FOX CHAPEL AUTHORITY
POLYETHYLENE WRAP

POLYETHYLENE WRAP – SPECIFICATIONS

When called for, the pipe, fittings, valves and other appurtenances shall be wrapped with 4-mil thickness high density cross laminated polyethylene film, using the following recommended minimum flat tube widths for the specified pipe sizes. The polyethylene film shall be of virgin polyethylene and shall be blue in color and manufactured in accordance with A.W.W.A. C105.

Nominal Pipe Size	Flat Tube Width
4”	14”
6”	16”
8”	20”
10”	24”
12”	27”
14”	30”
16”	34”

The polyethylene tube seams and overlaps shall be wrapped and held in place by means of 2-inch wide plastic backed adhesive tape. The tape shall be Polyken Number 900 (polyethylene), Scotchrap Number 50 (polyvinyl) or equal. The tape shall be such that the adhesive shall bond securely to both metal surfaces and polyethylene film.

POLYETHYLENE WRAP – INSTALLATION

The polyethylene wrap, when called for, shall be installed in accordance with the following:

1. Pick up the pipe by a crane at the side of the trench using either a sling or pipe tongs, and raise the pipe about three feet off the ground. Slip a section of the polyethylene tube over the spigot end of the pipe and bunch up, accordion fashion, between the end of the pipe and the sling. The tube should be cut to a length approximately 2 feet longer than the length of the pipe.

2. Lower the pipe into the trench, seat the spigot end in the bell of the adjacent installed pipe and then lower the pipe to the trench bottom. A shallow bell hole shall be provided in the trench bottom to facilitate the wrapping of the joint.

3. Make up the pipe joint in the normal fashion.

4. Remove the sling from the center of the pipe and hook into the bell cavity and raise the bell end 3 or 4 inches to permit the tube of polyethylene film to be slipped along the full length of the barrel. Enough of the film should be left bunched up, accordion fashion, at each end of the pipe to overlap the adjoining pipe about 1 foot.

5. To make the overlap joint, pull the film over the bell of the pipe, fold around the adjacent spigot and wrap with about three circumferential turns of the 2-inch wide plastic adhesive tape to seal the tube of film to the pipe.

   The tube on the adjacent pipe shall then be pulled over the first wrap on the pipe bell and sealed in place behind the bell using about three circumferential turns of the 2 inch plastic adhesive tape.

6. The resulting wrap on the barrel of the pipe will be loose, and it should be pulled snugly around the barrel of the pipe and the excess material folded over at the top and the fold held in place by means of 6-inch strips of the 2-inch wide plastic adhesive tape at intervals of about 3 feet along the pipe barrel.

7. Fittings, valves, hydrants, etc., shall be hand wrapped, using polyethylene film that is held in place with the plastic adhesive tape.

8. Bends, reducers and offsets can be wrapped with the polyethylene tube in the same manner as pipe.

9. Valves can be wrapped by bringing the tube wrap on the adjacent pipe over the bells or flanges of the valve and sealing with the adhesive tape. The valve bodies are then wrapped with a flat sheet of the film passed under the valve bottom and brought up around the body to the stem and fastened in place with the adhesive tape.

10. Hydrants can be wrapped with polyethylene tube slipped over the hydrant to encase the hydrant from the lead-in valve to the ground level of the hydrant. To provide drainage of the hydrant, it is necessary to cut a small hole in the film and insert short brass pipe nipples to drain the water to the soil outside the film wrap.

11. All fittings that require concrete backing should be completely wrapped prior to pouring the concrete backing block.