

# RECOMMENDED Procedure

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## SP-F01-012 Self-supporting Figure-8 Drop Cable Installation & Prep Guidelines for use with the Wirewise® Grip 5058, Issue 3

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### 1.0 General

This procedure describes the recommended procedure for handling and installing Sumitomo’s self-supporting Figure-8 Drop cable with the Wirewise® Grip #5058. Included are recommended sag & tension values along with support hardware installation guidelines.

The self-supporting Figure-8 Drop cable, intended for FTTP aerial drops to customer premises, contains up to 12 optical fibers. The color-coded fibers are protected inside a gel filled loose buffer tube. A black flame retardant indoor/outdoor PE jacket covers both the cable core and a 3.0-mm steel messenger.

### 2.0 Safety Precautions

The use of safety equipment is strongly recommended during the cable preparation procedure. This includes the use of protective clothing and eyewear.

### 3.0 Reference Documents

Wirewise Installation Procedures (on packaging)

## 4.0 Tools Required

The following tools and materials are required to complete this procedure.

1. Wirewise® Grip #5058 (0.102-0.114 in.)
2. Sheath Knife
3. Dry Rag
4. Needle Nose Pliers
5. Shears
6. Buffer Tube Remover (Blue Coax Cutter)
7. Cotton Gauze Pads
8. Isopropyl Alcohol
9. Gloves
10. Safety Glasses

## 5.0 Wirewise® Grip Installation

**5.1** Use a utility knife to separate the cable core section from the jacketed messenger (fig-1). Once a cut has been made the cable core can be separated by hand from the steel messenger (fig-2). The length of separation is dependent on the distance from the splice point to the suspension clamp point.



**Figure 1**



**Figure 2**

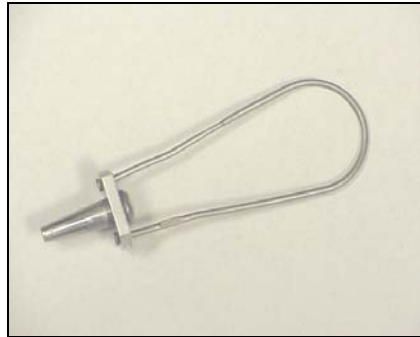
**5.2** Cut the messenger to the desired length that sets the proper sag. A typical length to allow a smooth bending radius of the cable core section away from the grip is approximately 6 inches.

**5.3** Using a sheath knife, remove the jacket material from the steel wire messenger by shaving along the wire. A minimum clean back length of 1.5 inches is required for the grip.

**5.4** Ensure that the bare messenger wire is free from dirt and grease by wiping it with a rag.

**5.5** Use the following grip part number. Install the Wirewise grip per the detailed directions provided on the packaging of the grip.

**Wirewise® # 5058**  
**12 BWG or 10 AWG**  
**Range .102 - .114 Inch**



**Figure 3**

**5.6** Attach the grip to the premises or pole per standard practices



**Figure 4**

## **6.0 Cable Core Preparation**

**6.1** Remove the outer jacket material by using the sheath knife and shaving the jacket along the strength members. Trim back jacket material and remove. Leave enough strength member for securing per the recommendations of the closure manufacture.

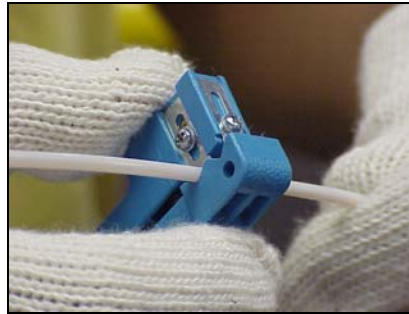


**Figure 5**



**Figure 6**

**6.2** The buffer tube can be removed by scoring the tube with the Buffer Tube Remover tool(fig-5) and snapping the tube being careful not to break the fibers underneath.

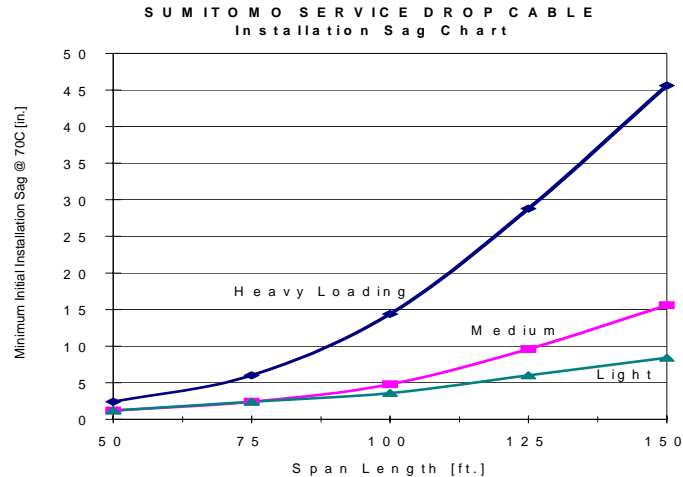


**Figure 7**

**6.3** After sliding off the buffer tube section, the fibers can be cleaned with alcohol and a cotton gauze wipe. The fibers are now ready for termination.

## 7.0 Sag & Tension

**7.1** Use the graph in Figure 1 as a guideline when installing the Aerial Service Drop cable. Based on span length, the initial sag should be at least the values shown on the graph. Alternatively, if tensions are measured, the initial tensions shown in the table 1 below should not be exceeded immediately after initial installation.



**Figure 8 Installation Sag Requirements.**

Span [ft.]	NESC Light Loading				NESC Medium Loading				NESC Heavy Loading			
	Initial Installation Requirements		Fully Loaded Values		Initial Installation Requirements		Fully Loaded Values		Initial Installation Requirements		Fully Loaded Values	
	Min. Sag [in.]	Max. Tension [lbs.]	Result Sag [in.]	Result Tension [lbs.]	Min. Sag [in.]	Max. Tension [lbs.]	Result Sag [in.]	Result Tension [lbs.]	Min. Sag [in.]	Max. Tension [lbs.]	Result Sag [in.]	Result Tension [lbs.]
50	1	330	2	550	1	330	4	640	2	170	7	620
75	2	370	6	600	2	370	8	700	6	150	14	670
100	4	440	10	680	5	330	14	700	14	110	25	700
125	6	410	14	680	10	260	23	680	29	90	40	690
150	8	420	20	700	16	230	32	700	46	80	56	700

**Table 1. Sag & Tension Values**

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