

### OVERVIEW

CATV semiflex coaxial cable can be easily damaged if the reels of cable are not stored and handled properly. Aside from cable damage, improper handling can also result in personal injury. The following are some points to consider when handling and storing cable.

### GENERAL

Reel wrappers play an important role in protecting cable from damage. The wrapping will prevent damage from minor impacts resulting from reels rolling into each other or from rolling the reel over rough surfaces. Once the wrapping is completely removed, the cable is susceptible to damage. The wrapping should not be completely removed until the cable is ready to be installed.

Cable may also be damaged if the reel is dropped. In the event that this occurs, the flange may break, deflect or the hub may collapse and damage the cable, degrading impedance properties (Structural Return Loss). More importantly, personal injury could result.

### UNLOADING PROCEDURE

#### **Unloading**

While unloading a truck it is important that the reels of cable not be dropped. They should be rolled from the truck onto a receiving platform which is the same height as the tailgate of the truck. If a platform is not available, arrangements should be made to obtain a forklift or lift gate truck so that the reels will not have to be dropped. Also, an inclined ramp could be fabricated locally from commonly available lumber.

#### **Visual Inspection**

Aside from making sure that the correct type and quantity of cable was shipped from the factory, it is necessary to inspect each reel for damage. Usually, if there is no sign of damage on the cardboard wrapper or flange, then the cable is probably undamaged. However, if there is any doubt, remove the wrapper and examine the cable thoroughly. If there is any shipping damage, it is the responsibility of the customer to notify TFC's Customer Service Department.

### ELECTRICAL INSPECTION

A removable cover marked "REMOVE FOR TEST" is provided near the top end of the cable and on the side of one of the two flanges so that the ends of the cable on the reel can be accessed for electrical testing without

having to remove the entire wrapping. After testing, replace the cable end caps.

### STORAGE

Reels of cable should remain properly wrapped to prevent damage from minor abuse during storage. The wrapping, however, will not protect the cable from forklift impacts or similar carelessness.

The reels should be left on their rolling edge whenever possible and lined up in rows so that the flanges of the reels touch each other. Care should be taken with the bottom end of the cable (the end of the cable that protrudes through the side of the flange) since it can be easily bent back and kinked making future SRL test results invalid.

After inspection, the wrapping should be replaced to minimize future damage, although it is recommended that the test port portion of the outer wrapper be discarded so as to allow air flow under the wrapper. This will minimize the effects of condensation and staining, discoloration or corrosion of the aluminum surfaces (refer to Technical Note 1050A, Discoloration, Water Staining and Corrosion of Aluminum).

In some cases, storage space is limited and it becomes necessary to stack reels on their sides to conserve room. Once stacked, however, the stack of reels should not be moved, since a stack of reels poses a safety problem if not handled carefully.

#### **Stacking Reels**

To facilitate stacking and unstacking with a forklift and to prevent damage of the bottom cable end, spacers should be used to separate the flanges of the stacked reels. Spacers can be made from 2 inch x 4 inch lumber to 2 feet to 3 feet long depending upon the type of reels to be stacked. The idea of the spacers is to provide enough room between the reels for the forks of a forklift to fit without having to tilt the stack of reels which might cause the stack of reels to drop or fall over. Reels should not be stacked on any surface which would allow the reels to be unstable and fall. The spacers should be placed under the bolts of the reel. On 36 inch reels 2 spacers are usually used while on 54 inch reels 3 spacers are used. Generally, 36 inch reels can be stacked 5 high and 54 inch reels, 4 high, but safety must be kept in mind at all times. Stacking large reels is usually a two-man job. While one man controls the forklift by positioning the forks, the other man gently pushes the reel over onto the forks.

### **ROLLING REELS**

With the reel wrapping in place, reels of cable can be rolled on their flanges without damaging the cable. Reels should be rolled at walking speed and should not be left unattended while they are rolling. Reels should not be allowed to bump into each other or any other objects which may cause cable damage. A reel of cable should not be rolled down any grade which could ultimately result in loss of control over the reel.

### **REEL TRAILER LOADING AND TRANSPORT**

In order to get the cable to the actual construction site, it is necessary to load the reel or reels of cable on the reel trailer. The reels should be loaded according to the recommendations of the trailer manufacturer. Once the reels are loaded, the wrapping may be removed and discarded. The wrapping may be reused for partial reel lengths if desired, but the cable end must be securely fastened to the flange to prevent the cable from loosening on the reel as it is transported.