

# Improving safety through glow-in-the-dark coatings



## The Problem/Need

Brey & Krause Manufacturing Company produces bathroom fixtures and safety railings for industrial applications. After a power loss prevented a building's occupants from finding exit routes and emergency aids, the firm saw an opportunity to improve their products by adding a glow-in-the-dark coating. Brey-Krause requested MRC's assistance in finding a material that could be added to 3-D surfaces and provide luminescence to their products.



## Project Outcomes

- Evaluated 28 potential solutions within seven different types of coating technologies: powder, dip, paint, fluid, plasma, and vacuum coatings.
- Determined powder coatings were best suited to client needs without requiring new equipment investments.
- Evaluated and profiled four powder coating suppliers whose products met the regulated luminescence criteria, were environmentally friendly, and certified.

## Key Requirements

- Comparable to a triglycidyl isocyanurate (TGIC) polyester powder.
- Must be compatible with current building codes, OSHA, and luminescence standards.
- Clear or pigmented white color.
- Available for purchase commercially or be within three months of commercialization.
- Should be compatible with Brey-Krause's existing manufacturing processes.



## Project Impact

- As a result of the project, Brey-Krause:
- Gained four new and vetted technology and supplier options, from which they have begun sample testing.
  - Began focusing on lean product development activities to ensure that they can successfully bring this new product to market.
  - Has a variety of new applications and new market opportunities that could lead to millions of dollars in revenue.

*"Technology scouting quickly provided us options that did not require additional capital investment from our company at this time. We are pleased with how efficient the process was. We can now move forward with our new product line."*  
– Vykie Whipple, CFO, Brey & Krause Manufacturing Company