



MarShield was approached by the architectural firm of Lord Aeck & Sargent to help design and build a customized radiation cabinet for the University of Michigan. The cabinet needed to be built to unique specifications in line with the university's Cyclotron Project room.

More than that, before the cabinet could be built, the architectural firm required design input from a proven radiation-protection specialist. It quickly became clear that a non-standard lead-lined cabinet would solve the issues.

The cabinet would need to be set flush against a wall and accessible from an adjacent room as well. Our team of skilled technicians quickly analyzed the situation and found there were many other unusual problems due to the cabinet's distinctive design requirements.



An uneven floor was one dilemma; another was the arrangement of the existing pneumatic piping, which had to become integral to the cabinet. Swing doors with lead glass would be needed to form the top section of the cabinet – and these doors would actually open up into the adjacent room as well, allowing operators on either side of the cabinet to have access. Other considerations included interior lighting, stainless steel countertops, convenient receptacle outlets and dual side-access doors.

Another challenge was the additional piping, which transported radioactive materials through the room, and which lay in close proximity to the cabinet. Part of the project, therefore, included specially made lead-lined conduits to wrap around these pipes to create a complete circle of protection from any radiation source.

The MarShield design solution answered every challenge, beyond the expectations of our client.

Then, there was the short time frame for manufacture and delivery. Special care and attention was mandatory to transport the cabinet. Our shipping department manufactured a custom palletized crate to both protect the unit and to make it easier to unload and place the cabinet in its exact location.

Upon completion of the project, our client was not only impressed, but also extremely grateful for our expertise in being able to meet such stringent prerequisites. As Suzann Turner, architect/project manager for Lord Aeck & Sargent Architecture expressed, *"They could handle what we needed. Their responsiveness was just outstanding. MarShield a firm that has what it takes to succeed in business."*

Our ability to meet almost any need our customers may have – no matter how complicated the design – is the MarShield hallmark of creativity and craftsmanship.