Aluminum RHH, RHW, USE



Underground Service Entrance Cable. 600 Volt. AlumaFlex® Brand Aluminum Alloy (AA-8176) Conductor. Cross-linked Polyethylene (XLP) Insulation. High Heat, Moisture, and Sunlight Resistant. Also Rated THWN-2. Rated SIS in #8 – 4/0 AWG

APPLICATIONS

Southwire Type RHH or RHW-2 or USE-2 conductors are used with conduit as specified in the National Electrical Code. When used as Type USE-2, conductors are suitable for use as underground service entrance conductors for direct burial at conductor temperatures not to exceed 90 °C. When used as RHW-2 or USE-2, conductor temperatures shall not exceed 90 °C in wet or dry locations. Voltage rating for RHW-2 or RHH or USE-2 conductors is 600 volts.

STANDARDS & REFERENCES

Southwire Type RHH or RHW-2 or USE-2 conductors comply with the following:

- ASTM B-800 and B-801
- UL 44 for RHH or RHW-2
- UL 854 for USE-2
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70, 2011 Edition
- NEMA WC-70 Construction Requirements
- RoHS/Reach Compliant

CONSTRUCTION

Southwire Type RHH or RHW-2 or USE-2 conductors are AlumaFlex® Brand AA-8000 series aluminum alloy, compact stranded. The insulation is an abrasion, moisture, heat and sunlight-resistant black cross-linked polyethylene (XLP). CT rated available upon request sizes 1/0 and larger.





| Conductor | | Insulation Thickness | Nominal | Net Wt. Per | Allowable Ampacities+ | | acities+ | Standard |
|---|----------------|-------------------------|-------------|-----------------|-----------------------|-----|----------|-------------------------------------|
| Size (AWG or kcmil) | No. of strands | I , IO | O.D. (mils) | 1000' (lbs.) | 60℃ | 75℃ | 90℃ | Package |
| 6 | 7 | 60 | 283 | 44 | 40 | 50 | 60 | AC |
| 4 | 7 | 60 | 333 | 64 | 55 | 65 | 75 | BCD |
| 2 | 6 | 60 | 388 | 93 | 75 | 90 | 100 | ABCD |
| 1 | 18 | 80 | 459 | 124 | 85 | 100 | 115 | CD |
| 1/0 | 18 | 80 | 496 | 149 | 100 | 120 | 135 | CD |
| 2/0 | 18 | 80 | 536 | 180 | 115 | 135 | 150 | ABC |
| 3/0 | 18 | 80 | 583 | 218 | 130 | 155 | 175 | BC |
| 4/0 | 18 | 80 | 635 | 266 | 150 | 180 | 205 | ABCD |
| 250 | 22 | 95 | 710 | 322 | 170 | 205 | 230 | CD |
| 300 | 35 | 95 | 760 | 377 | 190 | 230 | 255 | С |
| 350 | 35 | 95 | 806 | 431 | 210 | 250 | 280 | С |
| 400 | 35 | 95 | 849 | 484 | 225 | 270 | 305 | С |
| 500 | 35 | 95 | 926 | 590 | 260 | 310 | 350 | ВС |
| 600 | 58 | 110 | 1033 | 718 | 285 | 340 | 385 | N/A |
| 700 | 58 | 110 | 1100 | 829 | 310 | 375 | 420 | N/A |
| 750 | 58 | 110 | 1128 | 876 | 320 | 385 | 435 | С |
| 900 | 58 | 110 | 1222 | 1039 | 355 | 425 | 480 | N/A |
| 1000 | 58 | 110 | 1280 | 1138 | 375 | 445 | 500 | N/A |
| + Allowable Ampacities shown are for general use as specified by the National Electrical Code 2011 Edition, Section 310.15 and 240.4(D). Unless the equipment is marked for use at higher temperatures, the conductor ampacities shall be limited to the following per NEC 110.14(C): 60 ℃ - When terminated to equipment for circuits rated 100 amperes or less marked for 14 through 1 AWG | | | | | | | | Package Codes A-500' B-2,500' |

RECOMMENDED SAMPLE SPECIFICATIONS:

Conductors shall be UL-listed Type RHH or RHW-2 or USE-2, suitable for operation at 600 volts or less in wet or dry locations, including direct burial in the earth. Conductors shall be Alumaflex® brand aluminum alloy, XLP insulated, as manufactured by Southwire Company or approved equal.

NEC 110.14(C): 60 ℃ - When terminated to equipment for circuits rated 100 amperes or less marked for 14 through 1 AWG

conductors. 75 ℃ - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1

AWG. 90 ℃ - THHN dry locations and THWN wet or dry locations for ampacity adjustment purposes using NEC section 310.15.



C-1,000'

D-5,000'

| Size (AWG or kcmil) No. of strands Stock #: BK:272799, GN:301572 6 7 Stock #: BK:272807, GN:334680 2 6 Stock #: BK:272823, WE:575240 1 18 Stock #: BK:272831 1/0 18 Stock #: BK:272849 2/0 18 Stock #: BK:272856 3/0 18 Stock #: BK:272864 4/0 18 Stock #: BK:272872 250 22 Stock #: BK:272880 300 35 Stock #: BK:272898 350 35 Stock #: BK:272906, GN:576086 400 35 Stock #: BK:272914 500 35 Stock #: BK:272922, BN:560674 600 58 Stock #: BK:272930 700 58 Stock #: BK:272955 900 58 Stock #: BK:272955 | Conductor | | |
|--|-----------|----------------|-------------------------------|
| 4 7 Stock #: BK:272807, GN:334680 2 6 Stock #: BK:272823, WE:575240 1 18 Stock #: BK:272831 1/0 18 Stock #: BK:272849 2/0 18 Stock #: BK:272856 3/0 18 Stock #: BK:272864 4/0 18 Stock #: BK:272872 250 22 Stock #: BK:272880 300 35 Stock #: BK:272898 350 35 Stock #: BK:272906, GN:576086 400 35 Stock #: BK:272914 500 35 Stock #: BK:272922, BN:560674 600 58 Stock #: BK:272930 700 58 Stock #: BK:596530 750 58 Stock #: BK:272955 | ` | No. of strands | Stock Numbers |
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| 750 58 Stock #: BK:272955 | 600 | 58 | Stock #: BK:272930 |
| | 700 | 58 | Stock #: BK:596530 |
| 000 58 Stook #: N/A | 750 | 58 | Stock #: BK:272955 |
| 300 SIUCK #: IN/A | 900 | 58 | Stock #: N/A |
| 1000 58 Stock #: N/A | 1000 | 58 | Stock #: N/A |

Color Abbreviations

BK-Black BN-Brown WE- White GN-Green

