

What material is magnesium for cable trays



Article Overview

Magnesium in cable trays is used as part of a Zinc-Magnesium-Aluminum (ZM or ZAM) alloy coating applied to steel, enhancing corrosion resistance and durability.

Material Composition

Magnesium is not used as a standalone material for cable trays; instead, it is combined with zinc and aluminum to form a metallic coating applied to a steel substrate . This coating, often referred to as ZM (Zinc-Magnesium) or ZAM (Zinc-Aluminum-Magnesium), creates a protective layer that significantly improves the tray's resistance to corrosion, even in harsh environments such as coastal areas, water treatment plants, and agricultural settings .

Properties and Benefits

- **Corrosion Resistance:** The magnesium in the alloy reacts with the environment to form a dense, protective film over the steel, including cut edges and scratches, providing self-healing properties .
- **Durability:** The ZM/ZAM coating extends the service life of cable trays compared to traditional pre-galvanized or hot-dip galvanized steel .
- **Lightweight and Efficient:** The coating is thinner and lighter than traditional galvanizing, reducing material usage and production stages while maintaining high strength .
- **Environmental Advantage:** By eliminating the need for additional galvanizing proc...

Article Content

Apr 06, 2026

Aluminum-Magnesium Cable Trays VS HDG Cable Trays

Exploring Aluminum-Magnesium VS HDG Cable Trays When it comes to choosing the right cable tray for industrial,

Oct 24, 2025

Type of Cable Tray

Cable Tray Materials: Most cable tray systems are fabricated from a corrosion-resistant metal (low-carbon steel, stainless steel or an

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ZM FINISH ADDED TO CABLE TRAY RANGE - Unitrunk

ZM FINISH ADDED TO CABLE TRAY RANGE Our market-leading cable tray system is now available in ZM (Zinc Magnesium), as

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Sunway Anti-Corrosion Zinc Aluminum Magnesium Perforated Cable Tray

Type Ventilated or Perforated Trough Material Carbon Steel Width 200mm, 300mm, 600mm, 100MM, 400mm, 500mm, 150mm

Apr 23, 2026

ZM FINISH ADDED TO CABLE TRAY RANGE - Unitrunk

Our market-leading cable tray system is now available in ZM (Zinc Magnesium), as well as existing finishes (pre-galvanized, hot-dip

Mar 21, 2026

MMF/75/ZM Medium Duty, Zinc Magnesium, 3/7/2025 Cable Tray

Features: 25mm Return Flange. All Medium Duty cable tray supplied as 3 metre lengths up to 600mm wide. Available in 3 standard

May 31, 2026

New high performance zinc magnesium finish for cable management

Metsec Cable Management has introduced a new high performance Zinc Magnesium (ZM) finish to its ranges of cable

Aug 10, 2025

Different types of Material used in making Cable tray

Aluminium's resistance to chemicals within the application surroundings ought to be tested before installation. This was some of the

Jun 02, 2026

Ultimate Guide to Cable Tray Selection - Types, Materials & Best

Learn how to choose the best cable tray system for your needs. Explore types, materials, installation tips, and NEC

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Selecting the right materials for cable tray use at low temperatures

Selecting the right materials for cable tray use at low temperatures From the freezing cold of Antarctica to the frigid pipelines of

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MMF/300/ZM Medium Duty, Zinc Magnesium, 10/9/2025 Cable Tray

Available in 3 standard designs of cable tray to suit individual applications. Distinctive hole pattern designed to provide maximum

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Materials Used & Finishing Of A Cable Tray

There are many types of materials and finishings used to manufacture a Cable Tray. Hutaib Electricals, Cable Tray

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Cable Trays Selection Guide: Types, Features, Applications

Cable trays are components of support systems for power and communications cables and wires. A cable tray system supports and

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Types of Cable Typically Used in Cable Tray

Types of Cable Typically Used in Cable Tray The purpose of a cable tray system is to support, route, and protect cable as part of the

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NOW AVAILABLE IN ZM

ZM cable tray has a protective finish applied at the steel mill, which means once the product is manufactured it can be shipped

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Cable Tray Material

Cable tray products are formed from the 6063 series alloys which by design are copper free alloys for marine

Dec 15, 2025

Swifts cable tray

As well as being available in traditional pre-galvanised (PG), hot dip galvanised (G) and stainless steel (S) finishes, Swifts cable tray

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NOW AVAILABLE IN ZM

ZM (Zinc Magnesium) is a pre-coated steel product which uses a metallic composition of zinc, with aluminium, and magnesium. This

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Zinc Magnesium – a better finish for cable tray and trunking

Environmentally friendly: reduced raw materials and a less intensive production process means a smaller environmental footprint.

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Full cable tray systems specification document

B. Cable tray systems are defined to include, but are not limited to straight sections of [ladder type] [trough type] [solid bottom type]

Nov 15, 2025

GI Cable Trays – What it is, Types and Applications

Key insights on GI Cable Trays, their types, and applications for safe and efficient cable management in industrial and

Apr 29, 2026

Zinc Magnesium

Tamlex Zinc Magnesium cable trays offer a robust and corrosion-resistant solution for cable management in both industrial and

Sep 03, 2025

Cable Trays and Accesories

SFSP manufactures a wide range of products capable of providing the characteristics which respond to the proposed application,

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Zinc Magnesium – a better finish for cable tray and trunking

We know that Zinc Magnesium coated products will deliver superior performance across the board. They offer a sleeker, more

Jun 06, 2026

What is Zinc-Aluminum-Magnesium Cable Tray?

This article will explore the definition, key features, production process, and applications of Zinc-Aluminum

Contact Us

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