



OCC-206-1

*Storage and Handling
Excerpt
from
Optical Cable Corporation's
INSTALLATION GUIDE*

RECEIVING/HANDLING CABLE

Fiber optic cable represents an investment to the purchaser. To get the most benefit from this investment, the purchaser should specify high quality cable and have a complete visual inspection program that will help identify any cable that is damaged during transit. Any unacceptable cable is then returned to the manufacturer instead of being installed. Identifying and rejecting damaged cable improves the reliability and life expectancy of the fiber optic cable.

Receipt of Cable Reels

Upon receiving the cable shipments, the purchaser should conduct an acceptance inspection. A cable acceptance inspection involves several simple and inexpensive steps that can yield big dividends. The cable acceptance inspection should consist of the following steps:

1. Visually inspect for shipment damage

Visually inspect the cable reels and boxes for any damage that may have occurred in transit. Be particularly alert for cable damage if:

- a. Several reels are stacked
- b. Other freight is stacked on the reel
- c. Nails have been driven into the flange to secure blocking
- d. A reel flange is damaged
- e. A cable covering is removed, stained, or damaged
- f. A cable end seal, if applicable is removed or damaged
- g. A reel has been dropped (hidden damage likely)

Cable reels that are twenty four inch reels or less, in diameter, are typically shipped in boxes and may be shipped on their side. Cable reels larger than twenty four inches are typically shipped upright and should not be shipped on their sides.

2. Inspect reel tags

Visually check each reel to insure that it has the proper tags. The reel should

contain the following minimum information:

- a. Purchaser's name and address
- b. Purchase order number
- c. Part number
- d. Length of cable

Verify that the cable description, reel size, and cable length match that specified. Any missing information should be obtained from the manufacturer.

3. Check dimensional tolerances

Make a simple measurement of the basic cable dimensions on one reel of each size of cable in a shipment to verify that the cable's dimension meet the specification.

Handling of Cable Reels

When moving cable reels, care should be taken to insure that material handling equipment does not come in contact with cable surfaces or with protective covering on the reel. **Under no circumstances should cable reels be dropped from any height, or be allowed to roll uncontrolled.** Whenever possible, cable reels should be moved or lifted using the diagrams shown at the end of the document.

1. For cranes, booms, or other overhead lifting equipment, a heavy steel arbor or suitable heavy rod or pipe should be inserted through the reel hubs so that the cable reel can then be lifted by slings utilizing spreader bars or a lifting yoke. This method will insure that sling pressure against a reel flange, tipping of the reel, slipping of the sling, and other unbalanced situation will be minimized.
2. When lifting reels by fork truck equipment, reels should only be lifted from the sides, and only if the blades of the fork truck are long enough to cradle both flanges. This method will ensure that the lift pressure is equally distributed on both flanges and not on the cable itself.

3. Cable reels may be moved short distances by rolling them.
4. The path over which the cable reels are to be rolled must be clear of any debris, which might damage the cable if the reels were to roll over it. Cable reels unloaded down ramps should be rolled in a controlled manner. The ramps must be of a gradual incline, spaced parallel and wide enough to ensure contact at all times with both reel flanges during unloading.

Storage of Cable Reels

Where possible, cable reels are to be stored indoors on a hard, dry surface to prevent deterioration of the reels.

Cable reels stored outdoors must be supported off the ground and covered with a suitable weatherproof material. Allowable temperatures for storage are addressed by ICEA standards. Both ICEA S-83-596, Standard for Optical Fiber

Premises Distribution cable, and ICEA S-104-696, Standard for Indoor-Outdoor Optical Fiber Cable, allow storage temperatures from -40°C to +70°C. However, in cold weather installations, it is recommended that fiber optic cables be stored in a heated storage area at least twenty four hours prior to cable installation.

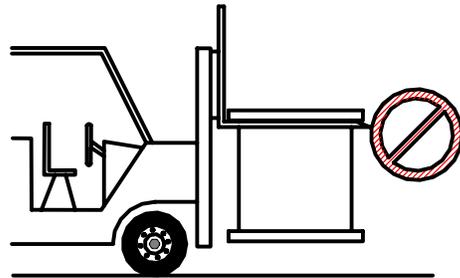
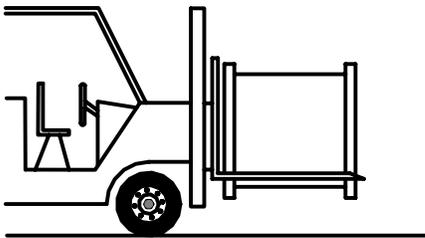
All cable reels should be stored in such a manner allowing easy access for lifting and moving, away from construction activities, falling or lying objects, sources of high heat, open flames, chemicals or petroleum products, etc. that may come in contact with the cable and cause damage. The use of fencing or other barriers to protect cables and reels against damage by vehicles or other equipment moving about the storage area is highly recommended.

NOTE: If a particular method of shipping is required (i.e. shipment to job site, etc.), the customer should inform the manufacturer of the special shipping requirements.

Cable Reel Handling

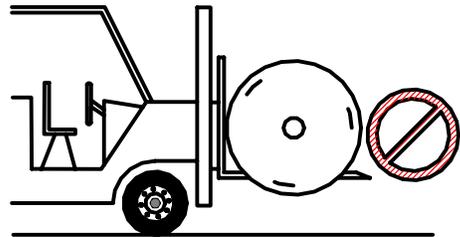
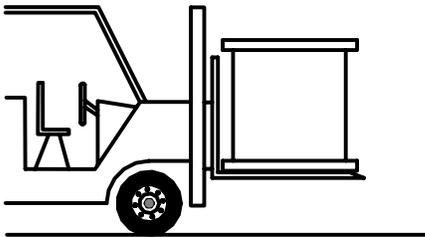
Recommended

Not Recommended



Do not allow forks to touch cable or reel wrap.

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