

MicroDrain®

THE INDUSTRY-LEADING
POND CONTAINMENT AND
DRAINAGE SOLUTION



The Plastics Experts.

Ponds are an essential component of many industries. Choosing the right liner means reliable operations for decades and helps avoid frequent interruptions due to maintenance and repairs. MicroDrain is AGRU's solution that combines containment and leak detection into one product. This brochure provides a general overview of the product and applications.

The AGRU success story has been unfolding for seven decades. Founded in 1948 by Alois Gruber, who set the company on the course for plastic manufacturing, AGRU has become one of the world's most important single-source suppliers for piping systems, semi-finished products, concrete protective liners, and lining systems made from engineered plastics. AGRU uses only the finest-grade thermoplastic polymers as raw materials. AGRU is your best choice for application and technical consulting.



Quality

The AGRU quality assurance system complies with multiple international standards, and AGRU's procedures help ensure that products meet or exceed these international standards on an ongoing basis. The start-to-finish attention to quality ensures that the products meet and exceed the strictest technical specifications, providing safe operation even in the most challenging conditions.

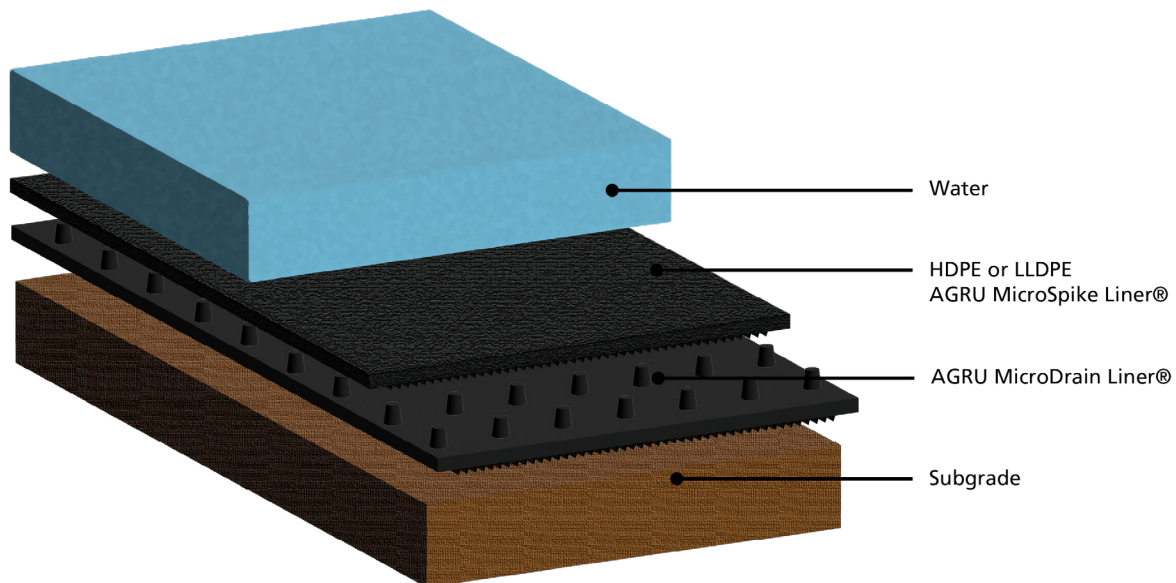
MicroDrain[®]

AGRU America's MicroDrain can be manufactured with either high-density polyethylene (HDPE) or linear low-density polyethylene (LLDPE). MicroDrain is best suited for single- or double-lined projects such as waste ponds, lagoons, and basins where containment and leak detection are crucial. MicroDrain eliminates the need for a separate geonet drainage layer, providing cost savings and improving performance.

MicroDrain features a consistent drainage stud pattern and spacing, which gives excellent flow rates and reliable drain capacity. The stud pattern also reduces the potential for chemical and biological clogging. MicroDrain also features an integrated bottom-facing MicroSpike surface with asperity heights above 20 mils.

MicroDrain Benefits

- Reduced installation time and cost by eliminating the need for a separate geonet drainage layer.
- Manufactured using a flat-die cast extrusion process for consistent stud pattern and spacing.
- High flow rates and reliable drain capacity compared with conventional geonet.
- Eliminates the risk of puncture from geonet to geomembranes.
- Leak detection drain studs provide an excellent walking surface compared with a traditional geonet.
- MicroDrain meets or exceeds GRI GM 13 for HDPE and GRI GM 17 for LLDPE.
- Increased shear strength compared with geomembrane and geonet.





Applications



Double-Lined Solution Ponds



Containment Ponds



Processed Water Ponds



Wastewater Lagoons



Leachate Ponds



Brine Evaporation Ponds

Product Integrations

MicroDrain works well with the following AGRU products.

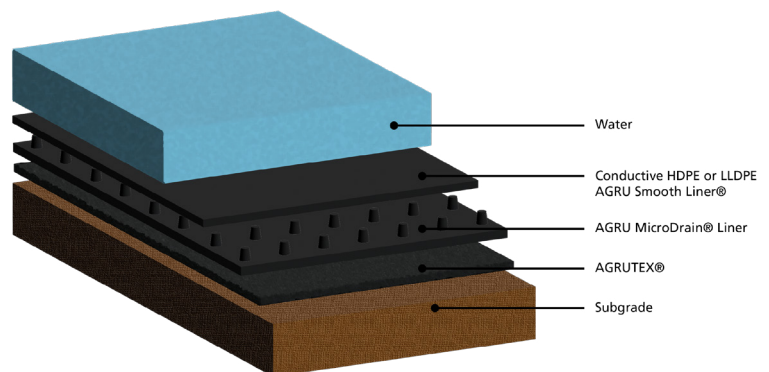
AGRU Conductive Liner

AGRU Conductive Liner supports construction quality assurance testing by facilitating the identification of holes, punctures, and other breaches over an installed geomembrane area using the test method ASTM D7240.

Conductive Liner Summary

- Improves construction quality control with spark testing per ASTM D7240
- Helps identify holes, punctures, and other breaches.

For complete details about AGRU Conductive Liner, visit:
<https://agruamerica.com/products/agru-conductive-liners/>.



*Pond application example shown above

AGRU Integrated Drainage System (IDS) | Gas Venting Control

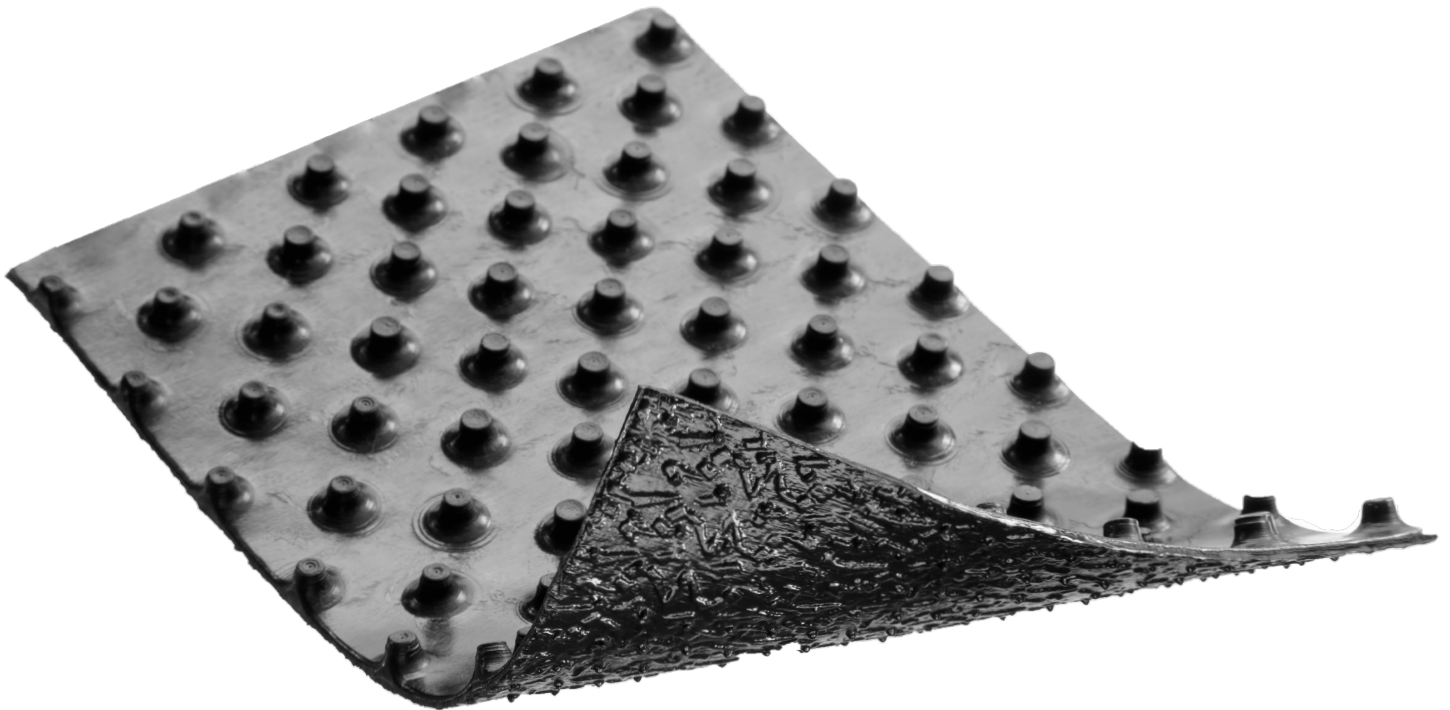
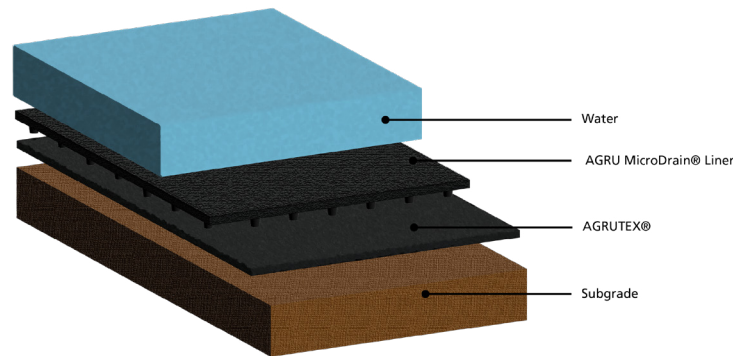
AGRU IDS offers reliable long-term venting and drainage performance, eliminates the need for a separate geonet component, and supports reduced installation time and cost.

IDS Summary

- Incorporates drainage and environmental containment performance into a single layer.
- Reduced need for separate drainage material layers, representing substantial cost savings and avoiding material delay associated with geocomposites.

For more details about AGRU IDS, visit:

<https://agruamerica.com/products/integrated-drainage-system/>.





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Illustrations are generic and for reference only.

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Revision Date: July 28, 2023

