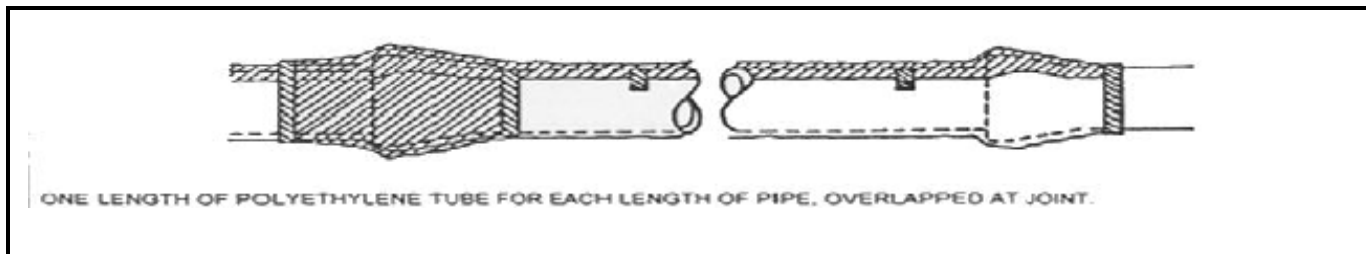


## **POLYETHYLENE ENCASEMENT FOR DUCTILE-IRON PIPE SYSTEMS**



**FIGURE 1, INSTALLATION METHOD A**

4.3.1 **INSTALLATION, GENERAL.** BURIED DUCTILE-IRON PIPE, FITTINGS, VALVES, AND OTHER APPURTENANCES SHALL BE INSTALLED WITH POLYETHYLENE ENCASEMENT PER ANSI/AWWA C105/A21.5-93 STANDARD. FOR INSTALLATIONS BELOW THE WATER TABLE, USE TUBE-FORM POLYETHYLENE WITH BOTH ENDS SEALED AS TIGHTLY AS POSSIBLE WITH ADHESIVE TAPE OR PLASTIC TIE STRAPS AT THE JOINT OVERLAP. PLACE CIRCUMFERENTIAL WRAPS OF TAPE OR PLASTIC TIE STRAPS AT 2-FOOT INTERVALS ALONG THE BARREL OF THE PIPE TO HELP MINIMIZE THE SPACE BETWEEN THE POLYETHYLENE AND THE PIPE.

4.3.2 **PIPE.** METHOD OF INSTALLATION OF POLYETHYLENE ENCASEMENT ON DUCTILE-IRON PIPE SHALL BE BY METHOD A.

4.3.2.1. **METHOD A.** (REFER TO FIGURE 1.) CUT THE POLYETHYLENE TUBE TO A LENGTH APPROXIMATELY 2-FOOT LONGER THAN THE PIPE SECTION. SLIP THE TUBE AROUND THE PIPE, CENTERING IT TO PROVIDE A 1-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 UP THE PIPE JOINT WITH THE PRECEDING SECTION OF PIPE. A SHALLOW BELL HOLE IS NECESSARY AND SHALL BE MADE AT 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 FIRST WRAP UNTIL IT OVERLAPS THE JOINT AT THE END OF THE PRECEDING LENGTH OF PIPE. SECURE THE OVERLAP IN PLACE. TAKE UP THE SLACK WIDTH AT THE TOP OF THE PIPE AS SHOWN IN FIGURE 1 TO MAKE A SNUG BUT NOT TIGHT FIT ALONG THE BARREL OF THE PIPE, SECURING THE FOLD AT QUARTER POINTS.

CUTS, TEARS, PUNCTURES, OR OTHER DAMAGE TO THE POLYETHYLENE SHALL BE REPAIRED AS DESCRIBED IN SECTION 4.3.5. PROCEED WITH THE INSTALLATION OF THE NEXT SECTION OF PIPE IN THE SAME MANNER.

4.3.5 **REPAIRS.** REPAIR CUTS, TEARS, PUNCTURES, OR DAMAGE TO POLYETHYLENE WITH ADHESIVE TAPE OR WITH A SHORT LENGTH OF POLYETHYLENE SHEET OR A TUBE CUT OPEN, WRAPPED AROUND THE PIPE TO COVER THE DAMAGED AREA, AND SECURED IN PLACE.