

How to generate cable tray elbows using BIM



Article Overview

Cable tray elbows in BIM can be generated in Revit either by using preloaded fitting families, creating custom elbow families, or automating placement with Dynamo scripts.

Manual Creation Using Revit Fittings

- Load the Correct Families: Ensure that your project uses the MEP template and that cable tray fitting families (45° and 90° elbows) are loaded into the project .
- Place Straight Trays: Draw straight cable tray runs in your floor plan view, setting the tray size, system type, and elevation in the properties palette .
- Add Elbows: When a tray changes direction, Revit can automatically generate elbows if the correct fitting families are loaded. For a 45° elbow, two segments are typically used, and for a 90° elbow, three segments are required .
- Adjust Parameters: Modify the elbow properties such as radius, angle, and elevation to match design requirements. Proper parameter setup ensures accurate connectivity and routing behavior .

Creating Custom Elbow Families

- Use the Family Editor in Revit to create custom elbow geometries if standard fittings do not meet project specifications.
- Define reference planes and parameters for angles, radius, and width to allow flexibility in placement.
- Save the family and load it into your project for use in cable tray routing

Article Content

Aug 08, 2025

BIM objects

Horizontal 90° elbow for Niedax Cable Tray. The Niedax Cable Tray is an extremely versatile and cost effective solution for your

Oct 28, 2025

Cable Tray Fitting creation (Elbow Bend)

I've taken a look at this file, but it doesn't seem to work. Here is the simple solution
Create two type : 90 elbow and 45

Dec 08, 2025

Solved: Cable Tray Elbow

You could simply only Edit Family >> Save As and then Load the Elbow Family which you require into your project.

Dec 12, 2025

Creation of cable trays using the CableTray Line node ...

My aim is to draw a line with the revit line command and use the dynamos script to draw the straight stretches and the

Sep 15, 2025

Video: Place Cable Tray

Draw the cable tray by setting an offset and defining the path of the tray. The cable tray type parameters control what fittings are

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Free download! Cable Trays and Horizontal Racks

Dimensions Cable Trays and Horizontal Racks Clear all Design App for Revit Get our new Design App for Revit Connect your model

Mar 02, 2026

Cable Tray and Conduit

Add Cable Tray Fittings As you draw cable tray, Revit automatically adds fittings. Use the following procedure to manually add cable

Feb 28, 2026

Automatic Cables

Dear all, I want to share the final definition for cable design inside cable trays. I'm uploading also the family usde for 2D

Oct 01, 2025

BIM objects

Solar Project - Cable tray systems in common dimensions for design purposes. Revit file includes all cable

Sep 25, 2025

T& B Cable Tray Systems Design Tools | ABB Electrification Canada

T& B ® cable tray files for building information modelling (BIM) ABB is a leading force in the cable tray systems industry. We offer a

May 13, 2026

Modeling and Coordinating Cable Tray Systems in Revit for Electrical ...

Understand how to model a cable tray using the systems tab in the electrical section for effective coordination,

May 21, 2026

Custom Cable Tray Fitting Family

Hello dear community, I cant think of a way to produce the cable tray fitting shown in the attached picture. Can you

May 12, 2026

Learn REVIT Fast LRF-ELEC-01-03 – Cable Tray – Revit news

This lesson walks through how to start a project and properly set up for Electrical Cable Tray design in Revit 2025. It focuses on

Nov 08, 2025

Create cable tray openings in walls and floors in Revit

Detect Cable Tray Intersections Automatically The tool identifies intersections between cable trays and host elements

Mar 31, 2026

Automate Cable Tray Modeling with Dynamo | ahmed tarek ...

Automated Cable Tray Modeling with Dynamo | Revit + AutoCAD Integration I've developed a Dynamo script that streamlines Cable

Apr 19, 2026

Automatic Place Cable tray/Conduit in Revit

Hi everyone, I'm trying to create the automatic cable trays/Conduit based on two Different Coordinate value with

Dec 21, 2025

Help | Video: Place Cable Tray | Autodesk

Transcript When you use Revit to design an electrical power system, you can model cable tray in your design. Currently in Revit,

May 10, 2026

Creation of cable trays using the CableTray Line node ...

Hi guys, I've been searching some forums, but haven't had any success yet. My aim is to draw a line with the revit line

Oct 02, 2025

Cable Tray Fitting creation (Elbow Bend)

Solved: I am having a problem creating a cable tray fitting, I did the best I could (see attached), however still doesn't

Aug 06, 2025

Custom Cable Tray System Families

Unfortunately, using fabrication parts at the end of the day is not much of a difference than me using custom families

Apr 13, 2026

Eliminate Cable Tray & Conduit Clashes with Electrical BIM

Know how electrical BIM coordination helps resolve cable tray, conduit clashes in MEP projects before they impact

Oct 25, 2025

Setting Up Cable Tray in Revit MEP: A Step-by-Step Guide

This Revit tutorial walks through setting up cable tray in revit mep, covering essential tools and techniques for your

Jan 27, 2026

THBIM Revit Add-ins

Automatically create openings in walls and slabs for conduits, pipes, ducts, and cable trays. Precisely matches the size of each

Dec 19, 2025

Learn REVIT Fast LRF-ELEC-01-03 – Cable Tray – Revit news

4. Cable Tray Fittings When drawing trays that intersect or change direction, Revit will auto-generate fittings (elbows, tees, crosses)

Dec 14, 2025

Cable Tray Orientation and Fittings

In order to automatically create a whole cable tray run, however, we need both the straight segment cable tray elements and also the

Contact Us

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