

PROBLEM STATEMENT

- Small modular reactors, microreactors, and mobile/naval reactor platforms — including shipyards — demand shielding that is lightweight, compact, and field-transportable.
- Legacy lead-based shielding is heavy, toxic, and generates hazardous mixed waste — incompatible with mobile, rapidly-deployed, space-constrained SMR designs.
- No product on the market today is purpose-engineered for the unconventional geometries and portability the next generation of small reactors requires.

TECHNOLOGY SOLUTION

Silflex® is a flexible, silicone-based shielding system with proprietary tungsten, bismuth, iron, and neutron materials, manufactured entirely in the USA in custom shapes, pipe wraps, sheets, magnetics, and personal protection.

ACT is the company developing next-generation shielding materials for the SMR industry.

Our engineers and materials are already qualified and passing inspection with some of the top energy companies, national nuclear energy laboratories, and naval shipyards in the United States — the emerging standard of choice as SMR and mobile reactor programs move toward production.

BENEFITS

- Up to 50% lighter than lead for equivalent attenuation — critical for mobile, weight-constrained SMR platforms
- 100% non-toxic, non-hazardous — zero mixed-waste liability or disposal cost
- Custom-molded to any geometry — conforms to tight, unconventional SMR/microreactor designs
- Magnetized options apply instantly with no secondary attachment — faster field install, lower dose
- Withstands 250°C+, resists boric acid/sodium hydroxide — no directly competing product on the market

GRAPHIC

