



Safety First

The FGI believes it is important to always put safety first. We'll be sharing tips often to ensure safety both off and on the job site.



CARBON MONOXIDE POISONING

Carbon monoxide is an odorless, colorless gas that often goes undetected, striking victims caught off guard or in their sleep. More than 400 people in the U.S. die from unintentional carbon monoxide poisoning every year, according to the Centers for Disease Control and Prevention. More than 20,000 visit the emergency room, and more than 4,000 others are hospitalized.

This "invisible killer" is produced by burning fuel in cars or trucks, small engines, stoves, lanterns, grills, fireplaces, gas ranges, portable generators or furnaces. When the gas builds up in enclosed spaces, people or animals who breathe it can be poisoned. Ventilation does not guarantee safety.

Symptoms of Carbon Monoxide Poisoning:

Headache - Fatigue - Shortness of breath - Nausea - Vomiting -
Loss of muscular coordination - Loss of consciousness - Death

Carbon Monoxide Safety Tips:

- Make sure you have a working carbon monoxide (CO) alarm installed on every level of your home, especially around sleeping areas.
- Test alarms every month and replace them according to the manufacturer's instructions.
- It is important to have both CO alarms and smoke detectors in your home. Combination CO and smoke alarms are available, but if you have separate ones, make sure you know the sound of each alarm.

[Download Tailgate Safety Flyers Here](#)



FGI Sets 2020 Webinar Calendar

The FGI is planning to offer a webinar each month throughout 2020. The webinars are free and each attendee will receive 1.0 PDH. All webinars, slides, and reference materials are posted on the FGI's [website](#). The FGI also offers a free online PDH Program that provides 1.0 PDH credit for each webinar viewed in its entirety online. Each webinar is approximately one hour in length. Upcoming webinars include:

February 27 at 4 p.m. CST - Floating Cover Systems by Graham Fairhead - [Register](#)

March 24 at Noon CDT - Storm Water Management Using Geosynthetics by Terry Sheridan - [Register](#)

April 16 at 11 a.m. CDT - Leak Location Surveys by Matthew Kemnitz - [Register](#)

May 19 at Noon CDT - Post Closure Care of Landfills by Jeremy Morris - [Register](#)

June 16 at 11 a.m. CDT - Testing & Design of Drainage Geocomposites by Eric Blond - [Register](#)

FGI Introduces New Membership Category:

The FGI has created a new membership category for government and regulatory agencies. There is no membership fee for this classification. FGI membership benefits include:

- Receive technical information
- Connect with industry professionals
- Participate in FGI-sponsored webinars, short courses, podcasts, and workshops
- Receive assistance in publishing case histories and other information
- Agency and logo listing on FGI website

**Download Membership
Application**

Geomembrane Panel Weight Calculator - December, 2019

By: Timothy D. Stark, Ph.D., P.E., D.Eng., F.ASCE
Fabricated Geomembrane Institute at
University of Illinois at Urbana-Champaign



The shape of the ponds is a right frustum, which leads to the total volume calculation of: $Volume = \frac{1}{3} * (L^2 + W^2 + L * W) * (Height)$
The contact area between the liquid and pond bottom, i.e., top of geomembrane or geomembrane compacted soil liner, consists of the area at the base of the pond and on the four sides.

FGI Creates Panel Weight Calculator

The FGI Panel Weight Calculator is a spreadsheet that calculates the surface area of a containment basin and then the number of factory fabricated geomembrane

panels that are required to cover or line the bottom of the basin. Afterwards, the spreadsheet calculates the weight of each panel based on the type of geomembrane selected, which can be varied. Using the number of panels required, the number of truck loads and days for field installation are calculated based on user selected allowable shipping weight/truck and number of panels that can be installed/day. The Calculator allows the user to input and vary the size of the containment basin, including length, width, depth, side slope angle, and freeboard. Using this data, the spreadsheet calculates the volume of the basin in gallons or liters and the surface area required to be covered or lined.

This tool is designed to help consultants, engineers, architects, and end users estimate material, factory fabrication, shipping, and field installation time and costs to optimize the basin size. The FGI has additional research and publications to help with these and other aspects of successful containment applications.

**Panel Weight
Calculator**

FGI Creates Podcast Series

Join Tim Stark (Professor of Civil Engineering and Technical Director of the FGI) and Jen Miller (Coordinator of the FGI) as they discuss emerging geosynthetics industry trends and news. Podcasts are available for download from the FGI Website or various online streaming services, such as Spotify, Breaker, Anchor FM. If you have a podcast topic or question for Tim and Jen, please email: fabricatedgeomembrane@gmail.com. Happy Listening!!



- Episode 1: History of FGI
- Episode 2: Factory Fabrication
- Episode 3: FGI at Geosynthetics 2020 Conference
- Episode 4: Geomembranes 101 (coming soon...)

**Download
Podcasts**

FGI's Website - #1 Resource for Fabricated Geomembranes

- Installation Details & Drawings
- Pond Leakage Calculator
- Online PDH Credit Program
- Webinar Library
- Member Directory
- ASTM Factory & Field Testing Videos
- Latest Specifications & Guidelines
- Material and Equipment Guides
- Technical Papers & Journal Articles
- Industry News and Events
- Photo and Video Gallery



[Visit FGI Website](#)

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