Tapcon 28280

Tapcon 28280 Concrete Screw Anchors User Manual

Model: 28280

1. Introduction

This manual provides comprehensive instructions for the proper use, installation, and maintenance of Tapcon 28280 1/4x2-1/4 Blue Star Drive Bugle Head Concrete Anchors. These anchors are designed for secure fastening into various masonry substrates, including concrete, block, and brick. Adhering to these guidelines will ensure optimal performance and safety.

2. Product Overview

The Tapcon 28280 concrete screw anchors are engineered for reliability and ease of installation. They feature a star recess head to minimize bit slip during driving and a patented thread design for consistent performance in masonry.

2.1 Key Features

- **Star Recess Head:** Designed to eliminate bit slip, ensuring a more secure drive.
- **Versatile Application:** Suitable for use in concrete, block, and brick.
- **Climaseal Blue Coating:** Provides long-lasting corrosion protection.
- **Chisel Edges:** Accurately cut threads into concrete for consistent driving and strong holding power.
- **Dimensions:** 1/4 inch diameter x 2-1/4 inch length.

2.2 Product Components



This image displays the Tapcon 28280 concrete screw anchors. The main packaging shows a blue screw anchor with a star recess head, indicating its design to eliminate bit slip. The packaging also specifies the dimensions as 1/4" diameter by 2-1/4" length, and notes that a T-30 driver bit and a 3/16" x 4-1/2" Tapcon drill bit are required for installation. These anchors are suitable for concrete, block, and brick. A single anchor screw is shown outside the packaging on the right, highlighting its blue Climaseal coating and threaded design.

Each box contains 25 Tapcon 28280 concrete screw anchors.

3. Setup

3.1 Required Tools and Materials

- Hammer drill (recommended for masonry)
- 3/16" x 4-1/2" Tapcon drill bit (or equivalent masonry drill bit)
- T-30 Star Drive bit
- Safety glasses
- Dust mask
- Measuring tape
- Marking tool (pencil/marker)

3.2 Preparation

1. Identify the location for anchor installation. Ensure the substrate (concrete, block, or brick) is sound and free of cracks or damage.
2. Mark the precise drilling points on the surface.
3. Wear appropriate personal protective equipment, including safety glasses and a dust mask, before beginning any drilling operations.

4. Operating Instructions (Installation)

Follow these steps for proper installation of Tapcon 28280 concrete screw anchors:

1. **Drill the Pilot Hole:** Using a hammer drill with a 3/16" x 4-1/2" Tapcon drill bit, drill a pilot hole into the masonry substrate. The hole depth should be at least 1/4 inch deeper than the anchor's embedment depth to allow for dust accumulation. Ensure the hole is straight and perpendicular to the surface.
2. **Clear the Hole:** Thoroughly clean the drilled hole of all dust and debris. This can be done using a wire brush and a vacuum or compressed air. A clean hole is crucial for proper anchor performance.
3. **Insert the Anchor:** Place the object to be fastened over the pilot hole. Align the anchor through the fixture and into the pre-drilled hole.
4. **Drive the Anchor:** Attach a T-30 Star Drive bit to your drill. Drive the Tapcon anchor directly into the pilot hole. Apply firm, consistent pressure. The anchor will cut its own threads into the masonry. Continue driving until the head of the anchor is flush with the surface of the material being fastened, or until it is properly seated. Do not over-tighten, as this can strip the threads or damage the substrate.
5. **Verify Security:** Once installed, ensure the fixture is securely fastened and the anchor is tight.

Important: *Always refer to local building codes and engineering specifications for specific application requirements and load capacities.*

5. Maintenance

Tapcon concrete screw anchors are designed for long-term performance with minimal maintenance. However, proper care and storage can extend their lifespan and ensure readiness for use.

- **Storage:** Store unused anchors in their original packaging in a cool, dry place to protect the Climaseal coating from

moisture and environmental degradation.

- **Inspection:** Periodically inspect installed anchors for any signs of corrosion, loosening, or damage, especially in outdoor or high-moisture environments. Address any issues promptly.
- **Cleaning:** If anchors become dirty, wipe them with a clean, dry cloth. Avoid using harsh chemicals that could compromise the protective coating.

6. Troubleshooting

Below are common issues and their solutions during Tapcon anchor installation:

Problem	Possible Cause	Solution
Anchor will not drive or binds	Pilot hole too small or not deep enough; hole not cleared of debris; incorrect drill bit used.	Ensure correct 3/16" drill bit is used. Redrill to correct depth. Thoroughly clean the hole.
Bit slips from anchor head	Incorrect driver bit used; worn driver bit; insufficient downward pressure.	Use a T-30 Star Drive bit. Replace worn bits. Apply firm, consistent downward pressure while driving.
Anchor spins in hole	Pilot hole too large; substrate is weak or damaged; anchor over-tightened.	If hole is too large, move to a new location or use a larger diameter anchor if appropriate for the application. Do not over-tighten.

7. Specifications

Attribute	Detail
Brand	Tapcon
Model Number	28280
Drive System	Star Drive
Head Style	Bugle Head
Anchor Diameter	1/4 inch
Anchor Length	2-1/4 inches
Quantity per Box	25
Coating	Climaseal Blue
Compatible Substrates	Concrete, Block, Brick
Required Driver Bit	T-30 Star Drive Bit
Required Drill Bit	3/16" x 4-1/2" Tapcon Drill Bit
Item Weight	2.4 ounces (per box)
Product Dimensions	6.25 x 0.82 x 0.51 inches (packaging)
Country of Origin	Taiwan

8. Warranty and Support

Tapcon products are manufactured to high-quality standards. For information regarding product warranty, limitations, or technical support, please refer to the official Tapcon website or contact their customer service directly. Keep your purchase receipt as proof of purchase.

For further assistance, please visit the manufacturer's official support channels.

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