

CLIMATE SOLUTIONS

WOOD COMPOSITES



| Solutions Found in Maine's Forests |

| At the forefront of testing and manufacturing new, innovative, and sustainable forest products to revitalize and diversify Maine's forest-based economy.

Since opening in 1996, the ASCC has stood at the forefront of wood-based composites research. our lab allows for forest products companies to conduct pilot-scale R&D with world class equipment and staff. As a collaborative hub across UMaine, the State of Maine, and industry, our lab educates and trains students for careers in the forest products industry. Serving as a nexus for intellectual exchange, it fosters a community interested in wood composites, building science, and construction.

Recognizing the pivotal role of sustainable strategies in forest industries, the ASCC emphasizes eco-friendly wood product manufacturing, contributing to carbon sequestration and reduced fossil fuel dependence. Sustainable practices such as timber management and carbon transformation are crucial for mitigating emissions responsible for climate change.

AMERICA'S

#1

MOST FORESTED STATE

140,000SF

RESEARCH AND DEVELOPMENT LABRATORY

NEARLY

30

YEARS LEADING THE INDUSTRY



WOOD COMPOSITES AT THE ASCC

Industrial Process Optimization

Because of the wide range of pilot-scale capabilities available, and the adaptive nature of its equipment, the ASCC is poised to help manufacturers with process optimization and product research and development. The researchers at the ASCC understand that every project is unique, with specific sets of parameters and goals, and work closely with our clients to ensure projects are scoped as efficiently as possible.

Product Evaluation

The ASCC, an ISO 17025 accredited testing laboratory, has a full suite of ASTM standards related to wood and wood-based products within its scope of accreditation designed to evaluate both mechanical and physical properties of wood and wood-based products, through static and dynamic testing, accelerating aging techniques, and long-term studies. As the interest in building science continues to grow, the ASCC and the University of Maine can also evaluate aspects such as the hygro-thermal and energy-efficiency of wood-based assemblies.

Innovation

As the impacts of climate change intensify, we are continuously looking for new and innovative ways to reduce our carbon footprint and contribute to a more sustainable world. Because of the benefit of carbon sequestration, wood lends itself well to this effort. The ASCC continues to research, develop, and add to existing database of knowledge on innovative wood products, such as Mass Timber (cross-laminated timber, glulam beams, etc.), wood fiber insulation, woody biomass, and others.

CAPABILITIES Wood Composites Pilot Facility

Our complete Wood Composites Pilot Facility allows the production of oriented strand board (OSB), laminated veneer lumber (LVL), particleboard, wood fiber insulation, and other cellulosic composites on a near-industrial scale.

Companies may opt for complete manufacturing – from log to panel – or select only certain unit operations, such as stranding, drying, and screening. Recent studies include the use of innovative, bio-based, resin systems, wax substitutes, fire retardants, and residuals to produce value-added products.

- LOG DELIVERY & CONDITIONING
- STRANDING & SCREENING
- DRYING
- RESIN BLENDING AND FORMING
- PRESSING
- CONDITIONING & TESTING



Inserested in a career in
**WOOD
COMPOSITES?**

UMAINE PROGRAMS



ASCC JOB OPENINGS

