

GoNano Nanotechnology

Independent Testing & Industry Recognition

Industry Recognition

Resilient Cities Expo 2025 Award Winner

- GoNano was the **only award recipient** at the Resilient Cities Expo 2025, selected from **500+ exhibitors worldwide**
 - Awarded during the Resilient Cities Expo held **November 5–6, 2025**, at the **George R. Brown Convention Center**, Houston, Texas
 - Recognition reflects GoNano's leadership in sustainable nanotechnology solutions for the built environment
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UL Hail Impact Resistance Testing (UL 2218)

(2020–2021)

- Impact resistance testing conducted by UL in accordance with **UL 2218** (Impact Resistance of Prepared Roof Covering Materials)
- Treated asphalt shingles tested using steel ball impacts corresponding to **Class 3 and Class 4 hail impact levels**
- GoNano-treated shingles demonstrated **no cracking, splitting, tearing, or rupture** under Class 3 impact conditions
- Class 4 impact testing showed increased resistance compared to untreated samples, with performance dependent on shingle condition and test configuration

Testing included multiple shingle types, treatment applications, and impact locations. Full laboratory reports available upon request.

CNETE Independent Laboratory Analysis

(May 2020)

- Third-party **FTIR analysis** comparing treated and untreated asphalt shingles and SBS elastomeric membranes
- Confirmed penetration of nanosilica and formation of **new, stable chemical bonds** within the material matrix
- Demonstrated restored flexibility and improved resistance to **heat, fatigue cracking, and material aging**
- Showed delayed oxidative aging and conversion of the surface to a more **hydrophobic, water-resistant state**

Full laboratory reports available upon request.

Independent Impact Resistance & Material Performance Testing

- Comparative impact testing conducted on **new and aged asphalt shingles** using multiple coating formulations, including GoNano Revive and GoNano Shingle Saver
- Testing evaluated treated vs untreated shingles using **high-energy impact**, exceeding several standard ASTM, FM, and UL impact energy levels
- GoNano-treated shingles consistently showed **reduced indentation depth** and improved resistance to cracking compared to untreated and competitor-treated samples
- Results demonstrated improved impact resistance across both newer and older shingles, with treated surfaces maintaining better structural integrity

Testing included multiple shingle types and ages. Results are based on controlled laboratory impact testing and comparative analysis.

UL Wind Resistance Testing (ASTM D3161)

(March 2023)

- Wind resistance testing performed by UL in accordance with **ASTM D3161/D3161M-20** (fan-induced method)
- Treated shingles conditioned and tested at standard wind speeds, including **90 mph and 110 mph exposures**
- Test panels passed with **no evidence of permanent damage**, including creasing, tearing, cracking, or splitting
- Self-sealing adhesive maintained tab restraint during wind exposure, supporting wind uplift resistance performance

Full laboratory reports available upon request.

UL Fire Testing (UL 790)

(October 2022)

- Fire testing performed by UL under **UL 790** (Standard Test Methods for Fire Tests of Roof Coverings)
- Treated asphalt shingles tested in as-received condition on prepared roof deck systems
- Test results achieved **Class A performance** across key fire evaluations, including spread of flame, intermittent flame, and burning brand
- All reported test configurations **passed** per UL's summary report for the items tested

Full laboratory reports available upon request.

Business Validation

- GoNano secured a deal on **CBC's Dragon's Den**, receiving investment backing from Dragon **Michelle Romanow**
- Appearance and deal reflect **third-party business validation** of GoNano's technology and commercial viability

Full laboratory reports and supporting documentation are available upon request.

