fischer 45650

Fischer FSL-RR Metalic Anchor M6x45 D8 Instruction Manual

Model: 45650

Product Overview

The Fischer FSL-RR Metalic Anchor is a high-performance anchor designed for secure fixings in concrete applications. Its robust construction and design allow for high load capacities, making it suitable for various structural and temporary installations. This anchor is ideal for applications requiring strong, reliable fastening points.
Typical applications include metal constructions, railings, corbels, stairs, cable trays, machinery, doors, and facades.

Technical Specifications

Specification	Detail
Model Number	45650
Size	fsl m6x45 d8
Material	Alloy Steel
Exterior Finish	Zinc Plated
Thread Size	M6
Fastener Type	Hexagon Bolt
Head Type	Hexagon
Item Hardness	Grade A
Number of Pieces	100
Product Dimensions	3.54 x 7.09 x 3.54 inches (packaging)
Item Weight	4 pounds (for 100 units)

Note: Always refer to the specific load capacity data provided with the product packaging for detailed engineering specifications.

Installation Guide

Follow these steps for proper installation of the Fischer FSL-RR Metalic Anchor to ensure maximum performance and safety.

1. Preparation and Drilling

Identify the desired fixing point. Ensure the substrate is suitable for anchor installation (e.g., compressed concrete). Use a drill bit of the correct diameter for the M6 anchor. The required drill hole diameter (d0) and effective embedment depth (hef) are critical for proper installation.

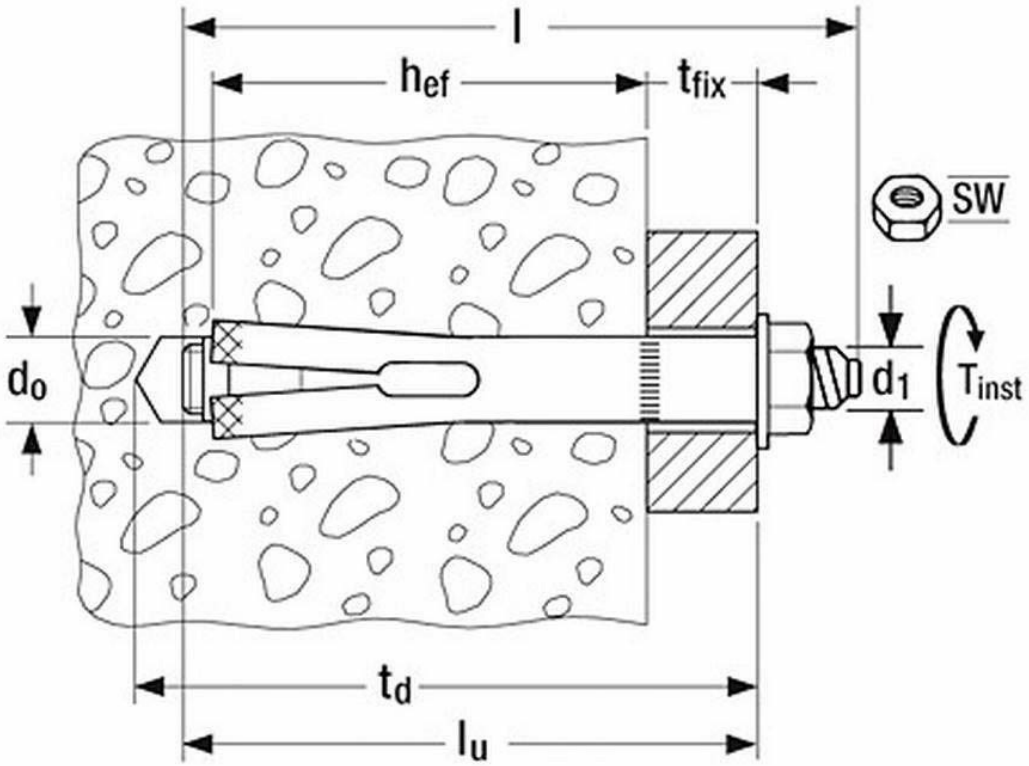

Image: Technical drawing illustrating the dimensions and components of the FSL-RR anchor, including drill hole diameter (d0), effective embedment depth (hef), and installation torque (Tinst).

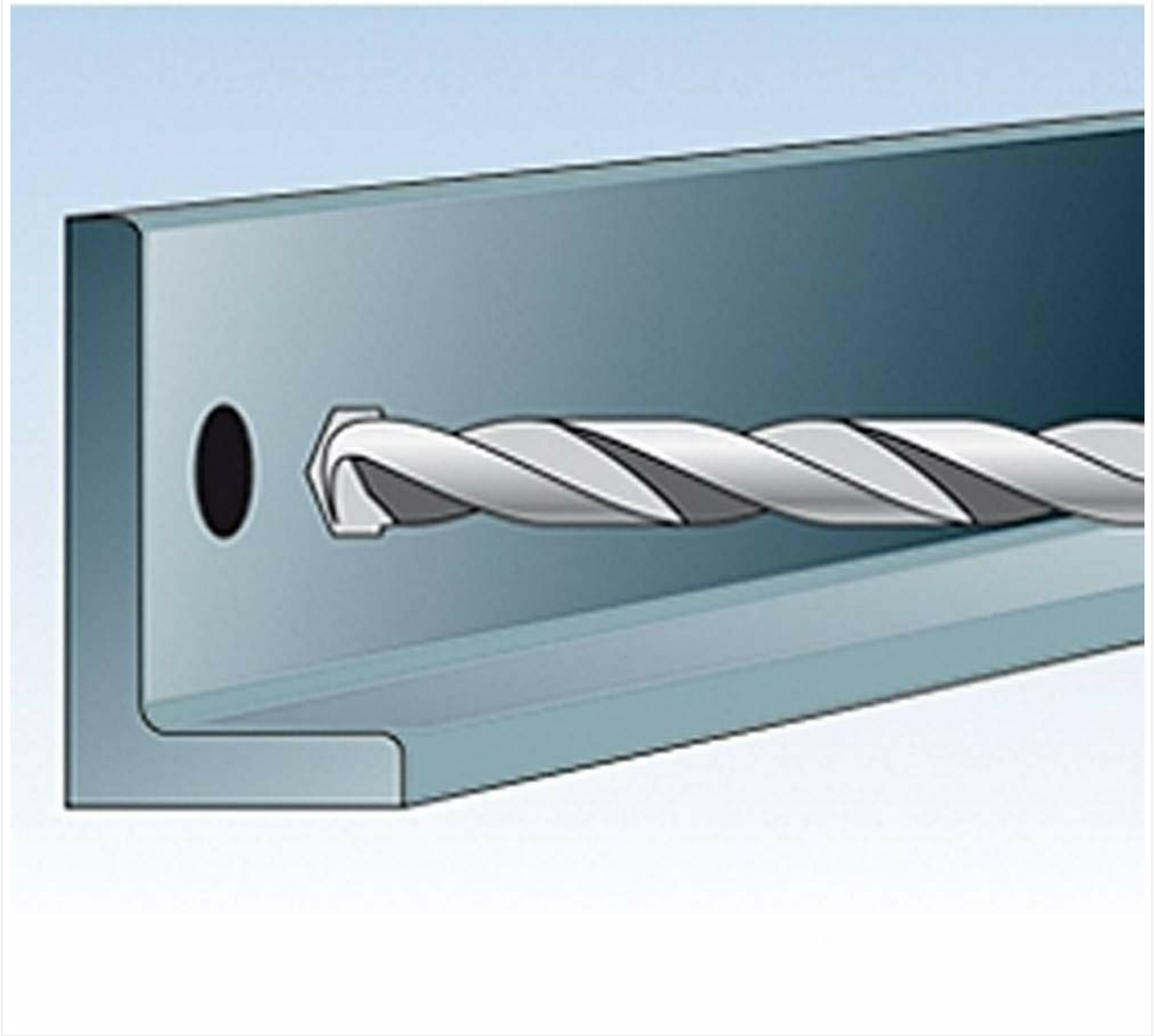

Image: Illustration showing a drill bit creating a hole in a concrete-like material, preparing for anchor insertion.

2. Hole Cleaning

After drilling, thoroughly clean the drill hole to remove all dust and debris. This is crucial for the anchor to achieve its full holding power. Use a brush and a blow-out pump or compressed air.

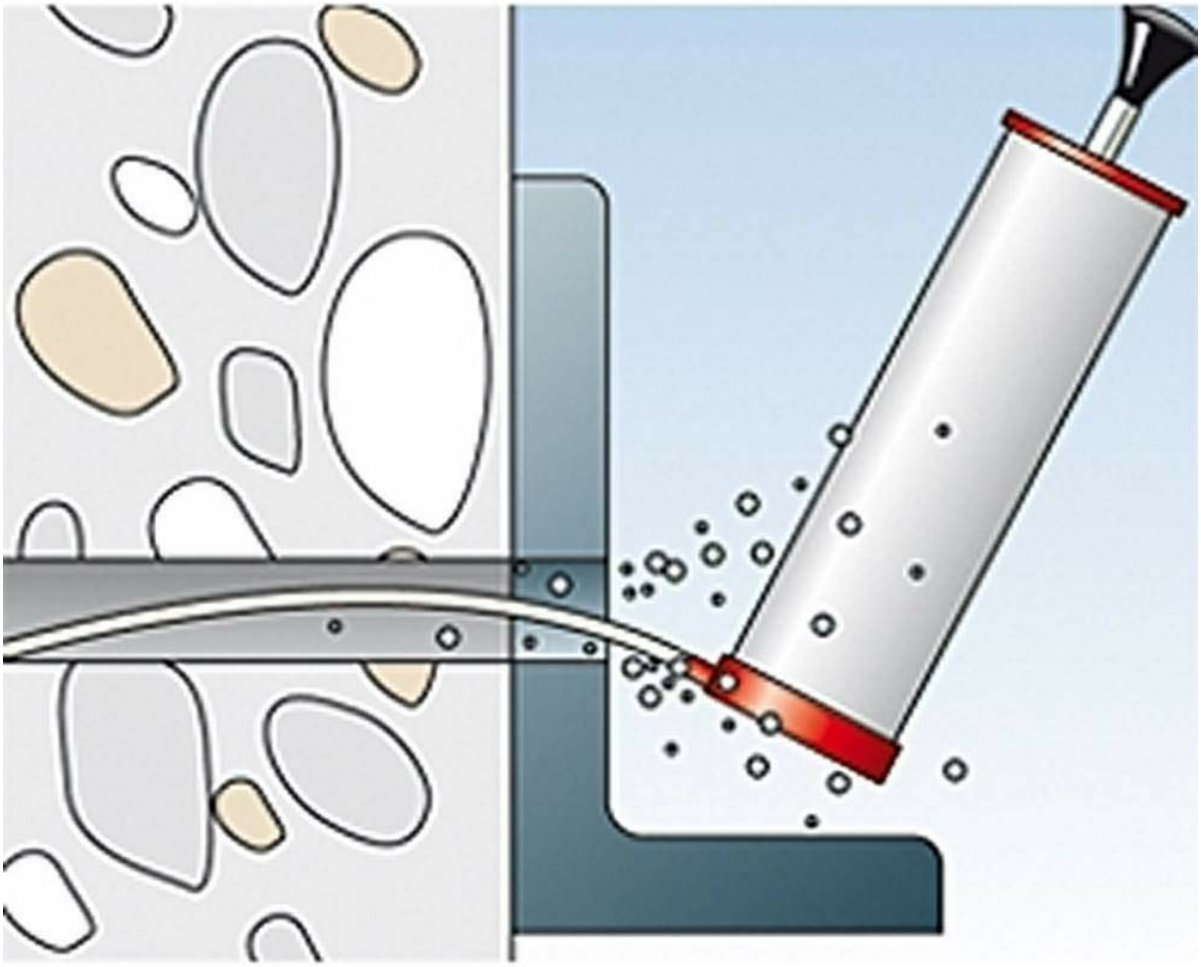

Image: Diagram depicting the process of cleaning a drilled hole using a blow-out pump to remove dust and debris, ensuring proper anchor seating.

3. Anchor Insertion

Insert the FSL-RR anchor into the cleaned drill hole. Ensure it is fully seated and flush with the surface of the fixture or substrate, depending on the application type.

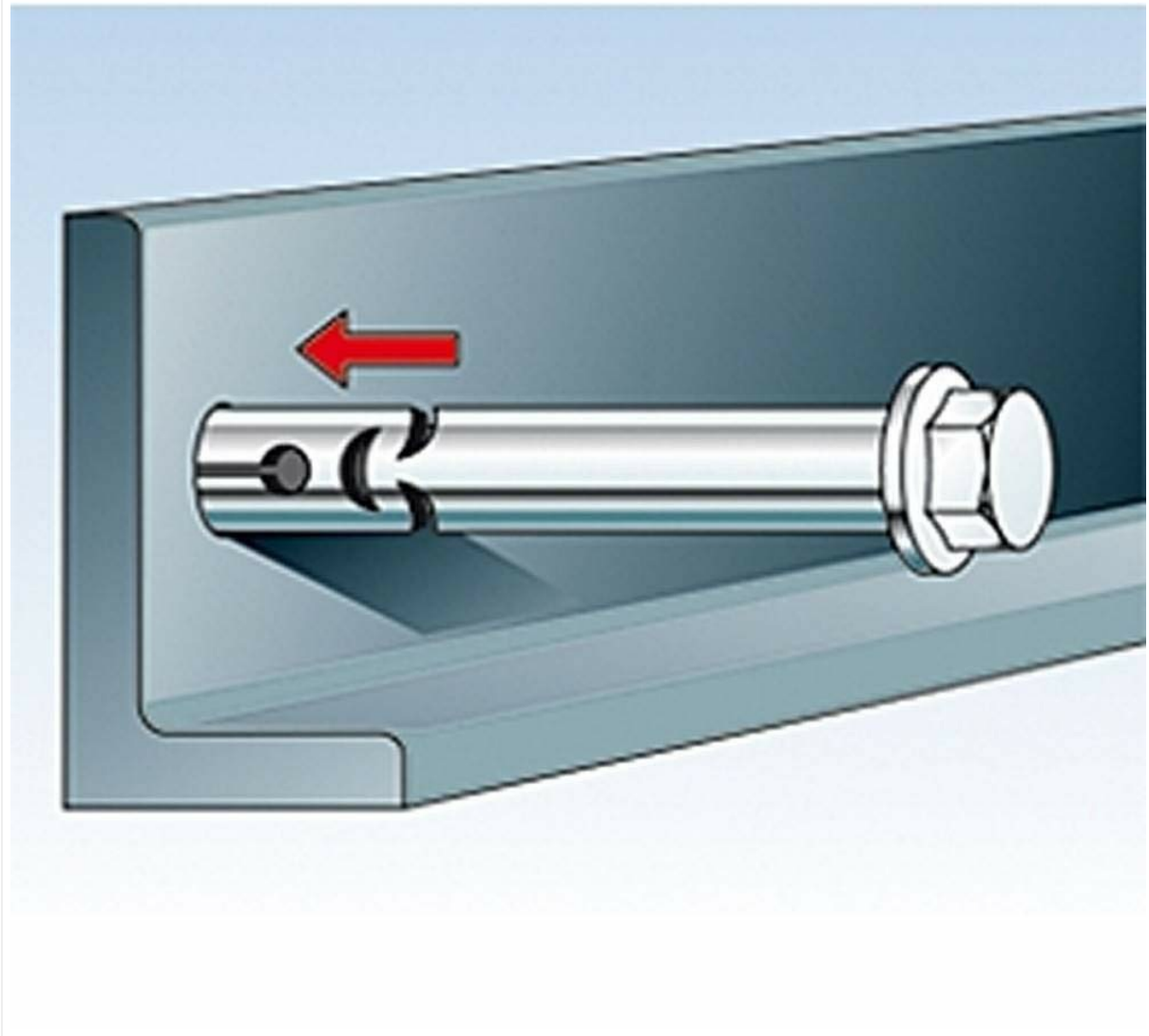

Image: Illustration showing the FSL-RR anchor being inserted into a pre-drilled hole in a fixture, ready for tightening.

4. Applying Torque

Tighten the anchor using a torque wrench to the specified installation torque (Tinst). This expands the anchor sleeve, creating a secure friction fit within the concrete. Refer to the product packaging or technical data sheet for the exact torque value for M6x45 anchors.

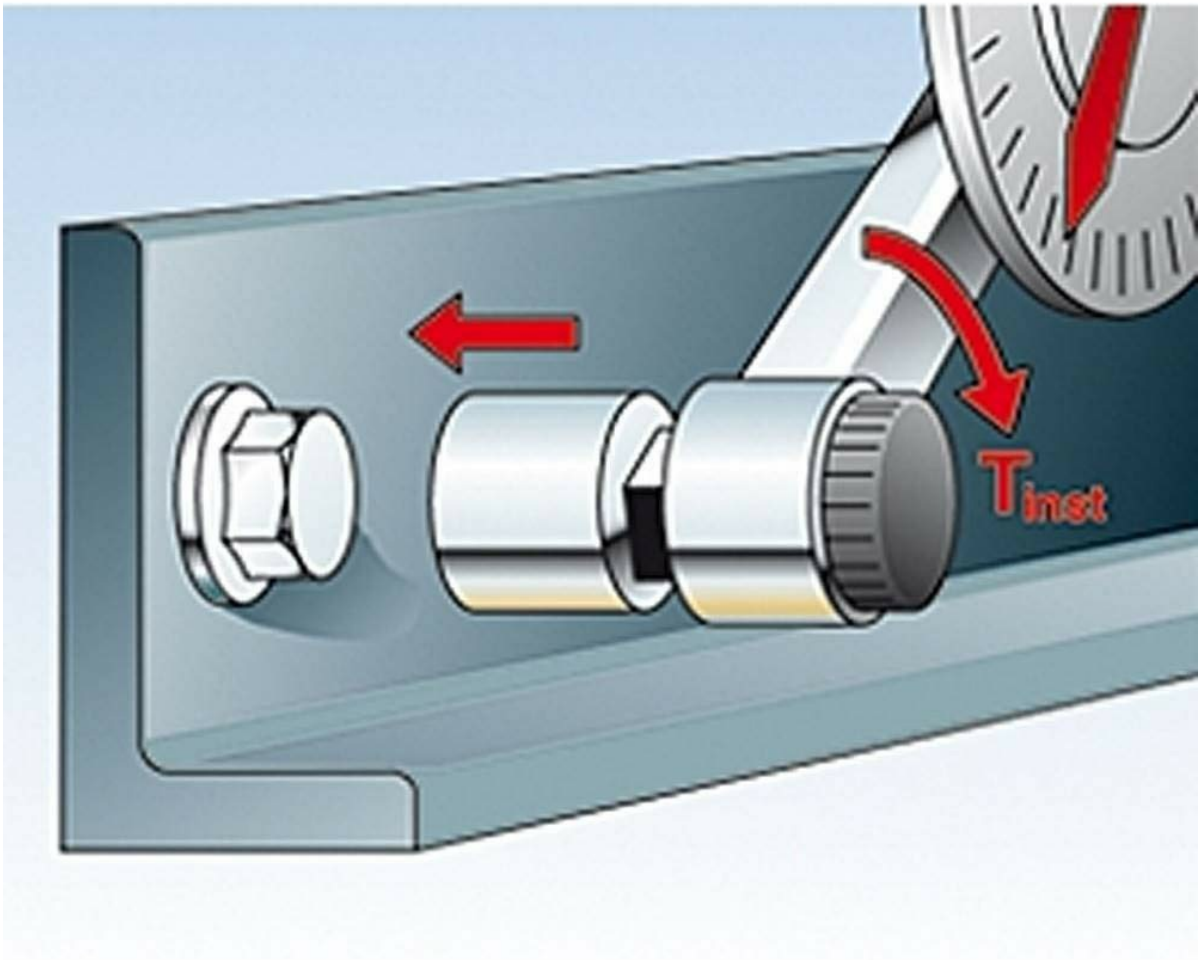

Image: Diagram showing a torque wrench being used to tighten the anchor, indicating the application of the specified installation torque (Tinst).

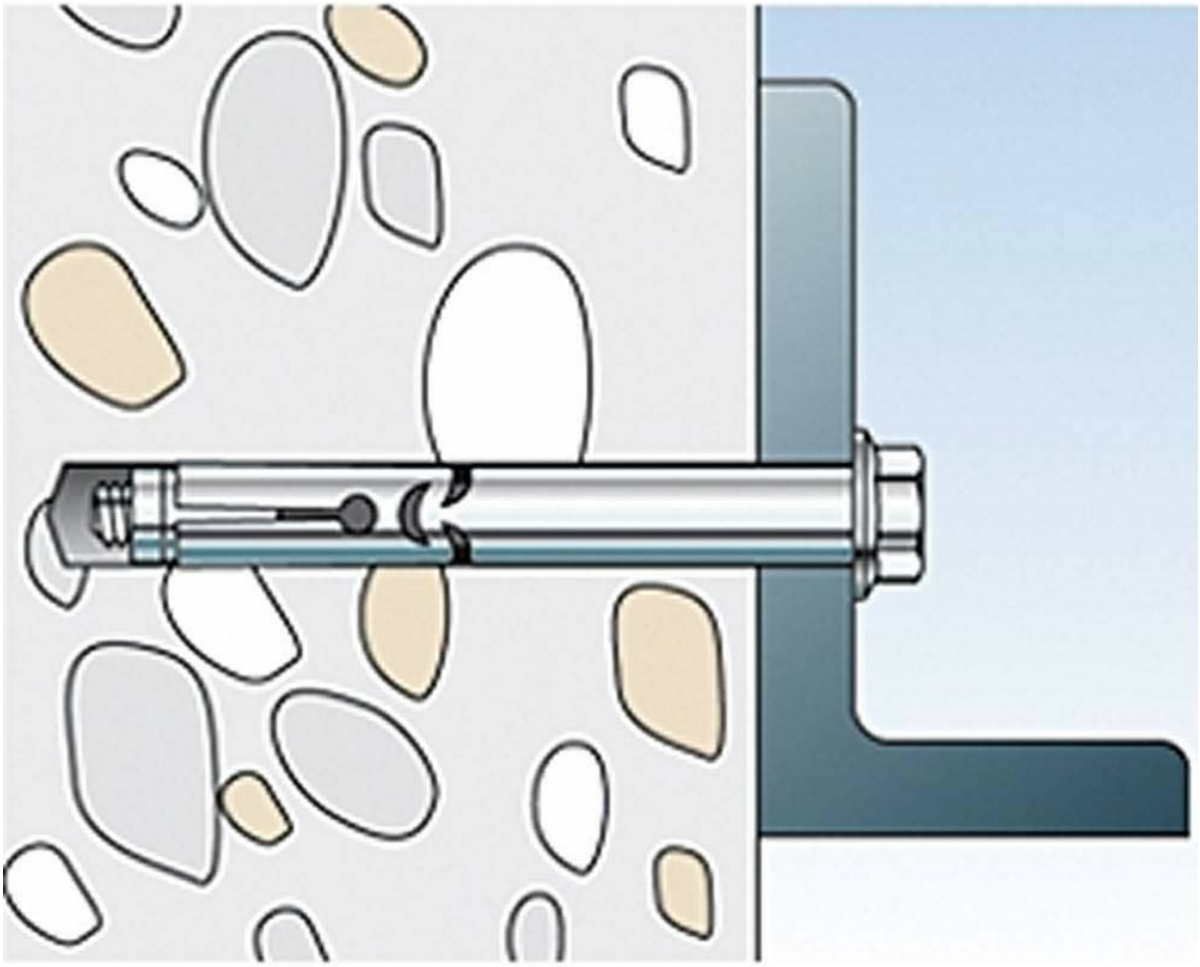

Image: Cross-section view of a fully installed FSL-RR anchor in concrete, demonstrating the expanded sleeve and secure fastening.

Applications

The Fischer FSL-RR Metalic Anchor is versatile and suitable for a wide range of applications where strong, reliable fixings are required in concrete.

- Fixing metal constructions and frameworks.
- Mounting railings and handrails.
- Securing corbels and support brackets.
- Installing stairs and stair components.
- Attaching cable trays and electrical conduits.
- Anchoring machinery and equipment.
- Fixing doors and window frames.
- Securing facade elements.

Image: Example application showing FSL-RR anchors used to securely fasten a bicycle rack to a concrete surface.

Image: Example application demonstrating FSL-RR anchors used for mounting a wall-mounted trash receptacle to a concrete wall.

Maintenance

Fischer FSL-RR Metalic Anchors are designed for long-term, maintenance-free performance once correctly installed. However, periodic inspection of the fixed elements and the surrounding concrete can help ensure continued safety and integrity, especially in dynamic or high-stress environments.

- **Visual Inspection:** Periodically check for any signs of corrosion, loosening, or damage to the anchor or the attached fixture.
- **Environmental Factors:** In environments with high humidity, chemical exposure, or extreme temperatures, more frequent inspections may be necessary.
- **Load Changes:** If the load on the anchor changes significantly, or if the fixture is modified, re-evaluate the anchor's suitability and consider professional inspection.

Troubleshooting

If you encounter issues during or after installation, consider the following common troubleshooting points:

- **Anchor Not Holding:**

- Ensure the drill hole diameter is correct and the hole was thoroughly cleaned of debris.
- Verify that the anchor was inserted to the correct embedment depth.
- Confirm that the specified installation torque was applied using a calibrated torque wrench.
- Check the concrete quality; very weak or cracked concrete may not provide adequate holding power.

- **Difficulty Inserting Anchor:**
  - The drill hole may be too small or not deep enough.
  - Debris might be obstructing the hole. Clean the hole thoroughly.
- **Anchor Appears Loose After Tightening:**
  - The concrete may be damaged or of insufficient strength.
  - Re-check the applied torque. If the issue persists, the anchor may need to be replaced or a different fixing solution considered.

For persistent issues or complex installations, consult with a qualified structural engineer or contact Fischer technical support.

Warranty Information

Fischer products are manufactured to high-quality standards. For specific warranty details regarding the FSL-RR Metalic Anchor, please refer to the official Fischer warranty statement available on the manufacturer's website or included with the product packaging. General warranty terms typically cover manufacturing defects under normal use conditions.
Keep your purchase receipt as proof of purchase for any warranty claims.

Customer Support

For further assistance, technical inquiries, or support, please contact Fischer customer service through their official channels:

- **Website:** Visit the official fischer website for product information, technical data sheets, and contact options.
- **Contact Form:** Many regions offer online contact forms for specific inquiries.
- **Local Distributor:** Contact your local authorized fischer distributor for immediate support and product availability.

When contacting support, please have your product model number (45650) and any relevant purchase details ready.