

## Green Effects: Adaptive Reuse

LEED V4 Materials & Resources: Building Life-Cycle Impact Reduction

LEED NC 2.2 – MR 3.1, 3.2

By adapting old structures to new purposes, architects can reduce use of building materials, conserve embodied energy, and curb urban sprawl.

Much of the labor and material investment in a building is related to constructing its basic structure: the foundation, walls, etc. Converting a building to a new purpose conserves much of the building materials in this part of the structure, as well as reducing the amount of existing material that goes into the waste stream. Relatively less material is required then to refit and/or upgrade the building to meet new requirements.

In addition, a building consumes a significant amount of energy to assemble. Adaptive reuse allows this embodied energy to be carried forward into the building's new purpose. In addition, much less energy is used to break down the existing building and prepare the site compared to new construction. Adaptive reuse also requires less energy in the transport of materials from and to the building site.

Finally, consistent with smart growth approaches to development, adaptive reuse allows redevelopment of brownfields within urban areas versus converting greenfield sites. Hunter Douglas' ventilated rainscreen façade systems are ideal systems for retrofitting the envelope of an existing building. Because ventilated façade systems depend on natural airflow, rather than sealed surfaces, to protect a building from weather, they can more easily be used to upgrade existing structures. For more information, please contact Hunter Douglas Façades.