Always block plugs when conducting air tests!

How to calculate pipeline forces and pressures:
1) Determine the inside diameter of the pipeline in inches.
2) Determine the maximum backpressure.
3) Calculate the pipe area in square inches.
4) Calculate the force the plug must withstand.

Example with 36” pipe: 18” x 18” x 3.14 x 5 psi = 5087 POUNDS OF FORCE!

Calculating pounds of force aid in building plug blocking systems. It also illustrates the tremendous force generated by a sewer air test.

Special Note:
Pressures being exerted on a plug, regardless of the medium (liquid, water or air) are the same. Ten (10) PSI water is the same as ten (10) PSI air. However, AIR IS A COMPRESSIBLE MEDIA. Therefore extreme caution should be observed when air testing.

Air back-pressure ratings reflect absolute back-pressure capabilities. Common engineering standards have been used to convert head pressure to PSI. IT IS IMPERATIVE TO BLOCK PIPE PLUGS when performing air-pressure tests and to ensure no one is in the zone of danger when a plug is in use. (Please see our Safety and Instruction Manual for complete details.)

Stand clear of the danger zone!

General Safety & Usage Instructions:
1. Death, bodily injury and/or property damage may result if plug fails for any reason.
2. Read and understand safety instruction sheet before using plug.
3. Must wear safety glasses and a hard hat.
4. Do not enter danger zone when plug is in use.
5. Measure pipe diameter before selecting plug.
6. Inspect plug for damage before and after use.
7. Never use a plug in a pipe size different from recommended usage range.
8. Always attach an inflation extension hose so plug can be inflated and deflated from outside the danger zone.
9. Never remove the inflation hose until all backpressure is released and the plug is deflated.
10. Must inflate plug to the pressure shown on plug.
11. Always use properly calibrated pressure gauges.
12. Do not exceed recommended maximum allowable backpressure (refer to this safety instruction sheet).
13. Always release backpressure from the pipe first, before deflating plug.