



## University of Washington

OCTOBER 14, 2015



The University of Washington Molecular Engineering Building was designed to operate in Pacific Northwest climate without air conditioning. This 77,000 Square-foot structure uses Phase Change M51 bioPCmat above the ceiling in areas where it could be naturally chilled by opening thermostatically controlled vents. These vents allow nighttime air from the outside atmosphere to pass over the bioPCmat, which transitions the phase change material and releases the heat that is absorbed during the day. The phase change materials play a crucial part in this building and it is an excellent example of intelligent design to create true energy efficiency. In an article published about this construction by Korky Koroluk he discusses the role of phase change materials in the future of construction.

"There has been a push to make buildings lighter, making them quicker and cheaper to build. The trade-off, though, is indoor temperatures that fluctuate more, which means higher heating and cooling costs. PCMs seem to offer one way to deal with that trade-off."

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