Cable Tray Color Classification Table and Price

Overview

This document provides guidelines for color classification of electrical items for PDMS design dated March 21, 2017.

Key Takeaways

Cable tray color codes help identify conductor functions, while prices vary based on material, finish, and load capacity.

Cable Tray Color Classification

Tray cables are color-coded to indicate their electrical function and ensure compliance with NEC standards. Common color codes include: E-1 (formerly K-1): Black, white, red, green, orange, blue – includes neutral (white) and ground (green) conductors, suitable for general applications. E-2 (formerly K-2): Black, red, blue, orange, yellow, brown – excludes white and green, fully NEC-compliant for circuits without dedicated neutral or ground.

Other custom codes: Some manufacturers offer custom color arrangements for specific industrial or commercial applications. These color codes help electricians quickly identify phase, neutral, and ground conductors, reducing installation errors and improving safety.

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Cable Tray Materials and Finishes

Cable trays are available in various materials, which influence both durability and cost: Steel: Pre-galvanized or hot-dip galvanized for corrosion resistance; suitable for most industrial and commercial installations. Aluminum: Lightweight, corrosion-resistant, ideal for outdoor or humid environments. Stainless Steel (AISI 316L): High corrosion resistance, used in chemical or marine environments.

Fiberglass or Pultruded Resin: Non-metallic, corrosion-resistant, lightweight, often used in highly corrosive or specialized environments. Finishes such as powder coating or anodizing can further protect trays and affect pricing.

Price Considerations

Cable tray prices depend on: Material: Steel is generally less expensive than aluminum or stainless steel. Tray type: Ladder, ventilated, solid-bottom, or channel trays have different costs. Load class and size: Wider trays or those designed for heavier loads cost more.

Length and fittings: Longer runs and additional fittings (elbows, tees, reducers) increase total cost. Approximate price ranges (subject to supplier and region): Steel ladder tray: $15–$40 per footAluminum tray: $25–$60 per footStainless steel tray: $50–$120 per footFiberglass tray: $40–$100 per foot Custom color-coded tray cables may add $0. 50–$2 per foot depending on conductor count and insulation type.

Summary

Choosing the right cable tray involves matching color codes to NEC standards, selecting a material and finish suitable for the environment, and considering load capacity and installation length to estimate costs. Proper selection ensures safety, compliance, and long-term durability in electrical installations.

Article Content

KrisTech''s Tray Cable Color Guide

Why Does Tray Cable Have Several Color Combinations?When and Where Can I Use Each Color sequence?Finding The Right Cable For The Right ApplicationKnowing when to use which color code can help you save time and prevent mistakes from occurring on the job. You''ll likely need to use a tray cable with the E-1 color code if you''re working on an electrical or utility application. When the project is not NEC-applicable, E-1 is OK to use. Locations where you''ll likely encounter this color scheme incl...See more on kristechwire Scribd

Electrical Color Code Guidelines

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This document provides guidelines for color classification of electrical items for PDMS design dated March 21, 2017. It outlines color classifications for cable trays, cable conduits, electrical panels and

GUIDE CABLE TRAYS TECHNICAL

NEMA VE 1-2017 Specifies requirements for metal cable trays and associated fittings designed for use in accordance with the rules of Canadian Electrical Code, Part I and the National Electrical Code®

CABLE TRAY SYSTEMS GUIDE

The design and cost of the cable tray is greatly affected by this designation. In order to determine the most appropriate and economical system, a class should be selected that reflects the actual total

CABLE TRAY, CABLE LADDER, CABLE TRUNKING CATALOGUE

Fitting anf accessories. with the same or different width of the cable run. All fittings are available in sizes and types corresponding to the straight cable tray sections. These fitting are including: elbow,

Tray Cable Color Guide for Optimal Wiring Choices

Learn the essential tray cable color codes to choose the right wire for your application, ensuring safety and compliance in all your electrical projects.

SWIFTS CABLE TRAY

Swifts® cable tray the quick fi t choice tal fl exibility. Available in four types, this strong, durable system has been designed with fast-fi t features that make it quick and easy to install, both i

Types of Cable Trays – Advantages, Applications and Sizes

Explore the types of cable trays, their advantages, applications, and standard sizes. Learn how they improve cable management and support various industries.

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 practical reference regarding cable tray characteristics, installation, and

GUIDE CABLE TRAYS TECHNICAL

In accordance with its continuous impro-vement policy, Legrand reserves the right to change the specifications and illus-trations without notice. All illustrations, descriptions and technical information

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Cable Tray Types and Sizes

Explore various cable tray types and sizes for electrical installations. Learn about ladder, perforated, solid-bottom, wire mesh, and channel trays in this complete guide.

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HOW TO SELECT CABLE TRAY MATERIAL AND FINISH CODE Tray is ofered in a variety of material types and finishes - aluminum, steel, stainless steel, paint ready. Refer to the material and finishes

Cable Tray Color Code and Segregation

6. Cable trays of E4 class shall be utilized for electrical cables of current less than 20A respectively. E4 cable trays shall be used for routing small power (conveinance receptacles) & lighting circuits only. 7.

Rick Astley

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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