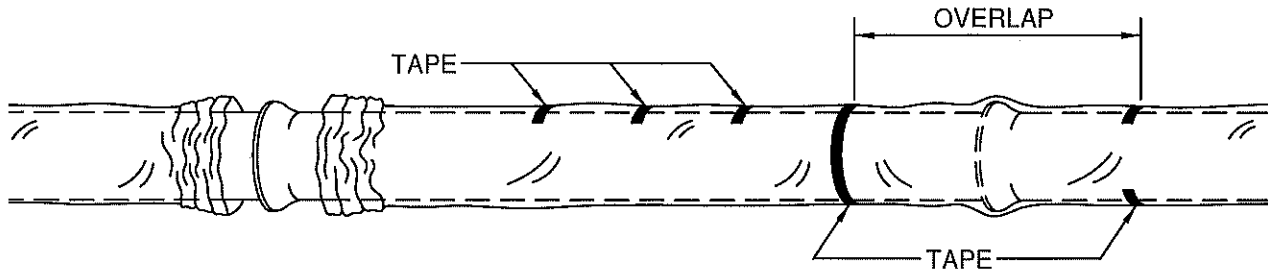


MATERIAL SPECIFICATIONS PER AWWA C-105
 LINEAR LOW-DENSITY POLYETHYLENE FILM
 WITH MIN. 8 MIL. THICKNESS, MADE FROM
 VIRGIN POLYETHYLENE ONLY.

TUBE SIZE REQUIRED												
PIPE DIAMETER	3"	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"	42"
MIN. FLAT TUBE WIDTH (INCHES)	14	14	16	20	24	27	34	41	54	67	81	81



THE FOLLOWING METHOD ILLUSTRATES THE PROCEDURE FOR APPLYING POLYETHYLENE:

CUT POLYETHYLENE TUBE TO A LENGTH APPROXIMATELY TWO FEET LONGER THAN THE LENGTH OF THE PIPE SECTION, SLIP THE TUBE AROUND THE PIPE, CENTERING IT TO PROVIDE A ONE-FOOT OVERLAP ON EACH ADJACENT PIPE SECTION, AND BUNCHING IT ACCORDION FASHION LENGTHWISE UNTIL IT CLEARS THE PIPE ENDS.

LOWER THE PIPE INTO THE TRENCH AND MAKE THE PIPE JOINT WITH THE PRECEDING SECTION OF PIPE. A SHALLOW BELL HOLE MUST BE MADE AT THE JOINTS TO FACILITATE INSTALLATION OF THE POLYETHYLENE TUBE.

AFTER ASSEMBLING THE PIPE JOINT, MAKE THE OVERLAP OF THE POLYETHYLENE TUBE, PULL THE BUNCHED POLYETHYLENE FROM THE PRECEDING LENGTH OF PIPE, SLIP IT OVER THE END OF THE NEW LENGTH OF PIPE AND SECURE IT IN PLACE. THEN SLIP THE END OF THE POLYETHYLENE FROM THE NEW PIPE SECTION OVER THE END OF THE PRECEDING LENGTH OF PIPE, SECURE THE OVERLAP IN PLACE, TAKE UP THE SLACK WIDTH TO MAKE IT SNUG, BUT NOT TOO TIGHT, FIT ALONG THIS BARREL OF PIPE, SECURING THE FOLD AT QUARTER POINTS.

REPAIR ANY RIPS, PUNCTURES, OR OTHER DAMAGE TO THE POLYETHYLENE WITH ADHESIVE TAPE OR WITH A SHORT LENGTH OF THE POLYETHYLENE TUBE CUT OPEN, WRAPPED AROUND THE PIPE, AND SECURED IN PLACE. PROCEED WITH INSTALLATION OF THE NEXT SECTION OF PIPE IN THE SAME MANNER.

PIPE-SHAPED APPURTENANCES

BENDS, REDUCERS, OFFSETS AND OTHER PIPE-SHAPED APPURTENANCES SHALL BE COVERED IN THE SAME MANNER AS THE PIPE.

JUNCTIONS BETWEEN WRAPPED AND UNWRAPPED PIPE

WHERE POLYETHYLENE WRAPPED PIPE JOINS A PIPE WHICH IS NOT WRAPPED, EXTEND THE POLYETHYLENE TUBE TO COVER THE UNWRAPPED PIPE A DISTANCE OF AT LEAST TWO FEET. SECURE THE END WITH CIRCUMFERENTIAL TURNS OF TAPE.

ODD SHAPED APPURTENANCES:

VALVES, TEES, CROSSES AND OTHER ODD-SHAPED PIECES WHICH CANNOT BE WRAPPED PRACTICALLY IN A TUBE SHALL BE WRAPPED WITH A FLAT SHEET OR SPLIT LENGTH OF POLYETHYLENE TUBE. THE SHEET SHALL BE PASSED UNDER THE APPURTENANCE AND BROUGHT UP AROUND THE BODY. SEAMS SHALL BE MADE BY BRINGING THE EDGES TOGETHER, FOLDING OVER TWICE, AND TAPPING DOWN. SLACK WIDTH AND OVERLAPS AT JOINTS SHALL BE HANDLED AS DESCRIBED ABOVE. TAPE POLYETHYLENE SECURELY IN PLACE AT VALVE STEM AND OTHER PENETRATIONS.

BACKFILL FOR POLYETHYLENE WRAPPED PIPE:

BACKFILL MATERIAL SHALL BE THE SAME AS SPECIFIED FOR PIPE WITHOUT POLYETHYLENE WRAPPING. SPECIAL CARE SHOULD BE TAKEN TO PREVENT DAMAGE TO THE POLYETHYLENE WRAPPING WHEN PLACING BACKFILL, BACKFILL MATERIAL SHOULD BE FREE OF CINDERS, REFUGE, BOULDERS, ROCKS, STONES OR OTHER MATERIAL THAT COULD DAMAGE POLYETHYLENE.

L-1003.Dwg Revision Date: 1/29/13

CITY OF COLUMBUS DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER	STANDARD DETAIL INSTALLATION OF POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE	
APPROVED: ADMINISTRATOR	1-26-13 DATE	