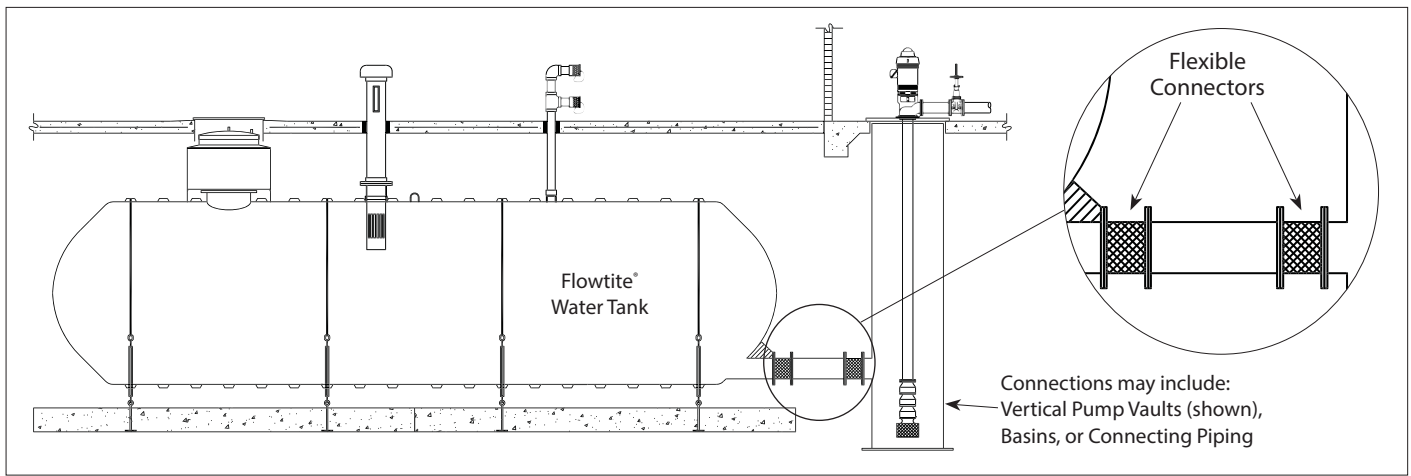


Containment Solutions, Inc., (CSI), requires the use of flexible connectors on all piping connections, within an underground tank system, that do not extend directly from the tank top to grade elevation or above. Flanged nozzles, piping and fittings that extend tangentially from any surface on an underground fiberglass tank must allow for differential movement between the tank and connection.

Provisions must be made to accommodate movement and misalignment between the piping and the tank. For this reason all connections to the tank must be flexible. Failure to utilize flexible connectors could damage the tank and/or surrounding property as well as void the tank warranty.

Flexible connectors are required on all tangentially mounted fittings. The flexible connector must allow for at least ½" of movement whether differential, angular, expansion or compression.



Connectors must be attached directly to each tank fitting, nozzle or pipe. Fiberglass flanged nozzles are manufactured per ASME B16.5 bolt hole, circle, and diameter specifications. Refer to table 1 for proper torque of a given flange diameter.

CSI does not offer flexible connectors. The tank Owner or Owners' representative is responsible for purchasing appropriate flexible connectors and properly installing the connectors in accordance with the product manufacturer's installation instructions.

Connectors must be designed for the required burial depth, based on fitting or connecting pipe to the underground tank.

All connectors and gaskets must be compatible with the product stored in the tank.

Table 1

Bolt Torque for Fiberglass Flange (per ASME RTP-1)	
Flange Dia.	ft/lb
2" to 12"	25
14" to 16"	30
18" to 24"	35
24"	40

Partial list of manufacturers with Flexible Connectors for Underground Application:

Company	Phone	Product Name	Model	Sizes
Morrill Industries	(209) 838-2550 Eddie Morrill	Expansion Joint Buried Service with Shorud	EJ-BSS-XX-G Where XX is size	4" to 24"
EBA Iron Sales, Inc.	(800) 433-1716	Flextend - Flexible Expansion Joint		3" to 48"
Proco Products, Inc.	(800) 344-3246 Ask for Project Sales Department	Proco Expansion Joint	Style 234UG Rubber Expansion Joint	4" to 24"