

TYPE DUPLEX - AA-8000 SERIES ALUMINUM - UNDERGROUND DISTRIBUTION CABLE - 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; US Accepted; ICEA S-81-570; UL Listing #E - 174428



Listed E-174428



CONSTRUCTION

Conductors

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

Insulation

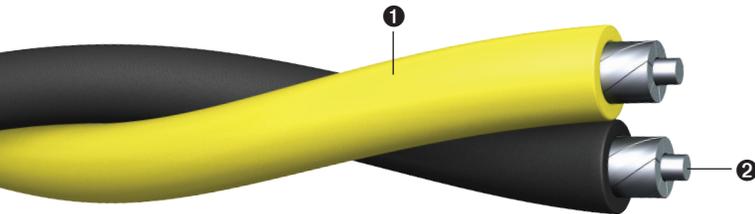
Cross-link polyethylene (XLPE) insulation per UL-44, UL-854 and ANSI/ICEA S-105-692. Black XLPE insulation on phase conductors, yellow XLPE insulation on grounded (neutral) conductors.

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 ^{1,2}		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 ³	8	7	0.060	0.254	8	7	0.060	0.254	64	64	40	45	500' 1000' 1500' Reels
Clafin	6-6 ³	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

¹ 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.

² IEEE 835, Standard Power Cable Ampacity Table

³ 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

TYPE TRIPLEX - AA-8000 SERIES ALUMINUM - UNDERGROUND DISTRIBUTION CABLE - 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; NFPA 70 (NEC®); 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



Listed E-174428



CONSTRUCTION

Conductors

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

Insulation

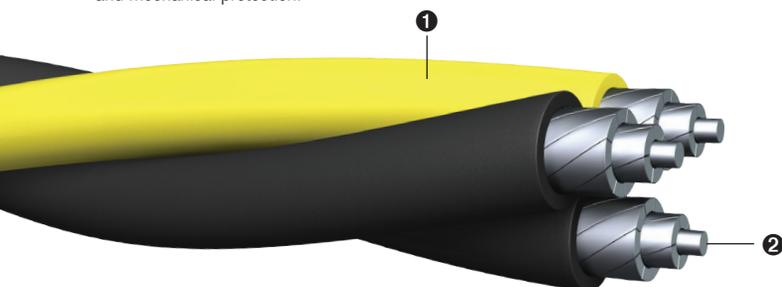
Cross-link polyethylene (XLPE) insulation per UL-44, UL-854 and ANSI/ICEA S-105-692. Black XLPE insulation on phase conductors, yellow XLPE insulation on grounded (neutral) conductors.

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 and when the service point is located inside the building envelope. For applications not exceeding 600 volts. 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 ^{1,2}		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	
Erskine	6-6-6 ³	6	7	0.060	0.289	6	7	0.060	0.289	0.643	130	50	55	500' 1000' 1500' Reels
Vassar	4-4-4	4	7	0.060	0.333	4	7	0.060	0.333	0.744	185	65	75	500' 1000' 1500' Reels
Stephens	2-2-4	2	7	0.060	0.388	4	7	0.060	0.333	0.869	241	90	100	500' 1000' 1500' Reels
Ramapo	2-2-2	2	7	0.060	0.388	2	7	0.060	0.388	0.869	269	90	100	500' 1000' 1500' Reels
Brenau	1/0-1/0-2	1/0	10	0.080	0.496	2	7	0.060	0.388	1.111	380	120	135	500' 1000' 1500' Reels
Bergen	1/0-1/0-1/0	1/0	10	0.080	0.496	1/0	10	0.080	0.496	1.111	436	120	135	500' 1000' 1500' Reels
Converse	2/0-2/0-1	2/0	12	0.080	0.536	1	8	0.080	0.459	1.200	471	135	150	500' 1000' 1500' Reels
Hunter	2/0-2/0-2/0	2/0	12	0.080	0.536	2/0	12	0.080	0.536	1.200	526	135	150	500' 1000' 1500' Reels
Hollins	3/0-3/0-1/0	3/0	15	0.080	0.583	1/0	10	0.080	0.496	1.300	573	155	175	500' 1000' 1500' Reels
Rockland	3/0-3/0-3/0	3/0	15	0.080	0.583	3/0	15	0.080	0.583	1.300	640	155	175	500' 1000' 1500' Reels
Sweetbriar	4/0-4/0-2/0	4/0	19	0.080	0.635	2/0	12	0.080	0.536	1.420	695	180	205	500' 1000' 1500' Reels
Monmouth	4/0-4/0-4/0	4/0	19	0.080	0.635	4/0	19	0.080	0.635	1.420	780	180	205	500' 1000' 1500' Reels
Pratt	250-250-3/0	250	22	0.095	0.710	3/0	15	0.080	0.583	1.550	844	205	230	500' 1000' 1500' Reels
Wesleyan	350-350-4/0	350	24	0.095	0.806	4/0	19	0.080	0.635	1.810	1105	250	280	500' 1000' 1500' Reels
Newark	350-350-350	350	24	0.095	0.806	350	24	0.095	0.806	1.810	1266	250	280	500' 1000' 1500' Reels
Holyoke	500-500-300	500	34	0.095	0.926	300	21	0.095	0.760	2.060	1528	310	350	500' 1000' 1500' Reels
Rider	500-500-350	500	34	0.095	0.926	350	24	0.095	0.806	2.060	1581	310	350	1000' Reels
Westchester	500-500-500	500	34	0.095	0.926	500	34	0.095	0.926	2.060	1739	310	350	1000' Reels
Fairfield	750-750-500	750	47	0.110	1.128	500	34	0.095	0.926	2.405	2300	385	435	1000' Reels

¹ 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.

² IEEE 835, Standard Power Cable Ampacity Table

³ 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:

6 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

1/0 THROUGH 750 KCMIL: ENCORE WIRE CORP (SIZE) AA-8000 AL CDR TYPE USE-2 OR RHH OR RHW-2 SUN-RES DIR-BUR FT2 600 VOLT XLPE FOR CT USE (UL) OR C(UL) DATE/TIME/OPER/QC

TYPE QUADRUPLEX - AA-8000 SERIES ALUMINUM - UNDERGROUND DISTRIBUTION CABLE - 600V

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

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories® Standards UL-44, UL-854; ANSI/CEA S-105-692; IEEE 835-1994; NFPA 70 (NEC®); 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



Listed E-174428



CONSTRUCTION

Conductors

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

Insulation

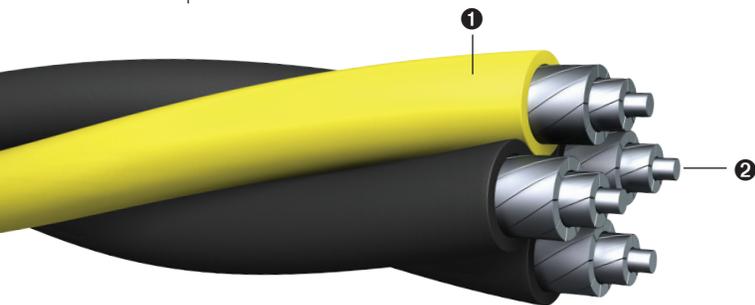
Cross-link polyethylene (XLPE) insulation per UL-44, UL-854 and ANSI/CEA S-105-692. Black XLPE insulation on phase conductors, yellow XLPE insulation on grounded (neutral) conductors.

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 or 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

Three black triple-rated USE-2/RHH/RHW-2 phase conductors 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/CEA 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 ¹		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	
Tulsa	4-4-4-4	4	7	0.060	0.330	4	7	0.060	0.330	0.797	248	65	75	500' 1000' 1500' Reels
Dyke	2-2-2-4	2	7	0.060	0.388	4	7	0.060	0.330	0.937	332	90	100	500' 1000' 1500' Reels
Wittenberg	2-2-2-2	2	7	0.060	0.388	2	7	0.060	0.388	0.937	360	90	100	500' 1000' 1500' Reels
Notre Dame	1/0-1/0-1/0-2	1/0	10	0.080	0.496	2	7	0.060	0.388	1.197	540	120	135	500' 1000' 1500' Reels
Purdue	1/0-1/0-1/0-1/0	1/0	10	0.080	0.496	1/0	10	0.080	0.496	1.197	600	120	135	500' 1000' 1500' Reels
Syracuse	2/0-2/0-2/0-1	2/0	12	0.080	0.536	1	8	0.080	0.459	1.294	648	135	150	500' 1000' 1500' Reels
Lafayette	2/0-2/0-2/0-2/0	2/0	12	0.080	0.536	2/0	12	0.080	0.536	1.294	704	135	150	500' 1000' 1500' Reels
Swarthmore	3/0-3/0-3/0-1/0	3/0	15	0.080	0.583	1/0	10	0.080	0.496	1.407	798	155	175	500' 1000' 1500' Reels
Davidson	3/0-3/0-3/0-3/0	3/0	15	0.080	0.583	3/0	15	0.080	0.583	1.407	864	155	175	500' 1000' 1500' Reels
Wake Forest	4/0-4/0-4/0-2/0	4/0	19	0.080	0.635	2/0	12	0.080	0.536	1.533	962	180	205	500' 1000' 1500' Reels
Earlham	4/0-4/0-4/0-4/0	4/0	19	0.080	0.635	4/0	19	0.080	0.635	1.533	1048	180	205	500' 1000' 1500' Reels
Rust	250-250-250-3/0	250	22	0.095	0.710	3/0	15	0.080	0.583	1.714	1176	205	230	500' 1000' 1500' Reels
Slippery Rock	350-350-350-4/0	350	24	0.095	0.806	4/0	19	0.080	0.635	1.946	1552	250	280	500' 1000' 1500' Reels
Niagara	350-350-350-350	350	24	0.095	0.806	350	24	0.095	0.806	1.946	1720	250	280	500' 1000' Reels
Wofford	500-500-500-350	500	34	0.095	0.926	350	24	0.095	0.806	2.235	2179	310	350	500' 1000' Reels
Marshall	500-500-500-500	500	34	0.095	0.926	500	34	0.095	0.926	2.235	2332	310	350	500' 1000' Reels
Windham	750-750-750-500	750	47	0.110	1.128	500	34	0.095	0.926	2.723	3178	385	435	500' 1000' Reels
Tabor	750-750-750-750	750	47	0.110	1.128	750	47	0.110	1.128	2.723	3460	385	435	500' 1000' Reels

¹ 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.

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:

4 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
 1/0 THROUGH 750 KCMIL: ENCORE WIRE CORP (SIZE) AA-8000 AL CDR TYPE USE-2 OR RHH OR RHW-2 SUN-RES DIR-BUR FT2 600 VOLT XLPE FT4 FOR CT USE (UL) OR C (UL) DATE/TIME/OPER/QC