
HILTI
Hilti HDA undercut anchor
SIMPLY RELIABLE.
Hilti. Outperform. Outlast.

Hilti HDA undercut anchor

THE ANCHOR THAT UNDERCUTS ALL BY ITSELF.

The Hilti HDA anchor is in its element wherever the most reliable heavy-duty fastenings are required. But what makes this anchor so special is its ability to create its own undercut during the setting operation. Moreover, it features a clear visual indicator that makes checking for correct setting easier than ever. Backed by countless approvals, the HDA is the undisputed leader throughout the world and the preferred solution for demanding high-load fastening applications, such as in nuclear power plants.

Advantages

- Easy, reliable installation
- Visual indicator for checking correct setting
- Capable of taking up extremely high loads
- Supports full load immediately after setting
- Fully removable
- Close spacing and small edge distances

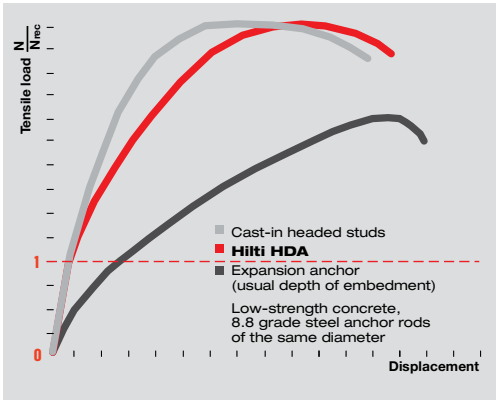
Applications

- Reliable heavy-duty fastening in cracked or uncracked concrete
- Fastenings in structures exposed to high seismicity and shock loads
- Fatigue loading, e.g. where vibration is a factor
- Anchor fastening in nuclear power plants where approval is required

Highlights

- Self-undercutting
- Loading capacity comparable with cast-in headed studs

For exceptionally demanding applications



The pronounced undercut results in high rigidity and thus low anchor displacement. This makes the HDA a robust solution for fastening in cracked concrete.

Confidence is good, approval is better.

The HDA undercut anchor is covered by the world`s most stringent product qualifications including a newly issued European Technical Assessment for C2 seismic. Additionally, Hilti manufactures the HDA to meet the requirements of several international nuclear quality control programs such ASME NQA-1 and HAF 003.

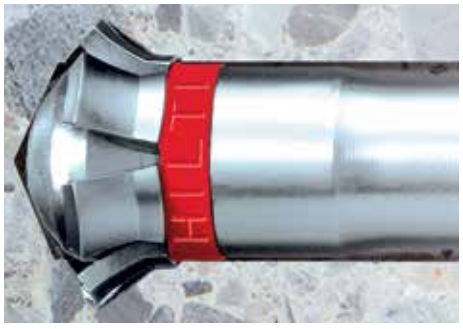
ETA 99/0009 ESR-1546 Extraordinary conditions

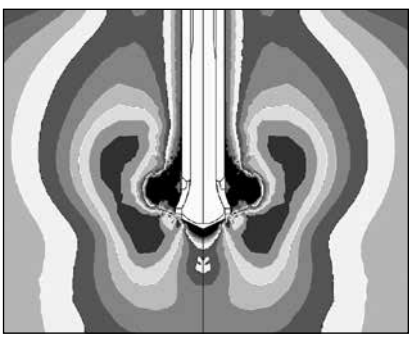
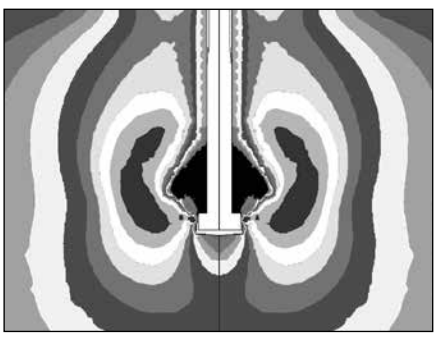
Zugelassen als Einbauteil vom Bundesamt für Bevölkerungsschutz und Katastrophenhilfe.

F 180 Dynamik NPP Shock Fatigue Seismic

Self-undercutting system.

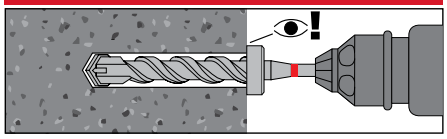
The HDA creates its own undercut during the setting operation. Its performance corresponds to that of a cast-in headed stud.



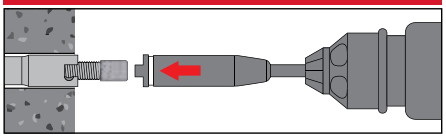
Optimum load transfer	HDA	Cast-in headed stud
Fastenings made with the HDA anchor exhibit virtually the same stress distribution characteristics as those utilizing cast-in headed studs. They exert low expansion forces and are thus ideal for applications requiring close anchor spacing or small edge distances.		

Reliable setting.
With clear visual check.

Setting operation

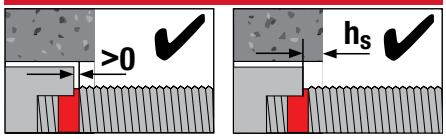


Perfectly-matched stop drill bits for precise setting depth
A special stop-type drill bit for each anchor length ensures that the hole is drilled to exactly the right depth for correct setting of the HDA every time. Used properly, it eliminates the risk of drilling too deep, or not deep enough. Details of the stop drill bit required are printed on the anchor package and in all technical product information.



Rotary hammer, setting tool and anchor – a perfectly-matched system for error-free undercutting
The HDA heavy-duty anchor setting tool is used in conjunction with Hilti combihammers (e.g. TE 40, TE 70). All components of the system are perfectly matched to each other for quick, reliable undercutting during the setting operation.

Important The appropriate Hilti system (combihammer, stop drill bit, setting tool) must always be selected according to the type of anchor to be installed (see documentation). Only then can optimum energy transfer all the way to the tip of the anchor be achieved to obtain correct installation.



Verification of correct setting for even greater safety
A reliable check at a glance. The anchor is positioned correctly when the following conditions are fulfilled:
- The red mark is visible above the end of the sleeve.
- The end of the sleeve is within the given area h_s beneath the upper edge of the baseplate (fastening through in-place parts with HDA-T) or, respectively, below the upper edge of the component (fastening using preset HDA-P anchor).

Please note: The complete, detailed setting instructions must always be observed.
Hilti can provide training on correct setting procedures at your request.

Fully removable

Hilti HDA heavy-duty anchors can be easily removed after use for temporary fastening applications.
The removal tool leaves nothing behind in the concrete – all parts of the anchor are removed.

The anchor for exceptionally demanding applications

Hilti system performance.
Because everything matches.

The Hilti Power Effect.

The Hilti HDA undercut anchor, setting tools, high-performance combihammers and stop drill bits are developed together, tested together and perfectly matched to each other to providing that you benefit in full from the Hilti Power Effect – superior system performance that adds up to much more than just the sum of its components.

1+1=3
Total performance.
Hilti tools + Hilti accessories.

HDA Dynamic Set

The Dynamic Set is a simple means of helping ensure even distribution of shear loads are taken up by several anchors. The annular gap between the anchor rod and the plate to be fastened is filled by injecting Hilti HIT-HY 200 adhesive mortar, thus providing even distribution of the load between all anchors. Only through use of the Dynamic Set are approval requirements for dynamic loading fulfilled (applies to carbon steel version in the sizes M10, M12 and M16).

HDA-CW centering washer

A special centering washer for use with the HDA system is available to transfer high shear loads when fastening thin components.

Heavy-duty fastening without compromise

The Hilti HDA range.
Reliability for every application.

The Hilti HDA anchor is available in versions for fastening through in-place parts (“T”), for applications where the anchor is pre-set (“P”) and in various materials (galvanized, sherardized and stainless steel

HDA-T, HDA-P
8.8 grade electrogalvanized steel, for use in dry interiors

HDA-TR, HDA-PR
Stainless steel as per DIN 1.4401 (A4-80), for applications with high corrosion-resistance requirements

HDA-TF, HDA-PF
Sherardized, for applications requiring a hot dipped galvanized level of corrosion resistance

Note No third-party product approval has been obtained for the sherardized version.

Hilti service.
You can rely on it.

Personal contact with our customers, even long after a purchase has been made, is of the utmost importance to Hilti. Our account managers and engineers know their customers' needs exactly and are always in the best possible position to offer the right advice and provide tailor-made solutions.

Training

We offer our customers an extensive training program, including training on the correct HDA heavy-duty anchor setting procedures. On request, we can provide training for the workforce of companies that install the HDA. For further information, please call the Hilti service number.

PROFIS Anchor

Profis Anchor is our well-proven PC software for the quick, reliable design and calculation of your specific fastening applications.
Visit www.hilti.com to find out more and download Profis Anchor.

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