

# RHH OR RHW/CT



**600 Volt**

**Copper Conductors**

**Flame Retardant  
Cross-Linked  
Polyethylene Insulation**

**High-Heat, Moisture,  
and Sunlight Resistant,  
and Rated for CT Use**

**UL VW-1**

## APPLICATIONS

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

## SPECIFICATIONS

Southwire Type RHH or RHW-2 or USE-2 conductors meet or exceed the applicable requirements of the following standards and specifications:

- UL 44 - Thermoset-Insulated Wires and Cables
- UL 854 - Service Entrance Cables
- UL 1685 - UL Flame Exposure Test
- UL 1581 - UL Flame Exposure Test (VW-1)
- ICEA S-95-658 - (NEMA WC70) Nonshielded Power Cables 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 - Flame Testing of Cables for Use in Cable Tray in Industrial and Commercial Occupancies (70,000 BTU/hr) 4/0 and larger

Type RHH or RHW-2 or USE-2 meets and exceeds all construction requirements of ICEA S-95-658 (NEMA WC 70) - Nonshielded 0-2 kV Cables, with testing frequencies based on UL requirements.

## CONSTRUCTION

Southwire Type RHH or RHW-2 or USE-2 copper conductors are annealed (soft) copper. Insulation is an abrasion, moisture, heat resistant and flame retardant cross-linked polyethylene (XLP). This product is sunlight resistant and rated for cable tray use.

### • Scope

This specification covers single conductor RHH or RHW-2 or USE-2 a flame retardant cross-linked polyethylene insulated cable for use in circuits not exceeding 600 volts. This cable is capable of operating continuously in wet or dry locations at a maximum conductor temperature of 90°C for normal conditions, 130°C for emergency overload conditions and 250°C for short circuit conditions. Cables may be installed in air, duct, underground, or in cable tray. This product meets UL VW-1 flame test requirements and is listed for sunlight resistant.

### • Standards

The following standards shall form part of this specification: ICEA S-95-658 - Standard for Nonshielded Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy. UL 44 - Thermoset-Insulated Wire and Cables and UL 1685 - UL Flame Exposure Test.

## WEIGHTS AND MEASUREMENTS

CONDUCTOR		INSULATION THICKNESS		AVERAGE OVERALL DIAMETER		APPROXIMATE NET WEIGHT		ALLOWABLE AMPACITIES*	
SIZE (AWG or kcmil)	STRANDING	inch	mm	inch	mm	lbs/1000 ft	kg/km	CONDUIT	FREE AIR
1/0	19	0.080	2.03	0.525	13.3	390	580	170	260
2/0	19	0.080	2.03	0.568	14.4	481	716	195	300
3/0	19	0.080	2.03	0.619	15.7	597	888	225	350
4/0	19	0.080	2.03	0.675	17.1	741	1102	260	405
250	37	0.095	2.41	0.751	19.1	880	1309	290	455
350	37	0.095	2.41	0.854	21.7	1207	1796	350	570
500	37	0.095	2.41	0.983	25.0	1693	2519	430	700
750	61	0.110	2.79	1.191	30.3	2516	3744	535	885
1000	61	0.110	2.79	1.340	34.0	3315	4933	615	1055

\*Ampacities based on Table 310.16 and 310.17 of the NEC® 2008 Edition. Ampacities are for general use with 90°C conductor and 30°C ambient temperatures as specified in section 310.15 and in cable trays as specified in section 392.11.

## CONSTRUCTION (continued)

### • Conductor

The conductor shall be stranded bare copper in accordance with ASTM standards.

### • Insulation

The insulation shall be a flame retardant cross-linked polyethylene meeting the requirements of the referenced standards. The minimum spot thickness shall not be less than 90% of the average insulation thickness.

### • Identification

Cable shall be identified by surface printing on the jacket.

### • Tests

Cable shall be tested in accordance with ICEA S-105-692, UL 1685, and the flame test requirements of IEEE 1202 (4/0 and larger).