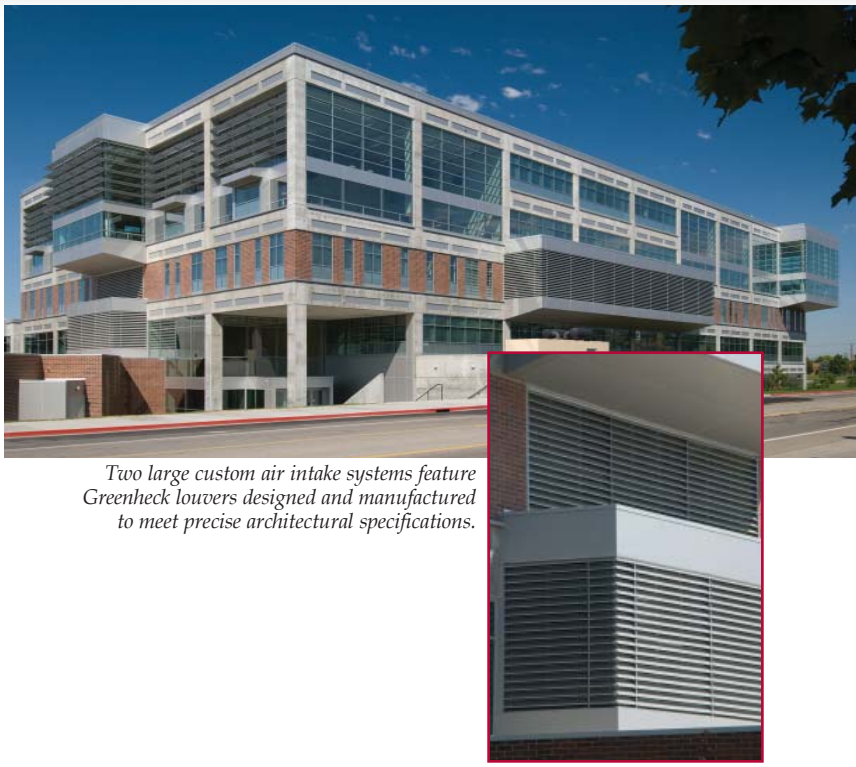
Greenheck Project Profile

Utah Valley University Library

Orem, Utah

- **Design Architect:**
  Alspector Architecture, LLC
  New York, NY
- **Associate Architect:**
  Cooper Roberts Simonsen Associates
  Salt Lake City, Utah
- **Engineer:**
  Colvin Engineering Associates, Inc.
  Salt Lake City, UT
- **Contractors:**
  General:
  Layton Construction, Sandy, UT
  Sheet Metal and Installing Contractor:
  Cherringtons, Inc., West Valley City, UT
- **Greenheck Rep:**
  Mechanical Products Intermountain
  Sandy, UT



Two large custom air intake systems feature Greenheck louvers designed and manufactured to meet precise architectural specifications.

The Challenge

- **Design and install louvers that contribute to the overall architectural language of the building and help establish it as an attractive entrance to the university campus.**
- **Reduce operational costs and improve energy efficiency wherever possible.**
- **Provide quiet ventilation to support library learning environment.**

The library, a 190,000 square foot building on the campus of Utah Valley University in Orem, Utah was completed in Summer, 2008. The building features cutting edge technology including a commons area with more than 140 computers, group study rooms, labs, seminar rooms and a 161-seat auditorium. A quiet peaceful indoor environment was desired to promote study and reflection. Wide expanses of glazing promote openness to new ideas and discussion while providing inspiring, sweeping views of the mountains and Utah Lake. Energy efficiency and sustainability also were key goals of this project. The Utah Valley University Library is the first building to participate in the High Performance Building program developed by the state's energy manager for new state-owned facilities. As a result, energy-efficient ventilation strategies were required to ensure lower energy and operating costs.

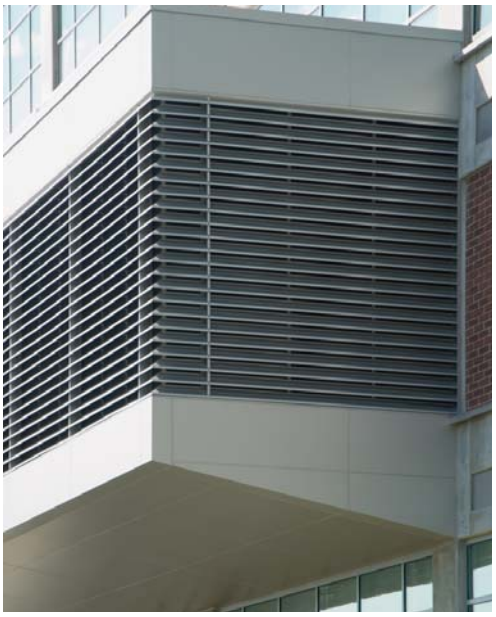
Greenheck's Solution

- **11 Stationary extruded louvers**
- **107 Greenheck reheat coils**
- **98 Life safety dampers and access doors**

Two large custom building air intake systems featuring Greenheck louvers (Model EDJ-601) were designed and manufactured to meet precise architectural specifications. The louvers were painted in a beautiful Champagne Mica finish, and project out from the building to help reduce heat penetration by shading rooms below. These louver projections also symbolize books being pulled from a bookshelf. One louver span was 93 feet long and included recessed mullions and custom angles to ensure a clean, continuous sightline that matched the sizes, shapes and overall appearance of the building's windows.

A facing was applied by the contractor to further enhance the clean, appealing look.

The life safety dampers were selected to maintain the required fire and smoke resistance ratings of walls, partitions, and floors where they are penetrated by air ducts or other ventilation openings as required by all building codes. Model HAD and RAD duct access doors were provided to allow access to each life safety damper for inspection and maintenance.



Custom air intake system featuring Greenheck louvers.

The reheat coils helped reduce heating costs when temperatures decline in the winter. Other Greenheck fans were selected because they are among the most energy-efficient in the industry and can operate below required sound levels.

Other Greenheck general ventilation products included on this project were:
3 – QEI Mixed Flow Fans
2 – LBP Penthouse Style Relief Fans
8 – RBE Hooded Propeller Relief Fans
4 – BSQ Centrifugal Inline Fans
1 – SQ Centrifugal Inline Fan
2 – CSP Centrifugal Inline Fans
1 – GB Centrifugal Roof Exhaust Fan
1 – GRSR Spun Aluminum Relief Hood

The Results

The Greenheck louvers played a role in achieving the building's overall design goals. The finished project is stunning! In fact, the Utah Valley University Library earned the *2008 Building Project of the Year* by the Association of General Contractors of Utah. Sales engineer Bob Burke of Mechanical Products Intermountain in Sandy, Utah said the architect was pleased with the quality of the louvers. The building's goals to achieve energy efficiency and lower operating costs have been achieved according to facility managers. Completion of this impressive project helped pave the way for the former Utah Valley State College to achieve its current university status.

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