

# UNDERGROUND DISTRIBUTION CABLE - DUPLEX - AA-8000 SERIES ALUMINUM - 600V

TRIPLE-RATED: USE-2/RHH/RHW-2

## ENGINEERING SPECIFICATIONS

### Standards

Underwriters Laboratories® Standards UL-44, UL-854; ANSI/ICEA S-105-692; IEEE 835-1994; Compact Stranded Aluminum Alloy 8000 Series per ASTM B800, ASTM B801, ASTM B836; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; RUS Accepted; ICEA S-81-570; UL Listing #E-174428



Listing E-174428



## CONSTRUCTION

### Conductors

Compact Stranded Aluminum Alloy 8000 Series per ASTM B800, ASTM B801 and ASTM B836

### Insulation

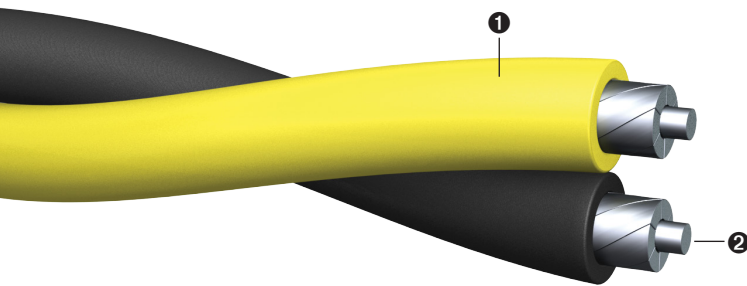
Cross-link polyethylene (XLPE) insulation per UL-44, UL-854 and ANSI/ICEA S-105-692. Black XLPE insulation on phase conductors, yellow XLPE insulation on grounded (neutral) conductors.

## APPLICATIONS

Triple-rated USE-2/RHH/RHW-2 conductors are suitable for underground service entrance applications and in raceways for general purpose lighting and power circuits. Triple-rated conductors can also be installed on both sides of the service point and when the service is located inside the building envelope. For applications not exceeding 600 volts. For NEC applications when used as USE-2 per UL 854 and NEC 310.104(A) and non-NEC applications; including direct burial, or for installation in electrical ducts or raceways. For wet or dry locations not exceeding 90°C for normal operation, 130°C for emergency overloads not to exceed 100 hours within 12 consecutive months. May be used for NEC applications, as well as, non-NEC applications including direct burial, or for installation in electrical ducts and raceways. For wet or dry locations not exceeding 90°C for normal operation, 130°C for emergency overloads, and 250°C under short circuit conditions. All conductors are UL triple-rated as USE-2 per UL-854 and RHH/RHW-2 per UL-44.

## FEATURES

One black triple-rated USE-2/RHH/RHW-2 phase conductor cabled together with one yellow triple-rated USE-2/RHH/RHW-2 neutral conductor. Superior weather, abrasion, crush, and sunlight-resistant XLPE insulation. Manufactured and tested according to *ANSI/ICEA S-105-692: Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables*. Also manufactured and tested according to UL-854 and UL-44 for triple-rated USE-2/RHH/RHW-2 cables. Conductors are surface printed for identification. Excellent ruggedized and mechanical protection.



- ① XLPE Insulation
- ② Compact Stranded Conductor, AA-8000 Series

Code Name	Conductor Sizes (AWG)	Phase Conductors				Neutral Conductor				Finished Cable		Allowable Ampacities for Direct Burial <sup>1,2</sup>		Standard Packaging (ft)
		Size (AWG)	No. of Strands	XLPE Thickness (in)	Outside Diameter (in)	Size (AWG)	No. of Strands	XLPE Thickness (in)	Outside Diameter (in)	Outside Diameter (in)	Approximate Net Weight (lbs/1000 ft)	75°C	90°C	
Bard	8-8 <sup>3</sup>	8	7	0.060	0.254	8	7	0.060	0.254	64	64	40	45	500' 1000' 1500' Reels
Clafin	6-6 <sup>3</sup>	6	7	0.060	0.289	6	7	0.060	0.289	88	88	50	55	500' 1000' 1500' Reels
Delgado	4-4	4	7	0.060	0.333	4	7	0.060	0.333	124	124	65	75	500' 1000' 1500' Reels

<sup>1</sup> Ampacity of conductors are based on the National Electrical Code (NFPA 70) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.

<sup>2</sup> IEEE 835, Standard Power Cable Ampacity Table

<sup>3</sup> Per NEC Section 200.6(B)(4) only conductors 4 AWG and larger are permitted for re-identification from yellow to white or gray at the time of installation.

NEC Article 310.15(B)(2)(a) for ambient temperature correction factors for temperatures other than 30°C (86°F).

NEC Table 310.15(B)(3)(a) for ampacity adjustment factors, as applicable, for more than three current-carrying conductors.

NEC Article 110.14(C) for conductor temperature limitations for equipment rated 100 amps or less, or for equipment rated for more than 100 amps.

The above data is approximate and subject to manufacturing tolerances.

### PRINT LEGEND:

**8 AWG THROUGH 1 AWG:** ENCORE WIRE CORP. (SIZE) AA-8000 AL CDR TYPE USE-2 OR RHH OR RHW-2 SUN-RES DIR-BUR FT2 600 VOLT XLPE (UL) OR C(UL) DATE/TIME/OPER/QC