



International Society of Fire Service Instructors "THE PROP SHOP"



Prop Shop:
2004-04

Confined Space Simulator
Georgia Fire Academy – Forsyth, GA

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CONFINED SPACE SIMULATOR (CSS)

This above ground simulator allows your department to conduct confined space rescue training in a totally controlled environment. This particular simulator is setup with horizontal and vertical entry points.

CONSTRUCTION

This simulator is constructed using four twenty-foot lengths of corrugated galvanized pipe that are twenty-four inches in diameter. The pipes are running between four pre-cast manholes that are set on top of level ground. To eliminate any drainage problems a drain can be placed inside each manhole and a concrete floor can be poured over the drainpipe.

Confined Space Simulator

- Pre-cast manholes
- Upright silo
- 20' Sections of corrugated galvanized pipe
- Simulated tank

Supplies Needed

- (4) 4" x 4" x 12' timbers
- 2" x 6" decking for 10' x 10' observation / working platform
- (4) 20' sections of 24" diameter corrugated galvanized pipe
- (4) Pre-cast manholes
- (1) 5' x 1/2" section of rope – used for safety railing around observation/operating deck

Photo By: Timothy E. Sendelbach

The pipes are set-in the manholes using concrete to fill around the pipes. Openings still allowing light to penetrate inside the simulator can be filled using spray-in expanding foam insulation. A simulated tank is fashioned using a silo laid on its side tied into one of the manholes. This allows for a variety of realistic scenarios.



A deck has been built over one of the manholes to allow for an elevated vertical entry point. Consideration should be given to construction a second deck with an offset hole and converging walls to provide a higher degree of difficulty for more advanced members.

Anyone interested in constructing such a prop should consider seeking donations from local industries, and/or utility companies. In return for the donation of materials, the department may consider providing annual refresher training in confined space operations.

With just a few donations and a little hard work your department can have an excellent confined space-training simulator at little to no cost.

This simulator is just one of the technical rescue props locate at the Georgia State Fire Academy.

FOR MORE INFORMATION

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