



Overhead Transmission

Overhead transmission conductors play a crucial role in the efficient and reliable transportation of electrical power over long distances. These conductors are an integral part of overhead transmission lines, which are the network of structures and wires that carry electricity from power plants to distribution centers and ultimately to end-users. Bare aluminum conductors are used as overhead transmission cables and as primary and secondary distribution cable.

Overhead transmission conductors are typically made of aluminum or a combination of aluminum and steel. Aluminum is chosen for its lightweight nature, corrosion resistance, and excellent conductivity. Steel reinforcement is sometimes incorporated to enhance strength and durability.



American Wire Group carries all major bare aluminum constructions, including ACSR, ACAR, ACSS, AAC, AAAC and OPGW. Our bare aluminum conductors meet or exceed applicable ASTM specifications.

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Empowering a Better World with Bare Aluminum Cables

Breaking Down the Product Types

ACAR

Aluminum Conductor Aluminum Alloy Reinforced. Versatile electrical conductor that is composed of a central core of aluminum alloy strands surrounded by a layer of high-purity aluminum strands. Offers higher strength and ampacity than ACSR.

ACSS

Aluminum Conductor Steel Supported. Features a central core of high-strength steel strands surrounded by one or more layers of high-purity aluminum strands. Designed to operate continuously at elevated temperatures, up to 250°C without loss of strength.

OPGW

Optical Ground Wire. Serves as an essential component in power transmission and distribution systems, providing both electrical grounding capabilities and a reliable communication channel through optical fibers.



ACSR

Aluminum Conductor Steel Reinforced. Consists of a central core made of steel wires surrounded by one or more layers of aluminum wire. The steel core stranding enables desired strength to be achieved without sacrificing ampacity. This design offers optimal strength for line design.

AAC

All Aluminum Conductor. Composed entirely of high-purity aluminum strands. Offers excellent conductivity while maintaining a low overall weight. This conductor is known for its versatility, corrosion resistance, and ease of installation.

AAAC

All Aluminum Alloy Conductor. Designed utilizing a high-strength aluminum alloy to achieve a high strength-to-weight ratio, which gives higher resistance to corrosion than ACSR. Offers a lightweight and corrosion-resistant solution for diverse electrical applications.

Overhead Transmission Accessories

Along with our bare aluminum cables, we also offer hardware and accessories, such as...

- Insulators
- Full Tension Splices
- Spacers
- Tension/Suspension Clamps
- Dampers
- Towers/Poles

... and many more!

Ready For Our Customers

At American Wire Group, we know that having the largest inventory of wire and cable products plus decades of experience is vital for our customers. That's why we store over \$200 million in inventory across three national warehouses. We are committed to shipping within hours, not days.



buyawg.com | sales@buyawg.com | 800.342.7215 | 945.455.3050