

EnduraGain™ OSP Cable Reel Transfer Guidelines

Superior Essex manufactures EnduraGain Outside Plant (OSP) cables for outdoor use in Category 5, 5e, 6 and 6A designs. These cables are designed for the OSP environment, but are much smaller than the typical OSP copper cable. The lower pair counts result in lower tensile ratings which, along with higher electrical performance requirements, demand strict compliance to handling guidelines, particularly when transferring cable to another reel, e.g., a cut-line operation. The following are guidelines for the successful transfer of EnduraGain OSP from reel to reel. These guidelines are supplemental to OSP Cable Reel Handling and Storage, which covers reel handling during transport, storage and installation.

Physical Limits

MINIMUM BEND RADIUS		TENSILE STRENGTH	
Cable Shield Type	Minimum Bend Radius	Design Type	Maximum Pulling Tension
No Shield	Cable diameter x 10	4-Pair (all)	25 lbs (110 N)
Single Shields	Cable diameter x 12	25-Pair MEGAPIC™	158 lbs (695 N)
Dual Shields	Cable diameter x 15	100-Pair MEGAPIC	633 lbs (2785 N)

General Guidelines

1. Cables (including cuts and remnants) that are transferred to other reels should be wound onto communications cable reels of sufficient size and substance to accommodate the cable and the environment. In general, compare to the original reel, adjusting for cable length if needed. If in doubt, contact Superior Essex Technical Support at 877-263-2818 for specific recommendations.
2. Thermal wrap may be used to protect cables from exposure to direct sunlight, if desired.
3. Cable end caps should be installed on all cable ends.
4. Both cable ends should be secured.

Equipment Options

Powered take-up and payoff with tension control	The preferred method for reel-to-reel transfer is to utilize an appropriately sized system with powered payoff and tension control. The tension control must be set to not exceed the maximum allowable pulling tension.
Hand-powered take-up with non-powered payoff and no tension control	If using this method: <ol style="list-style-type: none"> 1. Start the wind process slowly. 2. Maintain a consistent speed. 3. Avoid tension surges in the cable. 4. Stop the wind process slowly.
Powered take-up with non-powered payoff and no tension control	This option is not recommended for EnduraGain OSP cables. Extreme caution must be exercised to limit line surge which may induce electrical performance problems in the cable. If using this method, user assumes all risk for cable damage.