Can holes be drilled at the bottom of cable trays

Overview

Place 2nd part around opposite end of Trough Tray, align clamp holes and install hardware.) Recommended torque: for 3/8” fasteners: 25-35 ft-lbs [33.9-47.5 N-m].

Key Takeaways

Yes, holes can be drilled at the bottom of a cable tray, but the purpose, location, and protective measures must be carefully considered.

Solid-

Bottom Cable Trays

For solid-bottom cable trays, drilling holes is commonly done to prevent water accumulation or to allow cables to exit the tray. When installed outdoors or in humid environments, it is recommended to drill ¼-inch weep holes at the sides and middle every 3 feet to limit moisture retention, unless EMI/RFI shielding is required, as holes would compromise shielding effectiveness (Eaton B-Line series guidance).

Cable Exit and Field Modifications

Holes may also be drilled to allow cables to exit the tray. In such cases, abrasion protection is important. Snap-in bushings or cable channel bushings should be used to protect cable jackets from sharp edges (Eaton B-Line series).

Field drilling for splice plates or dropouts is also standard practice, with care taken to remove burrs and apply rust-proofing or protective coatings to maintain tray integrity.

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Guidelines and Safety Considerations

Hole size and spacing: Typically, ¼-inch holes for drainage or 5/16 to 7/16-inch for cable exit, depending on hardware and cable size. Avoid compromising structural integrity: Drill only where necessary and avoid weakening side rails or load-bearing sections. EMI/RFI shielding: Do not drill holes in trays that require electromagnetic shielding, as this will reduce effectiveness.

Compliance: Ensure that modifications comply with NEC Article 392, which governs cable tray installation and cable types.

Summary

Drilling holes at the bottom of a cable tray is permissible and often necessary for drainage or cable routing, especially in solid-bottom trays. Proper hole size, spacing, protective bushings, and adherence to code requirements are essential to maintain safety, structural integrity, and cable protection.

Article Content

B-Line series Cable Tray Design Considerations

When solid bottom trough tray is installed outdoors, or indoors in humid locations, and EMI/RFI shielding protection is not required, it is recommended that 1⁄4”weep holes be drilled into the tray bottoms at

Cable Tray / Trough Tray INSTALLATION

Place 2nd part around opposite end of Trough Tray, align clamp holes and install hardware.) Recommended torque: for 3/8” fasteners: 25-35 ft-lbs [33.9-47.5 N-m].

Drilling Holes For Containment Regulations/Guidance | Prime Cut

Precise wall and floor drilling holes for cable containment. Compliant with BS 7671 and fire safety regs. Ideal for hospitals, offices, and data centres.

Cable Tray and its types & Sizes

Drilling 1/4 inch drain holes in the bottom of the cable tray at three-foot intervals (at the middle and very near the sides) controls the spacing and supports all sizes of cables, but can not used in EMI/RFI

Solid Bottom Cable Tray

This can be controlled by drilling 1/4 inch drain holes in the bottom of the cable tray at three foot intervals (at the middle and very near the sides) if the cable tray is not being used for

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NEC Article 392: Cable Tray Systems

It provides rules for acceptable wiring methods that can be installed in cable trays, including conditions for use. It addresses uses permitted and not permitted for cable trays.

Cable Tray Design and Standards Guide

The document outlines codes and standards that must be followed for design and construction of cable trays and their components. Standards listed include those for materials, rolling and cutting

Cable Tray Type Selection

This can be controlled by drilling 1/4 inch drain holes in the bottom of the cable tray at three foot intervals (at the middle and very near the sides) if the cable tray is not being used for EMI/RFI shielding.

Cable tray manual

Instead of large conduits, cable channel may be used very effectively to support cable drops from the cable tray run to the equipment or device being serviced and is ideal for cable tray runs involving a

Safely Installing, Maintaining and Inspecting Cable Trays

A generic guideline developed by the Cable Tray Institute indicates that cable trays should not be filled in excess of 40-50% of the inside area of the tray or of the tray''s maximum weight based on the cable

Polymer Cable Trays Types: Your Guide to Choosing Right

Explore different Polymer Cable Trays Types. We break down solid, hollow, and steel-lined options for your cable management needs. Find the best fit.

Cable Tray Accessories, Cable Tray Hangers & Support | RS

What types of cable tray accessories are there? There are several different types of cable tray accessories, which are available in heavy-duty, medium-duty, or light-duty strengths. The type of

10 Best Under-Desk Cable Management Raceway

Discover the best under-desk cable management raceway systems for 2026. We tested 10 products to find top cable organizers, trays, and raceways for

Fiberglass Cable Tray for Telecom Applications

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FRP cable trays can be customized by width, height, length, cover type, resin, color, drilled holes, brackets, supports, labels, and packaging. This helps telecom buyers fit tray systems

15+ Creative DIY Cable Management Ideas

Use a small box or drawer to hide charging cables, cutting out holes for the cords to fit through and labeling each slot for different devices. You can

8 Best Under Desk Cable Management Solutions

Are tangled cables and wires beneath your desk giving you headaches? Solve your cable woes with these nifty under-desk cable organizer trays.

cable tray manfacturing machine

Product Description: Cable Tray Roll Forming Machine Cable tray roll forming machines are commonly used for cable management in commercial and industrial construction. This advanced roll former is

13 Best Desk Cable Management Trays (May 2026) Expert Reviews

Each tray measures 17 inches with pre-drilled holes that eliminate measuring and alignment headaches. The total 34-inch coverage suits larger desks, and you can position the trays

Related Video Reference

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