

## Premises Copper Cable Handling, Storage and Installation

### Introduction

Communications cables are designed with installation in mind. That being said, there are certain limitations to cable handling that must be considered during installation.

### Shipping and Transport

- All reels must be shipped upright. Shipping the reel on its side can cause damage to the reel flange and/or cause the cable layers to shift. This may cause damage to the cable by causing it to snag or tangle during payoff.
- All boxes must be shipped upright.
- Boxes must never be tossed or dropped. Rough handling of boxes can cause reels to separate from end plates within a Reel-in-box or cause the coil to collapse within a Pop box, resulting in snags/kinks/tangles during installation.
- Example of improperly shipped cable.



- Example of cable shipped in correct manner with all boxes upright.



## Storage and Handling

- Reels must always be stored upright. Reels must not be stored on their sides or stacked.
- Avoid storage areas that are susceptible to humidity or temperatures that are outside of the recommended temperature guidelines. See [TG-29 "Premises Cable Temperature Guidelines"](#) for additional information.
- If reels are to be rolled, they should be rolled in the direction of the arrow on the reel.
- Rolling reels in the opposite direction may cause the cable to become loose, resulting in difficulty during installation.



## Installation

### Reels

- Reels should be placed on a reel cart (or equivalent) with the cable paying off in the direction of the pull.
- Cable pull should start with a slow, smooth start and slowly increase speed throughout the pull. Always avoid yanking the cable to avoid possible damage.
- When the cable pull is nearing the end, slowly decrease the speed to avoid “overspin”. Overspin can cause the cable coils to become loose on the reel or cause the cable to be unnecessarily payed off onto the floor.
- After the initial pull, reels should be stored with both flanges on the floor. Reels should never be placed on their sides or stacked.

### Reel-in box

- Boxes should be placed with payout port on top or facing the direction cable is being pulled.



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- When the cable pull is nearing the end, slowly decrease the speed to avoid “overspin”. Overspin can cause the cable coils to become loose on the reel, causing tangles to occur due to excess cable slack and cables crossing over on the reel.
- After cables have been installed, boxes should be stored upright. Boxes should never be placed on their sides.

## BrakeBox®

- Before installation of cable in BrakeBox packaging, the brake should be set to increase resistance. This will keep reel from "overspinning" and causing potential tangling issues. See pictures for more information on setting the brake. Brake tension may be decreased to lower setting after the first several hundred feet are installed.



- Boxes should be placed with payout port on top or facing the direction cable is being pulled. See pictures for setup.



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- When the cable pull is nearing the end, slowly decrease the speed to avoid "overspin". Overspin can cause the cable coils to become loose on the reel, causing tangles to occur due to excess cable slack and cables crossing over on the reel.
- After cables have been installed, boxes should be stored upright. Boxes should never be placed on their sides.

## Pop Box™

Boxes should be placed with the payout tube facing in the direction of the pull or with the tube on top.



- Cable pull should be slow and steady throughout the entire pull. Avoid sudden yanking of the cable as this could cause a kinking of the cable within the payout tube.
- After cables have been installed, boxes should be stored in an upright position.