

## Method of Attachment

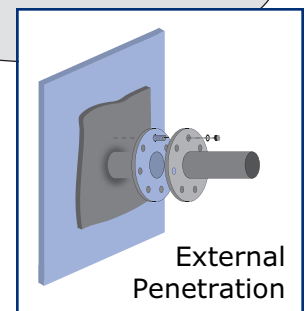
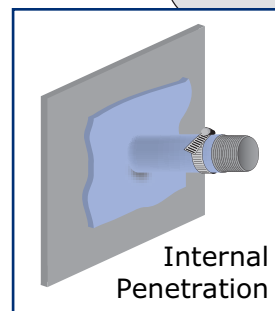
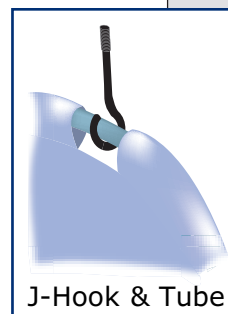
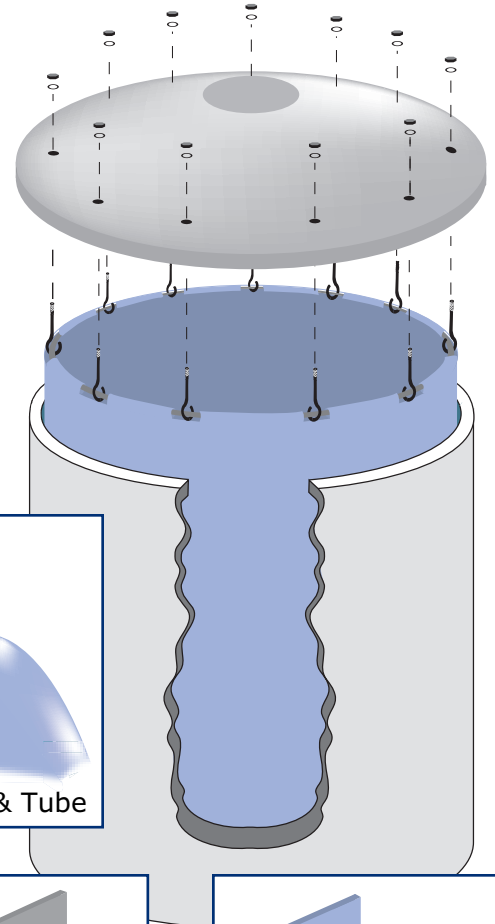
## | Sleeve & Tube

For an above-ground tank with a roof (typically constructed of steel or wood), the Flexi-Liner™ Sleeve and Tube Attachment System is a cost-effective and trouble-free solution.

The Flexi-Liner™ Sleeve and Tube Attachment System utilizes simple but effective mechanical means to ensure long-lasting liner performance. The Sleeve and Tube Attachment System provides the following benefits:

- Rapidly deployed or dismantled (minimizes down time)
- No bonding required (no adhesives or chemicals)
- Simple and cost-effective design
- Durable

*Flexi-Liner™ was awarded U.S. patent Nos. 3,068,561 and 3,167,209 for this method*



## Installation Process

The Flexi-Liner™ is rolled to fit through the man-way. Holes are drilled 3' apart on perimeter of tank roof. If necessary, geotextile padding is laid out.

Tubing is inserted in a sleeve that runs horizontally on the top of the liner. J-hooks are connected to the tube. The liner is raised to the roof using wires attached to the J-hooks that are secured to roof using stainless steel washers and nuts.

Connections (inlets, outlets, overflows, manhole) are attached using a hot air welder. Internal penetrations are lined with a sleeve that wraps around the pipe and is sealed with a stainless steel hose clamp. For external penetrations, the liner goes through the inside of the pipe and terminates at the flange face (see illustrations).

All nozzles are plant welded and attached to the liner using hot air field welds. Field welds are lap-welded, with minimum of 3" overlap and made using a portable hot air fusion-welding device. All field welds will be vacuum tested. Upon completion of installation, the membrane will be ready for water testing.

**New Life for Old Tanks, Long Life for New Tanks**