



[Manuals.plus](#) /

› [ITW RED HEAD](#) /

› Red Head RL-14 1-4-Inch Multi-Set Lipless Drop-In Anchor User Manual

ITW RED HEAD RL-14

Red Head RL-14 1/4-Inch Multi-Set Lipless Drop-In Anchor User Manual

Model: RL-14

INTRODUCTION

This manual provides detailed instructions for the proper installation, operation, and maintenance of the Red Head RL-14 1/4-Inch Multi-Set Lipless Drop-In Anchor. This anchor is designed for use in solid concrete or lightweight fill decks, featuring an internally threaded, all-steel shell with an expansion cone insert. Its design allows for below-surface setting, facilitating easy patch work, and offers higher performance potential with deep embedment settings.

SAFETY INFORMATION

Always observe standard safety precautions when working with tools and fasteners. Wear appropriate personal protective equipment (PPE), including safety glasses and gloves. Ensure the work area is clear and stable. Improper installation can lead to anchor failure and potential injury. Consult local building codes and regulations for specific requirements.

COMPONENTS

Each box contains 100 Red Head RL-14 1/4-Inch Multi-Set Lipless Drop-In Anchors. A setting tool (punch) is required for installation and is sold separately.

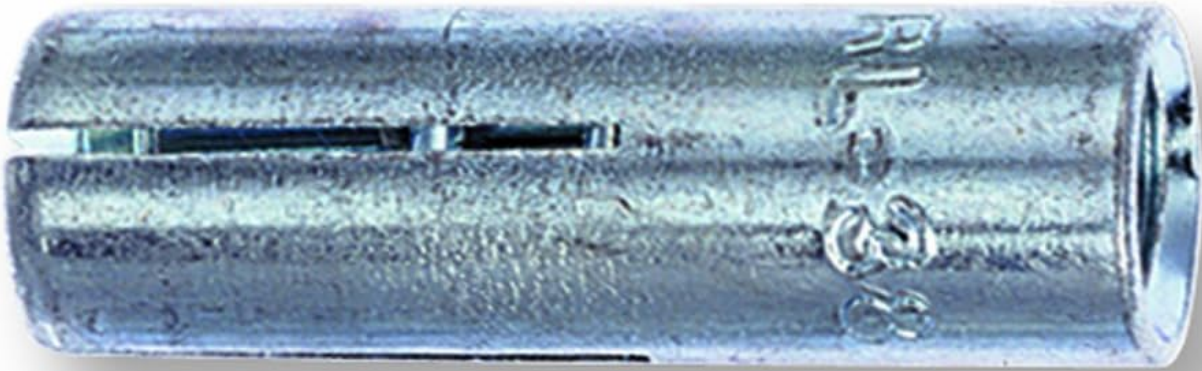


Figure 1: A single Red Head RL-14 1/4-Inch Multi-Set Lipless Drop-In Anchor. This image shows the cylindrical, zinc-plated steel anchor with internal threading visible at one end and expansion slots along its body.

SETUP AND INSTALLATION

The Red Head RL-14 anchor is designed for easy installation and inspection. It requires a carbide-tipped hammer drill bit and a specific setting tool (punch) for proper expansion.

Required Tools and Materials:

- Hammer drill
- Carbide-tipped drill bit (3/8 inch diameter)
- Setting tool (punch) for 1/4-inch drop-in anchors
- Safety glasses and gloves
- Brush or vacuum for hole cleaning

Installation Steps:

1. **Drill the Hole:** Using a hammer drill and a 3/8-inch carbide-tipped drill bit, drill a hole into the concrete. The minimum embedment depth for the anchor is 1 inch. Ensure the hole depth is sufficient to allow for the anchor to be set below the surface if desired for patching.
2. **Clean the Hole:** Thoroughly clean the drilled hole of all dust and debris using a brush or vacuum. A clean hole is critical for proper anchor performance.
3. **Insert the Anchor:** Place the Red Head RL-14 anchor into the cleaned hole with the internally threaded end facing outwards. The anchor should fit snugly.
4. **Set the Anchor:** Insert the correct setting tool (punch) into the threaded end of the anchor. Strike the setting tool firmly with a hammer until the anchor's cone insert expands the anchor body against the sides of the drilled hole. The expander slots facilitate this process, ensuring superior performance. Proper setting is indicated by a solid feel when striking the tool and the anchor being firmly seated.
5. **Inspect:** Visually inspect the anchor to ensure it is fully set and flush or below the surface as intended.

OPERATING THE ANCHOR

Once the Red Head RL-14 anchor is properly installed and set, it provides a secure, internally threaded point for attaching fixtures. Simply thread a 1/4-inch bolt (with 20 threads per inch) into the anchor to secure your desired object. Ensure the bolt length is appropriate for the fixture and the anchor's thread depth (3/8 inch).

MAINTENANCE

Red Head Multi-Set Lipless Drop-In Anchors are manufactured from zinc-plated carbon steel, offering low corrosion resistance. For optimal longevity, inspect installed anchors periodically, especially in environments exposed to moisture or corrosive agents. If an anchor shows signs of significant corrosion or damage, it should be replaced.

TROUBLESHOOTING

- **Anchor not setting properly:**
 - Ensure the correct drill bit size (3/8 inch) was used.
 - Verify the hole is free of debris.
 - Confirm you are using the correct setting tool (punch) designed for 1/4-inch drop-in anchors.
 - Apply firm, consistent hammer strikes to the setting tool.
- **Anchor feels loose after setting:**
 - The anchor may not have fully expanded. Attempt to re-strike the setting tool.
 - The hole may be oversized or the concrete too weak. In such cases, the anchor may need to be removed and a new one installed in a different location or a different type of anchor used.
- **Bolt does not thread into anchor:**
 - Ensure you are using a 1/4-inch bolt with 20 threads per inch.
 - Check for debris or damage within the anchor's internal threads.

SPECIFICATIONS

Manufacturer	Red Head
Part Number	RL-14
Item Model Number	RL-14
Item Weight	2.4 pounds (for 100 anchors)
Material	Steel (Zinc-plated carbon steel)

Item Package Quantity	100 per Box
Bolt Size	1/4 inch
Threads per Inch	20
Drill Bit Diameter	3/8 inch
Thread Depth	3/8 inch
Minimum Embedment Hole Depth	1 inch
Usage	Concrete
Corrosion Resistance Level	Low

WARRANTY

According to the product specifications, there is *No Warranty* provided for this product.

SUPPORT

For further assistance or inquiries regarding the Red Head RL-14 Multi-Set Lipless Drop-In Anchor, please contact the manufacturer, ITW RED HEAD, or the retailer from whom the product was purchased.