The Pennsylvania State University celebrated its forestry school’s centennial with a Leadership in Energy and Environmental Design (LEED) certified Silver facility, that makes exquisite use of hardwood species native to the region.

In a groundbreaking hardwood application, the 98,000-square-foot building is the first-ever, large-scale structure supported by soft maple glulam beams, as opposed to industry-standard softwood glulams.

University engineers fabricated five soft maple beams—three feet deep and up to 50 feet long—that carry the entire weight of the roof. “The hardwood beams are clearly the showpiece of the entire project,” said Aires. “They fit very well with the school’s mission of utilizing and educating about regional resources.”

The soft maple glulams were designed using hardwood glulam engineering standards developed by a team of Penn State researchers, in collaboration with the USDA Forest Service. “School of Forest Resources engineers were not only an integral part of the development of the technology, they were instrumental in convincing our engineers that the soft maple beams could support the weight,” said Kevin Aires, AIA LEED, project architect, BLT Architects.

Local hardwood was the project’s driving force. While the team did not seek FSC certification for the wood used, the project received...
According to Dr. Charles Strauss, who was the director of the School of Forest Resources at the time of construction, “What really gives this building a flourish is the hardwood we have throughout the public spaces, faculty offices, meeting rooms, and the auditorium. We worked with the architects on the specification of wood finishes because we did not want to use any heavy stains on this beautiful wood.”

In total, the building features over 1,700 linear feet of solid hardwood paneling and over 14,000 linear feet of other hardwood millwork, moulding, and trim. Reaction to the facility has been tremendous. “We have an aesthetic and an aura within this building that is unique to this campus,” noted Strauss. “The overall design of the building creates warmth and an ambiance that is unlike any other structure here at Penn State.”

Dr. Mike Messina, director of the School of Forest Resources, agrees. “Visitors always mention how beautiful our building is. Various campus organizations, offices, and departments request to use our atrium for their presentations, meetings, social gatherings, and so forth,” said Messina.

For information on American Hardwoods, visit the American Hardwood Information Center at www.HardwoodInfo.com, the Authoritative Resource for American Hardwoods.