

Complete Guide to Marking Lines on 45-Degree Bends of Cable Trays



Article Overview

To create a 45-degree bend in a cable tray, mark two 22.5-degree cuts on separate tray sections to form a mitered joint.

Step-by-Step Marking Procedure

- **Measure and Draw the Perpendicular Line** Begin by measuring the width of the cable tray and drawing a perpendicular line across it. This line serves as the reference for your angle cuts .
- **Mark the 22.5-Degree Angles** Since a 45-degree bend is formed by joining two pieces, each piece contributes half the angle. Use a protractor or angle finder to mark 22.5 degrees from the perpendicular line on each tray section. Ensure the second piece's angle is in the opposite direction to the first to allow proper alignment .
- **Determine Cut Points Along the Tray Lip** For trays with flanged edges, measure from the centerline to mark the points where the lip will be removed. This ensures the cut edges will overlap correctly when bent .
- **Draw Cutting Lines** Connect the angle marks across the tray width to form straight cutting lines. For more complex bends, you can use a stretch-out method, dividing the tray edge into equal points and transferring them at a 45-degree angle to guide the cut .
- **Optional Notches for Alignment** For precise assembly, small notches can be added at the ends of each cut to indicate the exact bend location. This helps align the pieces during installation .

Tools and Safety...

Article Content

Apr 25, 2026

Formulas for flat 45 degree bend in cable tray

Would someone kindly let me know the formula to create a flat 45 in say 100 mm cable tray for example. So I can then

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Master the Cable Tray Secret to Perfect Back of Bend ...

How to Master back of bend measurements on electrical Cable Tray. Make a 90

Oct 10, 2025

cable tray and trunking for electricians (Page 1) / Help Me ! / Math Is ...

the cable tray is 3 metres in length, this doesnt matter but i think the width does. it is 150mm across. i know that for a

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CABLE TRAY SYSTEMS GUIDE

Cable Tray Systems Guide HUBBELL Hubbell Wiring Device-Kellems and Hubbell Premise Wiring are divisions of Hubbell

May 28, 2026

cable tray bends and offset fabrication table

cable tray bends and offset fabrication table Published July 5, 2017 at 600 × 257 in Cable Tray Ladder Trunking Wire

Jan 04, 2026

Cable tray manual

All the technical information developed by the 1973 NEC® Technical Subcommittee on Cable Tray for Article 318 - Cable Trays was

Feb 16, 2026

Trunking Cutting Techniques Guide | PDF | Metalworking | Tools

The document provides instructions for forming various bends and joints in electrical trunking and cable trays. It describes: 1) How to

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Trunking Part 2: How to form 45 degree bends to clear an ...

So let's do the first 45 degrees. So what I'm going to do as I did before last time no

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

This guide for engineers and installers has been developed by ABB as a practical reference regarding cable tray characteristics,

Jun 29, 2026

Cable Tray Design and Components Guide

This document provides information about cable trays and accessories, including straight cable trays, perforated trays, returned edge

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Cable Trunking 45 Degree Bridge | How To Make 45 Degree Bridge

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Assembly Guide

Assembly Guide The bends, tees, crosses, risers and reducers of wire mesh cable tray can be easily and quickly made live at the

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Types of Bends in Wire Mesh Cable Trays: A Detailed

Wire mesh cable trays are widely used in industrial and commercial installations to support

Aug 04, 2025

TIPS HOW TO BEND CABLE TRAY USING X.80 FORMULA ANY SIZES OF CABLE TRAY ...

How to bend 22.5 degree of cable tray 3 layer with the same distance and gap • HOW

Dec 17, 2025

How to install industrial wiring systems

Tips and techniques for electrical apprentices learning how to industrial wiring systems such as steel conduit, trunking and cable tray.

Sep 06, 2025

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 30, 2026

Method Statement installation of Cable Trays and Ladders

This method statement covers the site installation of the cable tray & ladders and the requirements of checks to be

Aug 18, 2025

Make a 90 Bend in Electrical Cable Tray

How to make a 90 electrical cable tray bend to measurement of your choice. Great if you

Nov 07, 2025

The World Through Electricity: How to make 45° bend on trunking

In previous post, we learn about how to make 90° angle in trunking. So we are going to use the same method, but

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Cable tray 45 degree bend | Cable tray me offset kaise banaye

Cable tray 45 degree bend | Cable tray me offset kaise banaye | Cable tray offset

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Installation Of Cable In Cable Trays: NEC, Safety

Installation of Cable in Cable Trays involves precise routing on support systems, NEC/IEC compliance,

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How to make 45°degree OFFSETS cable tray (50mm depth

How to make 45°degree OFFSETS cable tray (50mm depth) Practical Tutorial 2

Aug 30, 2025

Safely Installing, Maintaining and Inspecting Cable Trays

Cable trays are not raceways, but they are treated as a structural component of a facility's electrical system. Cable trays are a part of

Oct 01, 2025

How to adjust cable trays at a 45-degree angle

To cut a cable tray for a 45-degree bend, you need to make two 22.5° cuts on two separate pieces of cable tray. Each cut should be

May 20, 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

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Techniques for marking lines on cable tray bends

This article explores how fiber laser marking technology enhances both speed and durability in cable tray production -- and why it's

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Make a (45-45) 90 Gusset Bend in Electrical Cable Tray In One Piece

How to make a 90 electrical cable tray bend to measurement with a gusset of your

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Cable Tray Design and Components Guide

Tables list standard sizes and specifications for straight and bent cable trays, including width, height, thickness, materials, and

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HOW TO BEND 90 DEGREE AND 45 DEGREE OF CABLE TRAY USING 3 BASIC FORMULA

How to bend 90 degree of cable tray accurate to joint and support with 22.5 degree offset

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

A practical guide to product selection and installation This guide for engineers and installers has been developed by ABB as a

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