Process

Doerr-Hosier Center Builds Connection to Natural Setting

What is Old is New Again

Guiding a Project Home

Schools: Building for a Whole Community
James Hardie recognizes in situ DESIGN, Bader Burke & Company and Pinkard Construction for its first-class design and construction of Benedict Park Place in Downtown Denver. By utilizing James Hardie siding with ColorPlus® Technology that is specifically engineered for Colorado's climate, they were able to create and achieve a contemporary, low-maintenance exterior at an affordable price.

- Multi-coat baked-on finish ensures color quality and consistency
- Resists warping, cracking and splitting caused by exposure to Colorado's weather and temperature extremes
- Professionally developed color palette based on market specific preferences
- New! HZ5™ Engineered for Climate™ with an industry leading 30-year nonprorated limited transferable warranty.

For a closer look, visit www.jameshardiecommercial.com or your local representative today.

Tim Farrell
James Hardie Building Products
303.725.3915
timothy.farrell@jameshardie.com

© 2009 James Hardie Technology Limited. All rights reserved. AD0916
Two piece architectural columns, deep spandrel profiles and a large cornice overhang made this a challenging precast project. 2,260 pieces of precast were erected in less than 6 months.

Architectural & Structural Precast concrete provided by Rocky Mountain Prestress
Giant's Causeway in Northern Ireland from one of nearly 40,000 basalt columns.

BRINGING YOU THE MOST EXTRAORDINARY SURFACES ON EARTH.

Experience a vast selection of porcelain, glass, ceramics and natural stone that will truly elevate any design. At Arizona Tile, there's a world of surfaces waiting to be explored. Through our exclusive relationships with select quarries and suppliers, you will discover stunning surfaces you won't find anywhere else on Earth.

For all showroom locations and a look at our complete collection, visit www.arizonatile.com.
## CONTENTS

### Features

18 Doerr-Hosier Center
Builds Connection to
Natural Setting

24 What is Old is New
Again

30 Guiding a Project Home

36 Schools: Building for a
Whole Community

### Departments

7 Letter from the President

8 Awards

9 Member News & Architects
Changing the World

11 Looking Ahead

12 All Aboard! Union Station Project
Transports Public Input to a New Level

42 Sustainability by the Book

44 On the Boards

46 Index to Advertisers
University Director
Taisto Makela
Student Director
Jeff Daigle, AIAS
Government Affairs Director
Mike Wisneski, AIA
SDA Liaison
Sue Zen, CDFA
Ex-Officio
Sonia Riggs

AIA Colorado, the voice of the profession of architecture, inspires and supports its members as leaders to improve and sustain the quality of the built environment. We promote the value of the profession and provide resources and education for members.

Corporate Sponsors
Platinum
Monroe & Newell Engineers, Inc.

Gold
AEC

Silver
BCER Engineering, Inc.
GE Johnson Construction Company
JVA Incorporated
Kens Reproductions, L.L.P.

Bronze
Ambient Energy
Centerline Construction
Fransen Pittman General Contractors
The Gallegos Corporation
JE Dunn Construction
Marten Martin, Inc.
MKK Consulting Engineers
Mortenson Construction
Pinkard Construction Co.
U.S. Metals, L.L.C.

Advertising
Contact Dawson Publications
800.322.3448

Subscriptions
$30 for one year. Contact AIA Colorado at 800.628.5598.

The opinions expressed in this publication or the representations made by advertisers, including copyrights and warranties, are not those of the editorial staff or the board of directors of AIA Colorado or Dawson Publications, Inc. Copyright: 2009 by AIA Colorado. All rights reserved. Reproduction in whole or in part without written permission is strictly prohibited.

Architect Colorado is produced on paper that contains recycled content and is printed with 100% green inks that do not contain solvents and are free of volatile organic compounds (VOC). Our printer has eliminated the use of film and film processing and utilizes aqueous plates, alcohol substitutes and waste recovery programs. Our printer is also certified by the Forest Stewardship Council (FSC) and holds environmental permits issued by the Department of Natural Resources (DNR) and work with Environmental Protection Agency (EPA) licensed handlers.
TRIM AND SIDING ARE NOT ICING ON THE CAKE.

THEY ARE CAKE. THEY'RE AN ESSENTIAL PART OF WHAT MAKES A GRAND HOUSE GRAND. A MODERN HOME MODERN, OR A DREAM HOME SIMPLY DREAMY.

WELL-CHOOSED TRIM AND SIDING MAKE A STATEMENT ABOUT STYLE THAT BUYERS UNDERSTAND IN AN INSTANT. AND EVEN THOUGH HOME BUYERS MAY NOT BE ASKING FOR TRUWOOD BY NAME, THEY ARE UNDOUBTEDLY ASKING FOR IT.
The primary mission of Architect Colorado is to inform AIA Colorado members about architectural news, trends and developments occurring throughout the state and about our members' work in our region and beyond. The publication also serves as an outreach tool to educate the community about the value of architectural excellence and the contributions of AIA Colorado architects.
Let’s see, you start with a program (or maybe you actually develop the program), then you generate concepts which coalesce into a schematic design which is revised (and revised) and gets into more detail and becomes design development ... or maybe not. And oh, is the entire fee gone yet? Even if the standard AIA contracts list the traditional phases of design, is that the best way to work? Is that how the best architects are getting things done today? Is that how architects are bringing the greatest value? Is that how architects are making money? AHHHHHH ...

A year ago, I (Stuart), along with 2008 AIA Colorado President Chris Stumm, AIA, issued a call to “return to the enduring values of our profession ... hard work, practical creativity, and integrity” as a way of ensuring our relevance, a position to which your current and incoming leadership still adheres. We suggest, however, that in this time of change and uncertainty we just might need to look at different ways to get from here to there, different forms of value we, as architects, can bring to clients and communities, different frameworks for practice. We hear a lot about how “the architect’s role is diminishing” and, in many ways, that is true. The typical design studio of the last half century may quickly be going the way of the cassette tape, and the eight-track before it. We bemoan an increase in the standard of care coupled with an erosion of our fees. We may feel a little like the three astronauts making their uncertain way around the moon and back to earth in the crippled Apollo XIII spacecraft facing, of all things, too much carbon dioxide. Our challenge, however, is to embrace the attitude of Flight Director Gene Kranz in his response to a NASA administrator’s handwringing and worries about a disaster for the agency: “With all due respect, sir, I think this will be our finest hour.”

This issue of Architect Colorado is about architects refusing to accept defeat, and instead, creating their own finest hours. Journey with these architects as they team with general contractors, fabricators, material specialists, engineers and other design professionals to redefine architectural practice and project delivery. Embrace their expanded notions of what architects bring to the table in matters not just of design, in its traditional sense, but of the design of public process and policy. See how they, as suggested by Michel Rojkind at the recent AIA CO/WMR design conference, recreate themselves as “strategists.” Be inspired by their “design thinking,” as called for by AIA National President Marvin Malecha, FAIA, at the same conference.

Architects are known and valued for creativity. Typically we think of creativity as manifesting itself in a building. But think of creativity as the process by which we can deliver that building. We must be leaders in the change of architectural process and practice so we can do what only we do best: develop consensus and steer complex teams to a successful conclusion.

Sail a steady course through turbulent and uncharted waters, discovering a future of possibilities while using the enduring values of our great profession as the ballast.
AIA COLORADO
2009 HONOR AWARD WINNERS
Architect of the Year
Brian R. Klipp, FAIA, klipp (Denver)
Firm of the Year
Studio B Architects (Aspen, Colo.)
25 Year Award
Republic Plaza (Denver)
Contribution to the Built Environment by a Non-Architect
Professor Tom Noel, University of Colorado Denver
Innovative Practices Award
Studio H:T (Boulder, Colo.)
Leadership Award
Mike Wisneski, AIA, of Gensler (Denver)

AIA COLORADO
2009 DESIGN AWARDS
Honor Built Architecture
Armstrong Oil and Gas, Inc.
Bothwell Davis George Architects and Lake|Flato Architects, Inc.
Denver

Honor Built Architecture
DEA - Centennial Station Office Building
Gensler
Centennial, Colo.

Honor Built Architecture
Chapel of the Sky
Anderson Mason Dale Architects
Granite, Colo.

Merit Interiors
WPP Co-Location
Gensler
Denver

Merit Built Architecture
National Museum of the Marine Corps
Fentress Architects
Triangle, Va.

Merit Built Architecture
Glenwood Springs High School
RTA Architects
Glenwood Springs, Colo.

Merit Built Architecture
TAXI 2
Alan Eban Brown Architects; Design Collaborators: David Baker & Partners, will bruder + PARTNERS LTD and Harry Teague Architects
Denver

Merit Built Architecture
Kent Denver Student Center for the Arts
Semple Brown Design, PC
Englewood, Colo.

Citation Built Architecture
One Fillmore Place
Gensler
Denver

Citation Built Architecture
Campus Services Center
Anderson Mason Dale Architects
Aurora, Colo.

Citation Unbuilt Architecture
Collegio Americano de Puebla
Anderson Mason Dale Architects and Ida Asociados de Mexico
Puebla, Mexico

Citation Built Architecture
32nd Street Modular
Studio H:T
Denver

Citation Built Architecture
Willi's Bend Live Work Artist Craftsmen Studios
Black Shack Architects, Glenn Rappaport, AIA
El Jebel, Colo.

Citation Built Architecture
Red Brick Center for the Arts
Willis Pember Architects
Aspen, Colo.

AIA DENVER
2009 HONOR AWARD WINNERS
Lifetime Achievement Award
Peter Dominick, FAIA, posthumously, formerly of 4240 Architecture, Inc. (Denver)
25 Year Award
Auraria Library (Denver)
James Sudler, AIA, Award for Contribution to AIA Denver
Denver Architectural Foundation (Denver)

AIA DENVER
2009 DESIGN AWARDS
Honor Commercial
DAT
JCL Architecture
Cheyenne, Wyo.

Merit Interiors
The Onyx Loft
HMH Architecture & Interiors
Boulder, Colo.

Citation Residential - Large
Curton Residence
HMH Architecture & Interiors
Lyons, Colo.

Merit Residential - Large
Rustic Knolls Residence
Michael Fowlech Architecture
Boulder, Colo.

AIA COLORADO NORTH
2009 HONOR AWARD WINNERS
Architect of the Year
Stephen Loos, FAIA, Principal of The Mulhern Group, Ltd. (Denver)
Firm of the Year
Arch 11, Inc. (Boulder, Colo.)
Contribution to the Built Environment by a Non-Architect
Will Smith, Executive Director of the Estes Park Urban Renewal Authority (Estes Park, Colo.)
Contribution to the Built Environment by a Non-Architect
Studio NYL (Boulder, Colo.)
25 Year Award
Hotel Boulderado (Boulder, Colo.)
25 Year Award
The Stanley Hotel (Estes Park, Colo.)

AIA COLORADO NORTH
2009 DESIGN AWARDS
Honor Commercial/Institutional
Riverwalk Center
Harry Teague Architects
Breckenridge, Colo.

Honor Residential Design- $1-3 million
Oliphant Residence
Black Shack Architects
Snowmass Village, Colo.

Citation Commercial/Institutional
Basalt River Lofts
Harry Teague Architects
Basalt, Colo.

Citation Unbuilt
Near/Far House
Willis Pember Architects
Aspen, Colo.

Citation Interior Design
Vertical Arts Tenant Finish
Vertical Arts
Steamboat Springs, Colo.

Merit Residential Design- $1-3 million
Meadowood House
Willis Pember Architects
Aspen, Colo.

Merit Sustainable Design
Aspen Middle School
Studio B Architects
Aspen, Colo.

Merit Unbuilt
Baobob House
Studio B Architects
Livingstone, Zambia, Africa
MEMBER NEWS

The Gold Nugget Awards, the building industry's premier annual awards program sponsored by the Pacific Coast Builders Conference (PCBC), awarded Fentress Architects three Gold Nugget Awards — two Grand Awards for the Dubai Mixed-Use Towers in the United Arab Emirates and the University of Colorado Denver Research 2, and an Award of Merit for the Santa Fe Convention Center. Winners were selected out of 375 entries from the 14 western United States and all international countries for their excellence and innovation in addressing complex design and construction issues.

"We were surprised and delighted to hear that we won three Gold Nugget awards from the oldest and largest awards program of its kind in the industry. We are also pleased to share that our dancing towers in Dubai, which won the International On the Boards category, is under construction and will open in fall 2011," said Curtis W. Fentress, FAIA, RIBA, principal-in-charge of design, Fentress Architects.

Brandon Anderson, AIA, has been named State Intern Development Program (IDP) Coordinator, for AIA Colorado. This is a three-year position that serves as a resource to AIA Colorado’s interns as they maneuver through the IDP process. Anderson recently moved from San Antonio, Texas where he worked at Lake | Flato Architects, Inc. He is currently a project manager at Roth + Sheppard Architects in Denver. Anderson can be contacted through the AIA Colorado office at 303.446.2266 or via e-mail at idp@aiacolorado.org. Speaking to Anderson about his new role, he said, “I look forward to serving as the IDP Coordinator by providing direction and support to young professionals and students. The IDP provides a good structure for developing well rounded architects. IDP has been changing to accommodate the current economy and our profession, and I welcome questions pertaining to updates within the program as well as the State of Colorado’s requirements for licensure.”

On June 9, 2009, Michael Shernick, Assoc. AIA, was appointed as an alternate member of the Longmont Planning and Zoning Commission. His term ends on Dec. 31, 2010. Alternate members of the commission serve when a regular member is unable to do so. Shernick has already served approving the annexation of 17 acres.
We have a long history and tradition of providing a quality product to our clients and resolving complicated quality issues before they escalate into problems.

Our approach to quality is focused on prevention through our “Dunn Right” Program that includes our in-house quality control department, staff training, and a project specific quality control plan.

initial.AEC
YOUR PREMIER SOFTWARE AND IT CONSULTANTS
A Division of initial.IT. Inc

- AEC Industry Specialists
- I.T. Expertise
- Lifetime Support

303.893.4350 • initialAEC.com
2460 W. 26th Ave. Suite 217C. Denver. CO 80211

Autodesk
Authorized Value Added Reseller

Microsoft CERTIFIED Partner

BUILDING TRUST FOR OVER 85 YEARS
Looking Ahead

Colorado Architecture Month April 2010

AIA Colorado and Colorado's local AIA chapters annually host a series of events for the public to experience architecture. In 2009, the celebration of architecture was expanded from one week to a full month of lectures, children's events and other exciting opportunities. Please visit www.coloradoarchitecturemonth.org for a full list of 2010 Colorado Architecture Month events, including:

- Young Architects Awards Gala
- Doors Open Denver
- Box City for Kids
- Delicious Designs
- How to Work with an Architect and Art
- Architecture & Appetizers

Connect with AIA Colorado on the Web

Follow AIA Colorado on Twitter at twitter.com/AIAColorado. Become a fan of AIA Colorado on Facebook at www.facebook.com/AIAColorado. To view pictures of AIA Colorado events, as well as local chapter events, visit www.flickr.com/photos/aiacolorado.

James Timberlake, FAIA, to Lecture at UCD

Join the University of Colorado at Denver College of Architecture and Planning, AIA Denver and the AIA Denver Committee on the Environment, for a lecture by James Timberlake, FAIA, of KieranTimberlake Architects (Philadelphia) on Monday, Feb. 22. The exact date and location of the lecture will be announced shortly.

KieranTimberlake received the AIA Architecture Firm Award in 2008, and is noted for its research and innovative design and planning services.

Navigating the Economy Resources Available on www.aiacolorado.org

AIA Colorado knows that the economy has put a strain on many of its members; therefore, it has created several ways to assist them during this difficult time. In addition to the steps that AIA National has taken to help members "navigate the economy," AIA Colorado offers the following:

- Job board
- Office space classifieds
- Free use of AIA Colorado conference room for business meetings
- Special programming
- Free and discounted continuing education programs for members

Visit www.aiacolorado.org for more information about how to take advantage of these offerings.

Correction Notices

In the article titled "Concession Proof," in the fall issue (Vol. 5, Issue 3) of the magazine, all of the photos with the exception of the last one, should have been credited to Greg Watts instead of Wayne Thom.

In the article titled "Background and Foreground: Four Colorado Architects Discuss Cultural Influences on Their Designs," in the summer issue (Vol. 5, Issue 2) of the magazine, the design of the Fort Collins Police Station should have been credited to Humphries Poli Architects. In the same article on page 25, the top photo (house south elevation) should have been credited to Bill Ellzey, instead of Hisa Ota, AIA. The middle photo on page 25 (Macaulay House stair) should have been credited to Martin Macaulay, instead of Hisa Ota, AIA.
All Aboard!
Union Station Project Transports Public Input to a New Level

By Chryss Cada

One look into the crowd of 96 faces at the first public meeting for the Denver Union Station (DUS) redevelopment project and it was clear this was not going to be the usual public input process.

In August 2001, the Regional Transportation District (RTD) purchased the 19.5-acre Union Station site in accordance with a jointly funded intergovernmental agreement with the city and county of Denver, the Colorado Department of Transportation (CDOT) and the Denver Regional Council of Governments (DRCOG). In early 2002 the four agencies held that first meeting and found out just how high interest in their project was.

"I think initially they (the four agencies) thought the meeting would primarily be a chance to update the public on their plans for the project," said Brian Klipp, FAIA, of klipp, Denver, who was at that first meeting representing the Downtown Denver Partnership (DDP). "When they saw how many people showed up, they realized that the public would be helping to form the vision for the project."
The DUS redevelopment serves as the centerpiece to the developing Denver RTD FasTracks light rail system and includes the construction of a $480 million multi-modal transit hub and more than 3 million square feet of commercial mixed-use development. The DDP knew the significance of the project from its onset.

"We’ve always looked at the importance of regional transportation and obviously this is an important part of that," said Tami Door, president and CEO of the DDP. "Every element of this system, and there are a lot of them, is an opportunity for Denver to grow. There’s not a committee, program or council related to this development that we’re not involved in."

Door said her organization is particularly interested in the urban planning of the project. "It’s important that the development is seamless into other parts of downtown," she said. "We don’t want it to feel like you’re entering a subdivision when you enter Union Station."

Getting Started

Since the station was always slated to be a regional transportation hub, those who showed up for that first public input meeting were not just from local neighborhoods like lower downtown (LoDo), but also from as far away as Highlands Ranch.

In addition, people were there to represent transportation corridors for major roads, such as I-225 and I-70, and all of RTD’s proposed light rail lines. Also represented were the historic preservation community, metro districts, chambers of commerce, and advocates for pedestrians, bicyclists, parks and the environment.

In all, there were 36 interest groups represented in what would officially come to be called the Union Station Advisory Committee (USAC). Klipp was named the new group’s co-chair. "I wasn’t there as a professional, but rather to provide leadership for a public advisory group," he said.

The committee met every two-to-three weeks for two-to-three hours. Subcommittees, officially known as "break-out groups (BOGs)," were formed. Klipp was chair of the land use and urban design group. Other BOGs were formed for finance, transportation, the environmental impact study and construction phasing. "Initially we thought we’d be meeting for about three months," Klipp said. The group disbanded earlier this year after more than seven years.

Also working on the master plan was the 60-member Technical Advisory Committee.

A Higher Vision

Initially, the USAC found itself at odds with the four agencies overseeing redevelopment of the historic station.

"We were very far apart the first year," Klipp said. "RTD’s mission is to provide transit, so it’s understandable they would see the project only in terms of transport. But those of us on the Advisory Committee thought it would be a huge loss to not take this historical station and create a dynamic mixed-use development."
The USAC advocated for rezoning of the property and a master plan that would allow mixed uses. "There are a lot of people who have always imagined redevelopment in the middle of historic downtown Denver," Klipp said. "This transportation center became a building block for a greater vision."

The new zoning created the Union Station neighborhood, which is bordered by the train tracks along Riverfront Park to 16th Street to Wynkoop Street in front of the historic Union Station to 18th Street. There are 10 parcels of land within those borders where both commercial and residential real estate will reside. According to recent estimates, there will be nearly 2.5 million square feet of office, retail and hotel space, nearly 900,000 square feet of residential space and nearly 2 million square feet in parking space.

Re-zoning was just the beginning of the discussions held by Denver City Council about the project.

"There have been many, many meetings over the last several years before council committees and council regarding several different aspects to the project that include rezoning, approval of historic designation, financing authorities' approval, approval of the master plan, open space design, partnership agreements, public benefits and more," said Judy Montero, Denver councilwoman for District 9, which is home to the Union Station project. "It is hard to give a single number for how many times issues related to DUS have come up, but I would say just on the council side — not including city departmental staff public meetings or planning board meetings or organization public meetings — there must have been at least 20 meetings."

The issues at the heart of the City Council’s discussions of the project were public benefits associated with the project, financing structures such as taxing districts, selection of architects, public process in architects' planning for open space design, design guidelines and site planning as part of the master plan for the project.

"This is a national hub for transportation and should be built as an iconic sense of place for Colorado," Montero said. "For the big picture,
there should be longevity for the project as the iconic transportation hub situated in the middle of the United States, which we can all be proud of and which will generate world-class connectivity to Colorado."

A Look Back
For those who have spent time in Denver, Union Station is already an icon.

The first train arrived in Denver's Central Platte Valley on June 21, 1870. At that time, only four small temporary stations were set up to serve passengers.

It was more than a century later before a major redevelopment of the station began. In the late 1980s, RTD and the city of Denver cooperated with the Denver Union Terminal Railway Corporation, the private owner of the terminal, to make improvements to the site. These improvements included upgrading rail platforms and canopies and accommodating an RTD bus lane to access Market Street Station from the I-25 bus/high occupancy vehicle (HOV) lanes.

During the time period from 1997 to 2000, RTD and DRCOG cooperated with the Union Station Transport Development Company and various private landowners and businesses to create the Central Platte Valley Light Rail Spur (C-Line), a major public transit connection to DUS.

Having a Say
Spanning two years, the Master Plan process invited the public to share ideas through town meetings, mailings, a Web site and other public outreach efforts.

The first town meeting was held June 20, 2002, to formally kick off the public scoping process and to identify the scope of issues to be addressed in the draft Environmental Impact Study (EIS). Approximately 200 people attended the meeting.

The second town meeting, held Sept. 12, 2002, was held to solicit public comments on the range of initial alternatives developed by the project team for the transportation and development components of the Master Plan. About 150 people attended.
On Jan. 27, 2004, a third town hall meeting was held to present the draft Master Plan, present the then-proposed new zoning for the Union Station property and describe the screening process used to select the final build alternative for the draft EIS. There were approximately 130 in attendance.

This public process produced more than 40 alternative scenarios and a series of goals and principles to guide redevelopment at the site.

Maria Garcia Berry is CEO of CRL Associates, Inc., Denver, which is coordinating public input for the Union Station redevelopment. "There has been a phenomenal appetite for information on the transit plans because of what this project represents — the rail future of the region," she said. "It will make us a hub for the rest of the United States."

Interest reached a fevered pitch when a forum was held for developers vying for the project. It was standing room only at the Paramount when more than 1,000 people showed up to hear the developers' presentations.

Following public input, the Master Plan was endorsed by the USAC and then underwent an approval process by each of the four agencies. CDOT approved the Master Plan on Sept. 16, 2004; the DRCOG Board of Directors approved the plan on Sept. 22, 2005, followed by approval by the RTD Board of Directors on Sept. 28, 2005. Denver approved the Master Plan, rezoning of the site and designation of the station as a Denver Landmark on Oct. 4, 2004.

Team Building

On Nov. 15, 2006, the four Union Station partnering agencies announced the selection of Continuum/East West Partners as the master developer team to head the redevelopment and preservation of Union Station. The developers created a joint venture, the Union Station Neighborhood Company (USNC), to serve as the developer of the project.

Also a part of the USNC are Kiewit Construction, the multidisciplinary practice of Skidmore, Owings, Merrill LLP and AECOM, a professional technical and management support services firm.

"I think our experience with LoDo was a major factor in our selection," said Tom Gougeon, principal and chief development officer with Continuum Partners. "We were prepared to think more broadly about solutions."

Continuum and East West are also stakeholders in the project. East West bought the 3½ city blocks of land west of the station. The land is adjacent to the main line, which services the majority of the transit in and out of the station. Continuum acquired and put into the partnership another block and a half adjacent to the East West property.

"We knew the connection would become important, so buying that land was our way of investing in the project," Gougeon said. "It was a sort of risk, but we figured that's what it would take to come up with the answers for this development."

Frank Cannon is development director and partner in the USNC. "Given the mixed-use, urban infill nature of this project in the heart of the community, it would have made sense for us even if land ownership wasn't an issue," he said. "This is a good fit for us."
Moving Forward

With a developer on board, the design team prepared 30 percent conceptual plans in 2007. The USAC turned over control to the Denver Union Station Project Authority, which will be responsible for managing the project, its funding and its construction.

On Oct. 17, 2008, the Federal Transit Administration signed the Denver Union Station Record of Decision, which includes the EIS. "At the end of 2008 all vehicles to finance the project were in place," Gougeon said. "We've spent the last nine months advancing design under our design-build contract agreement."

Architects have been selected for the two buildings that will mark the beginning of construction on the Union Station site. The relatively small, mixed-use buildings will be about 100,000 square feet each. One is on the north side of the station, the other on the south. Anderson Mason Dale Architects, in Denver, will serve as the primary building architect, while Semple Brown Design, P.C., in Denver, will address the ground level of the buildings and connections to public plazas and the station.

Each project is projected to cost $15 - $20 million. Work on the design has been taking place this year, with construction drawings expected to be completed by spring 2010. Because of its direct relationship to the historic Union Station, the south building has to be approved by the Landmark Preservation Committee. Ground breaking on the north building is expected to take place next fall. All transportation design plans are slated for completion by next summer, with a phased opening of the project to begin in 2013.

"There will be a lot of excitement when activity begins on the site," Door of the DDP said. "This is Denver’s chance to create something magnificent."
The recently completed Doerr-Hosier Center, the last structure to be built on the historically significant Aspen Institute campus, complements the site's Bauhaus buildings without being a complete re-creation of them. The original buildings of this campus, designed by Herbert Bayer and Fritz Benedict in the mid-20th century, reflect their modernist style.
The building had to fit between an existing block of hotel rooms and a health center, both designed by Bayer. So it was very important to be respectful but also to have a fresh voice for this building, one that would be a timeless expression," said the building's design architect, Jeffrey Berkus, AIA, of Jeffrey Berkus Architects in Aspen, Colo.

Berkus' three-level, 22,000-square-foot structure of precast white concrete, zinc panels, steel and glass fits easily into the campus, with a height and scale that does not overwhelm the older buildings. "It pays homage to the existing architecture in its strong, very formal simplicity," said Joede Schoeberlein, AIA, of Civic Forum Associates Inc., in Aspen, Colo, the project's associate architect. "The planes and the geometric forms are very simple, free from traditional narrative iconography."

Harnessing Natural Energy
Berkus' design highlights the building's natural setting. "It was the first building on the site to be connected to the Roaring Fork River below. It was important to engage the energy of that river and let the building and site connect to it," he explained.

Using Feng Shui criteria and geomantic considerations, Berkus sited the center to face southwest into the Maroon Creek Valley. "We aligned the building with the energy of the surrounding valleys and peaks. You can feel the energy from the peaks of the mountains coming together on this site, the confluence of two rivers and of three river valleys," he continued, "We built a receptacle for all this natural energy."

That energy flows into the center via a unique "Stone River" sculpture created by artist Andy Goldsworthy, a curving wall of red sandstone that travels the entire site, even through the building itself. "Andy's concept
was to connect the meadow through the meeting hall to the river beyond," Berkus said.

"At the Aspen Institute there is a history of environmental sculptures outside of the Herbert Bayer structures," he explained. "From the very beginning I thought it was important to have a major earthwork that actually engaged with the architecture. For the first time, they would be inseparable."

The top of the stone wall sculpture is exactly level with the floor in the large conference room. "It actually goes through and becomes an unbroken line of energy from one side of the site to the other. The building was built around and over it," said Berkus. He calls this blend of architecture and sculpture "dynamic modernism."

"Modernism as a rule has been about setting sculptures in a landscape that weren't necessarily respectful of the immediate environment. They were more like isolated artworks. The idea of dynamic modernism is a very close association with the artist and with site context and landscape features. That dynamic part is free-flowing energy."
Bringing people together in a healthy space

Floor-to-ceiling windows and a pyramid ceiling with skylights flood the meeting rooms in the Doerr-Hosier Center with natural light. "There's a soft transition between inside and outside, with many ways in and out of the building, and inside spaces with adjoining terraces that connect you to the outside. When you're inside, you're always very conscious of the outside. It's an acknowledgement of the building's extraordinary setting," said Schoeberlein.

"The outdoor areas and the natural light in the meeting rooms help keep people awake and facilitate creativity," added Amy Marjoram of the Aspen Institute.
The Doerr-Hosier Center is an environmentally sensitive structure, built with recycled, regional and low-emitting materials and furnishings. It was designed to cut typical water usage by 40 percent and heating costs by 36 percent. The building has earned a Leadership in Energy and Environmental Design (LEED) gold certification.

This healthy building in a natural setting is an ideal space for people to interact and to connect. “The goal of the Aspen Institute is to find common ground and foster values-based, enlightened leadership,” Berkus said. “As such they were interested in having a building that would be an inspired place for people to gather and discuss the most critical issues of our time.”

The building’s large, main-floor meeting room, which can seat up to 300 people theater style, is a one-level, circular space inspired by Tibetan mandalas. “This fosters the sense of equality; here, people can meet eye-to-eye and face-to-face,” said Schoeberlein.

A large pre-gathering area outside this room encourages impromptu discussions. “We watched how meetings work and we noted that everyone congregates right outside the meeting room. So we made our hallways wide and broad, so people could go where they want to go naturally,” said Marjoram. The building also includes small areas where two or three people can meet informally and a library/lounge where they can sit and work.

All of the center’s spaces link to nature: large windows and terraces in the main meeting room provide views of the spectacular setting; the art gallery on the lower level is lit by the skylights; and the 30-person executive board room on the upper level opens out into a 2,000-square-foot terrace.

The natural path to and through the building is clockwise, reminiscent of a contemplative walk around the stupas in Tibet. “Jeff was very interested in a kind of spiral flow of movement clockwise, so the building has a very strong path of movement. You come around it from the southeast to the northwest, you enter, and then turn towards the northeast and continue in towards the main room in a tightening spiral motion,” said Schoeberlein. “People talk about how much they like the feeling of being in the central room. I think that has a lot to do with the centralizing aspect of that space. The fact it has this very strong geometry gives it a kind of sacred quality.”

“When you design a space where people feel good, it makes a difference in the quality of their experience and the long-term viability of the building,” Berkus added. “It is really a backdrop for the theater of life, for the people of all races and colors who gather there from around the world. The satisfaction is seeing them engage in intense dialogs and, in many instances, finding common ground. To be able to craft spaces, interior and exterior, around that notion of bringing people together was amazing.”
FOR CREATING A VISION, MEETING MY CLIENT'S NEEDS AND DESIGNING A SUSTAINABLE, ENERGY-EFFICIENT BUILDING.

Design your new facility or major renovation with energy efficiency built right in. Energy Design Assistance from Xcel Energy offers free energy modeling, financial incentives to improve the cost effectiveness of energy-efficient opportunities, and field verification to ensure strategies are installed per the design intent. Not only is this assistance free to architects and engineers, we also often pay for their time. Find out how you can save money and energy by calling our Business Solutions Center today at 1-800-481-4700 or visit ResponsibleByNature.com.
What Is Old
Is New Again

Reborn and Renamed, a Historic Structure in Downtown Denver Gives a Building a New Lease on Life.  

By Kelly Roberson

It was the renovation project that almost wasn't.

Through the years, people had wondered, written, tracked and blogged about the building at 1575 Welton Street in downtown Denver. Owned by a company unwilling to part with it, abandoned and boarded up, the structure known as The Fontius Building was a sore spot in the otherwise continuing renaissance of the 16th Street Mall. In fact, it had the dubious distinction of being the place where people crossed the street in order to avoid close contact with its boarded-up facade.
Developer Evan Makovsky bought the adjacent block, intent on tearing down its amalgamation of unsavory structures. But he realized if nothing happened at 1575 Welton, his efforts to revitalize the next-door property would be for naught.

Thus began a nearly epic restoration journey, during which the city would find itself a new development hero, the public would watch a debate unfold over the most unlikely of building details, and the community would realize a reclaimed, restored jewel. How the structure got to that place is a lesson in partnership and perseverance.

History Lessons
When it was built in 1923, the four-story Fontius Building — known then as the Steel Building and home to a department store of the same name — was a distinctive Second Renaissance Revival addition to downtown Denver with large, center-pivot windows. "The elegance of the terra cotta exterior, the emerging technology of enabling exterior wall systems to have such large windows, and just the craft of the building are of particular importance from a historic perspective," says Brian Klipp, FAIA, principal of klipp in Denver and directing principal for the restoration project. "The historic integrity of the building was being lost, and it was close to not being retrievable."

After the Fontius Shoe Store closed in the 1980s and the building became more and more dilapidated, the issue for civic leaders became less one of tenants and more about public policy and economic development: a very large eyesore in the city's central core was detracting from groups visiting, businesses opening and tourists staying. So when Makovsky bought the adjacent block, the community instead shifted its — and his — focus to 1575 Welton. "I knew I couldn't tear it down, and whatever happened or didn't happen to that building would be a major reflection on the rest of the block I wanted to develop," says Makovsky. "Once we had an opportunity to acquire it, it became less a business decision and more a community decision — what would help downtown, clean up the area and spin off economic development."

Dealing with the Unknowns
It was a decision that would prove neither cheap nor easy. The years had been less than kind to the building. There were a few stray tenants but water and weather had damaged parts of the building and its mechanical systems were non-functional. Inside the old Fontius Shoe Store, it was a "step back in time," says Klipp. "It was as if they just closed the door 20 years ago and walked away. There were phones on the wall..."
The skylight that provides natural light to the top two floors of the building and their space are signature areas for Sage Hospitality Group, the major corporate tenant of the building.
with notes to call people.” A textile manufacturing company on one of the upper floors had left hand-made looms weaving men’s ties, and two decades of dust covered everything.

Klipp’s firm began by assessing the structure to try to figure out how to reuse and revamp it into a state-of-the-art building. On the exterior, the lower 20 feet of terra cotta cladding had been stripped off over the decades; handcrafted terra cotta with a more modern interpretation would be recast, one piece at a time. On the southern side of the building, a large opening was closed and replaced with a roof skylight that brought daylight down into the top two floors of the building.

The public’s stake in the project enabled Makovsky to use a variety of sources to fund its restoration, including a loan from the city of Denver and money from the Colorado Growth & Revitalization Fund. But undetermined issues, such as how much the project would cost and what structural deficiencies would be uncovered, dominated the discussion.

One of those issues became apparent when the renovation team moved to the inside, which would be necessary to demolish in order to create a historic structure that would operate like a 21st-century building. The concrete floors had sleepers in them, requiring new floors to be poured, which also necessitated a revamped “superstructure” to hold the weight. “You presume a great deal of unknown issues in a project like this, and if you budget for all of these, you’ll never do the deal,” says Makovsky.

**A Fork in the Road**

Despite all these unknown issues, the project was proceeding as planned until a most unlikely firestorm erupted. While elegant and unusual, the oversize pivot windows had deteriorated and couldn’t provide a well-sealed space.

Makovsky’s first choice was to replace them with metal-clad windows, but the city’s Landmark Preservation Commission (LPC) balked, insisting the original windows could be restored.

The resulting impasse ended with the commission agreeing to accept a new product that
re-created the exact profiles, but with high-performance window systems. But the debate set off a larger public discussion. “I got the sense that there was a lot of unhappiness about what the commission had done,” says Jim Bershof, AIA, an architect with OZ Architecture and member of the LPC. “The process, which became political as well as scientific and aesthetic, pushed the city to respond” with a windows subcommittee of the LPC that met for a year to hammer out better guidelines for restoration of historic projects.

A New Name, a New Life

In the end, the building was restored, its former name “Fontius” replaced with “Sage” to recognize the corporate tenant of the top three floors. The building has become a gem in downtown Denver. The pieces of its history that were usable were reclaimed; its restoration responds to the most modern impulses of good design and sustainable use; and its process forced public and private entities to wrestle with ongoing issues of both preservation and technology.

And no matter the headache, heartbreak and expanding budgets, Brian Klipp for one sees the value in the process. “The deeper I get into my career, it becomes clearer to me how vital maintaining history of cities and culture is to a citizenry,” he says. “The Sage Building is one of the most important structures in downtown, and I gained a deeper respect for the craft of building, and the work and intentions of that architect. It provides a reflection that reinforces the importance of maintaining older structures, of maintaining a timeline of culture and history.”

Complex projects? Simplify.

The economy is rough enough—don’t waste resources endlessly editing contracts. Let us help you save time and money.

Our new software release offers easy-to-use features that let you manage documents, enter required information in a snap, and calculate with the power of Microsoft® Excel, all in one tool.

Simplify your projects with the most widely accepted contract documents available. The Industry Standard—that much better.

Find us at www.aia.org/contractdocs

NEW Documents Included
Building Satisfaction Through Performance

Stunning Locations
Beautiful Projects

www.wje.com 303.994.9970
Dedicated Golden Loveland, Baseville, CO
Industrial Engineers and Builders

KLEA, Inc.
and built.

structures are designed

Revolutionizing the Way
Re-use

Building in North America.

Recycled steel gas pipe re-used in the

energy design assistance and daylighting analysis

and decision makers

compare energy analyses for building designers

from pre-design through operation—

years

30+

THE WEIDT GROUP
Guiding a Project

Home Architects Merge Work and Life in the Designs of their Own Houses

By Sarah Goldblatt, AIA
A recent *New York Times* article quoted Daniel Libeskind as saying, "Too often we celebrate civic institutions, but actually architecture is how people live and how well they live." This observation was a part of a story highlighting his recent venture into residential design – prefabricated, no less. It was clear that his interest lay less in the economy or sustainable potential of prefab, and more in the opportunity to create "a limited artistic edition of a new space, or a new way of living."

For successive generations, architects have persisted in their quests to establish a signature identity in the built environment. In reality, most architects rarely have the opportunity to create work that is unedited ... let alone conceive of a "limited edition." Their role is more often one of shepherd — seeing an idea from start to finish with the hope that it emerges relatively intact. Residential design is no exception. The process is typically driven by client preferences, budgets, zoning and community guidelines. And it is no surprise that in many scenarios, the final outcome is nothing like the architect's original vision.

But what happens when an architect becomes his or her own client and designs a home for him or herself? Recently, two Colorado architects embarked on this journey, giving us a snapshot of their own personal investigations of that architectural medium we call home.

Opposite page; Located along 32nd Avenue in northwest Denver, Brad Tomecek, AIA, LEED AP’s, 18-ft. wide dwelling asserts itself in the eclectic Highlands neighborhood. A pleasing composition of light-colored stucco, pine and cement-board siding, along with dark-colored metals, makes it a welcome addition.

Below; Tomecek and his wife Christa relax in the light-filled kitchen of their modular home. Sustainable materials were inserted among the standard factory finishes to achieve LEED for Homes Certification.
Jim Jose, AIA, LEED AP, Principal of Holy Cross Building and Design in Eagle, Colo., felt that designing his own house was an opportunity to practice what he preaches. The house not only had to accommodate the needs of his wife and three children, but also had to convey his design principles to clients and trades people who meet with him regularly in his home office.

“I thought, this is not only a house for me and my family, but a house that really showcases who I am as an architect and what I want to do for people in this community,” said Jose of his regionally influenced alpine ranch home perched above the Eagle River Valley.

With an affinity for sky and sunsets, Jose and his wife selected an acre site in the Highlands area of Eagle Ranch that affords sweeping views of Castle Peak and the Flat Top Mountains. The orientation of the home and window placement provides balanced natural light throughout the day and captures the ever-changing western sky at sunset. The couple spent hours scouting sites before making a decision. “We’d come out in the morning and see how the sun moves on the site and come back during the evening,” as Jose described the process of site selection.

Subtle adjustments in the plan resulted in spectacularly framed views of the landscape that never fail to astonish guests.

While his family was the gravitational center of the home, it also had to serve as a place to initiate and nurture friendships. Incorporating gracious dining areas and living space to welcome friends was paramount.

Home on the Ridge

Jim Jose, AIA, LEED AP, Principal of Holy Cross Building and Design in Eagle, Colo., felt that designing his own house was an opportunity to practice what he preaches. The house not only had to accommodate the needs of his wife and three children, but also had to convey his design principles to clients and trades people who meet with him regularly in his home office.

“I thought, this is not only a house for me and my family, but a house that really showcases who I am as an architect and what I want to do for people in this community,” said Jose of his regionally influenced alpine ranch home perched above the Eagle River Valley.

With an affinity for sky and sunsets, Jose and his wife selected an acre site in the Highlands area of Eagle Ranch that affords sweeping views of Castle Peak and the Flat Top Mountains. The orientation of the home and window placement provides balanced natural light throughout the day and captures the ever-changing western sky at sunset. The couple spent hours scouting sites before making a decision. “We’d come out in the morning and see how the sun moves on the site and come back during the evening,” as Jose described the process of site selection.

Subtle adjustments in the plan resulted in spectacularly framed views of the landscape that never fail to astonish guests.

While his family was the gravitational center of the home, it also had to serve as a place to initiate and nurture friendships. Incorporating gracious dining areas and living space to welcome friends was paramount.
Jose estimated that the after-hours design process (with nightly consults with his wife) took appreciably more time than when designing for a client. "It is definitely easier for me to have a client and get a feel for who they are and what they want and deliver something that they will love," acknowledged Jose. "For me, I have so many ideas in my head and I want to try them all. It's hard for me to narrow them down into a cohesive project that will work in the end." Ultimately he did, and he is pleased with the outcome.

Jose wanted the house to have an “additive feel” similar to the vernacular of the original ranches in the area that often started with a barn and modest main house and expanded as a family grew. Through the use of varied materials and rooflines, the house has the desired cumulative appearance. To further support this desired aesthetic, and his sustainable design principles, Jose used re-claimed timber from two Midwest barns that were locally available to clad his home.

Other decisions influenced by his conviction to tread lightly on the environment included utilizing pre-manufactured walls and trusses from a nearby factory to reduce overall project waste, cellulose insulation to achieve high thermal values and in-floor radiant heat in the basement level to provide an ambient temperature throughout the house. The house is also wired and plumbed for future solar thermal and PV panel installation.

Jose and wife, Joanna, had always planned on designing and building their own house. It was never a question of “if” but “when.” The resulting house is one they both agree realizes their vision of home.

Left: Jose designed an elegant Colorado buff sandstone fireplace and hearth to be the focal point of the living room. Expansive views to the surrounding mountains provide an ever-changing backdrop.

Right: A warmly lit hallway connects living zones in Jose’s home. Dark engineered-walnut-plank floors and reclaimed doors from a 1950s Denver schoolhouse, hung with barn-door track hardware, add to the ranch-home feel that Jose wished to create for his family.

**74 HOLLYHOCK**

**Architect** James Jose, AIA, LEED AP

**Location** Eagle, Colo.

**Construction Cost** $175/square foot

**Scope** Single family, 5,500-square-foot main house, 700-square-foot auxiliary dwelling unit (apartment over the garage)

**Purpose** Owner occupancy

**Completion Date** February 16, 2009

**Owner** Jim and Joanna Jose

**Contractor** Owner

**Structural Engineer** Carl Warnke, Engineering Design Works, Steamboat Springs, Colo.

**Interior/Lighting/Landscape Design** Owner/architect

**Photography** Ric Stovall, Eagle, Colo.

**Other Notable Projects**

- 76 Double Hitch, custom single family residence, Eagle Ranch, Eagle, Colo.
- 96 Brightwater 10,000-square-foot custom residence in Brightwater Club, Gypsum, Colo.
- 1001 June Creek, custom duplex residence in Single-tree, Edwards, Colo.
Urban Oasis

Nearly 127 miles due east of Jose's home in the Highlands area of Eagle is the hip-urban Highlands neighborhood of Denver where Brad Tomecek, AIA, LEED AR has wedged his own home on a 25-foot wide site.

Tomecek, principal of Studio H:T, naturally gravitates towards a challenge. And the design of his own home on a narrow lot that fronts 32nd Avenue in northwest Denver was no exception. The idea of exploration and innovation is at the core of his practice. So when a scrape-ready site became available in their desired neighborhood and within their price range, Tomecek and his wife, Christa, jumped at the opportunity.

Serendipitously, their 3,125-square-foot lot was an anomaly on the block with an R3 zoning designation rather than R2 like their neighbors, allowing them an additional story and the space they sought.

Top: "To see something that is typically thought of as grounded and rooted floating on wheels put me in complete awe. To be able to walk through the house in two separated pieces on the back of a truck on the side street was surreal," comments Tomecek on the delivery of his home.

Bottom: The second story of Tomecek's modular home is placed on top of the main level and the process of stitching the two boxes together begins.
Although Tomecek’s design focused on the needs of his family, which included a new baby, his enthusiasm was also fueled by the potential of using his own home as a design laboratory. "We question the most basic things we take for granted in design to see if there is a better way," said Tomecek of his firm's iterative design approach. Through this exploratory process, coupled with the fact that the site's buildable width was only 19 feet after setbacks, he concluded that his home project was a good candidate for modular construction, a design medium he longed to investigate.

While the prefabricated movement has experienced a renaissance of sorts in the past eight years, Tomecek sought to educate himself to avoid his predecessors' pitfalls. "Understanding the sizes and prerequisites of a factory-built home helps clarify the parameters of this technology so they don't feel like a constraint," explained Tomecek. To steepen the learning curve for himself and the modular fabricator, he incorporated sustainable elements to ensure that it would be a Leadership in Energy and Environmental Design (LEED)-certified residence.

In just more than a month after starting fabrication, the modular factory delivered the home in two pieces and craned them into place onto a site-cast foundation in less than six hours. Seams were then stitched and the home was clad in light-colored stucco that creates a natural canvas for the movement of light and shadow. Although unforeseen elements slowed the otherwise swift construction process, the end product is a veritable urban oasis.

The modular boxes were slipped to create sun-filled outdoor living spaces and overhangs that provide both sheltered openings and mitigate summer sun. While the site's narrow north-south aperture is not optimal for passive solar design, Tomecek placed large sliding-glass openings at either end for light-infused interior spaces and to create a visual link from front to back.

Deliberately placed windows on the east and west elevations maintain privacy from the neighboring houses on either side. Insertions of gray cement board cladding, pine siding, dark-colored metals and recycled brick add color and texture to this modern composition. On the interior, a high band of clerestory windows above the open-riser stair washes the three levels of light-colored living spaces in warm natural daylight, while modulated ceiling planes define spatial functions and diminish any resemblance to the home's origins as a box. From this peaceful tree-top aerie, Tomecek and his family can observe all the liveliness of 32nd Avenue without leaving the comforts of home.

Opportunities and limitations abound in these two projects. Yet in each case the architects have found unique ways to capitalize on both to create unfiltered visions of home. Both agree they would do it again.
Schools: Building For a Whole Community

By Chryss Cada

Students, faculty and administrators aren't the only stakeholders when a school is built or remodeled; the whole community has a sense of ownership in the project. After all, their tax dollars did pay for it.

A constant theme within school design is the promotion of schools as a community partnership or the recognition that a school is a community center in rural areas," said Greg Cromer, AIA, CEFP, and a principal at klipp, in Denver. The firm has completed 98 public and independent pre-kindergarten-12 school projects since 1990. "Schools represent one of the largest assets a community will receive in return for passing school construction bonds."

Designing for community use, while accommodating the numerous functions that are required for a school to meet the needs of the educational program, makes the school design process unlike any other. In Cromer's experience the time involved in developing a typical design for
a school may take up to eight months to a year and a half, much longer than the process for commercial development clients.

"What makes schools unique is the multiple programs/functions within a single school," he said. "For example, a new high school would include everything from the design of a state-of-the-art library to offices, to engaging learning environments versus traditional classrooms, to fitness and wellness centers instead of physical education, to fine arts complexes, food courts and technology centers that encourage the access and integration of technology in all aspects of a student's work and learning. It truly is an opportunity to design a multitude of environments within a single facility and challenge ourselves to create relevant and engaging spaces for today's students while anticipating what the future trends may demand."

Cromer has observed three primary influences that compel a school district to build a new school: changes in the educational program offerings, increase in demographics and facility conditions.

"A majority of school districts have a facilities management plan; like any strategic plan they are very dynamic and have to respond to many influences, which differ from year to year," Cromer said. "We are observing many districts responding to the need for increased educational efficiency, both in student achievement and resources. It is constantly changing."

Once a school has been slated for construction, input is sought from the project's many stakeholders. "Because the term stakeholders represents a large diverse group of vested individuals, we strive to facilitate a manageable design process that is accessible; we recommend establishing a central decision-making group to act as an advisory group," Cromer said. "Advisory groups usually consist of district leaders (curriculum and facilities), parents, students and community members. Initially there is a lot of angst in these groups; committee members think the architect is going to come in and tell people what the vision is. In fact, it is completely opposite, our role is to facilitate the district's vision for the school."
Funneling Funding

School districts decide where bond money is needed most long before voters go to the polls.

"We go through a very thorough process and complete an assessment report," explains Amy Spatz. As manager of design and construction for Aurora Public Schools, she helps decide how funding for schools will be distributed.

She is part of the Long Range Facilities Advisory Committee which includes teachers, principals, parents and school support staff. The committee analyzes empirical data such as enrollment trends, the history of additions to the building, the number of mobile facilities on the site and the specifications for what should be included in a classroom. Then they get on a bus to look beyond the numbers.

"We visited the schools so we could see first hand what does and doesn't work," she said.

The committee then goes through a very sophisticated voting process to prioritize projects.

"The needs we identified were double what we could ask voters for, so we had to make some difficult decisions," Spatz said.

Typical of architectural firms that design schools, once klipp and the design advisory group capture the "big idea," the process expands to include working with users in focus group meetings.

"Nobody can convey the needs of a specific space better than the users," Cromer said. "Our focus groups will include every program area within the school, such as classroom focus group, a food service focus group, a physical education/athletic focus group, counselors, music, art, etc."

"We don't just design the building envelope; we extend that passion to the interior design, creating functional, engaging and responsive spaces for the users," Cromer said. "We ask the questions that help the focus group members articulate the needs of their spaces, or the desired interactions they would like to have within a space. And sometimes it is a simple question that they have waited their entire teaching career to hear — 'How much storage space do you need?""

Klipp is currently working on the design for the new Frederick High School for the St. Vrain Valley School District in the Longmont, Colo., area.

"As a starting point for the new Frederick High School, we involved student councils from every high school within the district and asked them what a new 21st century high school should encompass," Cromer said. "What we heard unanimously is that they wanted a school design based upon sustainable energy practices and a college-like atmosphere."

In response to this student input, klipp came up with a campus-like setting that captures outside, and courtyard spaces that increase the building exposure for daylighting of interior spaces. Organizationally the building is designed with three building components: the academic building to the north, the activities building to the south and a bridge to connect to the administrative and media center functions. Each of these building components will be designed to reinforce the desired environment to promote learning, collaboration, activities and social interactions for today's students.

Other architects who work on schools take their own approaches to gathering the needs of a variety of user groups and then integrating them into design.
"The number one interest is education of the students," said Heidi Shuff, AIA, architect for the Neenan Company, in Fort Collins. "The next big component is the community, especially in smaller districts where schools are used for a variety of other functions."

Shuff was part of the team that recently completed additions to three schools in the small East Grand School District in Grand County.

Neenan, which specializes in school design and construction, came up with its own unique approach for gathering input on schools. Known as the "Collaborative Design Process" (CDP), it involves a one-day power planning session.

The 24-hour process begins the night before when Neenan hosts an open forum to put together a list of the community's top concerns. "At that community meeting we learned that a critical piece was security," Shuff said. "So the school entries were redesigned to provide visual control from the reception area of who enters the building."

The next day community members can join school administrators, teachers and the Neenan team, including estimators, field supervisors, construction engineers, electricians, plumbers, etc. "We want every one who is going to be involved in the process to be there from the very beginning," Shuff said.

Participants in the all-day workshop are broken into interest groups that meet for 50-minute sessions. Each session is followed by a 10-minute break that allows the chairs of each group to share information. "During the CDP for Granby Elementary School one group was discussing putting the addition on a side of the school that we found out from others wasn't the right way to go," Shuff said. "With these frequent check-ins, you waste 50 minutes instead of two weeks or more headed the wrong direction."
Neenan's preconstruction team walks away from the CDP with the basic information about scope and budget. "We come back to the office and our real work begins," Shuff said. "We make sure the plans are cleaned up and design works closely with preconstruction to make sure all the needs of the district are covered." In four to six weeks, Neenan comes back to the district with their interpretation of all the input and a shopping list that prices out options discussed during the one-day session.

A week after the bond passed, Neenan set to work on the next stage. "While the big decisions are made at that initial meeting, there’s still a lot of fine tuning to do during the course of design," Shuff said. During design and construction there are bi-weekly meetings between the district and the construction team, focused on specific topics.

"During the CDP if they decide that we need a new classroom and the components included in that room, then when we meet with the teachers they’ll tell us exactly where all the components should be located within that classroom," Shuff said.

Add special circumstances to the already complex process of designing a school and architects have a real challenge on their hands, like the project to expand Golden High School. "We like the challenging projects and Golden fit the bill," said Ben de Rubertis, AIA, AR7 Architects, in Denver. "When you have challenges like experimenting with new programming and a tight site, it puts design into sharp focus."

Right: Identified in the 2006 Bond Improvement Program, this Boulder High School project consisted of 77,600 square feet of renovation and 15,100 square feet of additions to the 1936 Art Deco building. The $9.4 million project was completed in July 2009.
A design committee that included faculty, community members, district officials, members of the facilities department, principals and students met once a week during the early stages of the project and then biweekly throughout design.

"We dealt with the constraints of the site at one of our first meetings," de Rubertis said. "We got creative, taking a felt board and moving the pieces around to make it all fit."

On the inside of the school, design needed to accommodate a new model of teaching. "The district is leaning away from teachers having their own rooms toward them sharing central office space and rotating classrooms," de Rubertis said. "We were really pushing the envelope with this new model."

AR7 garnered public input from a series of public meetings and focus groups of key stakeholders. "What we heard repeatedly from students is that they loved the outdoor spaces," de Rubertis said. "We knew they meant it because we'd be up there for meetings and the students would be hanging out in the quad in their shorts — even if it was 15 degrees outside."

Specifically the students were attached to a dramatic view of Table Mountain from the quad. "Everyone was very excited about keeping that feature of the campus," he said. "It became the project's big idea. And if everyone is behind a big idea, then it survives all the way through the process."

To see the Golden High School's commitment to their "big idea," one only has to visit the quad and take in the view.
Sustainability by the Book

Architects Play an Integral Role in the Development of the International Green Construction Code

By Brianne Sanchez

Architects shape the environment; environment affects the future, said Paul Mendelsohn, Vice President, Government and Community Relations for the American Institute of Architects (AIA). It naturally follows that architects should have a hand in developing building codes and standards for green construction. The AIA is working to make sure that architects are engaged and their input is incorporated in crafting the International Green Construction Code (IGCC) — the first sustainability code in the country. The code, the first draft of which will be released March of 2010, will address new and existing commercial buildings with a focus on increasing building performance. "Architects can help shape the agenda by using design as the basis to evolve a sustainable future in harmony with technology," Mendelsohn said.

Those involved in the discussions see the IGCC (the 14th of the I-codes) as a critical step toward achieving carbon-neutrality by 2030. "I see this as raising the bar — adding another rung..."
or two to the family of codes we have already," said committee member
Dennis Andrejko, AIA. “This code needs to be both aggressive and pro­
gressive to be able to encourage us to open our eyes as designers and
industry folks, to think of new ways and better ways for us to have a
sustainable future.”

Andrejko and his colleagues, like committee vice chair and
AIA Colorado member Chris Green, AIA, also emphasize that this code
must have a framework that allows it to evolve as well as to be flexible
regionally. “The code needs to anticipate that strategies, technology and
practices will have evolved in 2012,” Green said. He hopes it also acceler­
ates dialogue about the 2030 Initiative and about creating energy-positive
buildings.

Green is quick to stress that energy efficiency isn’t the only emphasis
for the IGCC. Improving water efficiency, using sustainable materials and
resources, improving indoor environment quality, providing education for
building owners and facility managers and reducing overall carbon emis­
sions are other goals the code covers.

Committee members view transparency and involvement as crucial to
the code’s adoption and success. Open meetings of the ICC Sustainable
Building Technology Committee (SBTC), like the one that took place in
Denver Aug. 27-29, 2009, serve as an opportunity for AIA members to
take part in the deliberations. A web site (www.iccsafe.org) dedicated to
the development of the code is another resource for those interested in
learning more and offering feedback. According to Andrejko, the
Colorado contingent was focused on reinforcing the value of building
service life, contributing valuable insight for the committee.

“We’re trying to engage as many members in as many ways as
possible,” Mendelsohn said. Early involvement leads to buy in, and
getting architects on board is essential for the code’s success. Although
significant internationally (Canada, Sweden and South Africa are also
interested in adopting the code), the implementation also has a local
focus. Because Colorado is a home-rule state, with each jurisdiction mak­
ing its own decision on whether or not it should adopt the code, the role
of all architects is to serve as trusted advisors in their communities, to
explain and to promote the IGCC.

“Architects are the facilitators, leaders, foundation for the build
environment,” Andrejko said. “More than any profession, we face the
challenge — and opportunity — to take responsibility for the way our
environments are determined.”

The goal for the SBTC is to produce a code that is above all adopt­
able, enforceable and usable, while at the same time one that will prove
effective in terms of green and sustainable outcomes. To reach that goal,
it needs architects at the discussion table.”
The Nassau Residence is designed as a simple glass box combined with a dynamic metal-louver skin. The glass allows for views in all directions, providing an intimate connection to the surrounding landscape and environment. The windows are operable for ventilation and access to outdoor spaces. More intimate areas have translucent glazing for privacy while still allowing daylight to fill the space.

The metal louvered-skin provides numerous functions for the residence. First, it screens the sunlight while still maintaining views and breathability. Second, the screen is operable, allowing the building to “close down” during periods of severe weather or when unoccupied. Lastly, the metal provides a flexible, kinetic façade that can be shifted, angled or removed to provide varying shadows, outdoor access and relief to the elevations. The architecture is sited in order to provide large, relatively flat outdoor spaces near the public areas. This will enable a multiple-gathering space near the house and pool or in various other outdoor terraces and gardens.
Designed to be built in two phases, Rawlins Elementary School will replace three facilities with one unique building. The first phase will house grades two through five in four individual, stacked communities. A later addition will serve the children in kindergarten and grade one. Each community (floor) is geared to a grade level, with unique open-flex labs that will complement regular classroom discussions by accommodating different learning styles in an active learning environment.

Continual learning is enhanced by measures such as proper daylighting, comfortable interiors and furnishings, inspiring views and building details that connect to history and local events. By incorporating area culture, history and geology into its design, the school will become integral to the community and a source of pride.

Culturally, the convergence of three schools — from three diverse populations — at one location is significant, and this is celebrated in Rawlins Elementary's harmonious combination of materials, textures and shapes. The school's design also reacts to its immediate physical environment. It minimizes the effects of the constant wind, both harvests and shades from the sun and takes design cues from significant land features and vistas. The nearby Rawlins Uplift inspires its form. The design respects the environment, incorporating practices such as daylighting, passive solar measures, operable windows/natural ventilation and use of sustainable and renewable resource materials.
## Categorical Index to Advertisers

<table>
<thead>
<tr>
<th>Category</th>
<th>Companies/Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Architectural Concrete</strong></td>
<td>Stresscon</td>
</tr>
<tr>
<td><strong>Architectural Wall Panel Systems</strong></td>
<td>American Fiber Cement Corporation</td>
</tr>
<tr>
<td><strong>Building Products</strong></td>
<td>James Hardie Building Products</td>
</tr>
<tr>
<td><strong>Commercial - Construction</strong></td>
<td>Shaw Construction</td>
</tr>
<tr>
<td><strong>Commercial - Hospitality</strong></td>
<td>Shaw Construction</td>
</tr>
<tr>
<td><strong>Commercial Interior Design</strong></td>
<td>Jean Sebben Associates, LLC</td>
</tr>
<tr>
<td><strong>Concrete</strong></td>
<td>Stresscon</td>
</tr>
<tr>
<td><strong>Construction Management</strong></td>
<td>Gerald H. Phipps, Inc.</td>
</tr>
<tr>
<td></td>
<td>JE Dunn Construction Company</td>
</tr>
<tr>
<td><strong>Curtain Wall</strong></td>
<td>LTS Drafting and Engineering</td>
</tr>
<tr>
<td><strong>Daylight Design Assistance</strong></td>
<td>The Weidt Group</td>
</tr>
<tr>
<td><strong>Design/Build</strong></td>
<td>American Fiber Cement Corporation</td>
</tr>
<tr>
<td></td>
<td>Gerald H. Phipps, Inc.</td>
</tr>
<tr>
<td></td>
<td>JE Dunn Construction Company</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>XCEL Energy</td>
</tr>
<tr>
<td><strong>Energy Design Assistance</strong></td>
<td>The Weidt Group</td>
</tr>
<tr>
<td><strong>Engineering</strong></td>
<td>DMA Engineering</td>
</tr>
<tr>
<td><strong>Environmental Services</strong></td>
<td>CTL Thompson</td>
</tr>
<tr>
<td><strong>Fabricated Windows &amp; Doors</strong></td>
<td>LTS Drafting and Engineering</td>
</tr>
<tr>
<td><strong>FSC Building Materials</strong></td>
<td>Collins Truwood</td>
</tr>
<tr>
<td><strong>FSC Lumber</strong></td>
<td>Collins Truwood</td>
</tr>
<tr>
<td><strong>FSC Siding</strong></td>
<td>Collins Truwood</td>
</tr>
<tr>
<td><strong>General Contractors</strong></td>
<td>GE Johnson Construction</td>
</tr>
<tr>
<td></td>
<td>Gerald H. Phipps, Inc.</td>
</tr>
<tr>
<td></td>
<td>JE Dunn Construction Company</td>
</tr>
<tr>
<td><strong>Geotechnical Engineers</strong></td>
<td>CTL Thompson</td>
</tr>
<tr>
<td><strong>Glass &amp; Glazing Products</strong></td>
<td>LTS Drafting and Engineering</td>
</tr>
<tr>
<td><strong>Information Technology</strong></td>
<td>initial.AEC</td>
</tr>
<tr>
<td><strong>Interior Design</strong></td>
<td>Jean Sebben Associates, LLC</td>
</tr>
<tr>
<td><strong>LEED Consulting</strong></td>
<td>The Weidt Group</td>
</tr>
<tr>
<td><strong>Materials Testing</strong></td>
<td>CTL Thompson</td>
</tr>
<tr>
<td><strong>Precast</strong></td>
<td>Rocky Mountain Prestress</td>
</tr>
<tr>
<td><strong>Renewable Energy</strong></td>
<td>XCEL Energy</td>
</tr>
<tr>
<td><strong>Reprographics</strong></td>
<td>Mercury LDO</td>
</tr>
<tr>
<td><strong>Siding</strong></td>
<td>James Hardie Building Products</td>
</tr>
<tr>
<td><strong>Slab</strong></td>
<td>Arizona Tile Company</td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>initial.AEC</td>
</tr>
<tr>
<td><strong>Stone</strong></td>
<td>Arizona Tile Company</td>
</tr>
<tr>
<td></td>
<td>CAPCO Tile and Stone</td>
</tr>
<tr>
<td><strong>Structural Engineers</strong></td>
<td>KL&amp;A, Inc.</td>
</tr>
<tr>
<td></td>
<td>Monroe &amp; Newell Engineers, Inc.</td>
</tr>
<tr>
<td><strong>Structural Precast Concrete</strong></td>
<td>Stresscon</td>
</tr>
<tr>
<td><strong>Tile</strong></td>
<td>Arizona Tile Company</td>
</tr>
<tr>
<td></td>
<td>CAPCO Tile and Stone</td>
</tr>
</tbody>
</table>

**Urban to Resort. Structural Engineering.**

- **Denver**
  - 1701 Wynkoop Street, Suite 200
  - Denver, CO 80202
  - (303) 623-4527
  - denver@monroe-newell.com

- **Vail**
  - 78 Benchmark Road
  - Suite 204 PO Box 1507
  - Vail, CO 81658
  - (970) 949-7768
  - vail@monroe-newell.com

- **Frisco**
  - 619 Main Street
  - Suite 770 PO Box 395
  - Frisco, CO 80443
  - (970) 668-3776
  - frisco@monroe-newell.com

[Visit www.mercury-ldo.com](http://www.mercury-ldo.com)

**GreenPlan**

*Digital is green.*

**Mercury LDO Reprographics**

*www.mercury-ldo.com*
## Alphabetical Index to Advertisers

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Website</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Fiber Cement Corporation</td>
<td><a href="http://www.americanfibercement.com">www.americanfibercement.com</a></td>
<td>48</td>
</tr>
<tr>
<td>Arizona Tile Company</td>
<td><a href="http://www.arizonatile.com">www.arizonatile.com</a></td>
<td>2</td>
</tr>
<tr>
<td>CAPCO Tile and Stone</td>
<td><a href="http://www.capcotile.com">www.capcotile.com</a></td>
<td>IBC</td>
</tr>
<tr>
<td>Collins Truwood</td>
<td><a href="http://www.truwoodsiding.com">www.truwoodsiding.com</a></td>
<td>5</td>
</tr>
<tr>
<td>CTL Thompson</td>
<td><a href="http://www.ctlt.com">www.ctlt.com</a></td>
<td>23</td>
</tr>
<tr>
<td>DMA Engineering</td>
<td><a href="http://www.dma-eng.com">www.dma-eng.com</a></td>
<td>47</td>
</tr>
<tr>
<td>GE Johnson Construction</td>
<td><a href="http://www.gejohnson.com">www.gejohnson.com</a></td>
<td>6</td>
</tr>
<tr>
<td>Gerald H. Phipps, Inc</td>
<td><a href="http://www.ghphipps.com">www.ghphipps.com</a></td>
<td>4</td>
</tr>
<tr>
<td>Initial AEC</td>
<td><a href="http://www.initialAEC.com">www.initialAEC.com</a></td>
<td>10</td>
</tr>
<tr>
<td>James Hardie Building Products</td>
<td><a href="http://www.jameshardie.com">www.jameshardie.com</a></td>
<td>IFC</td>
</tr>
<tr>
<td>JE Dunn Construction Company</td>
<td><a href="http://www.jedunn.com">www.jedunn.com</a></td>
<td>10</td>
</tr>
<tr>
<td>Jean Sebben Associates, LLC</td>
<td><a href="http://www.jeansebbenassociates.com">www.jeansebbenassociates.com</a></td>
<td>47</td>
</tr>
<tr>
<td>KL&amp;A, Inc</td>
<td><a href="http://www.klaa.com">www.klaa.com</a></td>
<td>29</td>
</tr>
<tr>
<td>LTS Drafting and Engineering</td>
<td><a href="http://www.ltsdrafting.com">www.ltsdrafting.com</a></td>
<td>48</td>
</tr>
<tr>
<td>Mercury LDO</td>
<td><a href="http://www.mercury-ldo.com">www.mercury-ldo.com</a></td>
<td>46</td>
</tr>
<tr>
<td>Monroe &amp; Newell Engineers, Inc</td>
<td><a href="http://www.monroe-newell.com">www.monroe-newell.com</a></td>
<td>46</td>
</tr>
<tr>
<td>Rocky Mountain Prestress</td>
<td><a href="http://www.rmpprestress.com">www.rmpprestress.com</a></td>
<td>1</td>
</tr>
<tr>
<td>Shaw Construction</td>
<td><a href="http://www.shawconstruction.net">www.shawconstruction.net</a></td>
<td>29</td>
</tr>
<tr>
<td>Stresscon</td>
<td><a href="http://www.stresscon.com">www.stresscon.com</a></td>
<td>OBC</td>
</tr>
<tr>
<td>The Weidt Group</td>
<td><a href="http://www.twgic.com">www.twgic.com</a></td>
<td>29</td>
</tr>
<tr>
<td>XCEL Energy</td>
<td><a href="http://www.xcelenergy.com">www.xcelenergy.com</a></td>
<td>23</td>
</tr>
</tbody>
</table>

---

**Ground Source Heat Pumps**

**Mechanical, Electrical & Plumbing design**

**Solar Photovoltaic & Solar Thermal**

**Building Commissioning**

**2D and 3D CAD**

**Energy Use Simulation**

**Energy Audits**

**Design Build**

**Biomass**

**DMA ENGINEERING**

**Renewable Energy Systems for Buildings**

DMA Engineering | 6606 W. 96th Ave | Westminster, CO 80021
[www.dma-eng.com](http://www.dma-eng.com) | [info@dma-eng.com](mailto:info@dma-eng.com) | 303-732-5559

---

*Colorado Springs, St. Francis Medical Center, Manitou Springs School*
American Fiber Cement Corporation is a distributor of top-of-the-line building products with leading edge technology that offer durability and long-lasting performance. The products offered have been thoroughly tested to assure that they meet the highest standards of performance and durability. All of the products marketed by AFCC are backed by comprehensive warranties and a technical support group that consults with architects and installers. The company also offers practical, on-site training during project start-up. Warranties for individual products may be obtained by contacting AFCC.

Building: Animas Hall
Fort Lewis College
Durango, Colorado

Architect: Anderson Mason Dale Architects

Fiber Cement Material: Eter-Color

American Fiber Cement Corporation
Ryan Hunter, Authorized Sales Agent
303-808-3122 • Fax 303-904-1407
rhunter@americanfibercement.com
www.americanfibercement.com

Eter-Color is a fully compressed, autoclaved, fiber cement sheet that is through-colored. The smooth aesthetic surface, pure color and natural hues give Eter-Color the appeal that is so much appreciated by contemporary architecture. Eter-Color sheets are available in eight standard colors characterized by fine sanding lines.

Eter-Color

Animas Hall
Fort Lewis College
Durango, Colorado

Anderson Mason Dale Architects

Eter-Color sheets are available in eight standard colors characterized by fine sanding lines.

Architectural Sales of Colorado

Design Solutions for Division 8 and Beyond.
EFCO | NANAWALL | ALL-LITE | HOPE'S STEEL WINDOWS

6855 South Havana Street | Suite 580 | Centennial, CO | 80112
Office: 303-715-0240 | Fax: 303-715-9642

For more information, visit us on the web at www.archsale.com