BUILDING A CIRCULATORY SYSTEM

BENEFITS OF DATA FOR SAFETY

FLEET MANAGEMENT OFFERS ELD SOLUTIONS

MOISTURE REMEDIATION IN CONCRETE FLOORS

BLENDING CPM AND LEAN SCHEDULING
A CH Foam Technologies announces Foam-Control® PLUS+’s water absorption max volume results of 0.3 percent in laboratory testing proves that molded polystyrene insulation resists moisture absorption as well or better than other rigid foam insulations on the market. Even more important is molded polystyrene’s ability to quickly dry after wetting conditions, which results in R-value retention over the life of the building. This is real-world performance. Foam-Control PLUS+ performs better, is less expensive than extruded foam insulations, is backed by ACH Foam Technologies’ 50-year R-value warranty, and is available in wide range of thicknesses including very thick panel sizes. Foam-Control PLUS+ is used in many applications: perimeter, under slab, plaza decks, green roofs, commercial roofs, cavity wall, and EIFS. Exposure to moisture could occur in any of these applications.

WET AND DRY
“All rigid foam insulations absorb water in wet conditions,” says Frank Kiesecker, vice president of sales and marketing at ACH Foam Technologies. “Science; however, proves in everyday use, and now in laboratory testing that molded polystyrene dries faster and retains R-values better than XPS.”

“Previous testing methodologies didn’t account for a wetting period followed by a drying period, which is the reality,” shares Todd Bergstrom, Ph.D., of ATZ Laboratories. Bergstrom’s C272 testing methodologies include air drying wet samples at 72 degrees F and 50 percent relative humidity for 24 hours before measuring water by volume. Foam-Control PLUS+ water absorption max volume results of 0.3 percent on the drying-period test is identical to XPS’ results.

This testing method is indicative of what happens when buildings and infrastructure are subject to normal wet and dry weather conditions. Foam-Control PLUS+ molded polystyrene is face labeled, is scored, and has superior R-value performance when exposed to moisture. In 15, 25, 40, and 60 psi grades Foam-Control PLUS+ can be manufactured in many thicknesses and can be very thick if needed and comes with a 50-year R-value warranty.

IN THE REAL WORLD
After 15 years of service as below-grade vertical wall insulation, molded polystyrene and XPS sections were removed from the exterior foundation of a building in St. Paul, Minnesota, and independently tested. Molded polystyrene weighed in at 4.8 percent water by volume, while the XPS materials were an astounding 18.9 percent water by volume. These results are indicative of molded polystyrene’s ability to release water after rain events and XPS’ propensity to trap moisture. In these real-world conditions, the molded polystyrene retained 94 percent of the original published R-value. The XPS product’s R-value was 2.6 per inch, just 52 percent of original published R-value. Trapping water through diffusion is only one of the factors impacting the R-value of XPS products.

“Molded polystyrene’s permeability and drying potential have always outperformed XPS in the field,” says Kiesecker. “Today, that fact is also validated by laboratory findings.” Molded polystyrene’s ability to quickly release moisture and maintain R-values translates to better long term performance. Along with the superior performance, molded polystyrene costs less per R and per inch of thickness than other rigid foam insulation, which results in best value for architects, contractors, and building owners.

For more than four decades, ACH Foam Technologies has been an industry leader in molded polystyrene manufacturing, providing architectural insulation, geofoam, protective packaging, cold chain packaging, and OEM components. When combining block molding and shape molding, ACH Foam Technologies has the most extensive molded polystyrene processing capabilities in the United States. ACH Foam Technologies maintains the highest standards of excellence in products, quality, and customer service. For more information, visit www.achfoam.com.

Images courtesy of ACH Foam Technologies