CEMSTONE ADVANTAGE

Sustainable Design - LEED® Gold Certification

PROJECT NAME: Memorial Hall / Cassat Hall Dormitories
LOCATION: Northfield, MN
ARCHITECT: LHB Architects and Engineers
CONTRACTOR: JE Dunn
SUB-CONTRACTOR: Northland Concrete and Masonry
OWNER: Carleton College
CATEGORY: Commercial Insulating Concrete Forms (ICFs)
READY MIX CONCRETE: 2,400 Cubic Yards
ICF FORMS: 55,965 Square Feet

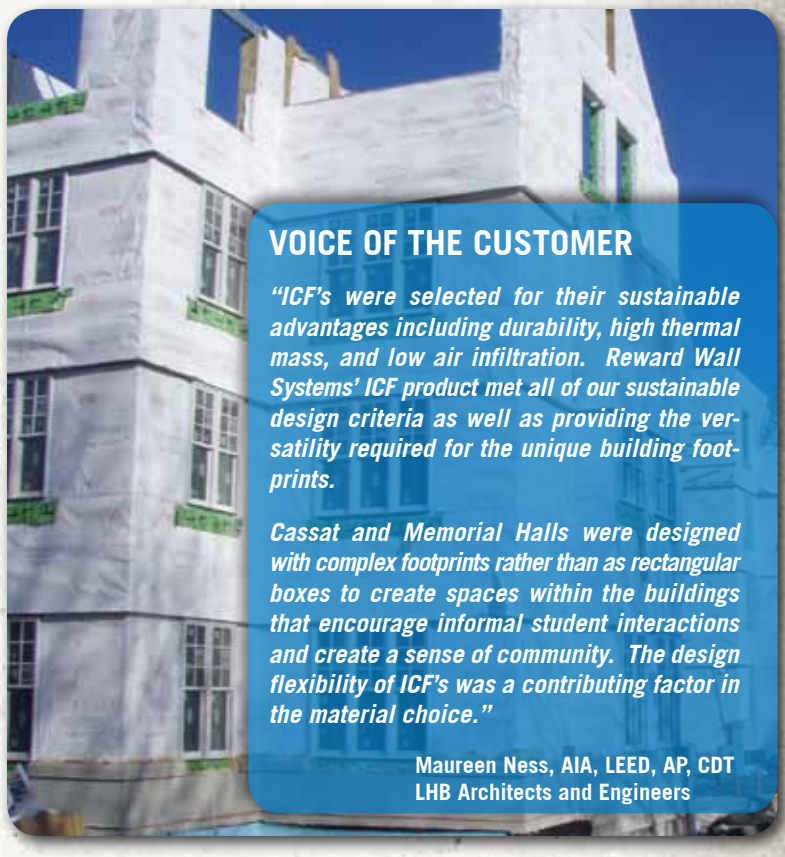
Carleton College, the small, private liberal arts college founded in 1866 and located in Northfield, Minnesota, is best known for its academic excellence. But it has recently been recognized for its sustainability excellence - as one of only 26 institutions of higher education in the nation to receive an A- on the College Sustainability Report Card 2010. It is the only Minnesota school to receive that grade the last three years. Illustrative of Carleton's leadership position in matters or sustainability is its Cassat and Memorial Hall Project.

An energy modeling analysis determined that using ICF construction would decrease energy consumption by a minimum of 28% compared to baseline building standards. Moreover, as a result of using ICF construction and in-floor radiant heat, no HVAC mechanical systems were required.

The "college gothic" design of the new residence halls – Carleton's first new full-scale residence halls since 1967 – was developed by Minnesota architecture firm LHB to blend with similar nearby buildings. Unlike their predecessors, though, these buildings have received the Leadership in Energy and Environmental Design (LEED®) NC Gold Certification from the U.S. Green Building Council USGBC.

This project represents one of the largest and most innovative structures utilizing Insulating Concrete Forms (ICF) in Minnesota to date. The residence halls are an exceptional example of how Cemstone concrete and ICF construction can simplify the process of design and construction of a sustainable structure. ICF construction creates an airtight, quiet, mold resistant and energy efficient building envelope that creates the most comfortable of living environments for the occupants. ICFs are also one of the most durable types of construction. The expectation is that these buildings will be around for 200 plus years.

The Carleton College Cassat and Memorial Hall Project is shining example of what Cemstone ICF construction can accomplish. It demonstrates how a team of building professionals - engineers, architects, general contractors, subcontractors, and materials suppliers – can work together using innovative construction methods to complete a project that exceeds the expectations of the client.



VOICE OF THE CUSTOMER

"ICF's were selected for their sustainable advantages including durability, high thermal mass, and low air infiltration. Reward Wall Systems' ICF product met all of our sustainable design criteria as well as providing the versatility required for the unique building footprints.

Cassat and Memorial Halls were designed with complex footprints rather than as rectangular boxes to create spaces within the buildings that encourage informal student interactions and create a sense of community. The design flexibility of ICF's was a contributing factor in the material choice."

Maureen Ness, AIA, LEED, AP, CDT
LHB Architects and Engineers

CEMSTONE®
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