

How to calculate the cable tray hanger rod



AI Overview

Cable tray support hanger rods are calculated by determining the total load on the tray, dividing it among the number of supports, and selecting rod size based on material strength and safety factors.

Step 1: Determine Cable Tray Load

Calculate the total weight of the cable tray system, including:

- Cable tray weight (based on type and material)
- Cables weight (sum of all cables laid on the tray)
- Additional components (angles, fittings, junction boxes) For example, a 1.5 m cable tray with 17 cables weighing 25.7 kg and GI angles weighing 5.8 kg results in a total load of 51.1 kg .

Step 2: Decide Support Spacing

Support spacing depends on tray type, load, and installation standards. Typical spacing ranges from 1.5 to 3 meters for straight trays . Use the formula to calculate the number of supports: $\text{Support Quantity} = \text{Total Tray Length} \div \text{Support Spacing} + 1$
For a 20 m tray with 2 m spacing: $\text{Support Quantity} = 20 \div 2 + 1 = 11$ supports .

Step 3: Calculate Load per Rod...

Article Content

Nov 19, 2025

Online Tools & Resources

Use our Unistrut calculation tools to calculate your design and support with technical submissions. The tools will help analyse the

Mar 07, 2026

Cable Tray Hanger Bracket & Channel Hangers | TechLine Mfg

Our Snap Track single hanger brackets & channel hangers are used for overhead or beam mounting when installed with a beam

May 26, 2026

Cable Tray Spacing Standards for Installation and Safety

Key Factors Impacting Cable Tray Spacing Understanding cable tray spacing is key to

Jul 14, 2026

Cable Tray Weight and Support Calculations

The document provides information on cable tray sizing including cable types and weights, tray sizes and weights, bending moment

Jul 17, 2026

Cable Tray Resources

Weight savings (offshore solutions) Best cable tray material at low temperature
KwikSplice cable channel savings calculator

Apr 21, 2026

CABLE TRAY

Prior to installing cable in the cable tray, examine cable paths to ensure all areas are free of debris that may interfere with the cable's

Aug 08, 2025

Cable Tray Sizing Calculator | IEC 61537 & NEC 392

Use this cable tray sizing calculator to check fill %, select tray size, and comply with IEC

Jul 31, 2025

Cable Tray Load and Support Calculations

The document provides specifications for cable tray and cable weights, support spacing, and live load factors. It includes calculations

Sep 15, 2025

Best Practice Guide to Cable Ladder and Cable Tray Systems

This guide covers cable ladder systems, cable tray systems, channel support systems and associated supports intended for the

Jul 27, 2025

Cable Tray Trapeze Hanger Rod Support Replacement

I'm in the process of determining a method of repair or replacement for existing corroded angles supporting three

Sep 09, 2025

Best practice guide to cable ladder and cable tray systems

Cable ladder and cable tray systems The following recommendations are intended to be a practical guide to ensure

Jan 05, 2026

Swage Ladder & Trof Tray Single Rod Hanger Support

Swage Ladder & Trof Tray - Single Rod Hanger Support Center-hung cable tray support kit comes with all the necessary

May 02, 2026

Cable Tray Slope & Fabrication Calculator | Utility Hub

The Cable Tray Slope & Fabrication Calculator is a field-ready tool for electrical construction workers who need to quickly calculate V

Feb 04, 2026

HANGERS & BRACKETS Lengths Cable Ladder

QQ QQ Maximum QQ 300mm, the tray overhead hangers are suitable for use with all types of Vantrunk cable tray. The loading table

Mar 24, 2026

Beama Best Practice Guide | Installation Of The System | Cable ...

The following recommendations are intended to be a practical guide to ensure the safe and proper installation of cable ladder and

Jan 01, 2026

Cable Tray Bend and Offset Formulas

The document discusses Metstrut cable tray systems, including their configuration, materials, dimensions, and compliance with

Jan 13, 2026

Cable Tray Technical Guide A practical guide to product selection and ...

Cable Tray Technical Guide A practical guide to product selection and installation This guide for engineers and installers has been

Feb 02, 2026

Cable tray support spacing calculator

Not sure how far apart to space your cable tray supports? Use our free cable tray support spacing

Sep 17, 2025

Cable Tray Raceway Fill and Load Calculations

The Wire Mesh / Cable Tray Fill table in below section shows the number of cables and the load in lbf/lineal foot

Feb 24, 2026

Cable tray Support

Then, according to cable tray support configuration, a structural engineer may calculate the actual load on each support

Jun 09, 2026

Cable Tray Slope & Fabrication Calculator | Utility Hub

Calculate V-cut dimensions, bolt hole positions, slope length, and hanger spacing for cable tray field fabrication. SVG layout for on

Jan 09, 2026

How to Calculate the Cable Tray Support Quantity

Learn how to accurately calculate cable tray support quantities in electrical

Jul 20, 2026

Cable Tray Sizing and Calculation Guide | PDF | Wire | Diameter

The document provides an overview of cable trays, which are designed to organize electrical wires and prevent tangling. It details

May 13, 2026

B-Line series Cable Tray Design Considerations

As an industry leader in cable tray, Eaton offers one of the widest ranges of cable management solutions available in the market

Dec 16, 2025

Cable Tray Threaded Rod Calculation

Weight of 1.5 meters length of 17 cables laid on cable tray is 25.7kgs. weight of 2 numbers of

Jun 18, 2026

Cable Tray Sizing Calculator (BS 7671)

Free cable tray sizing calculator to BS 7671. Tray width, grouping factor Cg, drop rod loading, and cable fixing spacings with BS EN

Sep 24, 2025

HANGER SUPPORT FOR CABLE TRAY & TRUNKING

Spread the love INSTALLATION DETAIL OF HANGER SUPPORT FOR CABLE TRAY& TRUNKING Installation

Jun 03, 2026

Free Cable Tray Fill Calculator | NEC & IEC Compliant Sizing | Shilden

Properly sizing your cable tray is critical for safety and compliance. Our free calculator helps you determine the correct tray size

Jan 11, 2026

Support methods

5 - Side hanger into position. Tray is held securely in position by means of a set screw, which prevents the wire from jumping out of

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://ntmmgroup.co.za>

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town,
7441, South Africa

This document is for informational purposes only. Specifications subject to
change without notice.

