


UNITING





For several years, roofing contractors have struggled with how to recruit not only field workers but also project managers and estimators. Competition for employees is fierce, and the roofing industry's negative image among construction industry job seekers only adds to the problem.

To help attract college graduates to the industry, members of The Roofing Industry Alliance for Progress turned their attention to universities that offer construction management degrees and sought partnerships with them to bring roofing curricula into college classrooms, as well as expose students to opportunities in the roofing industry.

The effort began in 2013 with the Alliance partnering with three construction management schools: the Department of Construction Management at Colorado State University, Fort Collins; McWhorter School of Building Science at Auburn University, Auburn, Ala.; and M.E. Rinker Sr. School of Building Construction at the University of Florida, Gainesville. A task force was

into existing curricula with the goal of developing standalone roofing courses at their respective universities.

The faculty reviewed the construction management courses at each university that include roofing content. They then reviewed the educational course materials provided by the Alliance to gain an understanding of the topical content and its applicability, overlap and/or congruency within the existing construction management program curriculum at each university.

Faculty concluded opportunities to incorporate roofing-specific content exist. Each school will review the final report and decide appropriate next steps for their individual programs.

STUDENT COMPETITION

To increase students' exposure to the roofing industry, the Alliance held a student competition. Alliance task force members designed the competition to challenge the students' roofing knowledge, construction manage-

THE ROOFING INDUSTRY ALLIANCE FOR PROGRESS FORGES IMPORTANT PARTNERSHIPS WITH UNIVERSITIES

BY BENNETT JUDSON

formed with Alliance members, the deans of the three construction management schools and NRCA staff. The task force identified three initial action items:

1. Develop a roofing-related curriculum that can be incorporated into existing courses
2. Explore scholarship programs for students and faculty members
3. Develop an internship program

SCHOLARSHIPS

In May 2014, the Alliance awarded its first construction management faculty scholarships to Jonathan Elliot, assistant professor in the Department of Construction Management at Colorado State University; James Sullivan, assistant professor at M.E. Rinker Sr. School of Building Construction at the University of Florida; and Jacqueline Thompson, assistant professor at the McWhorter School of Building Science at Auburn University (Thompson has since left Auburn University but upheld the scholarship commitment). The scholarship winners were charged with developing a plan to integrate roofing-related information and case studies

ment skills, time management, and organization and presentation skills.

The teams, consisting of four students from each of the three schools, were presented with a problem statement. They were asked to bid on installing a roof system on a Bass Pro Shop Sportsman's Center in Colorado. Each team had to research the project, review the plans and specifications, and assemble a full estimate and proposal to submit a qualified bid package.

Students were instructed to find a competitive edge in their estimates to beat their competition while maintaining a reasonable profit margin.

Each project consisted of a written proposal and oral presentation.

The written proposals were scored according to the following:

- The overall quality of the written proposal
- Project management and organization
- Feasibility of construction and program schedules
- Accuracy/feasibility of conceptual costs
- Quality of safety and quality control/quality-assurance plans

- Use of technology and innovative or unique ideas worth additional consideration

The oral presentations were judged by the following:

- Overall quality of the oral presentation
- Feasibility of project management, organization and scheduling
- Accuracy and completeness of project costs
- Quality of safety and quality control/quality assurance plans
- Answers to judges' questions

The oral presentations and judging took place during the 2015 International Roofing Expo® (IRE) in New Orleans. The team with the highest score was from Colorado State University. Team members included Tyler Eberhardt, Erick Erickson, Sean Howell (captain) and Chris Lierheimer. They were formally recognized during NRCA's Awards Ceremony and Cocktail Reception. The team received a team trophy, \$1,000 cash prize for their school, individual awards and media recognition.

"I thought the competition went well," says John Geary, a competition judge and director of education and industry relations for Firestone Building Products, Indianapolis. "The students seemed to find the project challenging yet not too daunting. They took it seriously and presented professionally. It accomplished one of our objectives to bring positive exposure to the roofing industry through affiliations with universities. I think the competition is ready to be opened up to other schools."

Nine Alliance member manufacturers and distributors also hosted the students in their booths on the trade show floor. In addition to sharing general information about the roofing industry, the various companies talked about different roof systems, products, materials, equipment, the role of distribution and career opportunities.

In July, the Alliance task force will meet to begin developing the criteria for the next competition, which will be offered to other construction management schools interested in participating. Judges will review the written proposals and select the three top-scoring teams to give oral presentations during the 2016 IRE in Orlando, Fla.

NEXT STEPS

The Alliance plans to again offer faculty scholarships. The criteria will be developed and made available after June 1.

The Alliance also will offer scholarships to construction management students. The program details and criteria for the awards are being developed. The plan is to offer the scholarships in the fall.

In addition to educating construction management students about different roof systems, materials and proper installation methods, the Alliance also wants to make sure students are aware of career opportunities.

The plan is to develop an internship program during the year that will be made available to Alliance members. The program will include opportunities for students to intern at roofing contracting, manufacturing and distributing firms to provide students with a first-hand understanding of daily operations; project bidding; scheduling; planning (equipment, methods, labor, etc.); quality control; safety; and different roofing applications, methods and products.

The goal of the internship program is to place students with Alliance members who are interested in participating as host companies. The three partner schools have different criteria for their internship programs; for example, they vary from three to six months in length, and only one school has a mandatory internship program.

Each school expects a host company to have developed a full plan for the intern; to assign a mentor to the intern; and to be sure the intern is exposed to a wide variety of the company's operations. The schools report about two-thirds of their students are hired after they graduate by the companies for whom they interned.

In an effort to partner with other construction management schools, the Alliance participated in the 51st Annual International Conference of Associated Schools of Construction held April 22-25 at Texas A & M University, College Station. Construction management faculty from more than 40 state colleges and universities attended. The Alliance had a booth and received a 20-minute time slot during which it shared its construction management initiatives.

"The opportunity to partner with the Alliance has been extremely beneficial for our university," says Richard Burt, endowed chair and school head, McWhorter School of Building Science at Auburn University. "Our relationship with the Alliance has caused us to reassess how we teach roofing topics in a number of our classes."

"The success of the partnership between the Alliance and higher education demonstrates what can be achieved when higher education and industries join forces," says Mostaffa Khattab, professor and head of construction management at Colorado State University. 🌐🔗

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