Cable Reel Preparation (Domestic)

1. Scope

1.1 The following procedure describes how to prepare the cable reel prior to cable installation.

2. Precautions

2.1 OFS optical fiber cables are designed to meet the rigors of conventional aerial, direct buried, and underground duct environments. However, during cable installation, care must be taken to prevent violating the minimum cable bend diameter and prevent exceeding the maximum rated cable load (MRCL).

2.2 Cable minimum bend diameters are typically expressed as a multiple of the cable outside diameter (OD) for both static and dynamic conditions. The static condition represents an installed cable subjected to long-term residual load. The dynamic condition represents a cable during installation that may be subjected to the MRCL. For standard loose tube cables, the minimum bend diameter is 20 × OD for static conditions (installed) and 30 × OD for dynamic conditions (during installation). For AccuTube cable, the minimum bend diameter is 30 × OD for both static and dynamic conditions. For Midia FX*plus* cable, the minimum bend diameter is 20 × OD for static conditions and 40 × OD for dynamic conditions.

2.3 Cable tensile load ratings are specified for both short-term and long-term (residual) conditions. The short-term condition represents a cable during installation. The long-term condition represents an installed cable subjected to a permanent residual load. Under short-term conditions (during installation), standard OFS loose tube cables have a maximum rated cable load (MRCL) of 600 pounds (2700N). For long term conditions, the maximum residual load is 200 pounds (890N). For Midia FX*plus* cable, the MRCL for short term installation conditions is 300 pounds and the maximum long-term residual load is 90 pounds. Please contact OFS Customer Service at 888-FIBER-HELP (888-342-3743) for information regarding self-supporting aerial cable or other special application cables.

2.4 Breakaway pulling swivels and/or calibrated pulling winches are recommended for use during cable installation to assure that the MRCL is not exceeded. Cable lubricants are also recommended to reduce the coefficient of friction and minimize the cable installation tension. Contact a cable lubricant manufacturer or OFS Technical Services for guidance on the proper lubricant for your application.

3. Reel Preparation

3.1 Remove the thermal wrap that is wrapped around the circumference of the cable.

3.2 Remove the cable certification sheets and save for future reference. The certification sheets provide detailed information regarding the cable type, identification, cable length, and fiber attenuation.

3.3 Inspect the reel flanges for protruding nails or other defects that may interfere with cable payout.

3.4 Remove the protective wood lagging boards from the side of the reel to expose the inside end of the cable (Figures 1 and 2). **Note:** The protective wood lagging boards may not be installed on reels containing small diameter cable.

Figure 1 - Protective wood lagging boards.

3.5 Because the cable reel may shrink as the wood ages and dries, a small amount of cable slack may form in the inside layer of cable. As the cable is being paid off the reel, slack cable will work itself towards the inside end of the cable and through the slot in the side of the cable reel. Pull out the white plastic straps and tape together the exposed coils of the cable. This allows the cable to "walk out" through the slot but remain restrained within the space provided by the straps (see Figures 2 and 3).

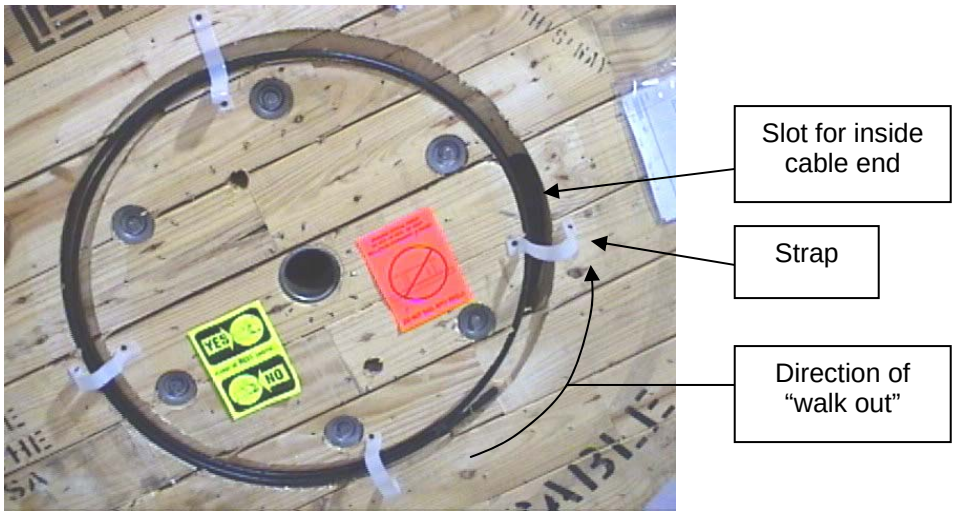

Figure 2 – Protective lagging boards removed to expose the inside cable end.

3.6 If the amount of cable "walk out" fills the space provided by the straps, it may be necessary to stop the cable installation and cut off the excess cable. Following removal of the excess cable, be sure to tape the cable back to itself to allow additional cable to "walk out" into the straps.

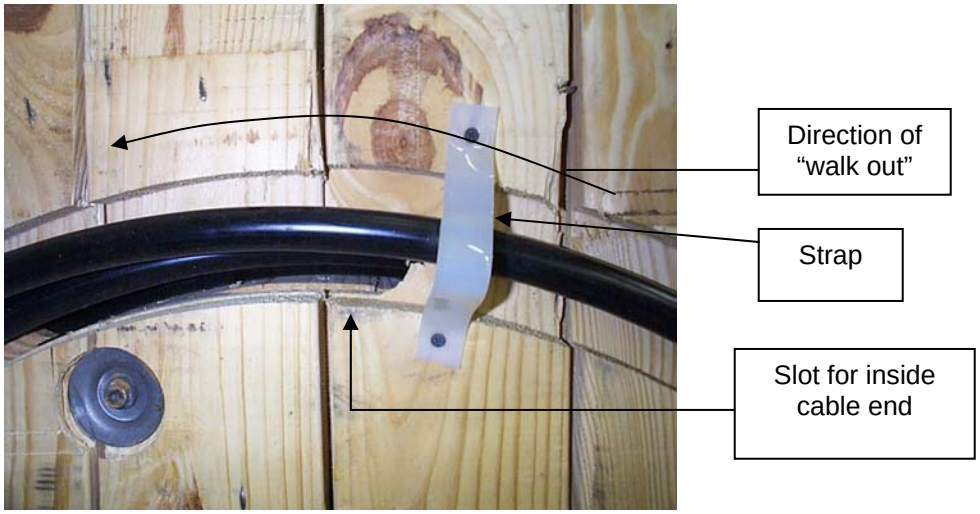

Figure 3 – Slot for inside cable end.

If you have any questions or require additional information, please contact OFS at 888-FIBER-HELP (888-342-3743).