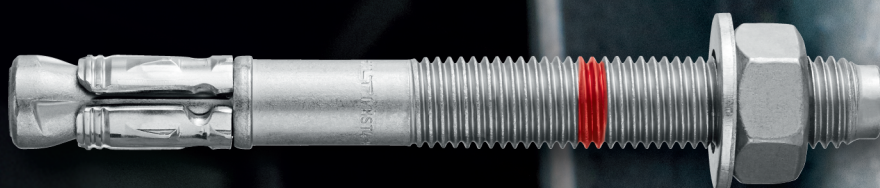


HILTI

HST4-R Stainless Stud Anchor

OUR BEST PERFORMANCE ANCHOR



KEY DESIGN FEATURES



TURBO-CHANNELS & INTERLOCK

- Additional interlock resistance for ultimate load in cracked concrete



HIGHLY ENGINEERED SLEEVE

- Tip groove design to maximize grip to concrete
- 4 longer segments to distribute anchor mechanisms more efficiently
- Tapered tip for smooth expansion



TURBO-MOUNTAIN-VALLEY SHAPE

- Maximal expansion
→ Strong in cracked concrete, seismic
- Anti-spinning design
→ Improving installation robustness



SCAN AND
KNOW MORE



HILTI

INNOVATING STUD ANCHORS

TO SOLVE CUSTOMER NEEDS
FOR 50 YEARS

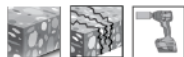


HST4-R

1st stud anchor with ETA to have the same concrete cone resistance of cast-in anchors (for M10-M16)



HST3



1st stud anchor to have ETA on impact wrench with adaptive torque module



HST



1st ETA for cracked concrete approved stud anchor in the market



HSA



HILTI is the **1st** to develop stud anchor, HSA, for uncracked concrete

-  Cracked Concrete
-  Uncracked Concrete
-  Adaptive Torque System
-  Variable Embedment
-  PROFIS Engineering

2025

2018

1998

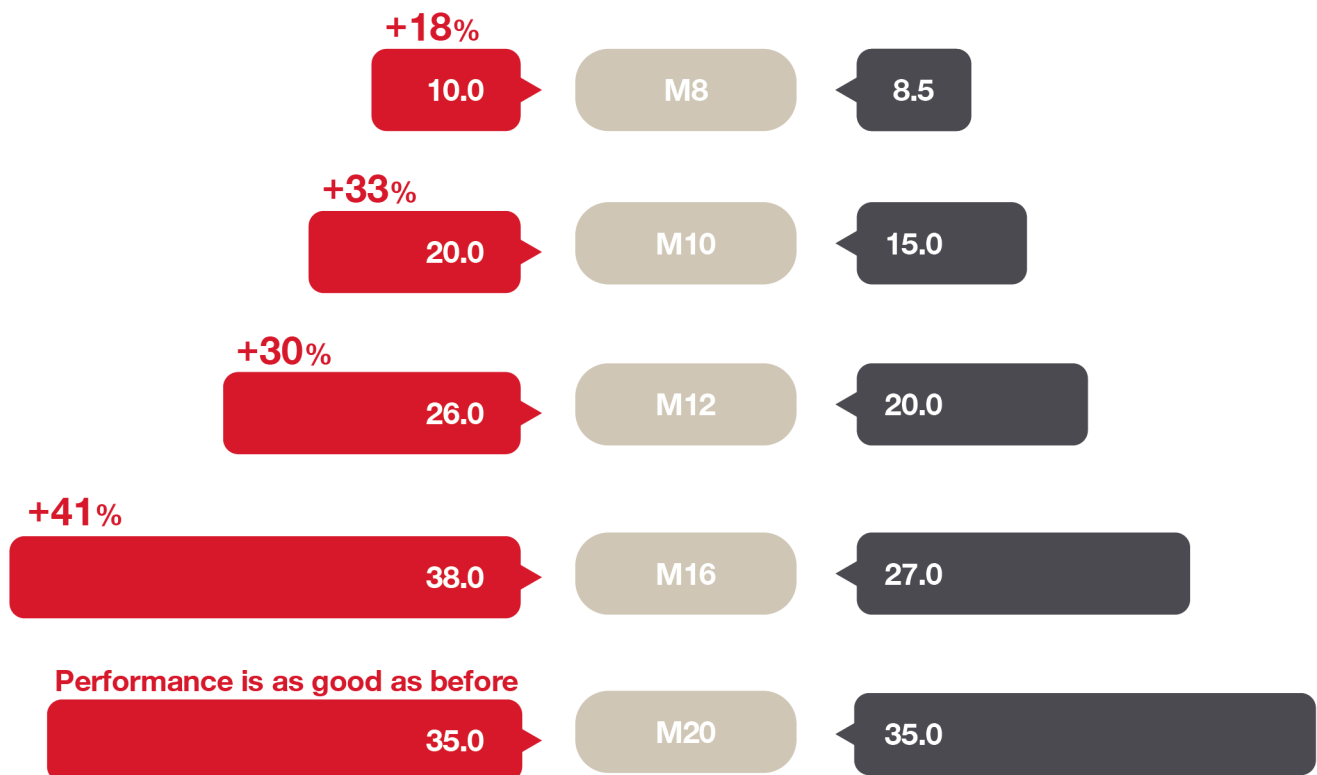
1975

CHARACTERISTIC PERFORMANCE

CRACKED CONCRETE - TENSION



BENCHMARK (*Pull out Performance [kN])



*Characteristic pull out performance in C20/25 cracked concrete



**Up to 41% increase in capacity vs. HST3
with additional features and full system offer**

Best-in-class static load performance in cracked concrete: the only stud anchor in the market to perform as cast-in fasteners so that **lightweight & smaller** baseplate can achieve equivalent performance.



SPEC2„SITE

HILTI's End-2-End Solution & On-site Support to Ensure Specifications are Executed On-site

DESIGN

SOFTWARE



PROFIS
Engineering

SERVICES



Seminar/
Technical Support

SUPPORT



E-learning

HARDWARE



High Performing
Anchor

INSTALL HARDWARE



Tools for
Quality Control

SERVICES



Testing & Training



20%

PROJECTS

FINISH BEHIND SCHEDULE

PRODUCTIVITY

High performing and value engineered solutions decrease the total cost and time of construction



1000+

PEOPLE'S

LIVES ARE AFFECTED BY
STRUCTURAL FAILURES EVERY YEAR

SAFETY

Easy solutions are more likely to be installed correctly according to the specification, ensuring your peace of mind



37%

CO2 EMISSION

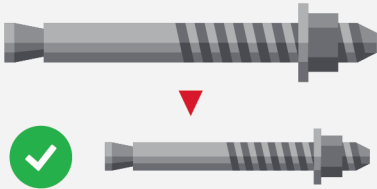
COMES FROM CONSTRUCTION

SUSTAINABILITY

Value engineered solution optimizes material consumption, enabling CO2 savings

SPEC2„SITE

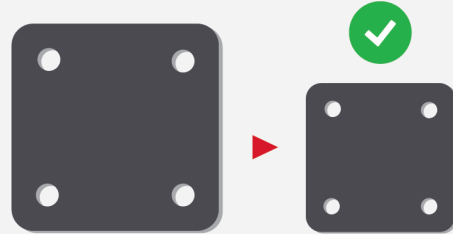
VALUE ENGINEERING



ANCHOR DOWNSIZING

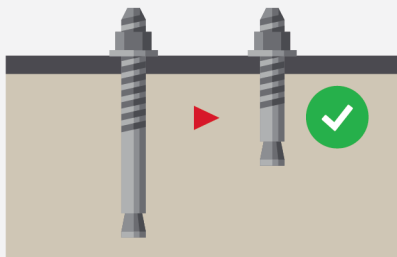
For most size, our new HST4(-R) exceed the performance of one size larger HST3(-R)

According to your design, smaller size of HST4(-R) can be adopted to fulfill your design



BASEPLATE DOWNSIZING

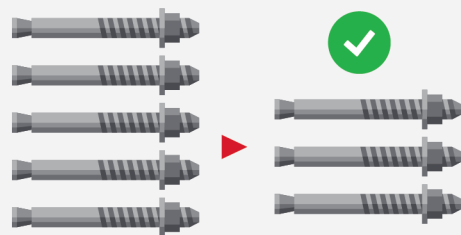
Given the flexibility in baseplate design, smaller spacing and edge with smaller anchor, the size of baseplate can be significantly reduced



SHORTER EMBEDMENT

Stronger performance leads to shorter embedment to fulfill same design

Shorter embedment reduces the chances of hitting rebar



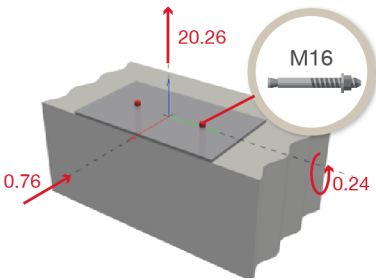
REDUCING NO. OF ANCHORS

In certain case, we are able to use less anchors to fulfill the design

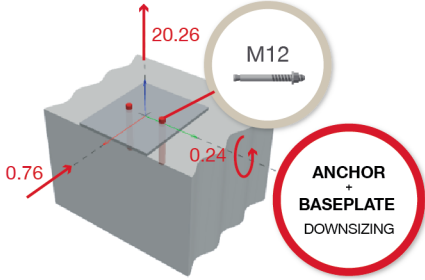
CASE STUDY

Optimizing both anchor and baseplate size

CASE 1 Application:
Curtain Wall Attachment



HST3-R M16 x2: 82.8% utilization
Embedment: 85mm
Baseplate: **410 x 240**



HST4-R M12 x2: 86% utilization
Embedment: 85mm
Baseplate: **200 x 240**

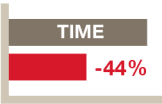
DESIGN COMPARISON

HILTI HST3-R M16
Embedment: 85mm
Baseplate: 410 x 240



HILTI HST4-R M12
Embedment: 85 mm
Baseplate: 200 x 240

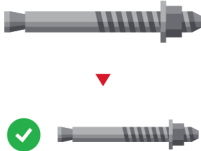
INSTALLATION COST



-44%
Labor Cost

-44%
Total Time

ANCHOR COST



Smaller

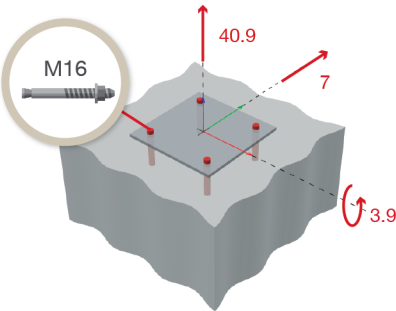
Higher Cost Effectiveness

BASEPLATE COST

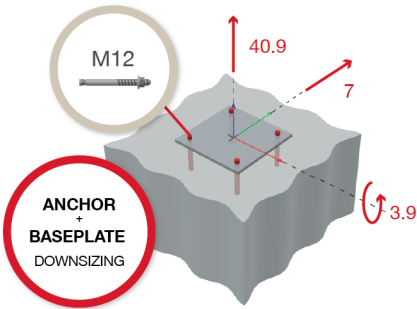


-51%
Baseplate Cost

CASE 2 Application:
Structural Baseplate



HST3-R M16 x4: 85% utilization
Embedment: 85mm
Baseplate: **250 x 250**



HST4-R M12 x4: 87% utilization
Embedment: 85mm
Baseplate: **200 x 200**

DESIGN COMPARISON

HILTI HST3-R M16
Embedment: 85mm
Baseplate: 250 x 250



HILTI HST4-R M12
Embedment: 85mm
Baseplate: 200 x 200

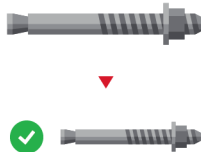
INSTALLATION COST



-44%
Labor Cost

-44%
Total Time

ANCHOR COST



Smaller

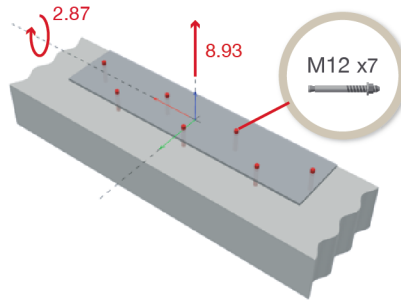
Higher Cost Effectiveness

BASEPLATE COST

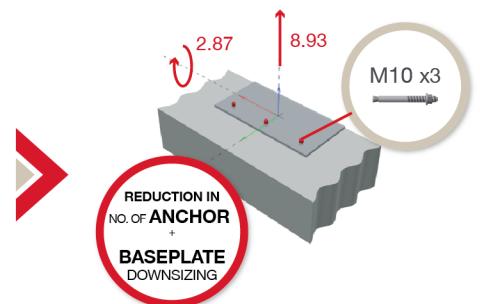


-36%
Baseplate Cost

CASE 3 Application: Cladding



HST3-R M12 x7: 91% utilization
Embedment: 70mm
Baseplate: **790 x 175**



HST4-R M10 x3: 91% utilization
Embedment: 70mm
Baseplate: **350 x 175**

REDUCTION IN
NO. OF ANCHOR
+
BASEPLATE
DOWNSIZING

DESIGN COMPARISON

HILTI HST3-R M12
Embedment: 70mm
Baseplate: 790 x 175



HILTI HST4-R M10
Embedment: 70mm
Baseplate: 350 x 240

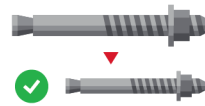
INSTALLATION COST



-70%
Labor Cost

-70%
Total Time

ANCHOR COST



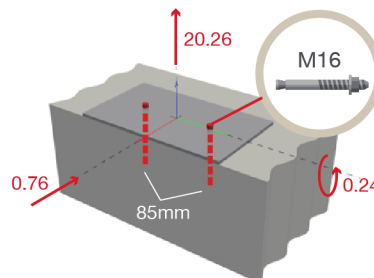
Smaller
+
Less Quantity
Higher Cost Effectiveness

BASEPLATE COST

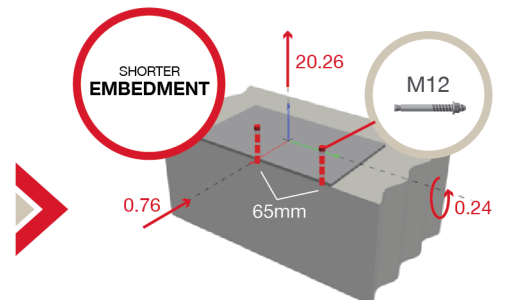


-56%
Baseplate Cost

CASE 4 Application: Scaffolding



HST3-R M16 x2: 82.8% utilization
Embedment: **85mm**
Baseplate: 410 x 240



HST4-R M12 x2: 86% utilization
Embedment: **65mm**
Baseplate: 410 x 240

SHORTER
EMBEDMENT

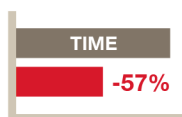
DESIGN COMPARISON

HILTI HST3-R M16
Embedment: 85mm
Baseplate: 410 x 240



HILTI HST4-R M12
Embedment: 65mm
Baseplate: 410 x 240

INSTALLATION COST



-57%
Labor Cost

-57%
Total Time

ANCHOR COST



Smaller
+
Shorter
Higher Cost Effectiveness

VALUE PREPOSITION

Faster
+
Simpler
+
Safer

Value Engineered Solution



We want to support you at every stage, from developing design solutions to on-site services for your structural or non-structural applications. Our experienced engineers, technical experts, digital resources and certified trainers are on hand wherever and whenever you need them. Contact us to help you make structural connection better.

