POWER CABLE

Hendrix® kerite®

Kerite Paper Insulated Lead Covered (PILC) Replacement Cable

Made to fit easily within the diameter of older ducts

kerite®

marmonutility.com

Are you Still Using PILC?

Most large North American urban centers still contain some form of paper insulated, lead covered (PILC) cables in their underground network power system. The introduction of these types of cables goes back to the early 1900s, making some of the first cables installed over 90 years old.

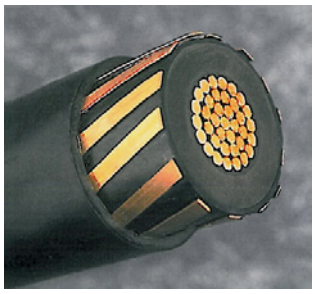
The EPA has been encouraging utilities to get PILC cable out of the ground as soon as possible. There are many problems to be dealt with when deciding to remove PILC type cables. Often the original ducts have shifted, or been crushed or misaligned, and the cable is jammed inside. The cable may have bends within the ducting, which will not easily straighten out when being pulled. Most often the PILC cable diameter is such that even with removal from the duct, many replacement cables are too large to be installed in the old duct. This is because most of the PILC cable is compact, three-conductor sectored cable where a three-conductor round cable, even of the same conductor size, is larger in diameter.

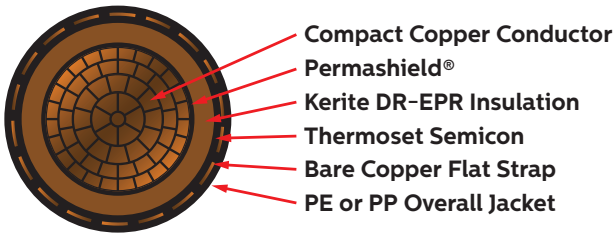
However, because of the high cost of duct replacement in urban areas, most utilities try to use an existing duct where it is in good condition after removal of the PILC cable. In order to get the maximum current carrying cable in the minimum diameter, custom cable designs are required.

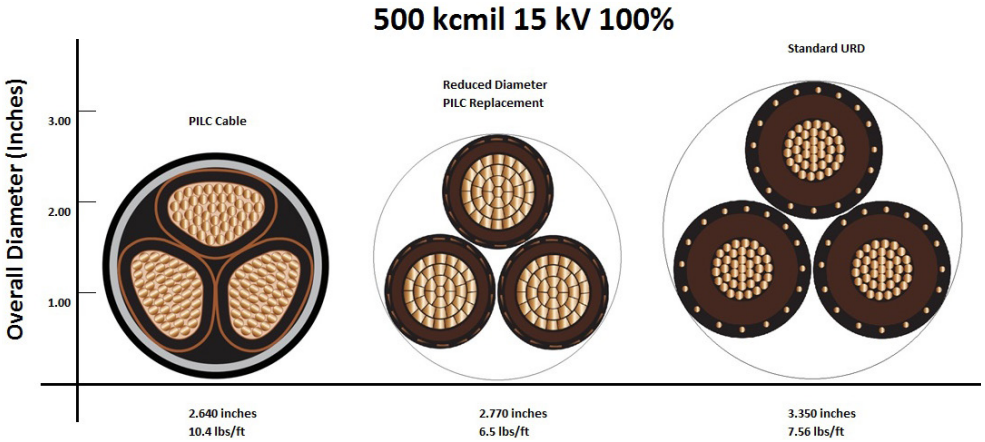
The Kerite Solution

PILC cables have performed well over the years but as these systems approach the end of their design life, Kerite offers an alternative that eliminates the concerns associated with lead cables, including oils used to impregnate the papers, the difficult labor intensive lead wipe process and related toxicity issues.

Because PILC cables represent some of the oldest cable installations and sectored conductor designs, they cannot always be replaced by today's standard designs. In order to get replacement cable in the existing ducts, it is frequently necessary that cable cross-sectional dimensions be reduced.







Like all Kerite cable, our PILC replacement product offers excellent reliability and a proven track record. It is specifically designed with reduced diameters in mind for compatibility with 3, 3-1/2, 4 and 5-inch duct systems installed in the early 1900s. Because of the enhancement that Kerite's Permashield stress control layer in conjunction with Kerite EP discharge resistant insulation provides to the overall dielectric performance of the cable, we are able to reduce insulation thickness and still maintain cable performance. This system introduced 60 years ago, has achieved the highest level of dependability and the lowest total cost of ownership in the industry.

Kerite cable terminates and splices faster than other solid dielectric cables due to our exclusive free-stripping insulation shield and will provide at least 50 percent additional cost savings compared to PILC lead wipe splices and terminations. Our cable is 30 percent lighter than equivalent PILC cable and 15 to 20 percent smaller diameter than other PILC cable replacement manufacturers allowing for longer and easier pulls.

Kerite Benefits

PILC Cables

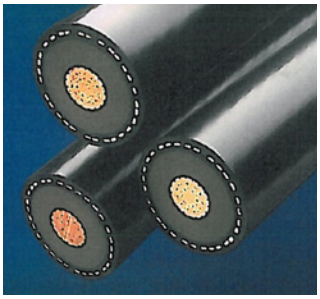
- Lead, oil used in manufacture
- Labor intensive
- Declining pool of experienced lead wipers
- Toxic material: lead wipe, lead pot
- Difficult Installation: heavy limit pulls
- Environmental Issues

Kerite Compact Power Cables

- No Lead, no oil
- Labor Savings
- Standard line person skills required
- No toxic materials: no lead sleeve required
- Ease of Installation: smallest cable diameter in the industry with 30% lighter per foot (longer, easier pulls)

Single conductor power cables allow for ease of splices and terminations which is why Kerite focuses on single conductor solution. In addition to Kerite's unique Permashield® and DR-EPR insulation system, our single conductor PILC replacement design consists of a compact strand that provides up to a ten percent reduction in conductor diameter over full round conductors, flat strap concentric neutrals providing a smaller profile and a polypropylene jacket for additional abrasion resistance.

Cables can also be paralleled or twisted on a single reel to aid the installation process.



Catalog Number Suffix = IHE00							
Voltage and Insulation System	Catalog Number Prefix	Size (kcmil)	Flat Straps (No.-AWG)	1/C		3-1/C	
				O.D. (inches)	Cable Weight (lbs/ft)	O.D. (inches)	Cable Weight (lbs/ft)
15kV 140 mil Insulation	135X15-	350	8 - #14	1.165	1.565	2.510	4.775
	150X15-	500	11 - #14	1.285	2.125	2.770	6.485
	175X15-	750	16 - #14	1.470	3.035	3.170	9.265
	190X15-	1000	22 - #14	1.625	3.950	3.500	12.060
25kV 210 mil Insulation	135X25-	350	8 - #14	1.310	1.710	2.825	5.220
	150X25-	500	11 - #14	1.425	2.285	3.070	6.975
	175X25-	750	16 - #14	1.615	3.210	3.480	9.800
	190X25-	1000	22 - #14	1.765	4.145	3.805	12.655
35kV 278 mil Insulation	135X35-	350	8 - #14	1.440	1.855	3.105	5.665
	150X35-	500	11 - #14	1.560	2.445	3.365	7.465
	175X35-	750	16 - #14	1.745	3.390	3.760	10.350
	190X35-	1000	22 - #14	1.895	4.340	4.085	13.250

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