

Our house: e-Pipes



- We have made our home in the Westbury subdivision of Houston since 1977. Built in 1957, our house is a mid-20th Century ranch. At less than 1300 square feet, it is small by today's standards—three bedrooms, 2 baths—with 18 connections to the water supply pipes. In Houston with our clay soils and low water tables, there are no basements and our galvanized pipes run through the attic.

- We had no leaks (at least none we knew of) but we had a bad rust problem. We were using lots of CLR in an effort to keep tile and bathroom fixtures clean.
- There was reduced pressure.
- We were starting to worry about leaks.
- Time to consider the expensive replacement of water pipes.

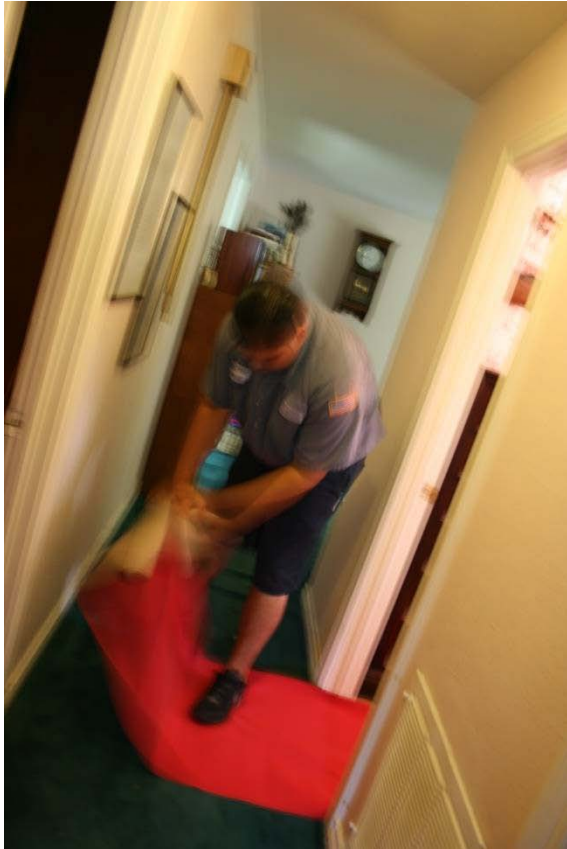


It's easy to see the rust problem in this photo.

This photo was taken at the end of the second day. It shows an old rusted valve that has been removed and tossed on the ground. The inlet pipe fitting was used to attach the hoses. The new DuraFlo liner (white) is also visible.

- Several years ago we remodeled the kitchen and I had just redecorated the hall bathroom. We hated the idea of tearing holes in the dry wall and having to repaint and repaper.
- Upon our regular plumber's recommendation, we investigated ACE DURAFLO, "the repiping alternative."
- Having assured ourselves that the process was feasible and no more expensive, we chose TDT Plumbing & Drains for the job.

July 6-8, 9, 2009



**Travis,
Martin,
and
George
put
down
mats to
keep the
floors
clean.**

**Our garage is filled with
equipment .**



Travis prepares the hot water heater pipes, the entrance and exit points for the process.



Three manifolds are laid down in the kitchen and both baths.



The water is turned off...

- We had prepared to make dry camp in the house.
- We did the water-saving portion of a hurricane prep.
- Drinking water: bottled water in the fridge, 5 quart-sized pitchers filled and covered on the counter, kettle and 2 largest pots filled on the stove top.
- Igloo dispenser on the counter for washing.
- Both bath tubs stocked with lots and lots and lots of water and buckets for flushing.
- A couple of other large containers of water outside for my potted plants. We're in the midst of a drought.
- Bottles of hand sanitizer everywhere.
- One last hot shower & shampoo to last awhile.

The header



Manifold connections



Watch your step



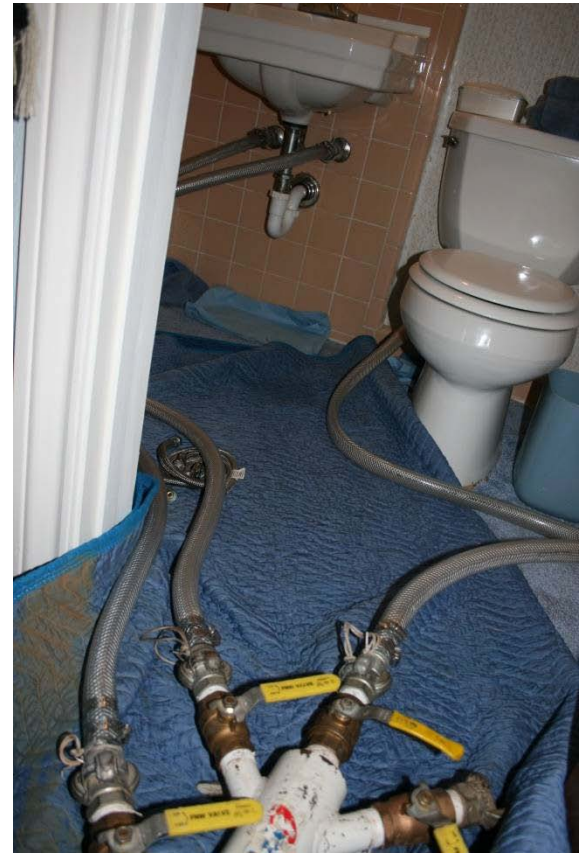
Inlet to house



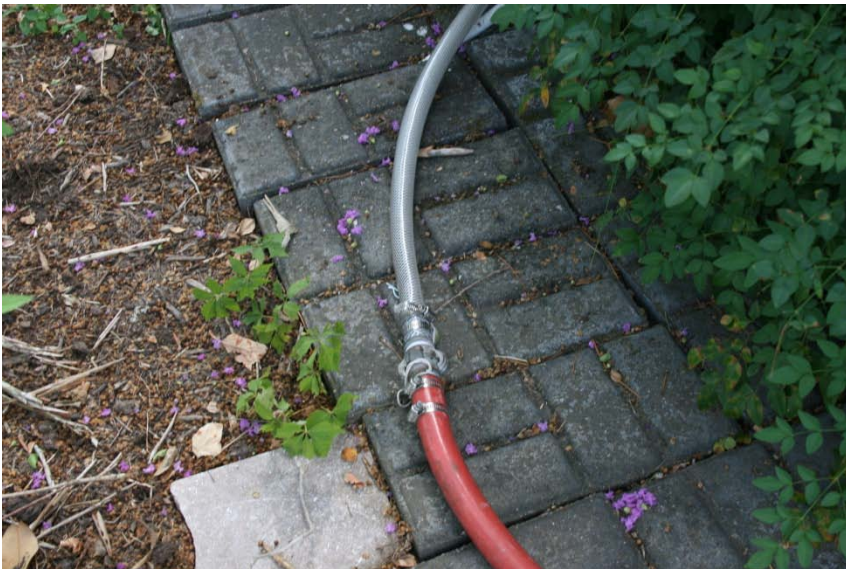
Trouble spot: main pipe slipped and hole had to be cut into the dry wall to find it and strap it to a stud. Small hole; back corner of a closet. No big deal. Venny came back out on Friday morning and fixed it.



Hooked up.



More connections:



Drain the pipes. Blower to dry it all out. Add the grit to remove the rust and open the pipes. Remove the grit.

George monitoring the grit.



Disconnect the manifold in the master bath and put it back in the garage. Coil the hoses from the master bedroom and bath and stow them in the hall closet. We have use of “the facilities” for the evening.

Nice workers and at the end of Day 1, it’s going as well as we had hoped.

Pumping the epoxy: both art and science.

**Martin and the generator
compressor that lived on our
driveway.**



**Second day: Chris subs for Martin,
monitoring the manifold in the hall
bath .**



After the epoxy is pumped

The crew pumps air through the system to set the epoxy. Once it gets tacky they add a heater and pump warm air to speed up the drying.

Then all the equipment is disconnected and the system is left open to dry overnight.

It's the end of day 2, David and I are starting to tire of the dry camp and need a shower but overall it's going very well.

The dried epoxy is like white plastic.



Pressure Check



Reconnect



Turn on the water...

No more bending to turn on the water for the lawn

Shiny new connections everywhere



Was it worth it? YES!

- Cost: \$6,800
- 3 days + ½ day for dry wall repair and water filter reconnect
- Increased water pressure
- No more rust
- Hot water is hotter
- Reduced noise
- Even unfiltered, the water tastes better.
- The crew was respectful of us and of our stuff. Great guys who answered all my questions.
- Great job, TDT.