

Universal Window and Door supplies energy efficient windows for pioneering WinnDevelopment Stone Mill project

February 17, 2023 - Construction Design & Engineering



Lawrence, MA Universal Window and Door has been selected to provide historic replica windows for Stone Mill, a 19th century mill being redeveloped into 86 apartments, a project that owner WinnDevelopment believes will become a model of energy efficiency for adaptive re-use properties.

Universal will supply hundreds of windows from its new energy efficient 1060 Series for the transformation of the mill – the city of Lawrence's oldest building. Developers of historic properties are often faced with the predicament of having to sacrifice energy efficiency in order to meet the stringent requirements of National Park Service or historic commissions preservation guidelines, and the new 1060 Series was designed to meet that market demand.

"Stone Mill will be among the first fossil-fuel free historic adaptive reuse projects ever done, utilizing high efficiency heat pump technology for heating, cooling, ventilation, and hot water," said Christina McPike, WinnDevelopment's director of energy and sustainability. "Given New England's cold climates and high cost for electricity, it was critical to ensure that Stone Mill's exterior thermal envelope was airtight and robust in order to maintain a low-energy, comfortable, and durable place to live. Universal's thermally broken triple glazed windows met the challenge, satisfying historic preservation requirements to match the building's original windows while meeting the project's energy performance objectives."

Constructed in 1845 as the Essex Company Machine Shop by the city's namesake, Abbot Lawrence, the renovated building will use electricity instead of natural gas to produce heat and hot water. The building will use approximately 40% less energy and emit approximately 30% fewer

greenhouse gases than a new construction, energy-code-compliant gas-heated building, according to WinnDevelopment.

The general contractor is Keith Construction, the architect is The Architectural Team, and the management agent will be WinnCompanies.

In 2020, Universal also supplied the windows for WinnDevelopment's 'The Tyler' in East Haven, CT, which was designed and built to meet the industry's strictest standards for energy performance, the Passive House Institute's rigorous EnerPHit Standard.

The \$38 million project is being funded in part by a nearly \$2.9 million grant from the Merrimack Valley Renewal Fund's Building Excellence Grant Program, created by a 2020 settlement agreement after the gas disaster that affected thousands of homeowners and businesses in Lawrence, Andover and North Andover. The program provides funding for projects that maximize energy efficiency, electrification and clean energy, and demonstrate a long-term commitment to provide affordable housing to low and moderate-income households. When completed in early 2024, Stone Mill will provide a mix of one-, two- and three-bedroom units, with 69 units reserved for households earning under 60% of Area Median Income (AMI), as well as 17 market-rate apartments.

"With the increased focus on sustainability, our customers have been seeking a window solution that would deliver maximum energy efficiency while retaining our best-in-class historic replica window design," said Jim Finn, president and CEO of Universal Window and Door. "And with the 1060 Series, we have answered the call."

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540