HILTI 258022

Hilti HIS-N Carbon Steel Internally Threaded Inserts

Model: 258022

1. Introduction

This manual provides essential information for the safe and effective use of Hilti HIS-N Carbon Steel Internally Threaded Inserts, Model 258022. These inserts are designed for creating internal threads in concrete and masonry applications, allowing for the attachment of various fixtures. Please read these instructions thoroughly before installation and use to ensure proper performance and safety.

2. Safety Instructions

Adherence to safety guidelines is crucial during the installation and use of threaded inserts. Failure to follow these instructions may result in injury or damage.

- Always wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and hearing protection.
- Ensure the base material (concrete, masonry) is suitable for the intended load and insert type.
- Use only Hilti-approved tools and accessories for installation.
- Verify the drill bit diameter and drilling depth are correct for the specific insert size.
- Clean the drilled hole thoroughly to remove all dust and debris before insert installation.
- Do not overtighten the insert during installation, as this can damage the base material or the insert itself.
- Consult local building codes and regulations for specific application requirements.
- Keep children and unauthorized personnel away from the work area.

3. Product Overview

The Hilti HIS-N Internally Threaded Insert is a high-quality fastening component designed for reliable performance in various construction applications. It features external threading for secure embedment in the base material and internal threading for attaching standard threaded rods or bolts.

Figure 1: Hilti HIS-N Carbon Steel Internally Threaded Insert. An image showing a single Hilti HIS-N Carbon Steel Internally Threaded Insert, 5/8 inch diameter, resting on its red and gray Hilti branded packaging. The insert is silver-colored with external threading along its length and an internally threaded opening at one end.

4. Specifications

Feature	Detail
Model Number	258022
Material	Carbon Steel, Heat-Treated
Thread Size (Internal)	5/8 inch
Thread Coverage	Threaded on both ends (external and internal)
Exterior Finish	Black Oxide
Thread Style	Right Hand
Item Weight	Approximately 1 pound (per piece)
UPC	643485967705

5. Installation Instructions

Proper installation is critical for the performance and safety of the Hilti HIS-N insert. Follow these steps carefully:

1. **Drill the Hole:** Using a rotary hammer drill and a Hilti-approved drill bit of the specified diameter, drill

a hole to the required depth in the base material. Ensure the hole is perpendicular to the surface.

2. **Clean the Hole:** Thoroughly clean the drilled hole using a Hilti brush and blow-out pump to remove all dust and debris. This step is essential for proper bonding.
3. **Insert the Capsule (if applicable):** If using an adhesive capsule system, insert the capsule into the cleaned hole.
4. **Install the Insert:** Attach the HIS-N insert to a setting tool (e.g., a rotary hammer with a setting tool attachment). Drive the insert into the hole, rotating it to mix the adhesive (if applicable) and ensure full embedment. Continue until the insert is flush with the surface or at the specified embedment depth.
5. **Allow Curing Time:** If using an adhesive system, allow the adhesive to cure for the recommended time before applying any load. Refer to the adhesive product's technical data for specific curing times.
6. **Attach Fixture:** Once the insert is properly set and cured, attach the desired fixture using a compatible threaded rod or bolt. Do not exceed the recommended torque values for the bolt.

Note: Specific drill bit diameters, hole depths, and setting procedures may vary based on the exact application and adhesive system used. Always refer to the detailed technical data sheets provided by Hilti for your specific project.

6. Operating Instructions

Once the Hilti HIS-N insert is correctly installed and cured, it functions as a reliable anchor point. To operate, simply thread a compatible bolt or threaded rod into the internal threads of the insert. Ensure the bolt engages sufficient threads for a secure connection. Do not overtighten the bolt, as this can damage the internal threads of the insert or the attached fixture.

7. Maintenance

Hilti HIS-N Carbon Steel Internally Threaded Inserts are designed for long-term, maintenance-free performance once properly installed. However, periodic inspection of the attached fixture and the surrounding base material is recommended, especially in dynamic or critical applications. Check for:

- Signs of corrosion on the exposed portion of the insert or attached bolt.
- Cracks or damage to the base material around the insert.
- Loosening of the attached bolt.

If any issues are observed, consult a qualified professional for assessment and corrective action.

8. Troubleshooting

While Hilti HIS-N inserts are robust, issues can arise from improper installation or application. Here are some common concerns:

- **Insert spins during installation:** This often indicates an oversized drilled hole or insufficient cleaning. Ensure the correct drill bit is used and the hole is thoroughly cleaned.
- **Bolt does not thread smoothly:** Check for debris in the internal threads or cross-threading. Clean the threads and ensure the bolt is aligned correctly. Do not force the bolt.
- **Fixture feels loose after installation:** This could be due to improper embedment depth, insufficient curing time of adhesive, or damage to the base material. Re-evaluate the installation process and base material integrity.

For persistent issues or complex problems, contact Hilti technical support.

9. Warranty Information

Hilti products are manufactured to high-quality standards. For specific warranty terms and conditions applicable to the HIS-N Carbon Steel Internally Threaded Inserts, please refer to the official Hilti warranty documentation available on the Hilti website or contact Hilti customer service directly. Keep your purchase receipt as proof of purchase.

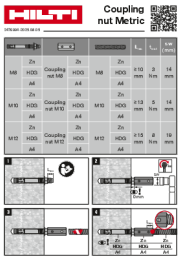
10. Support and Contact

For technical assistance, product inquiries, or further support regarding your Hilti HIS-N Internally Threaded Inserts, please visit the official Hilti website or contact Hilti customer service.

Hilti Official Website: www.hilti.com

Please have your product model number (258022) and any relevant purchase information ready when contacting support.

Related Documents - 258022

	Hilti HIT-HY 200 A/R V3 Adhesive Anchoring System Technical Guide Explore the Hilti HIT-HY 200 A/R V3 Adhesive Anchoring System with this technical guide. Discover product specifications, design data, approvals, and application details for rods, rebar, and inserts, compliant with ACI 318 and CSA A23.3 standards.
	Hilti Kwik Bolt 3 (KB3) Concrete Anchors - ICC-ES Evaluation Report ESR-2302 ICC-ES Evaluation Report ESR-2302 detailing compliance, design specifications, and installation guidelines for Hilti Kwik Bolt 3 (KB3) concrete anchors, evaluated against multiple building codes.
	Hilti Coupling Nut Metric Specifications and Installation Guide Technical specifications and installation guide for Hilti Metric Coupling Nuts (M8, M10, M12) with various coatings (Zn, HDG, A4), detailing required length (Lrec), installation torque (tinst), and wrench size (SW).

	[Hilti WHG Composite Anchor Installation Protocol] This document serves as a Hilti installation protocol for WHG (Water Hazard Act) compliant composite anchors, detailing the necessary steps, materials, and verification procedures for proper installation.
	[Hilti Composite Anchor WHG Installation Protocol - Technical Data and Record] This document is an installation protocol for Hilti composite anchors (Verbunddübel) used in Water Hazard Class (WHG) applications. It records details of the installation, including project information, materials used, anchor type, positioning, hole preparation, setting process, and confirmation of proper execution according to ETA standards and manufacturer requirements. It serves as a record for certified installers and supervisors.
	[Contrat d'Abonnement Logiciel et Services Hilti : Termes et Conditions] Ce contrat d'abonnement détaille les termes et conditions d'utilisation des logiciels et services Hilti, couvrant les obligations des parties, la protection des données et les niveaux de service.