

## Article Overview

For a 600mm (approximately 24-inch) wide cable tray, the typical support spacing ranges from 1.5 meters to 3 meters, depending on tray type, load, and cable weight.

## Recommended Support Spacing

- o Ladder Cable Trays: For a 600mm wide ladder tray, supports are generally recommended every 1.5 to 3 meters along horizontal runs to prevent sagging and maintain structural integrity, especially under heavy cable loads . Wider trays may require closer spacing if carrying large power cables or dense cable bundles .
- o Perforated or Wire Mesh Trays: These trays, often used for lighter cables, can follow similar spacing guidelines, but the maximum span should not exceed 1.5 to 2 meters for heavy loads to ensure stability and prevent deformation .
- o Vertical or Multi-Level Installations: When stacking trays vertically, maintain a minimum vertical clearance of 150mm between trays to allow for airflow, heat dissipation, and future cable additions .

## Factors Affecting Spacing

- o Cable Load and Type: Heavier power cables require closer support spacing, while small-diameter control or instrumentation cables can tolerate wider spans .
- o Tray Material and Design: Steel ladder trays can span longer distances than wire mesh or perforated trays due to higher rigidity .
- o Environmental Conditions: High-temperature or corrosive environments may necessitate closer support spacing to prevent tray deformation or failure .
- o Manufacturer Specifications: Always consult the cable tray manufacturer's load charts, as some wide trays may require reduced spans to safely support the intended cable load .

## Practical Tips

- o Use hanging rods or brackets with a minimum diameter of 8mm for stability .
- o Ensure supports are level and evenly spaced to prevent uneven stress on the tray and cables .
- o For installations with shielded power and signal trays, horizontal separation can be reduced, but support spacing should still follow load requirements . By following these guidelines, a 600mm wide cable tray can be safely mounted, ensuring proper cable support, heat dissipation, and long-term system reliability.

In accordance with its continuous improvement policy, Legrand reserves the right to change the specifications and illustrations



# 600mm wide cable tray mounting spacing

Note that wider rung spacings and wider cable tray widths decrease the overall strength of the cable tray. Specifiers should be aware

Estimate required cable tray width based on cable quantity, outside diameter, spacing, and allowable fill percentage per standard

This calculator determines the maximum number of cables that can be safely housed within a cable tray based on its

An 18 inch wide cable tray has an allowable fill area of 21 square inches. It would take 7-3 inch conduits to obtain this

Cable tray spacing is a critical aspect of electrical infrastructure, influencing both safety and

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

Easily calculate cable tray fill ratios with our free tool. Supports mixed cable sizes, NEC 40% rules, and metric/imperial units.

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

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

The tray is lightweight, dependable and engineered from one piece of steel. Cabling widths available with the EzyTray range from

Calculate cable tray capacity, fill ratio, width, height, or cable diameter from four known values using inches, feet, cm,

Calculate tray and ladder sizes by cable capacity with our IEC-compliant calculator for efficient and accurate electrical installations.

As per the NEC, the maximum allowable rung spacing is 9 inches (230 mm) when cable tray carries sin-gle-conductor cables of 1/0

Standard Support Construction Of The Cable Tray RS With the RS 60 cable tray installation system, we offer you the last installation

IEC Standard for Cable Tray: Complete Technical Guide The International Electrotechnical

Web: <https://www.in-au.co.za>

