



Ravnitski St 6, Petah Tikva, Israel, 08 JAN 2023

Announcement new product (Hilti HUS4 screw anchor) replacement of discontinued product (Hilti HUS3 screw anchor and HUS-H screw anchor)

Dear Sir/Madam

After several years of intense research and development, Hilti is introducing the new generation of Hilti HUS4 Screw Anchor. Although HUS3 is already an outstanding screw anchor solution in the market, Hilti wants to take the screw anchor further to provide an even more optimized fastening solution.

The Hilti HUS4 Screw Anchor is now suitable for an even wider range of applications and conditions by offering increased performance in case of concrete related failure modes and a wider range of sizes, embedment depth and head configurations.

Now you can enjoy the following technical documents and product features:

- ETA assessment for structural and non-structural applications
- ETA assessment for static, quasi-static and seismic C1 and C2 loading
- ETA assessment under fire action
- ABG assessment for reusability of the screw in fresh concrete
- VDS and FM for selected portfolio of HUS4 screw anchors
- Technical data for use in solid masonry, Aerated Autoclaved Concrete, Light Weight Aggregate blocks and Hollow Core Slabs
- Technical data for reusability of the screw in Hollow Core Slabs
- HUS4 screw anchor with 2 times bigger portfolio size 8/10/12/14 and 16
- HUS4-H (Hexagonal head), HUS4-C (Countersunk) and HUS4-A (Threaded head)

Based on this testing and recently released ETA 20/0867, HUS4-H is an ultimate performance screw anchor and, in many cases, has the best performance in the industry.

For equal embedment depths, HUS4 is equal to or better than HUS3 for designed static, quasi-static and seismic C1 loading, with the limited two exceptions:

- Smallest embedment depth ($h_{nom1} = 55$ mm) of size 10 where there is a load drop vs. HUS3 of 12% due to rounding load classes during approval process. In general, this affects only designs with utilization larger than 88% under tension loading.
- In case of stand-off design, we require to perform new design (especially related to shear resistance) in our Profis Engineering software as it is hardly possible to compare products due to the numerous influencing parameters.

New fire data and C2 seismic data are available. For size 8 and 10, immediate replacement is not always possible in C2 seismic conditions. Our recommendation in these cases is to recalculate with PROFIS Engineering before replacing HUS3-H 8 or 10 with HUS4-H 8 or 10, respectively.



For all other cases, we always recommend when replacing existing products even with new, higher performing products a re-calculation with PROFIS Engineering due to a dynamic environment concerning qualification and design.

PROFIS Engineering is updated with Hilti HUS4 Screw anchor from July 2022. If you need to recalculate before this date, our technical team will be available to support you. With the future PROFIS Engineering update, it will be feasible to perform necessary calculations and explore all the potential applications and possible economical savings coming along with Hilti HUS4 Screw Anchor.

The full ETA assessment for HUS4 is now available.

In case of any questions please contact your Hilti representative.

Yours truly,

Nir Mayerie
Product Manager
Hilti Israel Ltd