

Reference 2021/RE 500 V4
Department BU Anchors - Marketing
Date August 28, 2021

Announcement new product (Hilti HIT-RE 500 V4) replacement of discontinued product (Hilti HIT-RE 500 V3)

Dear Sir/Madam

After several years of intense research and development, Hilti is introducing the new generation of epoxy mortar "Hilti HIT-RE 500 V4 injection mortar system".

The injection system Hilti HIT-RE 500 V4 is now suitable for an even wider range of applications and conditions for added reassurance on your daily designs for both, anchor systems and post-installed rebar applications. HIT-RE 500 V4 offers the most flexible and optimized design for nearly all civil engineering disciplines due to its highest load performance and comprehensive approvals.

New and improved features of the new HIT-RE 500 V4 include:

- **Qualified based on EAD 332402-00-0601 (ETA-20/0539) to be designed in accordance to TR069, the latest design method for rigid rebar connections**
- **Improved performances in cracked concrete and seismic category 2 (C2) and new Temperature ranges for anchor systems (ETA-20/0541)** (see table "Temperature range definition").

Now you can enjoy the following qualifications, see relevant European Technical Assessment (ETA) documents for more details:

- Qualified for structural and non-structural applications
- Qualified for:
 - anchors systems (ETA-20/0541) based on EAD 330499-01-0601, for static, quasi static and seismic loading conditions
 - post-installed rebar applications (ETA-20/0540) based on EAD 330087-01-0601, for static, quasi-seismic, seismic and fire loading conditions with a working life of 50 years and 100 years
 - post-installed rebar - structural joints (ETA-20/0539) based on EAD 332402-00-0601 to be designed in accordance to TR069, for static and quasi static loading conditions with a working life of 50 years and 100 years
 - concrete overlay strengthening (ETA 18/1022, ETA 20/0475, ETA 20/0697) based on EAD 332347-00-0601, to be designed in accordance to TR066, for static, quasi static loading conditions
 - Glued-in rods for timber connections (ETA-19/0194) based on EAD 130006-00-0304
- Qualified in combination with Hilti Hollow Drill Bit (HDB) to ensure a dust free environment during installation and eliminating the need for borehole cleaning (Hilti SafeSet system installation)
- Qualified for diamond coring
- Qualified for diamond coring with roughening tool TE-YRT with a performance equal to hammer drilling (Hilti SafeSet system installation)
- Applicable for temperature below 0°C (down to -5°C of base material temperature)

- Approved for Seismic category 2 (C2) application for Hilti HAS-U, HIT-V and metric threaded rods under seismic actions to design according to EN 1992-4
- A bundle of technical data for design solutions going beyond the scope of the approval range including the Hilti HIT rebar design method
- Curing time and installation procedure remain unchanged compared to Hilti HIT-RE 500 V3

Temperature range definition:

Temperature range	Base material temperature HIT-RE 500 V3	Base material temperature HIT-RE500 V4
Temperature range I	-40 °C to + 40 °C	-40 °C to + 40 °C
Temperature range II	-40 °C to +70 °C	-40 °C to +55 °C
Temperature range III	-	-40 °C to +75 °C

We will supply this product to you under the same packaging concept and no changes in the element portfolio.

You can install HIT-RE 500 V4 replacing HIT-RE 500 V3 specification for the post-installed rebar connections based on EAD 330087-01-0601 on same conditions.

You can install HIT-RE 500 V4 replacing HIT-RE 500 V3 specification for the anchors systems based on EAD 330499-01-0601 for a working life of 50y and 100y (using Hilti Technical data with the same performance) except some extraordinary cases (Temperature Range II and III, see table "Temperature range definition"). In these cases, it is recommended to use PROFIS Engineering and Hilti PROFIS Rebar to redesign the existing project with the new Temperature Range and product. In case you need any further support, please reach out to your Hilti representative.

On the contrary HIT-RE 500 V3 cannot substitute HIT-RE500 V4 due to the superior performance of HIT RE 500 V4 and wider range of applications designed based on TR069.

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

Also, from September 2021 onward, Hilti PROFIS Engineering software and Hilti PROFIS Rebar software is updated with Hilti HIT-RE 500 V4 and you will be able to perform all the necessary calculations and explore all the potential applications for Hilti injection system including according to the new design method TR 069 for rigid post installed rebar connections. If you need any support before the software update is available, please contact one of our Technical Expert or Sales Representative.

Yours truly,



LPE Trade Management - David Brown



Head of Trade Management – Morten Stentebjerg-Baek