

Energy-Efficient Building Construction B-Roll

Scene-by-Scene Description

Get the facts behind the footage available on the U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) B-Roll Web site at eere.energy.gov/news/b_roll.cfm.

Video Title: Building Construction to LEED Silver Standards

Video Only/No Audio

Location: Parker, Colorado

Shoot Date: March 23, 2010 and May 26, 2010

Total Running Time: 5:55

Scene 1: 00:05: Cool, white roof installation. White roofs have been shown to cut air-conditioning costs by 20% or more in hot, sunny weather.

Scene 2: 01:01: Passive solar design. Using windows on south-facing walls to optimize daylighting, this design reduces the building's need for electric-powered bulbs.

Scene 3: 01:56: Installing heat and ventilation system, covering ducts from construction dust. Proper duct sealing prevents losses in efficiency as well as air pollution from contaminants.

Scene 4: 02:40: Concrete masonry units made from recycled materials used for interior/exterior wall construction. The selection of sustainably grown, harvested, produced, and transported products and materials have both energy and environmental benefits.

Scene 5: 03:29: Concrete made with recycled concrete and fly ash.

Scene 6: 03:59: Exterior blown insulation made from recycled materials and soybeans. Insulation composed of recycled content saves natural resources and reduces landfill and CO₂ emissions.

Scene 7: 04:32: Construction-waste recycling bins and bin drop-off. Emphasizing waste reduction in all phases of building development is key to the whole-building approach to efficiency.

Scene 8: 05:17: Establishing shots of construction in Parker, Colorado.

Learn More about Energy-Efficient Building Strategies

Buildings designed and constructed with attention to energy efficiency under LEED standards promote sustainability while minimizing operating costs and increasing asset value. Developed by the U.S. Green Building Council (USGBC), the LEED green building certification program uses a rating system to recognize

commercial and residential projects that implement strategies for improved environmental and health performance. This system encourages and accelerates the global adoption of sustainable green building and development practices.

The EERE Building Technologies Program's Commercial Building Initiative promotes a whole-building design approach to achieve these standards. The continued development of energy-efficient equipment, lighting systems, and windows as well as advances in passive solar, photovoltaics, fuel cells, advanced sensors and controls, and combined heating, cooling, and power will enable buildings reduce energy use while assisting the nation in become more sustainable, protect the environmental, and increase its energy security.

More information about how DOE is working with alliances and partners to significantly improve commercial building efficiency and quality can be found at the EERE Building Technologies Program Web site at eere.energy.gov/buildings.