

Technical Information Sheet # 309

Instructions for Lifeline RHW-2 Fire Rated Splice

In some cases when difficult or complicated cable runs or unexpected field circumstances occur, a reliable fire rated splice is required. The following Lifeline RHW-2 splice and installation procedure has been 2 hour qualified (UL2196) when used with Lifeline cables to assure system reliability. This procedure is not qualified for use with other fire rated cables.

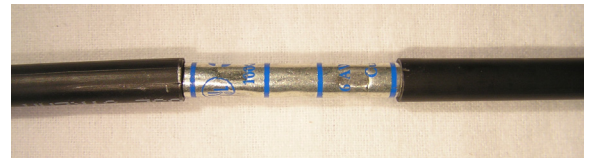
Materials Required: (See Table for Ordering Information)

1. Draka Lifeline Ceramifiable Splicing Tape
2. UL Listed Copper Compression Connector
3. Self-fusing silicone electrical tape, 3M Scotch # 70 or equivalent
4. Shrink Tubing, electrical grade rated 600 Volts or greater 3M type ITSCN Series Type heat shrink or 3M Series 8420 cold shrink (see size chart for requirements).

STEP 1: INSTALL SHRINK SLEEVE OVER INSULATED CONDUCTOR BEFORE PROCEEDING.

STEP 2: CONDUCTOR SPLICE

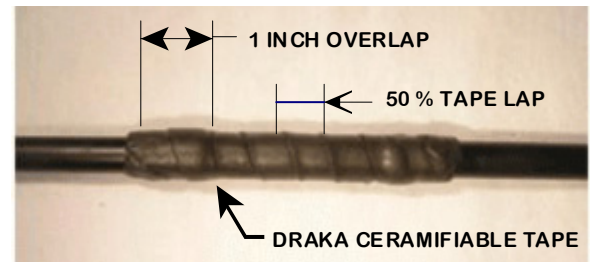
Join conductors with a compression connector installed per the manufacturers' instructions. See table for proper size & dimensions. Remove burrs or sharp edges.



STEP 3: DRAKA LIFELINE CERAMIFIABLE TAPE APPLICATION

A. Starting 1" beyond the end of the compression connector, carefully helically wrap the Draka Lifeline tape over the connector with a 50% lap (1/2 tape width). Caution: Be careful not to stretch the tape during the procedure.

B. Remove any excess tape beyond 1 inch of the far end of the connector.



STEP 4: SELF-FUSING SILICONE TAPE

Over-wrap the Draka Tape with Self-Fusing Silicone Rubber Electrical Tape (3M Scotch # 70 or equivalent). Start by applying two layers of tape beyond the Draka Lifeline ceramifiable splicing tape, then helically wrap with a 50% lap to one tape width beyond the Draka tape and finish with two complete wraps at end. Apply with moderate tension to protect but not deform the Draka tape.



Instructions for Lifeline RHW Cable Splice – Cont'd

STEP 5: SHRINK TUBE INSTALLATION

Align shrink tubing over Draka Lifeline Tape with a minimum of 1" overlap on either side. For cold shrink tubing, pull cold shrink loose core end while unwinding in a counter-clockwise direction being careful not to damage the underlying tapes. Do not bend tubing.



STEP 6: Complete shrink tubing installation per manufacturers' instructions.

Draka Lifeline QUALIFIED SPLICE TAPE ORDERING INFORMATION														
Order Part Number: 593-0100-057 *														
YIELD FROM ONE ROLL OF TAPE														
WIRE SIZE (AWG – MCM)	6	4	3	2	1	1/0	2/0	3/0	4/0	250	350	500	600	750
NUMBER OF SPLICES PER ROLL OF SLICE TAPE	7	6	5	5	4	3	3	3	2	2	1	1	1	1
* This product has a 6 month shelf life and is non returnable.														
CONTACT FACTORY @ 800-333-4248														

ORDERING INFORMATION FOR COMMERCIALY AVAILABLE COMPONENTS

LIFELINE PART NUMBER	AWG SIZE	COPPER COND. O.D. (IN.)	CABLE O.D. (IN.)	COMPRESSION CONNECTOR MAX LENGTH (IN.)	MAXIMUM TAPE BUILDUP (IN.)	MINIMUM SHRINK TUBE LENGTH (IN.)	3M ITCSN SERIES HEAT SHRINK TUBING	3M # 8420 SERIES COLD SHRINK (SEE
RHW-6	6	0.184	0.330	2.0	0.580	8.0	ITCSN-0800	8424-8*
RHW-4	4	0.232	0.375	2.0	0.625	8.0	ITCSN-0800	8424-8*
RHW-3	3	0.260	0.405	2.0	0.655	8.0	ITCSN-1100	8424-8*
RHW-2	2	0.292	0.435	3.0	0.685	8.0	ITCSN-1100	8425-8
RHW-1	1	0.332	0.525	3.0	0.775	9.0	ITCSN-1100	8426-9
RHW-1/0	1/0	0.372	0.565	4.0	0.815	9.0	ITCSN-1100	8426-9
RHW-2/0	2/0	0.418	0.605	4.0	0.855	9.0	ITCSN-1500	8426-9
RHW-3/0	3/0	0.470	0.660	4.0	0.910	9.0	ITCSN-1500	8426-9
RHW-4/0	4/0	0.528	0.715	4.0	0.965	9.0	ITCSN-1500	8426-9
RHW-250	250	0.575	0.820	4.0	1.070	12.0	ITCSN-2000	8427-12
RHW-350	350	0.681	0.925	5.0	1.175	12.0	ITCSN-2000	8427-12
RHW-500	500	0.813	1.050	5.0	1.300	12.0	ITCSN-2000	8428-12
RHW-600	600	0.893	1.160	6.0	1.410	12.0	ITCSN-2000	8428-12
RHW-750	750	0.998	1.260	6.0	1.510	12.0	ITCSN-3000	8428-12

NOTE: DO NOT BEND SHRINK TUBE DURING INSTALLATION. * THESE KITS CONTAINS ADAPTORS FOR CABLE BUILDUP