

## Studio 804

### BRAE™ Helps University Achieve LEED Platinum

**Industry:**

Education

**Category:**

Water Reuse

**Location:**

Lawrence, KS

**Installation:**

Rainwater Harvesting System, Transducer, Leaf Filters & Plumbing Products



**CUSTOMER:** University of Kansas

**SCOPE:** Create “green laboratory” – the Center for Design Research

**CHALLENGE:** Achieve LEED Platinum status; to be an example and a source of information about sustainability

**SOLUTION:** KU chose a BRAE rainwater harvesting system. BRAE also provided a transducer, leaf filters and all plumbing supplies needed for the project

**RESULTS:** BRAE system flushes toilets and keeps the green fern interior wall moist and alive

*“The center had to serve a dual purpose – a meeting venue as well as a working lab and place to share information about sustainability with the public.”*

*- CDR Director and design professor at KU, Gregory Thomas*

Professor Dan Rockhill and 23 students in the graduate design/build program, Studio 804, began designing the University of Kansas’ new Center for Design Research. “It had to serve a dual purpose, both as a meeting and presentation venue as well as a working laboratory, and to be a place that’s shared with the public as a source of information about sustainability,” said Gregory Thomas, CDR director and design professor at KU.

Inside the building is a conference room with a living “green wall.” Covered in fern and irrigated by the building’s BRAE rainwater harvesting system, the wall improves indoor air quality.

The BRAE system supplies water to flush toilets and keep the green wall lush. The system collects rainwater from the building’s flat roof. From there, it’s filtered and stored in an underground, 1,200-gallon storage tank. The storage tank is equipped with a pressure transducer. The device senses the level of water in the tank, providing a digital readout of tank volume. Also, if a dry spell is expected and the rainwater system can’t produce enough water for the green wall and toilets, the transducer will draw make-up water from the main supply.

Four times a day, a high efficiency, 1HP pump moves water from the rainwater cistern to the green wall. In addition to the tank and transducer, BRAE supplied four separate leaf filters, an expansion tank for the watering system, and all the plumbing supplies needed for the project.

