



Drill the holes using the Hilti TE 70-AVR rotary hammer and Hilti TE-C3X 16/47 drill bits.



Clean the holes by brushing and blowing out with compressed air using the appropriate Hilti accessories.



Set the shear connectors using Hilti setting tools featuring TE-C or TE-Y connection ends.



Inject Hilti RE 500 adhesive mortar through the funnel-shaped opening in the shear connector.

## Connections with cost-efficiency advantages.

## Concrete overlays with the Hilti HCC-B.

Using the Hilti HCC-B shear connector and Hilti HIT-RE 500 injectable adhesive, a new layer of concrete can be bonded to old concrete permanently, reliably and with high resistance to shear forces at only a fraction of the cost of reconstruction. But that's not all. Hilti supplies a complete cost-efficient system for structural reinforcement and repair using the concrete overlay method.

## **Applications**

- Concrete overlays
- Bridge renovation and repair
- Strengthening bridges for higher loads
- Strengthening concrete decks for higher loads, i.e. conversion for other uses
- Reinforcing foundations, pillars, supports and walls

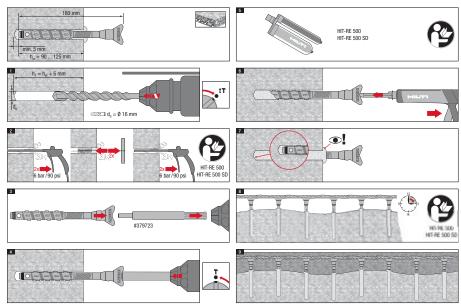
#### **Advantages**

- Easy to use the connectors require no beforehand preparation
- Quick leveling and height adjustment is possible during installation
- The connectors can be loaded immediately after setting thanks to their frictional hold
- Easy visual check to ensure injection of the optimum mortar quantity, internal injection system for reliable filling
- Reliable design the structure displays monolithic behaviour

#### **Highlights**

This complete system of matched components including a PC application for easy design, high-performance rotary hammers, Hilti HIT injectable adhesive mortars, mortar dispensers and the HCC-B shear connector provides the key to efficient and reliable concrete overlays.

## **Setting instructions**



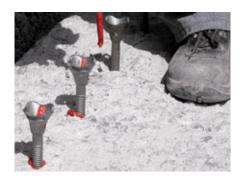


#### Performance data

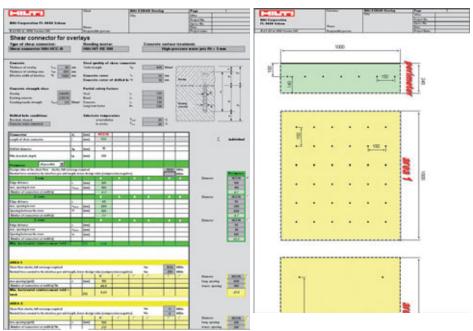
Base material	Cracked and uncracked concrete ≥ C20/25 (B25)
Drilling method	Hammer drilling
Connector material	Malleable cast iron
Structural design	EOTA Technical Report TR 029, technical data sheet:
	Concrete overlays for strengthening and repair in bridge,
	tunnel and building construction (item no. 241345)
Setting instructions	See HCC-B shear connector operating instructions

## **High system rigidity**

The greater the connector's rigidity, the greater its contribution to the transmission of shear through tensile forces.



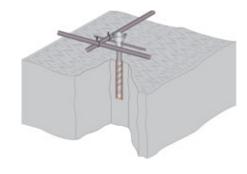
## Maximum planning and design reliability



A complete design concept incorporating the Hilti Exbar Overlay PC application provides all the required design information quickly and reliably.

## Radially symmetrical headed studs

The direction of shear forces is irrelevant as the connectors act as highly-robust rebar holders that keep the reinforcement in place, where it should be, even after the concrete has been poured.



#### **Shear connector**

Item no. Ordering designation ① 378921 Hilti HCC-B shear connector, in packs of 100

# 1

## Injectable adhesive mortar

Hilti HIT-RE 500 injectable adhesive mortar,	330 ml	2	305074
Hilti HIT-RE 500 injectable adhesive mortar,	500 ml		369109
Hilti HIT-RE 500 injectable adhesive mortar,	1400 ml		373958



## **Dispensers**

Hilti MD 2500 manual dispenser for 330 and 500 ml foil packs	③ 338853
Hilti MD 3500 cordless electric dispenser for 330 and 500 ml foil packs	273291
Hilti P 8000 D pneumatic dispenser for 1400 ml foil packs	373959



## **Accessories**

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HSD-M M12 1/2" x 50 (TE-C) setting tool		243752
HCC-M (TE-Y) setting tool		379723
HIT-VL 16/0.7 extension tube		024632
HIT-RB 12 round brush	(5)	336550
TE-C holder for round brushes		263437
TE-Y holder for round brushes	6	263439
HIT-RBS 10/0.7 brush extension 70 cm		336645
HIT-RBS 10/0.35 brush extension 35 cm	7	371722





## **Productivity plus**



easy, accurate leveling

and alignment







Powerful rotary hammers for tough drilling jobs

Drill bits perfectly matched to Hilti tools for maximum performance and productivity Innovative tool management reduces your costs by up to 50 %

## Hilti. Outperform. Outlast.