concrete ceilings e.g. using steel straps, punched band, Nonius system hanger
	Drywall / Plaster	Fastening battens, channels panels	metal undercut anchor with metric screw, esp. for drywall, metal to metal fastening, reliable undercut

■ Preferred choice

Please call Hilti technical person for further details.

Anchor Selection Chart

Plastic anchors			Hiilti HRD					Door/windows frames, stone cladding curtain wall bracket	Polyamide sleeve, 2 head version for stone & hexagonal with ETA approval
			HLD light duty anchor					Fastening to weak material with cavities	Elastic undercut anchor, simple setting, esp. for drywall applications
			HTB					ingenious and strong for hollow base materials	Convinving simplicity when setting. Technical superiority with up to 92mm fixing thickness. Used carrier by strong metal channel and screw
			IDP insulation fastener					Fastening of hard, self supporting insulating materials	for insulating up to 15 cm, simple setting
			Hiilti SS Clamp					For dry stone cladding	Stainless steel clamp in 316 & 304 grade/suitable pin to set the offset in between base material and stone from 50 - 120mm
			Hiilti HUD-1 /-L					For electrical fittings, interior furnishings, sanitary fixing etc.	High quality polyamide as sleeve
			Hiilti HPS-1 /-1R					Fixing wood battens, components for electrical and plumbing installations	Impact and temperature resistant, high quality plastic

■ Preferred choice

Please call Hilti technical person for further details.

Anchor type	Base material						Advantages	Application
	Cracked concrete	Un-cracked concrete	Lightweight concrete	Aerated concrete	Solid brick masonry	Hollow brick masonry		
	Pre-stressed concrete hollow deck							

Medium & Light Duty Anchor

HSP/HFPdrywall plug							for light fastenings on drywall panel self- cutting, quick setting	Fastenings in dry walls	
HT metal frame anchor		•	•	•	•	•	Fastening door and window frames, no risk of distortion or forces of constrain, expansion cone can not be lost	Fastening door and window frames	
IDMS / IDMR insulation fastener		•	•			•	•	for insulating material upto 15cm thick, a non-flammable, metal fastener, IDMS-T /IDMR - for non self-supporting insulation material	Fastening of soft and hard, self supporting insulating materials and non self supporting insulation materials

Chemical Anchors

HVZ adhesive anchor 	No expansion pressure, small edge distances and spacing. A strong and flexible foil capsule	Heavy-duty fastenings with small spacing and edge distances
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● = very suitable

○ = may be suitable per application

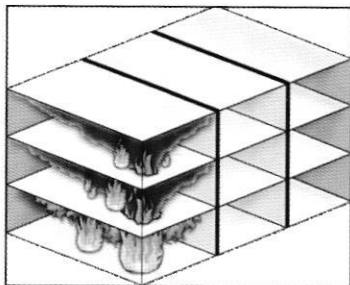
* = technical report

1) redundant fastening

Passive Firestop Systems

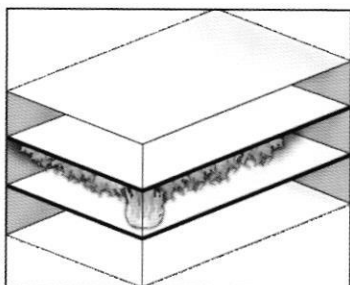
If a fire breaks out, it should be contained in a so-called fire compartment by passive firestop systems. To achieve this, each and every opening or penetration in a fire wall or floor must be sealed against the escape of fire and smoke. Materials used for this purpose expand during fire and closes any gaps which might result from melted components. A properly installed fire seal can prevent fire from spreading to a neighboring room for a time of one to four hours. As a result, escape routes are kept safe and the work of firefighters supported. Active fire prevention uses sprinkler systems, fire extinguishers fire services, which comes into action when a fire is actually fought.

Compartmentation



Vertical compartmentation

Fire can spread vertically via openings in floors



Horizontal compartmentation

Fire can spread horizontally via openings in walls

Why use Hilti firestop systems?

Firestop representatives from Hilti provide professional advice about firestop systems for building owners, specifiers and installers. They work closely with customers from the building planning stage to the firestop installation phase to select ideal solutions or applications from Hilti firestop programme. A full range of systems can be supplied by Hilti to seal joints, cable penetrations and pipe openings in fire walls and floors.

Each product has been optimised for the diverse requirements in buildings, installer benefit from the easy use of hilti firestop systems. They themselves can install the planned and necessary firestop systems, while resting assured that Hilti systems have been tested worldwide and approved in accordance with national regulations.

National Building Code of India 2005

Revised Building Codes of India Firestop Guidelines (excerpts from part 4 : Firestop Lifesafety)

Clause C-9 Compartmentation

The building shall be suitably compartmentalized so that the fire and smoke remain confined to the area where the fire incident has occurred and does not spread to the other part of the building.

Annex Clause C1.17 Fire Rated Ducts

Where the duct passes through fire walls, the opening around the duct shall be sealed with fire resisting materials having the fire resistant rating of the compartment.

Where the duct crosses the compartment which is fire rated, the duct shall be fire rated for same fire rating. Further, depending on the services passing around ductwork, which may be affected in case of fire temperature rising, the shall be insulated.

Annex Clause C1.12a Cable Ducts

The electric distribution cables / wiring shall be laid in a separate duct. The duct shall be sealed at every floor with non-combustible materials having the same fire resistance as the fire rating of the duct.

Clause 3.4.8.4 Fire Stopping

Every vertical opening between the floors of a building shall be suitable enclosed or protected as necessary to provide reasonable safety to the occupants while using the means of egress by preventing spread of fire, smoke or fumes through vertical openings from floor to floor, thus allowing occupants to complete their safe use of the means of egress.

Clause 3.4.8.3 Fire Stopping

Openings in walls or floors which are provided for the passage of all building services like cables, electrical wiring and telephone cables etc., shall be protected by enclosures in the form of ducts / shafts with a fire resistance of not less than 2 hours.

Annex Clause C1.9 Fire Stopping Service Ducts & Shafts

Service ducts and shafts shall be enclosed by walls of 2 hour and doors of 1 hour rating. All such ducts / shafts shall be properly sealed and fire stopped at all floors.

Annex Clause C1.16a Transformer Substation

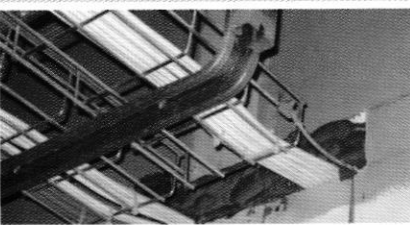
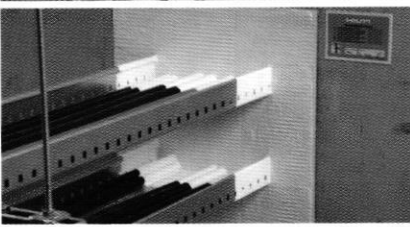
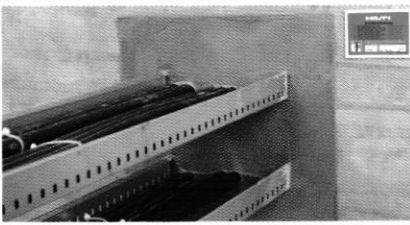
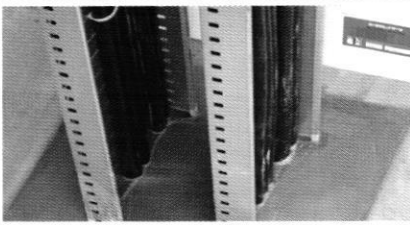
The outside walls, ceiling, floor, opening including door and windows to the transformer substation area shall be provided with fire resistance of 2 hours rating.

Annex Clause C1.16a Transformer Room

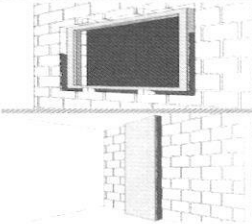
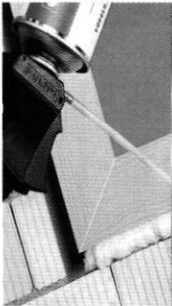
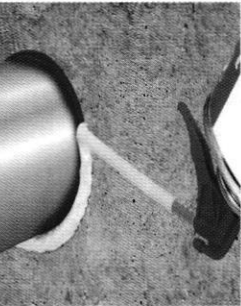
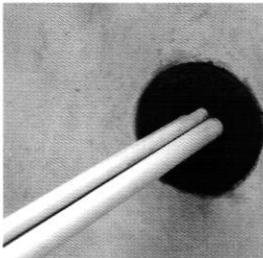
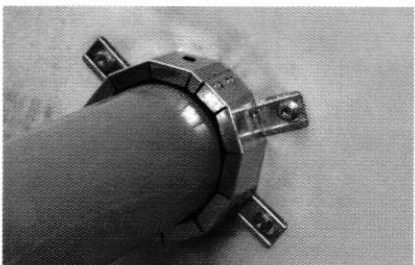
When housed inside the building the transformer shall be of dry type and shall be compartmentised from the other portion of the premises by walls / doors / cut-outs having fire a minimum fire resistance of 4 hours.

Annex Clause C1.12 Fire Stopping Cable Ducts Penetrations

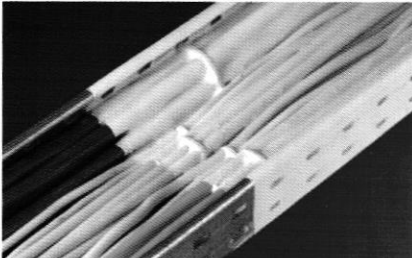
The electric distribution cables / wiring shall be laid in a separate duct. The duct shall be sealed at every floor with non-combustible materials having the same fire resistance as the fire rating of the cable duct.

Firestop & Foam system	Application	Product
	• Multiple penetrations • Single cable, cable bunches and cable trays • Insulated and non-insulated metal pipes	CP 620 Expanding Firestop Foam 
	• Large multiple penetrations • Single cable, cable bunches and cable tray • HVAC penetrations • Metal pipes	HMWB system 
	• Cable & cable tray penetrations • Duct work • Busway • Metal pipe	CP 636 Firestop Mortar 
	• Fire sealing of electrical shafts with cable trays • Cable/Cable bundles through floor cut-out	CFS-M BAS Firestop Mortar 
	• Rigid or low movement joints • Metal pipes up to 200 mm (UL std) • Annular space around HVAC ducts	CP 606 Flexible Firestop Sealant 
	• Expansion joints and connection joints • Metal pipe penetration	CP 601S Elastic Firestop Sealant 

Technical Data	Advantages	Approvals
Color: Red Storage/transport temperature: +5°C to +25°C Curing: – Non-tacky after Approx. 35s – Ready to cut after Approx. 1-2 min Acoustic insulation (air-borne sound): 59db, as per DIN 4109 Shelf life: after production 9 months (at 25°C and stored in a dry place)	• Wide application range • Easy to use in poorly accessible openings • Correct installation through fast expansion in the opening • Paintable • Time saving through few working steps • No wastage • Age tested up to 30 years	BS, DIN, UL, FM
Chemical basis-CP 606: acrylic dissension ,310 ML Color: white Curing rate: approximately 3mm in 3 days CP 670 content: 6 kg Curing rate: approximately 1mm in 1 day Consistency: can be applied by paint brush Dry film thickness: 0.7 mm Shelf life: 15 months (store in a dry place)	• Repnedrable system • Simple applications • Especially suitable for drywall penetrations • Very good acoustic insulation • Age tested up to 30 years	BS, FM, DIN, IAB
(at 23°C and 30% relative humidity) Mix ratio: 3:1 (mortar to water) Color: grey Form removal (depending on consistency): min 12 hours (walls) Density of hardened mortar: 0.82 g/cm³ Compressive strength (after 28 days at 23°C): 2.9 N/mm² Shelf-life after production: 12 months (at 23°C in a dry place)	• Simple applications by trowel • The mortar can be mixed to a stiff consistency, but form work may be required for large penetrations • Paintable • Age tested upto 30 years	BS, DIN, UL, FM
(at 23°C and 55% relative humidity) Mix Ratio: 2½:1 (mortar to water by volume) Contents of bag (quantity): 20 kg Color: Grey Yield per bag: Up to 23 L Form Removal: Min. 14 hours Density of cured mortar: Approx. 0.9 g/cm³ Compressive Strength: >3 N/mm² Shelf life after production: 12 Months	• Vibration tested • Low material consumption; only 70 mm thickness • Easy to use; No special tools required • Contains no asbestos, phenol or halogen constituents • Paintable • Strong and durable Laminated PP Packing	
(at 23°C and 50% relative air humidity) Skin-forming time: approx. 20 min. Curing rate: approx. 3 mm in 3 days Volume shrinkage: approx. 20% Movement capability: ±12.5% Shelf-life after production: 24 months (at 20°C in a dry place)	• Paintable • Fast and easy dispensing • Smoke, gas and water resistant • Excellent acoustic insulation • Age tested up to 30 years	BS, DIN, UL, FM
(at 23°C and 50% relative air humidity) Skin-forming time: approx. 15 min. Curing rate: approx. 2 mm in 3 days Volume shrinkage: 0 – 5% Movement capability: ±25% Shelf-life after production: 12 months (at 20°C in a dry place)	• Excellent movement capability • Fast and easy dispensing • Cost effective solutions • Smoke, gas and water tight • Good adhesion without use of a primer • UV stable • Age tested up to 30 years	BS, DIN, UL, FM

Firestop & Foam system	Application	Product
 	Insulation of • Joint around Door & window frames • Shutter boxes • Refrigeration pipes & systems • Heating pipes • Wooden floors • Insulation sheets • Drywall joints and gaps • Air-conditioning/Ventilation systems • Ventilation ducts	CF-I 65 Insulating and Filling Foam 
 	• Breaches in walls • Stair joints • Holes left by concrete forms • Pre-cast components	CF 116-45 Filling foam 
 	• PVC/ Plastic Pipe Penetration • Insulated Pipe Penetration • Cable Bundle Penetration	FS-ONE Intumescent Firestop Sealant 
	• Sealing of Combustible pipe penetrations from 2" to 6" in diameter	Firestop Wrap CP 648-E 
	• Sealing of Combustible pipe penetrations from 6" to 10" in diameter	CP 644 Firestop Collar 

Technical Data	Advantages	Approvals
Chemical basis: 1C Polyurethane foam Contents of foam(quantily filled): 750 ml Foam yield (freely foamed): Up to 65 L Curing: non-tacky after: approx.9 min Ready to cut after: approx. 20 min Load bearing after: approx.3-5 hrs. Temperature resistance of cured foam: -40°C to 90°C Storage and transportation temperature: +5°C to 25°C Building Materials Class (as per DIN 4102): B2 Shelf life after production: 12 Months	• Contains no CFC • High foam yield up to 65 L • Low expansion of foam • Contains no formaldehyde and PCB • Physiologically harmless class-according to DIN 4102 • B2 Building material class according to DIN 4102 • Acoustic Insulation of joints; IFT tested as per DIN 52110 • "Stop & Go" possible to interrupt work for long as desired • Regulation of quantity dispensed-bringing over various gap widths • Point of tool made of hardened steel-longer life • Precision plastic valve-functionality safeguarded by greatly reduced pressure loss=> long shelf life/constant product quality • Does not age or rot	
at 23°C and 55% relative air humidity Chemical basis: Single-component polyurethane foam Contents of can (quantity filled): 750 ml Foam yield (freely foamed): up to 45 liters Minimum temperature Can: +5°C Substrate/ambient: +5°C Non-tacky after: 10-12 min. Ready to cut/plaster over after: approx. 30 min. Temperature resistance of cured foam: -30°C to +80°C Building material class DIN 4102: B 2 Shelf life (at +200C, protect from frost): 12 months	• Contains no CFC • High yield foam • Easy to apply using finger adaptor or grip system • Contains no formaldehyde or PCB • No substances harmful to health to health are released after complete curing, neutral odor • Does not rot or deteriorate with age • Reusable system components	
(at 23°C and 50% relative air humidity) Color: Anthracite Skin-forming time: approx. 15 min. Curing rate: 5 mm in 3 days Shelf-life after production: 12 months (at 20°C in a dry place)	• Easy to work • Smoke and gas tight • Paintable • Expansion pressure up to 7 bar	DIN, UL, FM
Base Material: Concrete, Drywall, Masonry Expansion temperature: approx. 210°C Intumescent: Yes Acoustic Insulation: Yes Temperature resistance range: -20°C to 80°C Storage and transportation temperature: -5°C to 40°C LEED VOC: 3.1 g/l	• Quick and easy closure without need for tools • Easy to cut • Fast Installation; Zero installation cost • Maximum flexibility	UL 1479, ASTM-E 814
Base Material: Concrete, Drywall, Masonry Expansion temperature: approx. 210°C Intumescent: Yes Acoustic Insulation: Yes Temperature resistance range: -40°C to 60°C Storage and transportation temperature: -5°C to 40°C	• Ready to use collar • No construction required • Fast Installation; Zero installation cost • Maximum flexibility • Adjustable fastening hooks	UL 1479, ASTM-E 814

Firestop & Foam system	Application	Product
	• Power plants • Telecommunication complexes • Cement plants • Industrial plants • Petrochemical plants • Paper mills	CP 678 Cable Coating 
	• Power plants • Telecommunication complexes • Industrial plants • Petrochemical plants • Marine, oil and gas plants • Factories and production facilities	CP 679 A Cable coating 
	• Top of wall joints • Edge -of - slab/curtain wall perimeter joints • Expansion joints	CFS-SP WB Firestop Joint Spray 

Technical Data

Color:	White
Pail content:	20 kg
Application temperature:	+5°C to +40°C
Shelf life (stored dry and free from frost):	18 months
Density uncured:	approx. 1.30 g/cm ³
Consistency:	can be applied by paint brush, roller or sprayed
Full cure :	24 hours

Advantages

- Simple application using a paint brush, or airless spray gun
- Suitable for dry and indoor application
- Tested as per IEC 332 Part 3 Standard for reduced spread of flame & Tested as per FM class 3971

Approvals

FM, IEC,
IBMB

Color:	White
Pail content:	20 kg
Application temperature:	+5°C to +40°C
Shelf life (stored dry and free from frost):	12 months
Density uncured:	approx. 1.35 g/cm ³
Consistency:	can be applied by paint brush, roller or sprayed
Touch dry:	6 hours
Full cure :	24 hours
As per IEC 332 :	Dft of coating = 1mm; For flat surface - consumption = 1.7 Kg/m ² For cable bundles - consumption = 2.5 kg /m ²

- Simple application using a paint brush, or airless spray gun
- Suitable for outdoor application
- High yield, economical
- No derating effect on cables

FM, IEC,
IBMB

(at 23°C and 50% relative air humidity)	
Chemical bases:	latex based dispersion
Skin-forming time:	32-45 mins
Curing time:	48 hrs
Ph-value	Approx. 7.8
Movement capability:	up to 50%
Shelf-life after production:	12 months

- Maximum flexibility, exceeds 500 cycle requirement
- Halogen free, solvent free, asbestos free
- Water base, easy to clean
- If installed with an airless sprayer saves time and money
- Sprayable or may be applied by brush

UL, BS,
FM

Hilti Products Tested for

At least 13 other types of tests have been carried out covering properties such as water tightness, chemical compatibility, explosion resistance, radiation resistance, mould and mildew resistance, sound insulation, electrical resistance and rodent resistance etc.

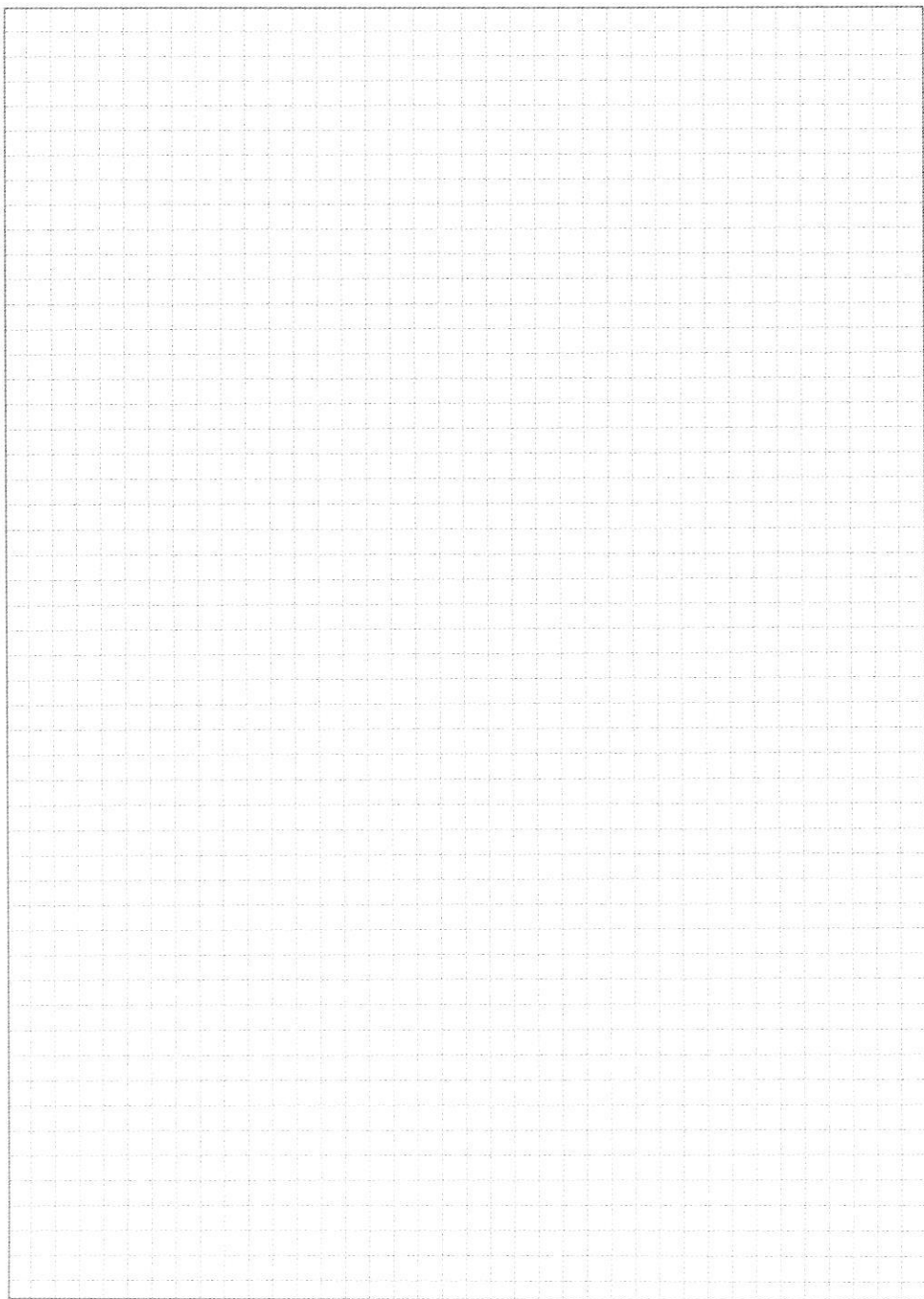
CP 620		Fire		Smoke		Air-seal		Acoustic		Age Tested
HMWB System		Fire		Smoke		Air-seal		Acoustic		Age Tested
CP 636		Fire		Smoke		Air-seal		Acoustic		Age Tested
CP 606		Fire		Smoke		Air-seal		Acoustic		Age Tested
CP 601 S		Fire		Smoke		Air-seal		Acoustic		Age Tested
FS-ONE		Fire		Smoke		Air-seal		Acoustic		Age Tested
CFS-SP WB		Fire		Smoke		Air-seal		Acoustic		Age Tested

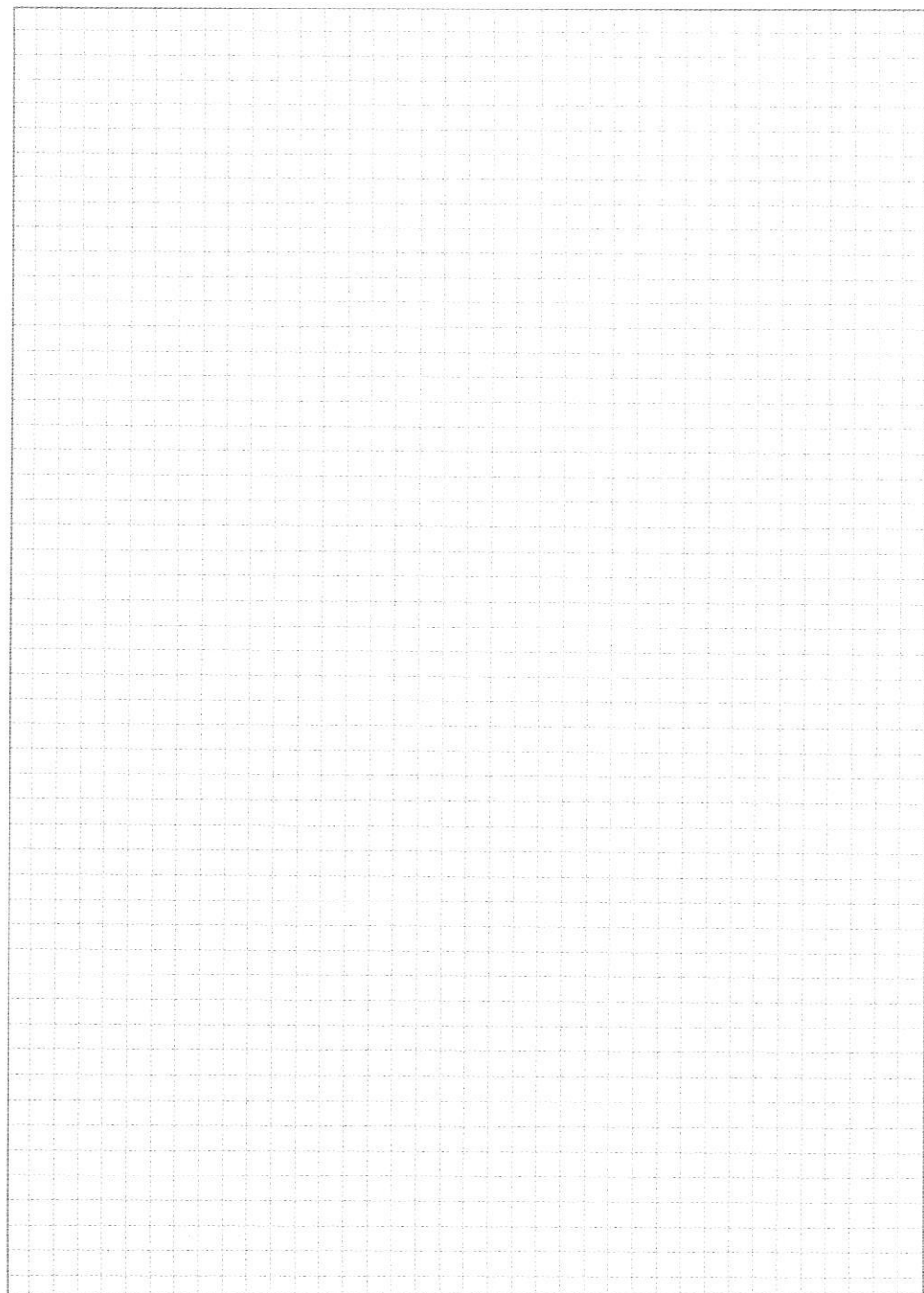
Products Approvals and Testing									
CP 620		British Standard B S 476-20		pr EN 1366-3					
HMWB System		British Standard B S 476-20	 Specification Tested	pr EN 1366-3	IAB				
CP 636		British Standard B S 476-20	 Specification Tested	pr EN 1366-3					
CP 601 S		British Standard B S 476-20	 APPROVED	pr EN 1366-3					
CP 606		British Standard B S 476-20	 APPROVED	pr EN 1366-3					
FS-ONE			 APPROVED	pr EN 1366-3					
CP 678		IEC 332	 APPROVED	IBMB					
CP 679A		IEC 332	 APPROVED	IBMB					
CFS-SP WB		British Standard B S 476-20	 APPROVED						

Special Attributes

- Age tested
- Third party accreditation
- Tested for Acoustic insulation
- Tested against the growth of Mold and Mildew
- Low VOC values and ideal for green Buildings
- Tested for Water tightness
- Tested for Zone 4 seismic stability test







Hilti Service Centre

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E-mail: customercare@hilti.com | www.hilti.in



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Bangalore NO. 22/163-1, 9th Mainroad, 3rd Block, Jayanagar, Near Ramakrishna Nursing Home, Bangalore - 560011.	+91 - 80 - 26531115
Bhubaneswar Kalyani Plaza Block - A Ground Floor, 283P, Shop # 7-12 Patra Para, Bhubaneswar, Orissa- 751019.	+91 - 674 - 2472703
Central Warehouse C/o Schenker India Pvt. Ltd., Opposite Gajanan Petrol Pump, Dapode Road, IND Corp. warehousing complex, Bldg 205-210, Mankoli Naka, Bhiwandi, Thane - 421 302	
Chandigarh SCO no - 08, 1st Floor, Industrial Area, Phase 2, Chandigarh-160002.	+91 - 172 - 5074613
Chennai TS-79, Guindy Ind. Estate, Chennai - 600032	+91 - 44 - 22254688
Cochin 'Saray' House No. 50/963 Manimala Road, Edapally Kochi-682024	+91 - 0484 - 2335543
Delhi F - 90/4, Okhla Industrial Area Phase I, New Delhi - 110020	+91 - 011 - 40646599
Gurgaon 543-C, Pace City II Sector 37, Gurgaon - 122002	+91 - 124 - 4272533
Hyderabad 12 & 13, M D R Arcade, Opp. Ashish Gardens, Main Road, Bowenpally, Secunderabad Hyderabad - 500011	+91 - 40 - 27952674
Haridwar Plot no 368/213, Opposite to Saini Ashram, Below Godrej interio Haridwar-Jwalapur road, Haridwar -249407	
Indore M6, New Siyarganj Market, Mal Godown Road, Near Railway Station, Indore - 452007, India	+91 - 731 - 2430711
Jaipur 26, Hans Marg, Near Riddhi Siddhi, Gopalpura Bypass - Mansarovar Link Road Jaipur - 302018 (Rajasthan)	+91 - 141 - 2761212
Jammu 824-A, Last Morth, Gandhi Nagar, Jammu, Jammu Kashmir - 180004 Kochi	+91 - 191 - 2430153
Kolkata DA-77, Sector-1, Salt Lake City, Kolkata, W. Bengal - 700064	+91 - 33 - 23349191
Lucknow B-95, VibhutiKhand, Gomti Nagar, Lucknow U.P.-226010	+91 - 522 - 4006143
Mumbai- Vashi Plot no. 11, Sector - 24 (Turbhe), Sion-Parvel Expressway, Vashi, Opp Sanpada Station, New Mumbai - 400705	+91 - 22 - 27831355
Mumbai-Vikhroli "Karma Stambh" Ground Floor, Opp. To Kailash Commercial Complex MTNL Exchange, Nr Home Town, LBS Marg, Vikhroli (w), Mumbai - 400083	+91 - 22 - 25794637
Nagpur Mehta Complex, Plot No-6, MIDS T-Point, Amravati Road, Wadi Nagpur - 440023	+91 - 7104 - 288520
Noida C-248, SEC-63 Noida (Uttar Pradesh) - 201301, India	+91 - 011 - 2335543
Pune 287/2, Ground Floor, Prode Purple Coronett, Opp. Big Bazar, Baner Road, Pune - 411 045	+91 - 20 - 27293595
Raipur C - 1/7, New Rajendra Nagar, Ring Road No-1 Raipur, Chattisgarh - 492006	+91 - 771 - 4013040
Singrauli House No 492, Ward No 38, Village Dhoti, Opp. Tata Commercial Automobiles P Ltd. Thana, Vindhyanagar, Distt - Singrauli (MP) - 486885.	

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E-mail: customer care@hilti.com | www.hilti.in