

Injectable mortar HIT-RE 10 580/1-A1

Hilti Injectable Mortar HIT-RE 10 580/1-A1 User Manual

Model: Injectable mortar HIT-RE 10 580/1-A1 | Brand: Hilti

1. INTRODUCTION

The Hilti HIT-RE 10 580/1-A1 is an economical injectable epoxy mortar designed for reliable anchoring in concrete. This product provides a cost-effective solution for various construction and renovation projects, offering exceptional bonding strength and durability.

It is suitable for post-installed rebar and concrete anchoring applications and is compatible with Hilti's range of accessories, including cordless electric dispensers, steel brushes, and piston plugs. The 580 ml hard cartridge is designed for use in severe on-site conditions and allows for flexible installation due to its long working time.



Figure 1: Hilti HIT-RE 10 580/1-A1 Injectable Mortar Cartridge. This image shows the dual-chamber cartridge containing the epoxy mortar components.

2. SAFETY INFORMATION

Always read the product label and Safety Data Sheet (SDS) before use. Adhere to all local safety regulations.

- **Personal Protective Equipment (PPE):** Wear appropriate PPE, including safety glasses, gloves (nitrile or butyl rubber), and protective clothing, to prevent skin and eye contact.
- **Ventilation:** Use in a well-ventilated area. If working indoors, ensure adequate air circulation or use

local exhaust ventilation.

- **Skin Contact:** In case of skin contact, wash immediately with plenty of soap and water. Do not use solvents.
- **Eye Contact:** In case of eye contact, rinse immediately with plenty of water for several minutes and seek medical attention.
- **Ingestion:** Do not ingest. If swallowed, seek immediate medical attention.
- **Storage:** Store in a cool, dry place, away from direct sunlight and sources of ignition. Keep out of reach of children.
- **Disposal:** Dispose of unused material and empty cartridges according to local environmental regulations.

3. PRODUCT COMPONENTS

Each package of Hilti Injectible Mortar HIT-RE 10 580/1-A1 typically includes:

- 1 Injectible Epoxy Mortar Cartridge (580 ml)

Note: Mixing nozzles are typically sold separately or included with dispenser systems. Ensure you have the correct mixing nozzle for optimal performance.

4. SETUP AND PREPARATION

1. Surface Preparation:

- Ensure the concrete substrate is clean, dry, and free from dust, grease, oil, or other contaminants.
- For optimal adhesion, the concrete surface should be sound and free of loose material.

2. Drilling the Hole:

- Drill a hole of the specified diameter and depth according to the Hilti technical data for your specific application (e.g., rebar or anchor rod).
- Use a rotary hammer drill with a carbide drill bit.

3. Hole Cleaning:

- Thoroughly clean the drilled hole using a steel brush to remove all loose particles.
- Follow with compressed air to blow out dust. Repeat brushing and blowing at least twice until no dust is visible.

4. Cartridge Preparation:

- Unscrew the cap from the cartridge.
- Attach a new, clean mixing nozzle securely to the cartridge.
- Load the cartridge into a compatible Hilti dispenser (e.g., Hilti HIT-MD 2000 or similar).

5. Dispensing Initial Material:

- Before injecting into the hole, dispense a small amount of mortar onto a piece of cardboard or waste material until the color is uniform and consistent. This ensures proper mixing of the two components. Discard the initial 2-3 pumps of material.

HIT-RE 10 EPOXY ANCHOR



Standard ● ● ● ○ ○

Economical injectable epoxy mortar for anchoring in concrete

- Base materials: Concrete (non-cracked)
- Base material condition: Dry, Wet
- Seismic loading: No



Figure 2: Hilti HIT-RE 10 Epoxy Anchor showing key features and base materials. This image highlights the product's suitability for concrete (non-cracked) in dry or wet conditions.

5. OPERATING INSTRUCTIONS (APPLICATION)

1. Injecting Mortar:

- Insert the mixing nozzle to the bottom of the drilled hole.
- Begin injecting the mortar, slowly withdrawing the nozzle as the hole fills. Ensure no air voids are trapped.
- Fill the hole approximately 2/3 full to allow for displacement when the anchor element is inserted.

2. Inserting Anchor Element:

- Immediately after injecting the mortar, insert the anchor element (rebar or threaded rod) into the filled hole with a slight twisting motion.
- Ensure the anchor element is fully inserted to the required depth.

3. Curing Time:

- Refer to the Hilti technical data sheet for specific curing times, which vary based on ambient temperature and concrete temperature.
- Do not disturb the anchor element during the curing period.
- The mortar will harden over time, forming a strong bond.



Figure 3: Side view of the Hilti HIT-RE 10 Injectable Mortar cartridge, showing the label and dual chambers.

6. MAINTENANCE

- **Storage:** Store unused cartridges in their original packaging in a cool, dry place (typically between 5°C and 25°C / 41°F and 77°F) away from direct sunlight. Check the product label for specific storage conditions and shelf life.
- **Dispenser Cleaning:** After use, clean the dispenser thoroughly to prevent mortar from hardening within the mechanism. Follow the dispenser manufacturer's cleaning instructions.
- **Nozzle Disposal:** Used mixing nozzles should be disposed of after each application, as the mixed mortar will cure inside them.

7. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|--|---|---|
| Mortar not mixing properly (streaky color) | Insufficient initial dispensing; clogged or incorrect mixing nozzle. | Dispense more material until uniform color is achieved. Replace mixing nozzle. Ensure correct nozzle type is used. |
| Poor adhesion or anchor failure | Improper hole cleaning; incorrect hole diameter/depth; insufficient mortar fill; anchor element not fully inserted; curing time not observed. | Ensure thorough hole cleaning. Verify hole dimensions. Fill hole adequately. Fully insert anchor. Allow full curing time. |
| Mortar not dispensing | Clogged nozzle; empty cartridge; dispenser malfunction. | Replace nozzle. Replace cartridge. Check dispenser for blockages or damage. |

If you encounter issues not listed here, please refer to the comprehensive Hilti technical data sheet or contact Hilti customer support.

8. SPECIFICATIONS

| Attribute | Value |
|------------------------|--|
| Product Name | Hilti Injectable Mortar HIT-RE 10 580/1-A1 |
| Model Number | Injectable mortar HIT-RE 10 580/1-A1 |
| Brand | Hilti |
| Material | Epoxy |
| Compatible Material | Concrete |
| Item Form | Paste |
| Item Volume | 580 ml |
| Item Weight | 2 kg |
| Water Resistance Level | Water Resistant |
| Country of Origin | India |

Note: For detailed technical specifications, including curing times, load values, and application temperatures, please refer to the official Hilti technical data sheet for HIT-RE 10.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or further assistance with your Hilti Injectable Mortar HIT-RE 10 580/1-A1, please contact Hilti customer service directly or visit their official website.

Hilti provides comprehensive support and resources for their products, including technical data sheets, safety information, and application guides.

Manufacturer: Hilti

Legal Disclaimer: The color of the product may slightly vary due to monitor/device screen resolutions.