

Article Overview

Zinc-Aluminum-Magnesium (ZAM/ZM) cable trays offer superior corrosion resistance, durability, and cost-effective installation, making them ideal for industrial and commercial projects in Ethiopia.

Material Advantages

ZAM/ZM cable trays are manufactured from steel coated with a Zinc-Aluminum-Magnesium alloy, typically comprising around 93-94% zinc, 3-3.5% aluminum, and 3% magnesium . This composition provides:

- o Exceptional corrosion resistance, including protection for cut edges and scratches, which is crucial in humid or outdoor Ethiopian environments .
- o Self-healing protective layer, where magnesium migrates to damaged areas to prevent rust formation .
- o High strength and durability, supporting heavy cable loads while maintaining structural integrity .
- o Lightweight construction, facilitating easier handling and installation without compromising load capacity .

Recommended Configurations

ZAM/ZM cable trays are available in multiple designs suitable for various applications:

- o Ladder-type trays: Ideal for long cable runs and heavy-duty industrial installations .
- o Perforated trays: Provide ventilation and heat dissipation, suitable for data centers and precision equipment rooms .
- o Channel-type trays: Compact and versatile for smaller installations or constrained spaces .
- o Fully enclosed trunking: Protects cables from dust, moisture, and mechanical damage, suitable for outdoor or industrial environments . Optional organic coatings can further enhance corrosion resistance and aesthetic appeal .

Supplier Options

While Ethiopia-specific distributors are not listed in the web results, international suppliers with proven ZAM/ZM products include:

- o Unitrunk ZM cable trays: Compliant with BS EN 10346, suitable for solar, construction, and electrical projects .
- o Tamlex Zinc Magnesium trays: High-performance, lightweight, and corrosion-resistant, ideal for indoor and outdoor installations .
- o ECTRAY ZAM trays: Offer a full range of standard, heavy-duty, aluminum alloy, and marine-grade trays,

Recommended Ethiopian Zinc-Aluminum-Magnesium Cable Trays

suitable for industrial plants, ships, and offshore platforms . For Ethiopian projects, it is recommended to contact local electrical distributors or importers to source these trays, ensuring compliance with local standards and installation requirements.

Installation and Lifecycle Benefits

- o Reduced lead times: ZM trays eliminate the need for post-galvanizing, allowing faster project delivery .
- o Long service life: The self-healing coating ensures minimal maintenance and extended durability .
- o Cost efficiency: Lightweight and high-strength design reduces material and labor costs over the lifecycle .

Conclusion

For Ethiopian applications, ZAM/ZM cable trays are highly recommended due to their corrosion resistance, structural strength, and installation efficiency. Ladder, perforated, and fully enclosed designs can be selected based on project requirements, and suppliers like Unitrunk, Tamlex, and ECTRAY provide reliable international options that can be sourced through local distributors or import channels.

What is Zinc Magnesium? ZM is a metallic coating applied to steel which is made up of a chemical composition which includes Zinc,

NOVA's cable tray system is a versatile, universal cable tray that is compatible with the standard cable management systems and

ECTRAY offer a wide range of perforated cable trays which are fabricated using quality raw material such

SWIFTS CABLE TRAY ZINC MAGNESIUM (ZM) As well as being available in traditional pre-galvanised (PG), hot dip galvanised (G)

A corrosion-resistant cable support system manufactured from steel substrate with advanced Zn-Al-Mg alloy coating.

Cable Management Aluminium-Cable-Tray Floor Trunking Desk-type Extension Floor Box Electric-cable

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

NEMA VE 1-2017 Specifies requirements for metal cable trays and associated fittings designed for use in accordance with the rules

Most cable tray systems are fabricated from a corrosion-resistant metal (low-carbon steel, stainless steel or an aluminium alloy) or

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

Cable tray installed in a hazardous location must contain only those cables that are appropriate for this type of environment as

Aluminum Ladder System SPAN/LOAD CLASS DESIGNATIONS Commonly called the Load Class, this defines the load-carrying

Legrand now offers a new finish for its Cablofil range of steel wire cable trays and accessories. The new zinc aluminium finish

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

The HS (High Resistance) alloys used in ZnAl (Zinc Aluminum), ZnMg (Zinc Magnesium) or ZnNi (Zinc Nickel) cable trays have an

Alu Zinc + Magnesium: Trays with Zinc-Aluminium-Magnesium coating are ideal for multiple engineering applications where good

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