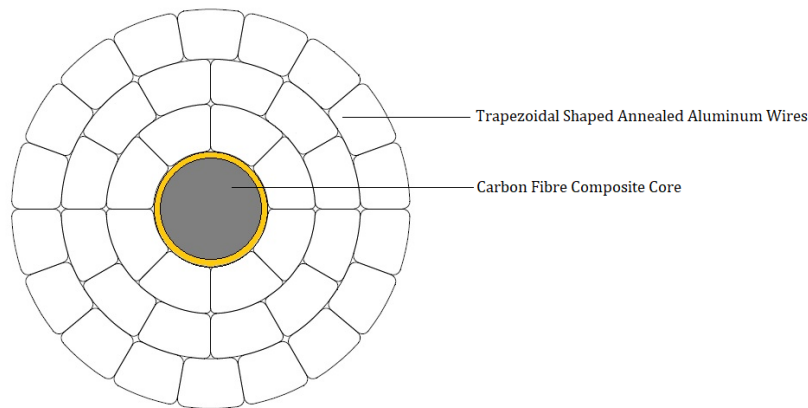


Aluminum Conductor Composite Core (ACCC®)

ACCC® Conductor consists of a hybrid carbon and glass fiber core which is wrapped with trapezoidal shaped aluminum strands. The high strength structural core carries most of the conductor's mechanical load, while the fully annealed aluminum strands carry all of the conductor's electrical current. ACCC® Conductor's composite core is much lighter and stronger than conventional or high-strength steel core.



APPLICATION

Ideal for Reconductoring

- Increase capacity while improving line clearance and losses.
- Reduce strain on structures, increasing life.

Reduced Line Losses in New Lines

- Under equal load conditions reduces line losses by 25%-40% or more compared to conductors of the same diameter and weight.
- 100% more capacity building towards future demands.

BENEFITS

- With 28% more annealed aluminum in a trapezoidal configuration, the ACCC® Conductor of the same diameter as ACSR, can double the current (ampacity) rating; Higher operating efficiency reduces line losses and associated emissions by 25-40% or more, resulting in more power delivered and lower power generation costs.
- ACCC® Conductors use a patented carbon/glass/thermoset resin core that provides high strength and reduces high temperature sag.
- Can re-conductor existing pathway without structural modification and reduce capital expenses on new lines.
- Uses conventional installation methods, tools and mostly conventional hardware. Requires no special tools and limited special training.
- Resists environmental degradation-will not rust, corrode, or cause electrolysis with aluminum conductors and components.

TECHNICAL SPECIFICATIONS

PROPERTIES	UNIT	ACCC SILVASSA	ACCC COPENHAGEN	ACCC CASABLANCA	ACCC DRAKE	ACCC HAMBURG	ACCC PRAGUE
Appropriate System Voltage	kV	≤ 110 kV	66/132 kV	132 kV	220 kV	220 kV/above	220 kV /above
Equivalent ACSR	--	DOG	WOLF	PANTHER	ZEBRA	ZEBRA	MOOSE
Reference Standards	--	ASTM B 609, ASTM B987,ASTM B 857 or EN 50540.					
Conductor diameter	mm	14.35	18.29	20.50	28.14	28.63	31.78
Weight	kg/km	392	659	832	1566	1626.8	2030
Ultimate tensile strength	KN	66.5	72	100.4	180.6	159.7	167.9
DC resistance at 20°C temperature	Ohm/km	0.2286	0.1272	0.1024	0.0536	0.0514	0.0407
Current carrying capacity at maximum operating temperature (180)	A	632	910	1050	1592	1634	1891

Note: The Catalogue conductor Parameter are informative and can be customized in Technical Data Sheet offer by Sterlite.

Assumptions: Ampacity is calculated based on, 45°C ambient temperature, 0.56 m/s wind velocity, 0.8 as coefficient of solar absorption, 0.45 as coefficient of emissivity and 1045 W/sq.m coefficient for solar radiation, 0 m Elevation.

ACCC® ULS Conductor offers greater strength, a lower coefficient of thermal expansion and higher modulus of elasticity than the standard ACCC Conductor core. added strength can enable longer spans, the higher modulus and increased stiffness reduce sag and blow out during high wind conditions. Improved stiffness can also reduce sag under heavy ice load conditions.

ACCC® Conductors are manufactured under license from CTC Global USA.

Non-Specular (NS) Dull Finish Conductor can be available on special requirement.

Disclaimer:

* Parameters mentioned in the document are indicative and can vary subject to different standards

* Customizations are available on select products. Please indicate your interest by reaching out to the sales team

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