



Confirmation of performance equivalence for mutual replacement between HILTI HAS metric rods and HILTI HAS-U anchor rods

To whom it may concern,

In autumn 2023 Hilti has launched the new pre-cut HAS anchor rods portfolio in metric sizes, to be used together with any Hilti HIT injection mortars system. HAS metric anchor rods have been tested according to European Assessment Document: EAD 330499 to take ETA approval and fully complies with ISO 898-1 standard for carbon steel rods and ISO 3506-1 for stainless steel ones.

HAS metric portfolio has the same steel strength and performance level of equivalent sizes of HAS-U portfolio for post-installed anchor applications in both masonry and concrete, as long as same embedment depth and same anchor plate width remains. HAS-U's and HAS's corrosion resistances are the same when the comparison is made between anchor rods with same corrosion protection.

Similarly to HAS-U, the HAS metric portfolio has been included in ETA documents of all major Hilti HIT products, making this new anchor rod fully compatible with Hilti HIT injection systems.

In order to keep consistency and clarity for all customers, HAS nomenclature follow the same approach as for HAS-U, as described below:

Naming composition: *[Product Name] [Steel grade/type] [Diameter] x [Length]*

Examples	HAS-U portfolio	New HAS portfolio
1: 5.8 electrogalvanized rod, diameter M16, length 220mm	HAS-U 5.8 M16x220	HAS 5.8 M16x220
2: 8.8 hot-dip galvanized rod, diameter M20, length 180mm	HAS-U 8.8 HDG M20x180	HAS 8.8 HDG M20x180
3: Stainless steel rod, diameter M16, length 150mm	HAS-U A4 M16x150	HAS A4 M16x150

Important: while replacing the predecessor HAS-U with the new HAS metric portfolio and viceversa is always possible as long as those rods are used with HIT injection systems, differently than HAS-U the HAS metric rods can't be used with Hilti capsule systems like HVU2.

When replacing HAS-U rods with HAS or viceversa, the installation procedure does not need to be changed. Installation parameters are equivalent, as shown in Hilti HIT injection systems' ETA documents.

This equivalence is being highlighted also in the Hilti Profis Engineering Suite, where starting from October 2023 HAS anchor rods will be proposed in the design implementation and final reporting as possible alternative to HAS-U.

In case of questions, please do not hesitate to contact one of our technical experts or sales representatives.