

DeSimone

Media Contact: Rosemary Siciliano
Rosemary.siciliano@desimone.com
207.332.9008

Press Release

For Immediate Release

DeSimone Completes Innovative, Hybrid Structure for the New Bruce Springsteen Center for American Music

Firm leveraged in-house collaboration of structural engineers, detailers, and façade and building envelope experts to design a sustainable timber and steel structure with distinct weathering steel and glass façades.

NEW YORK CITY, June 15, 2026—DeSimone Consulting Engineering has completed an innovative, multi-disciplinary collaboration to design a hybrid structure for the Bruce Springsteen Center for American Music at Monmouth University, which opened to the public on June 13, 2026. The firm devised and detailed a sustainable, hybrid structural system combining mass timber and steel along with concrete and masonry elements—also engineering dramatic, two-story weathering steel and glass curtain wall façades through a unique service model that enhanced and expedited project delivery.

The 30,000 square-foot cultural facility, designed in collaboration with COOKFOX Architects, honors both the New Jersey-born rock legend and the heritage of American music. The new center will host exhibitions, education programs, live performances, and events on the first floor, and house archival, research, and exhibition spaces on the second. The result is a design that references New Jersey's industrial history through featured materials like exposed structural timber and steel elements that allow visitors to see and experience the building's framework as part of the architecture.

DeSimone's structural engineers worked in close collaboration with in-house detailers and façade and building envelope experts—along with mass timber fabricator Timberlab and structural steel contractor Metropolitan Walters—to integrate the hybrid mass timber core, steel perimeter structure of the galleries and archive portion of the building, the steel structure of the theater— and two distinct façade materials. A key structural challenge included the creation of the center's dramatic, double-height, 70-foot-long, column-free performance space, which opens up views to the outside through a two-story glass curtain wall on the building's north elevation. The engineers designed the structural portion of the theater with steel to create the open, column-free space.

In collaboratively modeling the mass timber and steel in a single, fully integrated, 3D Tekla model through a process called fabrication-ready modeling, the team resolved interfaces between glulam beams and columns, CLT floor panels, and steel components. This multidisciplinary approach bypassed the need for separate discipline models—typically produced across multiple firms—which significantly reduced coordination gaps, tolerance risks, and fabrication conflicts while enabling real-time collaboration, minimizing field adjustments, accelerating approvals, and streamlining fabrication for both materials.

The main portion of the building features a sustainable mass timber structure featuring glulam and CLT beams, columns, and floor panels—exposed throughout the interior—along with a steel-frame perimeter structure, concrete roof slab, and masonry shear walls. The structural timber was selected for sustainability and to add

natural, visual warmth to the interior, with steel, concrete, and masonry elements added for strength, durability, stability, and safety.

“The innovative collaboration of our structural engineers, steel and timber detailers, and façade experts optimized delivery of the unique hybrid structure for the Bruce Springsteen Center for American Music,” said Luis Ramirez, PE, Managing Principal at DeSimone. “Our integrated approach to the design of this highly sustainable mass timber, steel, concrete, and masonry structure achieves COOKFOX Architects’ vision while improving structural design and fabrication accuracy, mitigating risk, and ultimately cost-effectively expediting the project schedule.”

DeSimone’s façade experts also collaborated closely with the structural engineering team in advising on the technical execution of this unique enclosure system, much of which ties back to the primary timber structure. Challenges included supporting the large, weathering steel panels on three elevations as well as the glass curtain wall on the theater’s north elevation, which is secured by 21 structural steel knife plates spanning two stories and doubling as architectural design elements within the theater interior.

Designed as a net-zero-ready, all-electric building, it is Monmouth University’s first LEED-certified building (LEED Gold target), and reflects a practical approach to lowering embodied carbon through the use of timber. Working with mass timber fabricator Timberlab, DeSimone’s detailers optimized the framing to reduce glulam and CLT quantities, eliminating custom beam hangers to reduce embodied carbon and lower material costs—without sacrificing constructability, aesthetics, or acoustics.

DeSimone’s role in the creation of the Bruce Springsteen Center for American Music builds on their extensive experience in the design of such cultural facilities as museums, archives, and performance venues. The company’s recent portfolio includes the Statue of Liberty Museum in New York Harbor, the renovation and expansion of The New York Historical in Manhattan, the Faena Arts District in Miami, and the O’Reilly Theater in Pittsburgh.

For more information about the collaborative effort to create the hybrid structure, see DeSimone’s website feature for the Bruce Springsteen Center for American Music and fact sheet [here](#).

For more details about the use of mass timber in the hybrid structure, contact PR@DeSimone.com.

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About DeSimone Consulting Engineering: Founded in New York City in 1969, DeSimone provides structural engineering, façade and building envelope consulting, vertical transportation consulting, forensics, detailing, single source steel, fabrication-ready modelling (FRM), and dispute resolution services across building types. Known globally for delivering thoughtful, innovative, and sustainable solutions to clients around the world, the firm places a premium on providing trusted, dedicated service from offices in the United States, Canada, United Kingdom, and South America. DeSimone has been named a 2026 Top Workplace by USA Today, a South Florida Top Workplace by the Sun Sentinel, and Best Place to Work by The Sunday Times of London, as well as a 2025 Miami Best Place to Work by The Miami Herald, a 2025 NYC Top Workplace by amNY Metro, and a 2025 NYC Best Place to Work by Crain’s New York. <https://www.desimone.com/>