

News and Updates

Durability of Building Materials & Components 2029

I was just recently invited to be on the steering committee for the 2029 DBMC. The 2026 version, which is the 17th edition of the DBMC, is being held on July 20 to 23rd in Montreal, Canada. Planning for the 18th edition will begin shortly afterwards. I will be representing ASTM and as Chair of Committee G03 on Durability and Weathering we have a lot of interest in the field of Building Materials durability.

The DBMC is held every few years (historical range 2-7 years) all over the world. This year is the 3rd time back in Canada, while the United States has hosted once back in 1981. This year's program covers evaluating the durability of building materials and components, climate change and environmental resilience, decarbonization, reducing greenhouse gas emissions, and rapidly developing techniques in construction.

I will be helping to promote the 2029 conference through the Benchmark website, through ASTM and particularly Committee G03, and through the help of my contacts at the weathering sites. I will add content to the website as it becomes available.

History of Weathering Sites

This year also marks the 100th anniversary of commercial outdoor testing in Florida. At least as far as my research has uncovered, the first test site was begun in 1926 in Miami, by General Motors. The University of Miami was also founded in 1926, but there were research centers working on solar degradation here before that. The engineering staff at GM had just determined that vehicles deteriorated faster in Miami than back in Detroit. The combination of commercial interest by the auto manufacturer and the science being done at the U created the need for an outdoor test site in Miami.

The Miami hurricane of 1926 destroyed a large portion of the city, but land was cheap and available after the storm passed (as it generally is), and the U was founded in Coral Gables and the test site was started just north of that on LeJeune Road and NW 7th Street in Miami. Incidentally, that is why the University of Miami are known as the Hurricanes, because of the great hurricane of 1926 which hit Miami the same year the University we founded.

I have enough research materials to compile a rough story of the first 100 years of Benchmark testing in Florida, and one of these days I will write it all down for the website. Commercial

Always Expose Replicate Specimens

"I ALWAYS ENCOURAGE PEOPLE EXPOSE MULTIPLE REPLICATES OF THEIR SPECIMENS WHEN PERFORMING OUTDOOR TESTING. THERE ARE MANY REASONS OTHER THAN BEING ABLE TO PERFORM STATISTICS, FOR HAVING EXTRA SPECIMENS ON THE RACK. DON'T SKIMP ON SPECIMEN QUANTITY."

exposures in Arizona date back to 1948, so that is coming up on the 80th anniversary in a few years, and I will include the history for that too. I can of course lay claim to first-hand knowledge of the last 44 years of outdoor weathering. There have been a lot of changes in that time, which includes moves, mergers, and technical changes. I have known many of the important and influential figures in outdoor weathering, and I have some great stories to tell.

Arizona Exposures

I have been asked many times over the years about benchmark testing locations, and of course we all know and recognize Florida as the primary benchmark to which all other testing is compared. Testing in Florida is essential, but it is by no means the only place to test. One very important factor in weathering is water (condensation, humidity, rain) and its influence is not on the rate of degradation, but on the type of degradation that occurs. Florida should not be used to evaluate the performance of materials in dry climates.

Most of the inhabited planet is classed as a temperate climate, or possible tropical. Florida is the best for these locations, but there are many major inhabited locations in desert type climates. Examples are the Southwest USA, Middle East, and Western Asia. Products heading there should be tested in a climate such as Arizona. For plastics especially, the difference in results is radical. Dry climates act like a hot desiccator, causing brittle failures. More information on this can be found in the Technical Articles section of the Benchmark website.

Unified Testing Equation (UTE)

I want to promote again this new presentation I just created which brings together all the experience I gained in 44 years of performing weathering tests. The 1st draft is available, and I will be expanding it as needed. The UTE is a common-sense reminder about which tests are the best. Check it out on the Benchmark website.

Standards Information

ISO TC35 SC9 WG31 is proposing a new standard on reporting results of exposure on the edges of a panel. Typically when a panel is exposed, the edges are sealed to prevent these edge effects, but in some cases the edges are not protected leading to corrosion, blistering, delamination etc. In ASTM we just use the rating standards for those effects noting they were on the edge. ISO is writing a new Part-11 to ISO 4628 which basically takes 20 pages to say that.

Benchmark is the name of our website, and is derived from the basis that “**Florida outdoor weathering is the Benchmark by which all other weathering tests are compared.**” You can find **BENCHMARK** at either of these URLs bestweathertest.com or bestcorrosiontest.com

CALENDAR

FGIA Fall Conference
Aug 31 to Sep 3, 2026
Calgary, AB CANADA

SAE-CAD RETEC
Sep 13, 2026
Louisville, KY

SAE Lighting Materials Meeting
Scottsdale, AZ
Oct 4 to 7, 2026

ASTM Nov Committee Week
D01, D20, G01, G03
Jacksonville, FL
Nov 3 to 8, 2026

BENCHMARK