

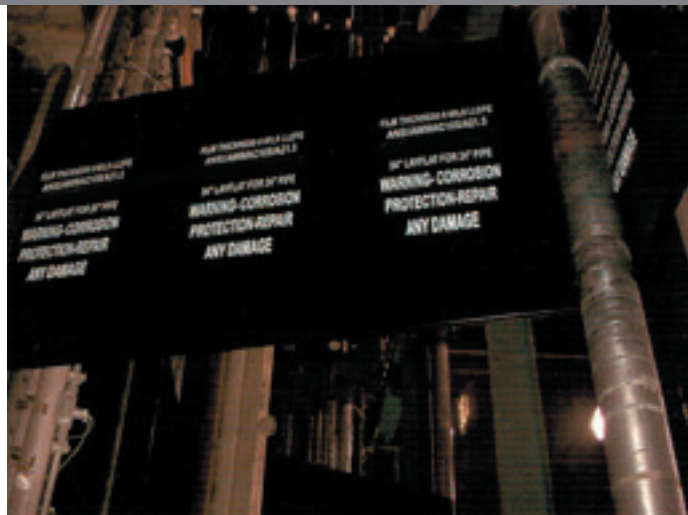
POLYETHYLENE ENCASEMENT PRODUCTS

# 8 Mil Linear Low Density Polyethylene

Polycase LLDPE encasement film is a carefully engineered linear low density virgin polyethylene resin film designed to meet the requirements of the ANSI/AWWA C105/A21.5 standard.

Carefully controlled molten resin is forced under high pressure through a die-head producing a bubble of polyethylene in a vertical column. The resulting tube is cooled and gathered onto spooling equipment at the top of the column.

Film strength characteristics are referred to as strength in the machine direction (direction of travel through the die-head), and the transverse direction (perpendicular to the machine direction). Minimum acceptable test values should consider both MD and TD.



## Specifications

Physical Attribute	Test Direction	ANSI/AWWA C105/A21.5 MINIMUM REQUIREMENT	SIGMA LLDPE TYPICAL TEST VALUES
TENSILE STRENGTH ASTM D882	MACHINE DIRECTION	3600psi	4635psi
	TRANSVERSE DIRECTION	3600psi	4216psi
ELONGATION ASTM D882	MACHINE DIRECTION	800%	948%
	TRANSVERSE DIRECTION	800%	1012%
DIELECTRIC STRENGTH ASTM D149 (VOLTS / MIL)	n/a	800 volts / mil	1786 volts / mil
IMPACT RESISTANCE ASTM D1709 (grams)	n/a	600 grams	928 grams
PROPAGATION TEAR RESISTANCE ASTM D1922 (gf)	MACHINE DIRECTION	2550 grams/force	4082 grams/force
	TRANSVERSE DIRECTION	2550 grams/force	6159 grams/force



Years of effort have gone into the establishment of the ANSI/AWWA C105/A21.5 American National Standard for polyethylene encasement for ductile-iron pipe systems. This quality polyethylene encasement film product that meets this minimum standard does not “just happen”. The required design parameters must be defined. Product engineers must determine what raw materials and processes are necessary to meet the design characteristics. We know, from our own experience and testing, that only quality, virgin, materials that meet the criteria of the standard; coupled with proper manufacturing processes, will yield the required finished film physical properties. We are proud to offer certification per Section 5.1 of the standard.

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## Quality Management

Polycase LLDPE encasement film is continuously monitored for thickness and tube size. Each roll contains control identification traceable to actual mill test reports, virgin resin tests, and applicable ASTM test data.

High speed printing plates provide printing as required by Sect. 4.3.1 of ANSI/AWWA C105.

### 8 mil Stock Tube Sizes

(BASED ON ANSI/AWWA C105/A21.5 Table 1 )

Item No.	DI PIPE SIZE	LAYFLAT TUBE SIZE
47-PPR16	4" - 6"	16" X 500 FT.
47-PPR20	8"	20" X 500 FT.
47-PPR24	10"	24" X 500 FT.
47-PPR27	12"	27" X 500 FT.
47-PPR30	14"	30" X 500 FT.
47-PPR34	16"	34" X 500 FT.
47-PPR37	18"	37" X 500 FT.
47-PPR41	20"	41" X 500 FT.
47-PPR54	24"	54" X 500 FT.
47-PPR67	30"	67" X 440 FT.
47-PPR81	36" & 42"	81" X 360 FT.
47-PPR95	48"	95" X 220 FT.
47-PPR108	54" & 60"	108" X 220 FT.
47-PPR121	64"	121" X 110 FT.

### Custom LLDPE Products

For product not shown in our standard ANSI/AWWA C105/A21.5 Stock tube sizes we can provide film designed to meet your most demanding requirements .

Specialty Polyethylene Products Specification/ Ordering Guidelines	
THICKNESS	10-12-15-20-24-30 Mils.
TUBE SIZE	Based on Manageable Weight
Colors	Options are available
Minimum Order Qty.	Based on Requirements
Lead Time	Approximately 6 Weeks

## Contact SIGMA For More Information or to Place an Order

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