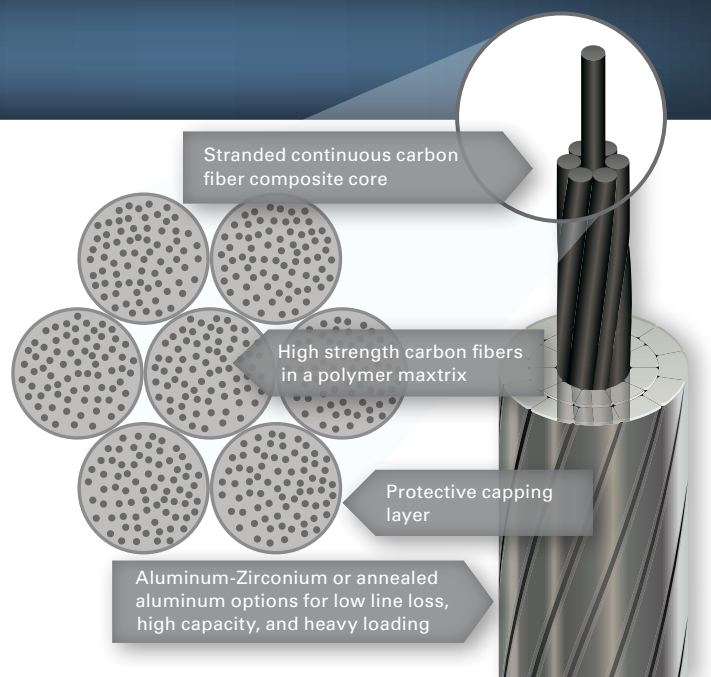


## C7<sup>®</sup> Overhead Conductor

### Innovation starts at the core.

**Lighter, Stronger, Tougher.** Southwire is revolutionizing the industry with its innovative C7 Overhead Conductor. With its unique stranded construction, Southwire's C7 is the most durable, rugged, and reliable composite core conductor on the market - and the only composite core conductor developed by a conductor manufacturer with full knowledge of utility needs and practices.



- **Minimal thermal expansion** – minimal sag increase at high power transfer
- **Stranded core** – no single point of failure
- **Flexible** – robust, installs like traditional conductor
- **Less sag** – for lines with clearance or structure limitations
- **Easy installation** – uses traditional methods and familiar hardware
- **Designs for all loading conditions** – light loading to heavy ice loading
- **Trapezoidal Wire (TW) or Round Wire available**
- **Aluminum-Zirconium (AlZr) or O-temper Aluminum available**

#### New lines:

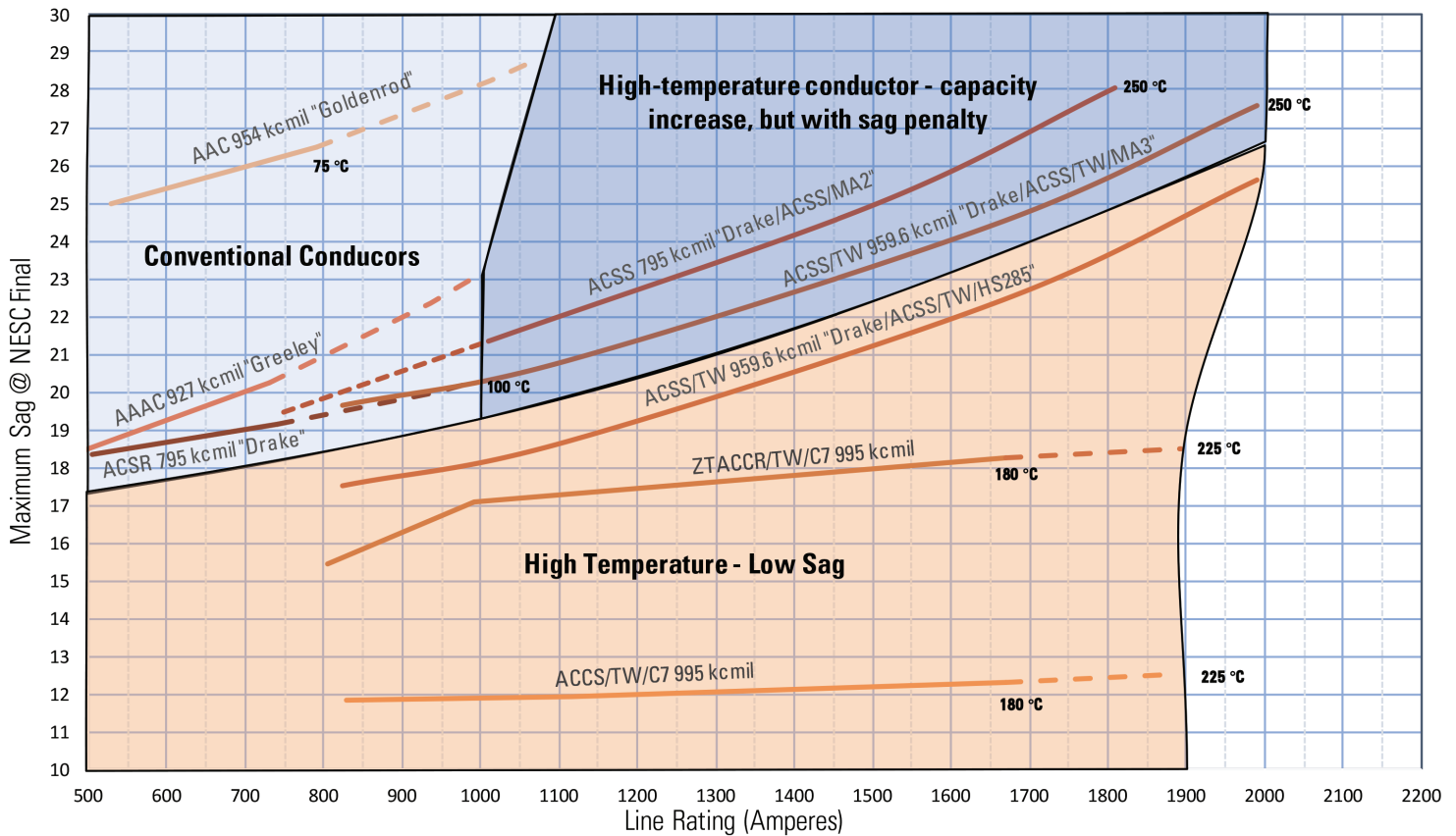
Reduce new line costs by saving on structure and foundation costs. Cross challenging terrain or reduce the visual profile in sensitive areas. Build for the future with higher system ratings while maintaining line clearances.

#### Reconductoring:

Double the capacity of existing ACSR lines. Benefit from light conductor weight and use existing structures, even lines previously designed with all aluminum and aluminum alloy (AAC, AAAC, ACAR) conductors.

# Technical Specifications

## 1.108-inch OD – Generalized Performance Map – NESC Medium, 800 ft Span



## C7<sup>®</sup> Overhead Conductor

	795.0 kcmil 26/7 ACSR "Drake"	995.0 kcmil T13 ZTACCR/TW/C'	995.0 kcmil T13 ACCS/TW/C'
<b>Construction Information</b>			
Size	795.0 kcmil [402.8 mm <sup>2</sup> ]	995.0 kcmil [504.2 mm <sup>2</sup> ]	995.0 kcmil [504.2 mm <sup>2</sup> ]
Overall Diameter	1.108 in [28.14 mm]	1.108 in [28.14 mm]	1.108 in [28.14 mm]
Equivalent Type Number	16	13	13
Weight	1.093 lb/ft [1.627 kg/m]	0.996 lb/ft [1.483 kg/m]	1.001 lb/ft [1.490 kg/m]
Rated Breaking Strength	31,500 lb. [140.2 kN]	41,400 lb [184.2 kN]	33,500 lb [149.0 kN]
<b>Outer Strand Information</b>			
Material	1350-H19 Aluminum	Aluminum-Zirconium	1350-O Aluminum
Conductivity	61.2% IACS	60% IACS	63% IACS
Number of Strands	26	20	20
<b>Core Information</b>			
Material	GA2 Zinc-Galvanized Steel	Carbon Fiber Composite	Carbon Fiber Composite
Number of Strands	7	7	7
Core Diameter	0.4080 in [10.36 mm]	0.4110 in [10.44 mm]	0.4110 in [10.44 mm]
<b>Electrical Information</b>			
Continuous Rating*	731 amp @ 75°C	1672 amp @ 180°C	1666 amp @ 180°C
Contingency Rating*	993 amp @ 100°C	1903 amp @ 225°C	1888 amp @ 225°C

\*Ampacity estimates are for comparison only and are based on 40°C ambient, 2 ft/s perpendicular wind, 95.97 W/ft<sup>2</sup> sun, 0.5 emissivity, 0.5 absorptivity.

