The Sandwich Plate System® (SPS) Flood Panels designed by Flood Panel, LLC integrate the existing concept of a modular flood barrier system with the proven success of SPS technology. SPS technology was developed by Intelligent Engineering (IE) using BASF polyurethane for a wide range of applications in the marine, offshore, civil and military industries. IE has developed design procedures for SPS products based on sandwich plate theory and mechanics of materials and these have been verified through extensive testing.

SPS is a composite material comprising two metal plates bonded to polyurethane (PU) elastomer core. Metal plates can be steel, stainless steel, aluminum or any other metal.

Typical modular flood barrier systems must have the following elements: panels which can be manually stacked, supporting structure to restrain the panels, clamping and locking mechanisms, and seals. Together these components must prevent water penetration into buildings and must be sufficiently robust to resist impacts from floating debris.

SPS Flood Panels are made from extruded aluminum alloy filled with PU elastomer to form thin, lightweight, impact-resistant panels. The extruded panels are shaped to provide interlocking shear capacity between panels and include fitted openings for custom-designed gaskets. The geometry of the extrusion is designed with consideration for the anticipated flood loading and support conditions, and the panel thickness was minimized to reduce the storage volume required when panels are not in use.

For more information, visit Flood Panel, LLC at www.floodpanel.com