AAC-AlamAfroze Co.
Electrical & Instrument Equipment

Electrical Bulk Material

www.alamafroze .com
marketing@alamafroze.com

AAC-AlamAfroze Co

شرکت مهندسی، تولیدی و بازرگانی عالم افروز

PRODUCTS

- Cable Tray, Ladder, Supporting System and Related Accessories.
- GRP Cable Tray, Ladder and All Accessories
- Grounding System
- Electrical Conduit and Related Fittings
- Explosion Proof and Industrial Cable Gland
- Lighting Pole and Lamp
- Junction Box

Cable Tray, Ladder and Related Accessories.

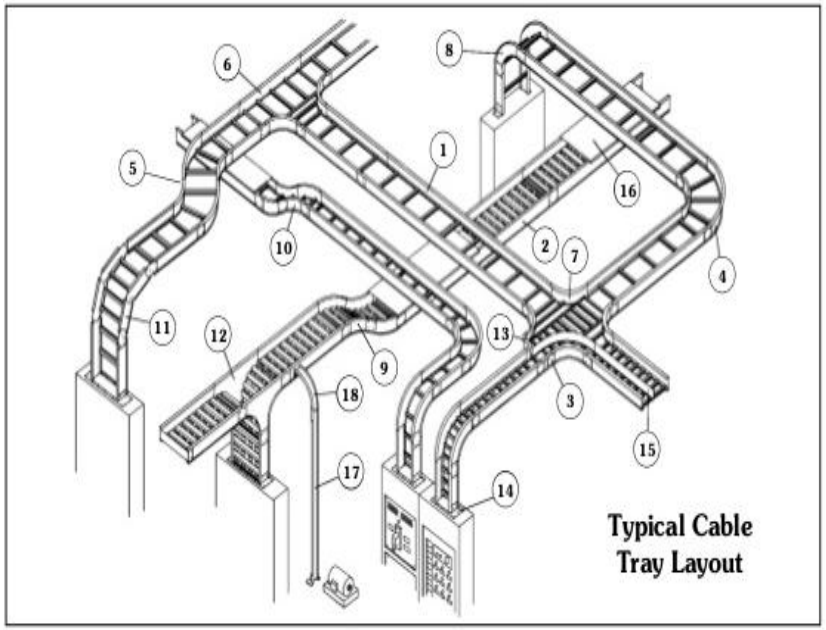
Introduction:

In the electrical wiring of buildings, a cable tray system is used to support insulated electric cables used for power distribution and communication. Cable trays are used as an alternative to open wiring or electrical conduit systems, and are commonly used for cable management in commercial and industrial construction. They are especially useful in situations where changes to a wiring system are anticipated, since new cables can be installed by laying them in the tray, instead of pulling them through a pipe.

Available Materials: HDG, stainless steel in all grades, GRP and sheet steel galvanized.

Available Dimensions: Length 2-3mt, Depth 50-150mm, Width 50-900mm, Thickness 1.25-2.5mm, light loads, medium loads and heavy loads are available. Cross Radius 300mm (standard), 600mm & 900mm also available.

Available Standards: AAC cable tray, ladder and all accessories are galvanizing according to **ASTM 123A** standard and also manufacturing based on **IEC 61537** Standard.



1. Ladder Type Cable Tray
2. Ventilated Trough Type Cable Tray
3. Splice Plate
4. 90° Horizontal Bend, Ladder Type Tray
5. 45° Horizontal Bend, Ladder Type Tray
6. Horizontal Tee, Ladder Type Tray
7. Horizontal Cross, Ladder Type Tray
8. 90° Vertical Outside Bend, Ladder Type Tray
9. 45° Vertical Outside Bend, Ventilated Type Tray
10. 30° Vertical Inside Bend, Ladder Type Tray
11. Vertical Bend Segment (VBS)
12. Vertical Tee Down, Ventilated Trough Type Tray
13. Left Hand Reducer, Ladder Type Tray
14. Frame Type Box Connector
15. Barrier Strip Straight Section
16. Solid Flanged Tray Cover
17. Cable Channel Straight Section, Ventilated
18. Cable Channel, 90° Vertical Outside Bend

Grounding System

Introduction:

The most underground structures have been electrically bonded in common to reduce hazardous voltages associated with lightning and man-made fault currents or induced currents in the earth. A common grounding system provides an economical and lower resistance to remote earth than does an individual earthing connection. This tends to ensure a low resistance return path for power system earth return currents and fault currents. An additional benefit is minimizing earth potential gradients around individual earthing electrodes or elements. It also tends to reduce step and touch voltages at the surface of the earth.

Characteristics of a Good Grounding System:

- Good electrical conductivity that causes.
- Low resistance and electrical impedance.
- Withstanding high fault currents with no evidence of fusing or mechanical deterioration in the event of a foreseeable fault. Energy is dissipated into the ground in the safest possible way.
- High frequency lightning impulses will flow through the ground electrode path. In preference to any other. Good corrosion resistance.
- Electrically interconnecting many dissimilar metals in the soil environment can lead to significantly increased corrosion rates on some of the underground structures.
- Mechanically robust, reliable and ability to perform for at least 40 years working life-time for a facility

AAC-AlamAfroze Co

www.alamafroze .com
marketing@alamafroze.com

شرکت مهندسی، تولیدی و بازرگانی عالم افروز

Electrical Conduit and Related Fittings

Introduction:

An electrical conduit is a tube used to protect and route electrical wiring in a building or non-building structure. Electrical conduit may be made of metal, plastic, fiber, or fired clay. Most conduit is rigid, but flexible conduit is used for some purposes. Conduit is generally installed by electricians at the site of installation of electrical equipment. Its use, form, and installation details are often specified by wiring regulations, such as the US National Electrical Code (NEC) and other building codes.

Standards Threads:

High quality, clean, sharp, standard internal and external PG threads and protected from damages by plastic end cap.

Quality Steel:

Maximum strength, impact resistance and consistent performance. Usually ST37.

Corrosion Protection:

- Hot Dip Galvanized.
- Painted.
- Electro Galvanized.

Explosion Proof and Industrial Cable Gland

Introduction:

A cable gland (in the U.S. more often known as a cable connector or fitting) is a device designed to attach and secure the end of a cable to the equipment. A cable gland provides strain-relief and connects by a means suitable for the type and description of cable for which it is designed—including provision for making electrical connection to the armor or braid and lead or aluminum sheath of the cable, if any. Cable glands may also be used for sealing cables passing through bulkheads or gland plates. Cable glands are mechanical cable entry devices and can be constructed from metallic or non-metallic materials. They are used throughout a number of industries in conjunction with cable and wiring used in electrical instrumentation and automation systems. Cable glands may be used on all types of electrical power, control, instrumentation, data and telecommunications cables. They are used as a sealing and termination device to ensure that the characteristics of the enclosure which the cable enters can be maintained adequately.

These are the four main materials from which cable glands are made: 1) Brass, 2) Plastic, 3) Aluminum 4) Stainless Steel.

Standards Threads:

1) PG Standard 2) Metric Standard

Available Standard:

British Standard: **BS 6121** and European Standard: **EN 50262**

AAC-AlamAfroze Co

www.alamafroze .com
marketing@alamafroze.com

شرکت مهندسی، تولیدی و بازرگانی عالم افروز

Lighting Pole and Lamp

Introduction:

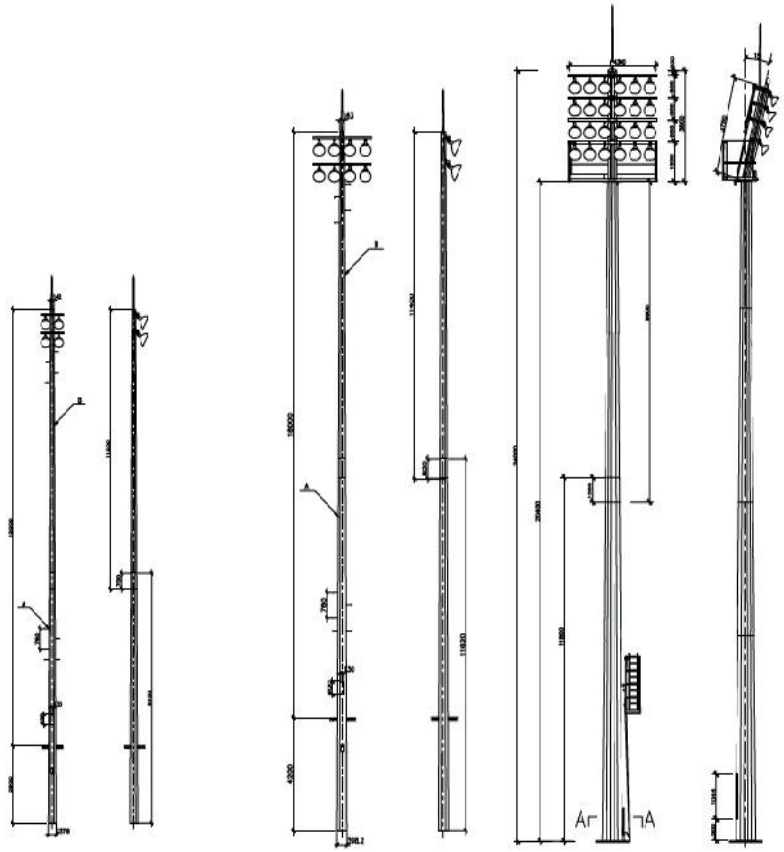
A street light, light pole, lamppost, street lamp, light standard, or lamp standard is a raised source of light on the edge of a road or walkway. Modern lamps may also have light-sensitive photocells that activate automatically when light is or is not needed: dusk, dawn, or the onset of dark weather. This function in older lighting systems could have been performed with the aid of a solar dial. Many street light systems are being connected underground instead of wiring from one utility post to another.

Range of Dimension:

From 2 meter to 24 meter.

Types:

- Octagon.
- Tubular or cylindrical.



15m sports lighting 18 m sports lighting 24 m sports lighting

AAC-AlamAfroze Co

www.alamafroze .com
marketing@alamafroze.com

شرکت مهندسی، تولیدی و بازرگانی عالم افروز

Junction Box

Introduction:

An electrical junction box is a container for electrical connections, usually intended to conceal them from sight and deter tampering. A small metal or plastic junction box may form part of an electrical conduit or thermoplastic sheathed cable (TPS) wiring system in a building. If designed for surface mounting, it is used mostly in ceilings, under floors or concealed behind an access panel - particularly in domestic or commercial buildings. An appropriate type (such as that shown on the right) may be buried in the plaster of a wall (although full concealment is no longer allowed by modern codes and standards) or cast into concrete - with only the cover visible. It sometimes includes built-in terminals for the joining of wires.

A similar, usually wall mounted, container used mainly to accommodate switches, sockets and the associated connecting wiring is called a patters. The term junction box may also be used for a larger item, such as a piece of street furniture. In the UK, such items are often called a cabinet. Junction boxes form an integral part of a circuit protection system where circuit integrity has to be provided, as for emergency lighting or emergency power lines, or the wiring between a nuclear reactor and a control room. In such an installation, the fireproofing around the incoming or outgoing cables must also be extended to cover the junction box to prevent short circuits inside the box during an accidental fire.

Available Material:

Hot Dip Galvanized, GRP, Stainless Steel and aluminum.

AAC-AlamAfroze Co.
Electrical & Instrument Equipment

Contact Information

Address:

Apt.6, 3rd Floor, No.2, Tajari St (No.218), Bagheri Ave, Tehranpars, Tehran, Iran

Tel/Fax:

+98-2177054612 , +98-2177382672

E-mail:

marketing@alamafroze.com , info@alamafroze.com

Website:

www.alamafroze.com