

27th RCI International Convention and Trade Show



Addressing the Building Envelope

30 Hours of Building Envelope Investigation, Repair, and Design Education

Golf Tournament | Registration Exams | Weekend Trade Show
Keynote Speaker | Product Demonstrations | Awards Luncheon
RCI Foundations Fundraiser Event | Annual Meeting | Annual Banquet

**Hilton Anatole
Dallas, Texas
March 15 - 20, 2012**

Keynote Speaker: Herman Edwards
ESPN analyst and former NFL coach

Annual Banquet Entertainment:
Charley Jenkins, country music star





President
Richard L. Cook
RRC, RWC, REWC, RBEC, RRO

A handwritten signature in black ink, appearing to read "Richard L. Cook".

Howdy, Folks.

Every year I look forward to the RCI member event of the year, the annual convention and trade show. The convention committee and RCI staff, supported by our generous sponsors, always do a singular job of putting together an event that is the right mix of education, networking, and entertainment. There are so many noteworthy accomplishments among our members, so much technical information to be shared, and so many new products to learn about, that this is an opportunity no one should miss.

Once again with this visit to Dallas, our host venue will be the elegant Anatole Hotel. The hotel is so spacious that we are able to contain the social events and trade show on the premises, a real plus with all the opportunities that are presented. We also have an opportunity to celebrate incoming president Chip Ward at the president-elect's golf tournament or participate in something a little different with the clay shooting.

Personally, I am excited about the opportunity to meet so many of our members and honor those who are receiving certifications and awards. Our talented and hardworking members deserve the recognition they receive at the awards luncheon, as do our outstanding chapters.

Of course I also look forward to hearing from Herm Edwards, who has much to share from his sports career and philanthropic activities. I plan to wear my boots to the annual banquet and get in a little Texas two step! I hope everyone will "Cowboy Up" and share the evening with us. Even if you don't enjoy country music as much as I do, I think you'll really enjoy Charley Jenkins. And who can resist a hip hop classically trained violinist?

My wife Sharon is excited about the spouse opportunities at the convention, and has been working with several other spouses to make the events even more enjoyable. Once again there will be gift bags, this year focusing on a few things from my hometown of Charleston, SC, as well as the handcrafting talents of some of our member's wives. I hope you will all consider bringing your spouse or a guest this year.

I hope you will join us at the 27th RCI International Convention and Trade Show in Dallas, March 15-20 at the Hilton Anatole.

SPECIAL THANKS TO THESE PLATINUM SPONSORS

Carlisle SynTec, Inc.
Trade Show Breakfast Buffet

DERBIGUM
Golf Tournament Awards Ceremony and Luncheon and Directional Signs

Firestone Building Products
Annual Banquet

GAF Materials Corporation
RCI Foundation Reception and Event

Georgia-Pacific Gypsum, LLC
Name Badge Lanyards

Johns Manville
Opening Ceremony and Keynote Speaker

Sika Sarnafil, a Division of Sika Corp.
Awards Luncheon

Siplast
Convention Tote Bags

Situra, Inc.
Trade Show Reception

Thaler Metal Industries, Ltd.
Hotel Guest Room Keys

Dear RCI Members and Friends,

Here is your information-filled package for the 27th RCI International Convention and Trade Show. This year's show is themed *Addressing the Building Envelope* in keeping with our expanding mission for RCI members. As you look over our educational offerings, I'm sure you will find the Convention Committee has done a great job covering the spectrum of subjects.

Once again this year we will kick off the social portion of the convention with the President-Elect's Golf Tournament on Friday. It will be held at the Cowboys Golf Club, the world's first NFL-themed golf course. Golf not your thing? On Friday morning we will simultaneously offer a Sporting Clays Tournament at the Elm Forks shotgun sports complex, one of North Texas' most challenging sporting clay courses. You and your spouse are encouraged to participate in either activity as a great way to have a good time as well as meet other members.

The keynote speaker for the convention will be Herman "Herm" Edwards, former NFL coach and now an ESPN studio analyst and author of a book sharing the leadership lessons he learned both on and off the field.

On Sunday afternoon, join your peers at the luncheon where industry awards and recognitions are given. Sunday evening marks the second "showdown" auction between the RCI Foundations (U.S. and Canada) as they attempt to entertain you as well as earn money.

The President's banquet will reflect our current president's love of country music as well as pay homage to our Texas venue, with entertainment by crowd-pleasing country music artist Charley Jenkins. Charlie's group includes versatile violinist Lindsey Stirling, who was a fifth-season finalist on *America's Got Talent*.

Spouses who are attending the convention are encouraged to come in Thursday evening or Friday morning, and, if they are not participating in golf or clay shooting, to attend the spouse luncheon Friday afternoon. Attendees at last year's luncheon enjoyed the social opportunities and door prizes. This year for the first time, the luncheon will be off-site and include an activity. Of course, there will also be some entertaining tours available for spouses and guests on Saturday morning and Monday.

This year's convention is once again at the luxurious Anatole Hotel in Dallas. We encourage all attendees to stay on site to enjoy the full benefits that being close to the convention offers.

LIVE LARGE. THINK BIG. HAVE A BALL.

Dallas' slogan, *Live Large. Think Big.* describes the essence and vitality of a city built on big dreams, freshly blazed trails and an attitude that all things are possible. This richly diverse city offers a thriving culinary scene, leading arts district, countless luxury accommodations, professional sports, trendy entertainment districts and endless shopping opportunities. For more information about Dallas, visit: www.visitdallas.com or contact the Convention & Visitors Bureau directly at: 800-CDALLAS.



Executive Vice President and CEO
James R. Birdsong

A handwritten signature in black ink that reads "James R. Birdsong". The signature is fluid and cursive.



PRESIDENT-ELECT'S GOLF TOURNAMENT

Friday, March 16

Shuttle Departs – 7:30 AM

Registration and Breakfast – 8:00 AM - 9:00 AM

Tee-Off – 9:00 AM

The annual President-Elect's Golf Tournament will be held at the Cowboys Golf Club, the world's first NFL-themed golf course. The tournament will be organized as a shotgun, four-person scramble. Golfers who do not submit a foursome will be assigned to one based on handicap or average score. Placements will be determined by the club pro's system. Golfers will be provided with a list of team and tournament rules at the on-site registration desk.

Spouses are encouraged to participate — there will be pairings for couples at the tournament. The tournament offers prizes for 1st and 2nd place. Contests will include longest drive and closest to the pin. Be sure to stick around for many other contests and raffle prizes immediately following the tournament. A breakfast buffet, lunch, snacks on and off the course, and beverages will be provided. The event will conclude with an awards ceremony.

Cowboys Golf Club | 1600 Fairway Drive, Grapevine, TX 76051
817-481-7277 | www.cowboysgolfclub.com

Tournament Fee - \$200 per person

SPORTING CLAYS TOURNAMENT

Friday, March 16

Shuttle – 7:30 AM

Registration and Breakfast – 8:00 AM - 9:00 AM

Start of Event – 9:00 AM

Elm Fork Shotgun Sports Complex is one of North Texas' most challenging sporting clay courses. It is located in a naturally wooded area with many unique and challenging targets. The tournament will consist of teams of four participants shooting clays on one of two courses designed to simulate various game birds.

The sporting clay tournament will be organized as a shotgun start beginning at 9:00 AM. Team sign-in begins upon arrival with coffee and continental breakfast. A BBQ lunch buffet, including non-alcoholic drinks, will be provided. The event will conclude with an awards ceremony.

Elm Fork Clay Sports | 10751 Luna Road, Dallas, TX 75220
972-556-0103 | www.elmfork.com

Tournament Fee - \$200 per person

KEYNOTE SPEAKER — HERMAN "HERM" EDWARDS, SPORTS ANALYST

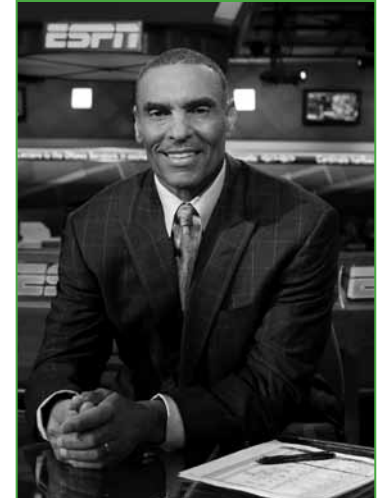
Saturday, March 17 — 1:30 PM to 3:15 PM

Former NFL head coach Herm Edwards joined ESPN in March 2009 as an NFL studio analyst, primarily appearing on *NFL Live*, *SportsCenter*, and *ESPNEWS*. Edwards, who worked a brief ESPN stint during the 2008 NFL offseason as a guest analyst, also contributes to ESPN's NFL Draft coverage and offers analysis on ESPN Radio and other platforms throughout the year.

Edwards spent eight years as an NFL head coach for the New York Jets (2001-05) and the Kansas City Chiefs (2006-08). He led his teams to four NFL postseasons, including a 2004 playoff appearance in which his Jets squad finished with a 10-6 regular season record and advanced to the AFC Divisional Playoffs. Edwards, who also guided the Chiefs to a Wild Card berth in 2006, is one of only four NFL coaches to lead two different teams to the playoffs in his first season as head coach with the respective teams.

The first graduate of the NFL's Minority Coaching Fellowship (1987), Edwards began his coaching career as a defensive back coach at San Jose State University (1987-89). He joined the NFL ranks as a scout with the Chiefs in 1990 and was with the club for four seasons (1992-95) as a defensive back coach and in his final year as a member of the player personnel department before joining Tony Dungy's staff in Tampa Bay. He served as the Bucs' assistant head coach and defensive back coach from 1996-2000. Edwards played defensive back in the NFL for 10 seasons (1977-86), mostly for the Philadelphia Eagles, with whom he recorded 38 career interceptions. He also played for the Atlanta Falcons and Los Angeles Rams during his final season.

A native of Seaside, California, Edwards attended the University of California, Berkeley, for two years before graduating from San Diego State University with a degree in criminal justice. He was appointed a charter member of the Fritz Pollard Alliance and named a member of the Positive Coaching Alliance's National Advisory Committee in 2003. Edwards also remains active in numerous charitable and philanthropic endeavors, including the Juvenile Diabetes Research Foundation (JDRF) and the Herm Edwards Youth Foundation, which he created in 1985 with the goal of making a direct impact on the lives of underprivileged children.



Keynote Speaker,
Herman "Herm" Edwards

As an NFL head coach, Edwards is infamous for his game-day terminology, known by fans as "Hermisms," including the quote and sound bite, "You play to win the game!", a message that Edwards famously gave during a New York Jets press conference. It also became the title of his book.

AWARDS LUNCHEON

Sunday, March 18 — 12:45 PM to 2:15 PM

Don't miss this celebratory gathering as RCI recognizes its outstanding members and volunteers. Support your peers and enjoy the camaraderie at this tasty luncheon.

RCI FOUNDATION UNITED STATES AND RCI FOUNDATION CANADA RECEPTION AND EVENT

Sunday, March 18

6:30 PM to 8:00 PM — Auctions and Raffles

All attendees are encouraged to attend the combined fundraiser for the US and Canada RCI Foundations.



ANNUAL MEETING OF THE MEMBERS (LUNCHEON)

Monday, March 19 — 12:00 PM to 2:00 PM

This is the RCI members' business meeting and annual election. Members sit down for a meal to discuss RCI business and to select leaders for the upcoming year. Boxed lunches will be served.

PRESIDENT'S RECEPTION AND ANNUAL BANQUET

Monday, March 19— 6:30 PM to 7:30 PM (Reception)

Monday, March 19 — 7:30 PM to 11:00 PM (Banquet)

Here's your chance to reminisce with fellow members over a sumptuous meal and lively entertainment. Entertainment this year will be provided by popular country music performer Charley Jenkins and Lindsey Stirling, fiddler extraordinaire.

ANNUAL BANQUET ENTERTAINMENT — CHARLEY JENKINS WITH LINDSEY STIRLING



Country music performer, Charley Jenkins

BORN COUNTRY

Charley Jenkins has country roots that run deep. He was raised on a farm in eastern Utah where he learned how to rope, ride and work hard. Life on the Jenkins farm revolved around cows, horses, and, of course, rodeo. Country music is all about a real cowboy's life - like Charley's. "Country is who and what I am. It is only natural for me to sing the songs that I love and relate to," says Charley. His first album, *Greatest Hours*, was written and produced with the help of his friend, Jordan Allen. With the success of this album and some personal advice from George Strait, Charley pushed his career to a new level.

In the summer of 2001, Charley loaded up his truck with everything he owned and headed off to Nashville, Tennessee. It didn't take him long to get his foot in the door in the country music industry. Charley was soon working on Music Row for a song-writing publishing company. It was here that Charley learned the ins and outs of the country business.



Violin virtuosa, Lindsey Stirling

VIOLIN PRODIGY

Lindsey Stirling has been in multiple national competitions and is noted for her versatility, performing music from country to hip hop. She has played in Las Vegas clubs, NBA halftime shows, and venues across the country. Lindsey has opened for or played with acts such as Sean Kingston, Donny Osmond, Allan Jackson, Shaun Barrowes, and Benton Paul.

At the age of 23, Stirling was a finalist on the fifth season of *America's Got Talent*, where she was known as the hip hop violinist. After Stirling's performance, Sharon Osbourne said, "Wow... we love you, Lindsey!" and Piers Morgan called her performance "electrifying."

EDUCATIONAL PROGRAMS AT A GLANCE

SATURDAY, MARCH 17

HSW/SD*

| | | |
|--|---|---------------------------------------|
| 9:00 AM - 10:30 AM and 10:45 AM - 12:15 PM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Sustainable Building Envelope Design at the 2010 Olympic Village • Evolution of EIFS • Lessons Learned From Restoration of Architectural Terra Cotta • Repair Strategies for Metal Roofing • A Robust Recycling Program for Roofing Systems in North America | HSW/SD HSW HSW HSW HSW/SD |
| 3:15 PM - 7:15 PM | Trade Show | |

SUNDAY, MARCH 18

| | | |
|---|---|-----|
| 9:00 AM - 12:15 PM | Trade Show | |
| 2:30 PM - 4:00 PM and 4:15 PM - 5:45 PM | Educational Programs – General Sessions <ul style="list-style-type: none"> • Communication Strategies of Expert Witnesses • Consultant Insurance 201 • What Is Real? Field Monitoring the Wind Performance of Commercial Roofs • Roof Warranties – Duration Vs. Coverage: Sustainable? | HSW |

MONDAY, MARCH 19

| | | |
|--|--|---|
| 8:45 AM - 10:15 AM and 10:30 AM - 12:00 PM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Ice Sphere Impact Testing of Photovoltaic Solar Panels • Restoration After Hurricane Ike: Memorial Hermann-Texas Medical Center • Water Testing Misconceptions: Fenestration Product Certification Vs. Forensic Investigation of Building Leaks • Evaluating Directly Bonded Stucco • Evaluating Condensation Resistance for the Design of Wall Assemblies • Case Study: Uplift Testing of Built-Up Roof Systems Along the South Texas Coast | HSW/SD HSW HSW HSW HSW/SD HSW |
| 2:15 PM - 3:45 PM and 4:00 PM - 5:30 PM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Case Study: Designing a Post-Disaster Building Enclosure for Blast, Hurricane, and Flood Resistance • Ice Ball Impact Testing of Siding • Effective Use of Roof Coatings • Thermal Storage With PCM Vs. Thermal Insulation in Hot Climates • Evaluation of Roofing Renovation Methods Using an Energy-Based Life-Cycle Analysis • Roof Anchors for Façade Access – A General Overview | HSW/SD HSW HSW HSW/SD HSW/SD HSW |

TUESDAY, MARCH 20

| | | |
|-------------------|--|------------|
| 8:00 AM - 2:00 PM | Auxiliary Seminars** <ul style="list-style-type: none"> • Liquid Sealants: Selection, Design and Installation • Metal Roofing | HSW HSW |
|-------------------|--|------------|

*HSW — indicates a program that qualifies for AIA Health Safety and Welfare credit. SD — indicates a program that qualifies for AIA Sustainable Design credit.

**Auxiliary Seminars offered at additional cost.

RCI CONTINUING EDUCATIONAL HOURS (CEHs)

All registered attendees will receive Continuing Educational Hours based on hourly attendance at Educational Programs and Auxiliary Seminars. Attendees will earn 1.0 CEH for spending up to three hours on the trade show floor. Attendees who spend more than three hours at the trade show will receive 2.0 CEHs.

AMERICAN INSTITUTE OF ARCHITECTS (AIA) LEARNING UNITS (LUs)

All Educational Programs and Auxiliary Seminars are registered to provide Learning Units for AIA members. Each program will provide 1.0 LUs per hour of attendance.

SCHEDULE OF EVENTS

THURSDAY, MARCH 15

| | |
|--------------------|---|
| 7:30 AM - 12:00 PM | RICOWI Board & General Membership Meeting |
| 7:30 AM - 4:00 PM | Convention Registration |
| 7:30 AM - 4:00 PM | Internet Café and Marketplace |
| 7:30 AM - 4:00 PM | Spouse/Guest Lounge |
| 8:00 AM - 5:00 PM | Committee Meetings |
| 9:30 AM - 10:30 AM | New Officer/Director Orientation |
| 11:00 AM - 4:00 PM | 2011- 2012 Board of Directors Meeting |
| 1:00 PM - 5:00 PM | RICOWI Board and General Membership Meeting (continued) |

FRIDAY, MARCH 16

| | |
|--------------------|---|
| 7:15 AM - 5:00 PM | RICOWI Roofing Seminar/Workshop |
| 7:30 AM - 5:00 PM | Convention Registration |
| 7:30 AM - 5:00 PM | Internet Café and Marketplace |
| 7:30 AM - 5:00 PM | Spouse/Guest Lounge |
| 7:30 AM | Shuttle Departs for President-Elect's Golf Tournament at Cowboys Golf Club |
| 7:30 AM | Shuttle Departs for Sporting Clays Tournament at Elm Fork Clay Sports |
| 8:00 AM - 11:00 AM | RRC Exam - Part 1 |
| 8:00 AM - 11:30 AM | RWC Exam - Part 1 |
| 8:00 AM - 12:00 PM | RRO Exam |
| 8:00 AM - 12:00 PM | REWC Exam |
| 8:00 AM - 9:00 AM | Golf Tournament Registration and Breakfast |
| 8:00 AM - 9:00 AM | Sporting Clays Tournament Registration and Breakfast |
| 9:00 AM | Tee-off – President-Elect's Golf Tournament |
| 9:00 AM | Start – Sporting Clays Tournament |
| 11:30 AM - 1:30 PM | Spouse Guest Luncheon |
| 12:00 PM - 1:30 PM | Lunch On Your Own |
| 12:00 PM - 3:30 PM | RRC Exam - Part 2 |
| 12:30 PM - 5:15 PM | RWC Exam - Part 2 |
| 1:00 PM - 6:00 PM | Trade Show Exhibit Setup |
| 2:00 PM - 4:00 PM | Train the Trainer |
| 3:00 PM - 6:30 PM | Committee Meetings |

SATURDAY, MARCH 17

| | |
|---------------------|---|
| 7:30 AM - 4:00 PM | Convention Registration |
| 7:30 AM - 4:00 PM | Internet Café and Marketplace |
| 7:30 AM - 4:00 PM | Spouse/Guest Lounge |
| 7:30 AM - 8:45 AM | Regional Meetings |
| 7:30 AM - 12:00 PM | RCI Foundations Board of Directors Meetings (U.S. and Canada) |
| 8:00 AM - 1:00 PM | Trade Show Exhibit Setup |
| 9:00 AM - 12:00 PM | Spouse/Guest Outing: Dallas Arboretum and Botanical Gardens |
| 9:00 AM - 10:30 AM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Sustainable Building Envelope Design at the 2010 Olympic Village • Evolution of EIFS • Lessons Learned From Restoration of Architectural Terra Cotta • Repair Strategies for Metal Roofing • A Robust Recycling Program for Roofing Systems in North America |
| 10:30 AM - 10:45 AM | Break |

SCHEDULE OF EVENTS

SATURDAY, MARCH 17 – CONTINUED

| | |
|---------------------|---|
| 10:45 AM - 12:15 PM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Sustainable Building Envelope Design at the 2010 Olympic Village • Evolution of EIFS • Lessons Learned From Restoration of Architectural Terra Cotta • Repair Strategies for Metal Roofing • A Robust Recycling Program for Roofing Systems in North America |
| 11:45 AM - 12:15 PM | Exhibitor Briefing |
| 12:15 PM - 1:15 PM | Lunch on Your Own |
| 12:15 PM - 1:15 PM | Executive Committee, Region Director, Past President, and Chapter President Luncheon |
| 1:30 PM - 3:15 PM | Opening Ceremony and Keynote Presentation |
| 3:15 PM - 7:15 PM | Trade Show – Grand Opening and Reception |
| 4:15 PM - 4:45 PM | Product Demonstration by Carlisle SynTec, Inc. – Trade Show Floor |
| 5:15 PM - 5:45 PM | Product Demonstration by Kemper System America, Inc. – Trade Show Floor |
| 6:15 PM - 6:45 PM | Product Demonstration by Atlas Roofing Corporation – Trade Show Floor |
| 7:15 PM - 7:45 PM | Exhibitors' Booth Selection Meeting for 2013 Trade Show |
| 7:15 PM - 10:00 PM | Exhibitors' Hospitality Receptions |

SUNDAY, MARCH 18

| | |
|---------------------|---|
| 8:00 AM - 4:00 PM | Convention Registration |
| 8:00 AM - 4:00 PM | Internet Café and Marketplace |
| 8:00 AM - 4:00 PM | Spouse/Guest Lounge |
| 8:00 AM - 9:00 AM | Nondenominational Religious Service |
| 9:00 AM - 12:15 PM | Trade Show with Full Breakfast Buffet |
| 9:45 AM - 10:15 AM | Product Demonstration – Grace Construction Products |
| 10:00 AM | Spouse/Guest Tour - The Art Collection of the Hilton Anatole |
| 11:00 AM - 11:30 AM | Product Demonstration – PROSOCO, Inc. |
| 12:15 PM - 8:00 PM | Trade Show Exhibit Dismantle |
| 12:45 PM - 2:15 PM | Awards Luncheon |
| 2:30 PM - 4:00 PM | Educational Programs – General Sessions <ul style="list-style-type: none"> • Communication Strategies of Expert Witnesses • Consultant Insurance 201 • What Is Real? Field Monitoring the Wind Performance of Commercial Roofs • Roof Warranties – Duration Vs. Coverage: Sustainable? |
| 4:00 PM - 4:15 PM | Break |
| 4:15 PM - 5:45 PM | Educational Programs – General Sessions <ul style="list-style-type: none"> • Communication Strategies of Expert Witnesses • Consultant Insurance 201 • What Is Real? Field Monitoring the Wind Performance of Commercial Roofs • Roof Warranties – Duration Vs. Coverage: Sustainable? |
| 6:30 PM - 8:00 PM | RCI Foundations Reception and Event |
| 8:00 PM | Dinner on Your Own |

MONDAY, MARCH 19

| | |
|--------------------|--|
| 7:30 AM - 5:00 PM | Convention Registration |
| 7:30 AM - 5:00 PM | Internet Café and Marketplace |
| 7:30 AM - 5:00 PM | Spouse/Guest Lounge |
| 8:45 AM - 10:15 AM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Ice Sphere Impact Testing of Photovoltaic Solar Panels • Restoration After Hurricane Ike: Memorial Hermann-Texas Medical Center • Water Testing Misconceptions: Fenestration Product Certification Vs. Forensic Investigation of Building Leaks • Evaluating Directly Bonded Stucco • Evaluating Condensation Resistance for the Design of Wall Assemblies • Case Study: Uplift Testing of Built-Up Roof Systems Along the South Texas Coast |

SCHEDULE OF EVENTS

MONDAY, MARCH 19 – CONTINUED

| | |
|--------------------------|--|
| 10:15 AM - 10:30 AM | Break |
| 10:30 AM - 12:00 PM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Ice Sphere Impact Testing of Photovoltaic Solar Panels • Restoration After Hurricane Ike: Memorial Hermann-Texas Medical Center • Water Testing Misconceptions: Fenestration Product Certification Vs. Forensic Investigation of Building Leaks • Evaluating Directly Bonded Stucco • Evaluating Condensation Resistance for the Design of Wall Assemblies • Case Study: Uplift Testing of Built-Up Roof Systems Along the South Texas Coast |
| 10:00 AM - 4:00 PM | Spouse/Guest Outing – Dallas Shopping |
| 12:00 PM - 2:00 PM | Annual Meeting of the Members (lunch served) |
| 2:00 PM - 2:15 PM | Break |
| 2:15 PM - 3:45 PM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Case Study: Designing a Post-Disaster Building Enclosure for Blast, Hurricane, and Flood Resistance • Ice Ball Impact Testing of Siding • Effective Use of Roof Coatings • Thermal Storage With PCM Vs. Thermal Insulation in Hot Climates • Evaluation of Roofing Renovation Methods by an Energy-Based Life-Cycle Analysis • Roof Anchors for Façade Access – A General Overview |
| 3:45 PM - 4:00 PM | Break |
| 4:00 PM - 5:30 PM | Educational Programs – Concurrent <ul style="list-style-type: none"> • Case Study: Designing a Post-Disaster Building Enclosure for Blast, Hurricane, and Flood Resistance • Ice Ball Impact Testing of Siding • Effective Use of Roof Coatings • Thermal Storage With PCM Vs. Thermal Insulation in Hot Climates • Evaluation of Roofing Renovation Methods Using an Energy-Based Life-Cycle Analysis • Roof Anchors for Façade Access – A General Overview |
| 6:30 PM - 11:00 PM | President's Reception and Annual Banquet |
| TUESDAY, MARCH 20 | |
| 7:30 AM - 9:00 AM | Breakfast - Board of Directors and Affiliated Chapter Presidents |
| 7:30 AM - 11:00 AM | Convention Registration |
| 7:30 AM - 11:00 AM | Internet Café and Marketplace |
| 7:30 AM - 11:00 AM | Spouse/Guest Lounge |
| 8:00 AM - 2:00 PM | Auxiliary Seminars <ul style="list-style-type: none"> • Liquid Sealants: Selection, Design and Installation • Metal Roofing |
| 9:00 AM - 1:00 PM | 2012 - 2013 Board of Directors Meeting |

RRC, RWC, REWC, AND RRO EXAMS

Friday, March 16

| | | | |
|------------------|--------------------|------------------|--------------------|
| RRC Part 1 ----- | 8:00 AM - 11:00 AM | RRC Part 2 ----- | 12:00 PM - 3:30 PM |
| RWC Part 1 ----- | 8:00 AM - 11:30 AM | RWC Part 2 ----- | 12:30 PM - 5:15 PM |
| REWC ----- | 8:00 AM - 12:00 PM | | |
| RRO ----- | 8:00 AM - 12:00 PM | | |

RICOWI ROOFING SEMINAR AND WORKSHOP

Friday, March 16 – 7:15 AM - 5:00 PM

SUSTAINABLE BUILDING ENVELOPE DESIGN AT THE 2010 OLYMPIC VILLAGE

David Fookes, PEng – Morrison Hershfield, Vancouver, BC

The Village at False Creek is a mixed-use development that includes 1,100 residential units, commercial space, and a community center. Certified as LEED Platinum for ND and LEED Gold for NC, the project addresses sustainable building envelope design features, including enhanced thermal performance of wall and roof assemblies, passive design, and durability of the building envelope. One of the buildings, a 68-unit affordable housing facility for seniors, is targeting net-zero annual energy consumption. Other features of the development include 50% vegetative roof coverage and rainwater harvesting. The speaker will discuss the details of this project.

David Fookes is a principal and technical director of the building science division of his firm. He has a wide scope of practical experience in product evaluation and specification, combined with academic training in materials science and engineering.

EVOLUTION OF EIFS

Ryan Barnes, EI – SBSA, Inc., Golden, CO

Since their U.S. introduction over 40 years ago, exterior insulation and finish system (EIFS) claddings have evolved, with code and industry standard modifications, to effectively manage moisture. As costs declined, EIFS installation became viable in the residential market. Increased construction errors fueled application and design changes that require compliant use of code-recognized systems. Barrier EIF systems do not incorporate moisture-management components and depend on the exterior surface (including all sealant joints) to be completely weatherproof. Damage resulting from water infiltration behind barrier EIF systems arose in the 1990s due to improper detailing and construction, lack of oversight, and absence of a moisture-managed system. Code and industry standards evolved to prevent the damage associated with barrier system failures over water-sensitive materials with the introduction of moisture-managed EIF systems, which incorporate a weather-resistive barrier and weep mechanisms to promote drainage. A case study of the largest post-litigation construction repair project in Denver's history will illustrate common errors in EIFS application, effects on related systems, and challenges encountered in transitioning from a barrier system to a moisture-managed façade. The presenter will offer first-hand experience of the forensic investigation, testing, repair design, and on-site quality assurance.

Ryan Barnes is a certified third-party EIFS inspector, and his areas of expertise include exterior cladding materials, plaza deck and balcony waterproofing, window assemblies, sealants, and related moisture management materials. Barnes provides forensic services, rehabilitation and new building design, and consultation services, including development of construction documents, design review, on-site quality assurance, and construction administration services.

LESSONS LEARNED FROM RESTORATION OF ARCHITECTURAL TERRA COTTA

Nicholas Floyd, PE – Simpson Gumpertz & Heger, Inc., Waltham, MA

Many historic buildings used mortar-set architectural terra cotta as decorative roof elements that relied on the terra cotta system as "waterproofing." Such systems frequently leak or deteriorate over time due to ongoing water absorption, and require extensive repair or complete replacement in order to meet contemporary water infiltration and structural performance standards. Design of new/replace-ment terra cotta elements must include sound attachment to the structure and a secondary flashing system below. Thermal movement and future maintenance must also be considered. Through reference to multiple case studies, this presenter will outline the steps necessary to evaluate existing systems, design replacement systems, and successfully install architectural terra-cotta roofing.

Nicholas Floyd specializes in the investigation and remedial design of building enclosures; in particular, historic buildings, plazas, and large public structures. He has experience investigating and designing repairs for slate, copper, and various membrane roofing systems such as brick and stone masonry, plaza waterproofing, and architectural terra cotta. Floyd has an architectural engineering degree from the University of Texas and is industrial rope-access trained.

Coauthor: Susan L. Knack-Brown – Simpson Gumpertz & Heger, Inc., Waltham, MA

REPAIR STRATEGIES FOR METAL ROOFING

James Ripley, RRC, RWC, REWC, RBEC, RRO, RA, NCARB – A/R/C Associates, Inc., Orlando, FL

The presenter will discuss how a metal roof system changes throughout its service life and detail different repair designs/strategies. Field investigation procedures and factors to consider when evaluating a roof system's repair options will be presented. Some of the repair concepts to be discussed include isolated repairs and refurbishment, simplification of the roof system and detailing, elastomeric coatings, high-performance finish systems, overlays with nested panels, overlays with thermoplastic roofing membrane, new metal roofing system on an overlay furring system, and metal roof removal and replacement.

James Ripley has practiced architecture since 1976. He has been involved in roof and waterproofing consulting full-time since 1993. His practice in Florida offers him a unique opportunity to observe metal roofing performance and deterioration in high-humidity, high-ultraviolet, high-wind environments.

A ROBUST RECYCLING PROGRAM FOR ROOFING SYSTEMS IN NORTH AMERICA

Rod A. Pfannenstiel – Nationwide Foam Recycling, Inc., Framingham, MA

Management of construction and demolition waste streams is an important environmental issue. With over 3 billion square feet of commercial reroofing performed each year, the disposal of torn-off materials represents an area of special concern. Roof system manufacturers and industry associations are working with roofing contractors to demonstrate the feasibility of reclamation. Additionally, private sector entrepreneurs are investing in collection and processing systems to make this option available to many roofers on a regional basis. Unfortunately, recycling services are not being fully utilized throughout the continent. Finding a home for the volume of removed roofing system components is the fundamental challenge. As more end-markets for roofing debris form, the economics of handling and collecting will improve dramatically. This, in turn, will allow recycling companies to offer roofing material recycling services that complement a project's schedule and budget – two necessary elements of a truly robust program. The presenter will offer an assessment of roof system recycling in North America and detail what aspects are working and what developments still need to come.

Rod Pfannenstiel is vice president of his firm, which is based in Framingham, MA. He holds a business degree from Colorado State University and champions the effort to provide recycling services for large commercial roof replacement projects.

Coauthor: Richard Garrison – Nationwide Foam Recycling, Inc., Framingham, MA.

EDUCATIONAL PROGRAMS — SUNDAY, MARCH 18 2:30 PM - 4:00 PM AND 4:15 PM - 5:45 PM

COMMUNICATION STRATEGIES OF EXPERT WITNESSES

Thomas Matyas – Edwards Wildman Palmer LLP, Chicago, IL

Communication is an art – and a sport with winners and losers. To win, one must have a strategy. The presenter will discuss the nuances of expert witness communication by telephone, by e-mail, by letter, at inspections, in conferences, during depositions – and most importantly – in court. The full scope of the expert witness process will be addressed, from first contact and the engagement agreement to the due-diligence period, the drafting of report(s), deposition – and finally – trial testimony. The speaker will stress the importance of speaking with reference to the past and being mindful of the present while executing a plan for the future.

Thomas Matyas is an attorney who specializes in real estate litigation. He has extensive experience handling complex claims in state and federal trial and appellate courts for matters of equitable and/or monetary relief, including injunctions, specific performance, money judgments, declaratory judgments, evictions, quieting titles, foreclosures, reformation, and rescission. Matyas has litigated matters for retail, office, and apartment buildings; industrial, unimproved, railroad, hospitality, retirement, and health care properties.

CONSULTANT INSURANCE 201

Byron Spencer – Norman-Spencer, Lombard, IL

Gretchen McAlinden – Norman-Spencer, Lombard, IL

The presenters will give an overview of insurance products most consultants should have in place. Professional liability insurance will be a particular focus. Claims-made coverage, contract requirements, and proper definitions of covered services will be explained. Concepts to be roughly detailed include best practices to help claims, steps to take when a dispute becomes a "demand for payment," the basics of a business package, general liability, additional insured requests, umbrella policies for asset protection, worker's compensation, and, as time allows, employee health insurance coverage. Adequate time will be allowed for Q&A.

E. Byron Spencer has over 35 years of experience in all phases of business and personal insurance, including ten years managing a large commercial carrier's association division. He is a founder and CEO of his firm.

Gretchen McAlinden has over 35 years of varied insurance background. For many years, she was the insurance buyer for a Fortune 300 manufacturing company, handling group benefits for 38,000 employees worldwide. Today, she serves as the president of her firm. In addition to serving the needs of her individual clients, she drives the efforts of her Chicago-based company in development and management of professional liability programs.

WHAT IS REAL? FIELD MONITORING THE WIND PERFORMANCE OF COMMERCIAL ROOFS

A. Baskaran, PhD, PEng – NRC/IRC, Ottawa, ON

Building codes and standards reference wind pressure coefficient data for design of roofing systems. The data are mostly from wind tunnel studies. The roofing community in North America has undergone much change over the last 25 years, including advances in material science, computer-aided design, and engineering applications. Most wind tunnel data were developed over two decades ago and are ill suited to quantify wind-induced loading of current-day roof coverings. As part of the Special Interest Group For Dynamic Evaluation of Roofing Systems (SIGDERS), a project has been initiated at the National Research Council (NRC) to collect field performance data from commercial roofs in three locations across North America (Ottawa, ON; Mt. Pleasant, MI; and Rialto, CA) The presenter will offer data from the field performance of these roofs and attempt to answer the following questions: How do we quantify the difference in wind loads between rigid versus flexible roofs? | What is the role of roof membrane flexibility on wind loads? | How does one model

roof covering flexibility and maintain boundary layer flow in the wind tunnel without introducing the Reynolds number effect? | What is the real effect of wind on roofs?

A. "Bas" Baskaran is a group leader and senior research officer at the National Research Council of Canada, Institute for Research in Construction (NRC/IRC). He has spent 25 years researching the effects of wind on building envelopes through wind-tunnel experiments and computer modeling. Baskaran serves as adjunct professor at the University of Ottawa. He is a member of RCI, ASCE, SPRI, RICOWI, ICBEST, and CIB technical committees. His work in the area of wind engineering and building envelopes has received national and international recognition. Baskaran has an extensive research record with more than 150 publications in peer-reviewed journals and conference proceedings. A professional engineer, Baskaran received his master's degree in engineering and doctorate degree from Concordia University, Montreal, Canada. Both of his graduate research topics focused on the effects of wind on buildings and earned best dissertation awards from the Canadian Society of Civil Engineers.

ROOF WARRANTIES – DURATION VS. COVERAGE: SUSTAINABLE?

Brian P. Chamberlain – Carlisle Construction Materials, Carlisle, PA

Customers view warranties as indicative of a roof system's relative life expectancy. While warranty language is designed to clarify coverage limitations, a roof warranty may have little to do with the actual life duration or sustainability of the assembly. What warranty language should be sought to confirm or verify performance? How can a warranty back up sustainability? Should warranties be used as design criteria? The presenter will discuss the merit of warranties compared to a focus on materials, performance assemblies, and workmanship.

Brian Chamberlain has been with his firm since 1987. He holds a bachelor's degree in architectural design from the University of Wisconsin at Milwaukee. He is part of a team responsible for systems configuration, details development, and code-testing operations for those assemblies. Chamberlain has offered numerous design-related presentations in the U.S., Canada, South Korea, and China.

EDUCATIONAL PROGRAMS — MONDAY, MARCH 19

8:45 AM TO 10:15 AM AND 10:30 AM TO 12:00 PM

ICE SPHERE IMPACT TESTING OF PHOTOVOLTAIC SOLAR PANELS

Jim D. Koontz, RRC, PE – Jim D. Koontz & Associates, Inc., Hobbs, NM

The use of alternative renewal energy sources, such as photovoltaic solar panels, is becoming more prevalent worldwide. Substantial investments in this technology are being made by residential and commercial entities. The relative hail resistance of photovoltaic solar panels, however, may not be clearly understood. Several photovoltaic solar panel manufacturers list a hail resistance of up to 1" in diameter, which is not an unexpected meteorological event for most areas of the United States. The speaker conducted impact tests, per ASTM standards, of several photovoltaic solar panels with ice spheres of various diameters. The solar panels' electrical output was measured before and after impactation. The effects of ice sphere impact on the performance of the photovoltaic solar panels will be discussed.

Jim Koontz has been involved in the roofing industry for over 50 years. As a researcher, he has authored numerous technical articles on roofing. Koontz has also been a guest speaker for organizations such as NRCA, ASTM, RCI, and others. As a consulting engineer, he has worked in over 40 states, Canada, Mexico, and the Caribbean. Koontz's most notable projects include the Kingdome in Seattle, the Denver International Airport, and the Church Street USPO at ground zero in New York after the 9/11 event.

RESTORATION AFTER HURRICANE IKE: MEMORIAL HERMANN-TEXAS MEDICAL CENTER

Amy Peevey, RRO, PE, CDT – Building Exterior Solutions, LLC, Houston, TX

The Memorial Hermann-Texas Medical Center is a level-one trauma hospital essential for providing emergency care in Houston. On September 13, 2008, Hurricane Ike struck Houston. The center's signature clay roof tiles were damaged, became airborne, and impacted nearby buildings. Exterior glazing and roofing system damage was sustained throughout the center. The presenter's firm was retained as the engineer-of-record to evaluate, make repair recommendations, develop associated repair documents, and perform construction observations for the center's restoration. A major concern with the restoration process was to allow the hospital to remain in operation with little or no disruption. The speaker's firm strived to retain the center's existing aesthetics while providing repair solutions that would prevent future widespread failure and offer long-term repair and/or replacement solutions.

Throughout her career, Amy Peevey has participated in a wide variety of projects involving investigation, evaluation, repair, and construction of structural, architectural, and material-related building problems. She specializes in design peer review, building envelope commissioning, failure investigation, evaluation, repair design, and construction monitoring of building envelope systems. Peevey has been published in an ASTM International (ASTM) special technical publication on inspection of natural stone façades.

WATER TESTING MISCONCEPTIONS: FENESTRATION PRODUCT CERTIFICATION VS. FORENSIC INVESTIGATION OF BUILDING LEAKS

Brandon S. Buchberg, PE – Simpson Gumpertz & Heger, Inc., Waltham, MA

Francesco J. Spagna, PE – Simpson Gumpertz & Heger, Inc., Waltham, MA

One of the primary goals of a building envelope leak investigation is to trace sources of leaks. National testing standards certify newly installed fenestration products for compliance with specified performance criteria. While these standards can be adapted and used with building envelope leak investigations, water testing for the purpose of tracing leaks should be based on physical evidence, experience, and engineering judgment rather than on guidelines for product certification. Investigators and other professionals often mistakenly apply guidelines for product certification testing during building envelope leak investigations, misunderstand the purpose of accepted test devices (such as the applicable water spray volume), and apply inappropriate test procedures. The speakers will provide an overview of fenestration product certification. Through a study of testing standards and building leak investigations, they will differentiate between test methods appropriate for fenestration product certification and those applicable to building envelope leak investigations.

Francesco Spagna is experienced with building envelope investigations, condition assessments, construction litigation, design of building envelope repairs, construction administration, and peer review of building envelope designs. He has been involved in the investigation and remedial design of curtain walls, windows, roofing, EIFS and stucco claddings, brick and stone veneer, load-bearing masonry, plaza waterproofing, and below-grade waterproofing. He has a bachelor's degree in architectural (structural) engineering from Pennsylvania State University and a master's degree in civil (structural) engineering from North Carolina State University.

Brandon Buchberg's work involves design, investigation, and repair of building envelopes. He commonly performs water testing to identify leak paths and to verify fenestration performance. Buchberg is a member of ASTM Committee C18 and a member of the Building Enclosure Council of the Boston Society of Architects. He has bachelor's and master's degrees in civil engineering from the Georgia Institute of Technology.

EVALUATING DIRECTLY BONDED STUCCO

Lee Cope, PE – Wiss, Janney, Elstner Associates, Inc., Duluth, GA

John Fraczek, PhD, PE, SE – Wiss, Janney, Elstner Associates, Inc., Northbrook, IL

The presenters evaluated several coastal high-rise buildings with stucco cladding directly applied to concrete or concrete masonry. Stucco delamination and poor bonding were frequently observed. The speakers discovered several causes, including lax substrate preparation, improper placement of stucco accessories, and poor installation techniques. They will discuss the significance of delaminated stucco and the conditions that affect bonding. Also offered will be an overview of field and laboratory test methods (destructive and nondestructive) that can be used to evaluate conditions and glean quantitative values for understanding bond strength.

Lee Cope is a licensed professional engineer who has extensive experience with portland cement plaster (stucco) façade systems, air barriers, window systems, waterproofing, and interfaces of various envelope components. He has evaluated a variety of structures to determine the causes of distress on exterior façade /curtain wall systems and building envelope systems. Cope is a voting member of ASTM Committee C11 on Gypsum and Related Building Materials and Systems.

John Fraczek is frequently engaged to resolve construction-related design problems; in particular, those related to concrete materials. An established author, he has served as a principal speaker in a nationwide seminar series on concrete repair and restoration. Fraczek has presented numerous lectures on structural failures, repair techniques, materials performance, and nondestructive testing. His professional affiliations include the American Concrete Institute (ACI), the Precast/Prestressed Concrete Institute (PCI), and the Structural Engineers Association of Illinois (SEAOI).

EVALUATING CONDENSATION RESISTANCE FOR THE DESIGN OF WALL ASSEMBLIES

Patrick Roppel, PEng – Morrison Hershfield, Vancouver, BC

The energy efficiency aspirations of regulators necessitate innovation in many aspects of composite wall design. To meet energy standards in mild and cold climates, insulation in both interior and exterior wall cavities is increasingly becoming the norm. Designers' failure to understand the multidimensional nature of construction and how buildings actually operate can unnecessarily restrain the condensation resistance and efficiency of wall systems. This presenter will explore how practitioners can evaluate the condensation resistance of wall assemblies using generic solutions.

Patrick Roppel is a building science engineer in his firm's buildings, technology, and energy division. He specializes in the analysis of building envelope performance through mathematical methods. Roppel's research includes predicting indoor moisture levels for uncontrolled humidity, thermal performance of building envelopes, generic solutions for wall assemblies with low air and vapor permeance insulation, and attic ventilation.

Coauthor: Mark Lawton – Morrison Hershfield, Vancouver, BC

CASE STUDY: UPLIFT TESTING OF BUILT-UP ROOF SYSTEMS ALONG THE SOUTH TEXAS COAST

David Amori, RRC, PE – EFI Global, Inc., San Antonio, TX

The presenter will offer analysis of uplift testing results from a series of adhered built-up roofs installed on buildings near the south Texas coast. The speaker observed a diverse array of failure modes and obvious disconnect between design specifications and stated insurability requirements. The presenter will direct a discussion of the design, construction and insurance process to highlight and provide recommendations for better built-up roof designs that meet insurability guidelines.

David Amori is a structural/geotechnical engineer with more than 19 years of domestic and international experience in building, heavy civil construction, and engineering. He is responsible for forensic engineering, fire investigations, and environmental consulting in southern Texas.

EDUCATIONAL PROGRAMS — *MONDAY, MARCH 19*

2:15 PM - 3:45 PM AND 4:00 PM - 5:30 PM

CASE STUDY: DESIGNING A POST-DISASTER BUILDING ENCLOSURE FOR BLAST, HURRICANE, AND FLOOD RESISTANCE

Chris Norris, PE, LEED AP, CEI – Morrison Hershfield, Atlanta, GA

The presenter will detail the unique challenges and solutions developed for a hospital project in New Orleans. The building enclosure was designed to meet hurricane impact, blast resistance, and flood requirements. The building enclosure materials include precast panels, insulated metal panels, rainscreen walls, membrane roofing, and vegetative roofing. The design was such to allow the building to remain fully operational, even with full flooding of the first floor. To do this, it required an additional layer of building enclosure material to provide an air/vapor barrier between the first and second floors. It also required designed environmental separations for stairwells and elevator shafts. The enclosure is designed to minimize flood damage and allow for easy refurbishment of the ground level following subsidence of flood waters. The design requirements were met through close collaboration among the architect, building enclosure consultant, blast design consultant, structural engineer, and enclosure system manufacturers.

Chris Norris specializes in building enclosure consulting. His experience includes consultation for new construction projects, assessment of existing buildings, and expert consultation in support of litigation. He has been involved with projects throughout North America.

ICE BALL IMPACT TESTING OF SIDING

Richard F. Herzog, RRC, PE – Haag Engineering Company, Burnsville, MN

Each year, hailstorms cause considerable damage, typically to buildings' siding. Disagreements sometimes arise regarding whether the damage resulted from hailstone impacts, normal weathering, material or manufacturing deficiencies, or other mechanical contact. A laboratory study was conducted to determine the diameter of hailstones necessary to fracture vinyl or dent metal siding of common thicknesses and design. Freezer ice balls of various sizes were propelled at free-fall velocities to simulate hailstone impacts, and the threshold ice-ball size to fracture or dent the various materials was determined.

Richard Herzog is a principal engineer, meteorologist, registered roof consultant, and branch manager for his firm. He is licensed as a professional engineer in 16 states. Herzog has authored or coauthored several articles related to roofing and storm damage issues. He has lectured for organizations including the Roofing Industry Committee on Weather Issues (RICOWI), the Property Loss Research Board (PLRB), Tile Roofing Institute (TRI), trade associations, contractor groups, and insurance companies. He has been the chairman of the RICOWI Hail Committee since 2001, and was lead author on the RICOWI Hail Investigation Project. He has testified in numerous court cases, arbitrations, and appraisal hearings on roofing and building envelope issues.

Coauthors: Scott Morrison, Shawn Patnode, and Jeff Green – Haag Engineering Company, Irving, TX.

EFFECTIVE USE OF ROOF COATINGS

Gregory R. Doelp, PE – Simpson Gumpertz & Heger, Inc., Waltham, MA

Matthew M. Copeland, PE – Simpson Gumpertz & Heger, Inc., Waltham, MA

Roof coating manufacturers assert the many merits of their products, including protection from ultraviolet rays, reduced thermal cycling, improved waterproofing performance, and, with reflective coatings – reduced energy costs. The presenters will offer a summary of the major coating types available, including acrylics, polyurethanes, and specialty products such as soy-based coatings. The speakers will explain the importance of matching coatings to roofs based on coating characteristics, performance, and maintenance expectations.

Gregory Doelp specializes in investigating and designing roofing, plaza waterproofing, and below-grade waterproofing systems. His projects often include analyzing building moisture problems and leakage problems and repairing/renovating structures. Doelp is a member of the American Society of Civil Engineers and several honor societies. He is a registered professional engineer in Massachusetts and seven other states.

Matthew Copeland is a project engineer specializing in historic building investigation and repair projects, with a focus on materials science issues. He has experience with a variety of building envelope issues, including implementation of technologies such as building-integrated photovoltaics and custom terra cotta rain screen systems. Copeland is a registered professional engineer in Massachusetts.

THERMAL STORAGE WITH PCM VS. THERMAL INSULATION IN HOT CLIMATES

Christoph Spaeh, PE – Sutton-Kennerly & Associates, Inc., Greensboro, NC

The presenter will discuss how installation of phase change materials (PCM) can provide energy-efficiency improvements for buildings in hot and mild climates. He will detail a comparative analysis of thermal energy flows and interior temperature fluctuations of buildings with increased insulation values and increased thermal storage (PCM), respectively. Data analysis was performed using hygrothermal software WUFI by the Fraunhofer Institute in Germany. The findings show positive results regarding heating and cooling energy demands as well as interior temperature fluctuations. This indicates a need to perform further research to allow such insulation alternatives to be considered in the building energy codes.

Christoph Spaeh has practiced as an engineering consultant in Germany and the United States since 1994. He focuses his practice on building physics issues, including moisture in building enclosures, hygrothermal analysis, energy efficiency, and air barriers. Spaeh holds a master's degree in building physics from the University of Stuttgart in Germany. He is a licensed professional engineer based in North Carolina.

EVALUATION OF ROOFING RENOVATION METHODS USING AN ENERGY-BASED LIFE-CYCLE ANALYSIS

Ivan Lee – Morrison Hershfield, Burlington, ON

Steven Murray, PEng, PMP – Morrison Hershfield, Burlington, ON

As one of the most critical parts of the building enclosure, a roofing system has significant impact on both the energy performance and durability of the building. It is widely known that roofs of greater insulation value provide greater energy savings in operational energy. However, very little consideration is given to the embodied energy of the roofing materials as it relates to the total energy of the assembly. The presenters will discuss how to evaluate the overall energy performance and energy-related life-cycle costs of various conventional roofing replacement options while considering embodied energy cost, operational energy savings, and expected service life of the roof construction.

Steve Murray is the director of his firm's building science groups in Ontario and Alberta. He has been practicing in the building science field for over 20 years and has expertise in envelope rehabilitation, roofing design, and infrared thermography through investigation and repair of dozens of envelope failures. Murray is a past board member of the RCI Ontario Chapter and a winner of the RCI Horowitz award for his paper, "Solving Roof Leaks with Fans."

Ivan Lee is the sustainable design coordinator for his firm's Burlington, ON, office. He has been involved in various sustainable design and LEED projects and durability reviews of building enclosures for both institutional and residential buildings. He has developed an expertise in energy modeling, hygrothermal analysis, sustainable building materials, and building enclosure design.

Coauthor: Robin Koke – Morrison Hershfield, Burlington, ON

ROOF ANCHORS FOR FAÇADE ACCESS – A GENERAL OVERVIEW

Greggery G. Cohen, PE – Simpson Gumpertz & Heger, Inc., Waltham, MA

Building façade access is required for window washing, inspection, maintenance, and repairs. Top-down suspended equipment is often the most appropriate access method. For safety reasons, the equipment used for building façade access must be anchored to the building. The presenter will discuss design, installation, inspection, and testing of roof anchors for façade access on existing buildings.

Greggery Cohen has been with his firm for 23 years. He has designed noteworthy structures such as the University Hospitals of Cleveland; Mather Pavilion; Lerner Tower; LeLacheur Baseball Stadium in Lowell, MA; and the Richmond County Ballpark in Staten Island, NY. Cohen designed the renovations and additions to the Swedish American Hospital in Rockford, IL. He has evaluated many buildings for façade access equipment as part of inspection and repair projects. He has also designed roof anchors for façade access.

Coauthor: Rolf A. Larson – Simpson Gumpertz & Heger, Inc., Waltham, MA.

LIQUID SEALANTS: SELECTION, DESIGN AND INSTALLATION

Kami Farahmandpour, FRCI, RRC, RWC, REWC, RBEC, PE – Building Technology Consultants, PC, Arlington Heights, IL
Patrick Gorman – Gorman Moisture Protection, Inc., El Paso, TX
Daniel Cain – The George D. Alan Company, Irving, TX
Rick Johnson – BASF

The presenters will discuss issues related to liquid joint sealant selection, design, and installation. The discussion will include insights from a manufacturer, a designer professional, and two contractors. The manufacturer will discuss the characteristics and uses of different types of sealant materials. The designer will discuss the design criteria and selection process for joint sealants. The contractors will demonstrate installation methods recommended by the Sealant, Waterproofing, and Restoration Institute (SWRIInstitute). The session will close with a discussion of installation training and common causes of sealant failure.

Kami Farahmandpour has been involved in the evaluation, testing and repair of construction materials and building envelope performance since 1984. He has managed over 400 projects, many of which have involved multiple disciplines and complex building envelope issues. His professional experience includes investigation of system deterioration, water and air leakage issues, and assessments of building performance, code compliance, and repair alternatives. He is a charter member and past president of the Chicago Area Chapter of RCI, and Past Associated Director of the Sealant, Waterproofing and Restoration Institute. Farahmandpour is a Fellow of RCI.

Patrick Gorman is lead author of the SWRIInstitute's liquid sealant application training module. He has authored and coauthored several ASTM, ISO, and RILEM research papers concerned with sealant durability and application. Gorman has made presentations annually for the last 35 years on liquid sealant topics in many different venues.

Daniel Cain is a graduate of the California State University at Sacramento with a BS degree in construction engineering management. Working as a specialty contractor in the moisture-protection field, his experience includes thousands of projects throughout the Mid-Atlantic, Central, and Southwest regions of the United States. Cain serves on the board of directors of SWRIInstitute. He has written several articles for construction-related publications and given presentations on the subject of moisture protection in buildings for nearly 20 years.

Rick Johnson is a regional sales manager for his company. Prior to his current job for a sealants manufacturer, he worked for a moisture protection and restoration contractor. Through his current position, Johnson works daily with design professionals, contractors, and building owners. He participates with the International Concrete Repair Institute (ICRI) and is a board member for SWRIInstitute.

METAL ROOFING

Brian Gardiner, RRC, CCS – Austech Roof Consultants, Inc., Austin, TX
Charlie Smith – Architectural Building Components, Houston, TX

Long an aesthetically appealing design element, metal has unique properties that separate it from other roof choices. The introduction of corrugated metal roofing in the late 19th century became a welcome economical materials option. Metal roofing has continued to evolve with technological advances in alloys, coatings and the use of "floating" standing-seam roof panels. RCI's Metal Roof educational program provides attendees with a well-rounded look at metal roofing history, properties, design, and installation practices. The program is divided into several sections, covering both traditional and modern metal roofing.

Brian Gardiner has practiced as a full-time roof consultant in Texas for over 27 years. He is past a RCI Region IV director (1995-98), acted as Document Competition Committee chair and currently serves RCI as the metal roofing course committee chair. Gardiner has designed, specified, and performed failure analysis on several hundred metal roofs.

Charlie Smith is owner and president of his firm, a metal roofing manufacturing company located in Houston, TX. He has helped bring several advancements to the metal roofing industry.

SPOUSE/GUEST LOUNGE

For the convenience of registered spouse/guest attendees, a comfortable lounge area will be available for meeting with friends and relaxing. See the schedule for available times.

SPOUSE/GUEST LUNCHEON

Friday, March 16 – 11:30 AM to 1:30 PM

After making their own mojito drinks, guests will see demonstrations of how to make other mixed beverages and enjoy light tapas. With the conclusion of the mixed-drink lesson, guests will then enjoy lunch at La Duni Latin Kitchen. Blending European traditions with Latin American soul, La Duni mixes the flavors, aromas, colors, textures, forms, and sounds of both cultures to create the ultimate Latin dining experience. This is a luncheon not to be missed!

SPOUSE/GUEST OUTING — DALLAS ARBORETUM AND BOTANICAL GARDENS

Saturday, March 17 – 9:00 AM - 12:00 PM

Discover Dallas' greatest natural resource - The Dallas Arboretum and Botanical Garden. Set beside White Rock Lake in sight of downtown's gleaming spires, the arboretum features 66 acres superbly landscaped with towering trees, fragrant gardens, and lush lawns that beckon visitors into a serene and beautiful world.

From the gorgeous blooms of springtime to the vivid colors of fall, there is something to see year-round. As guests explore the grounds, they also discover fountains, sculptures, two historic mansions, and much more to delight the eye and refresh the spirit.

Built on the 44-acre former estate of petroleum geologist and oilman Everett Lee DeGolyer, the historic 21,000-square-foot DeGolyer House is the focal point of the arboretum. This elegant Spanish Colonial-style revival mansion is now a museum offering guided tours of DeGolyer's study and other rooms filled with art and furniture. After a guided tour through the gardens and the handsome DeGolyer House, guests enjoy a light box lunch in a reserved setting of Rosine Hall, also located on the arboretum grounds and overlooking beautiful White Rock Lake.

From the more than 2,000 varieties of azaleas in the spring to the countless colors of chrysanthemums in the fall, the splendors of these gardens are a must-see when visiting Dallas. An afternoon at the Dallas Arboretum and Botanical Gardens offers a chance to relax and replenish without leaving the city.



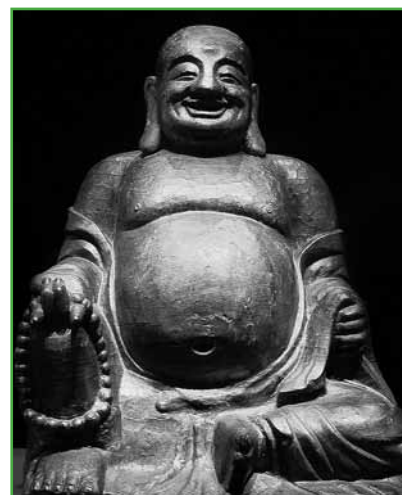
SPOUSE/GUEST TOUR — THE ART COLLECTION OF THE HILTON ANATOLE

Sunday, March 18 – 10:30 AM

Note: tour includes coffee and a danish.

Equal parts luxury hotel and museum, the Hilton Anatole houses an extensive private collection of fine art and antiques – the largest ever assembled in an American hotel.

The Hilton's art collection features over 1,000 pieces showcased throughout the property. Many pieces are on permanent loan from the collection of Trammell and Margaret Crow, some dating back to the fifth century B.C. Also, works from some of the world's most famed artists are part of the Hilton Anatole's vast collection, including pieces by J. Seward Johnson Jr., Josiah Wedgwood, G. Marcel Suchorowsky and more.



SPOUSE/GUEST OUTING — DALLAS SHOPPING

Monday, March 19 – 10:00 AM to 4:00 PM

There is one activity in Dallas that never goes out of season: shopping!

Did you know that Dallas boasts more shopping square footage than Los Angeles or New York? On this tour you'll take a shopping shuttle bus from the hotel to visit several of the area's finest merchant's establishments.



HILTON ANATOLE
 2201 Stemmons Freeway
 Dallas, Texas 75207

The Hilton Anatole hotel is located on 45 lush acres just north of the downtown Dallas, Texas, business district on interstate highway I-35E (Stemmons Freeway) — just three miles from the recently expanded Dallas Convention Center, 20 minutes from Dallas/Ft. Worth International Airport and 10 minutes from convenient Dallas Love Field Airport.

Featuring 1,606 richly appointed hotel guest rooms, over 333,000 square feet of premier meeting and event space, a full-service health club and spa, a priceless art collection, and impeccable dining, travelers — from American presidents and glamorous celebrities to generations of loyal business and leisure guests — have experienced the authentic Texas icon for one reason: the Hilton Anatole hotel transcends expectations.

RESERVATION CONTACT INFO.

214-748-1200 or 800-445-8667
 www.hiltonanatolehotel.com

INTERNET SERVICE

Complimentary high-speed Internet access is available for all guests.

ROOM RATES FOR RCI CONVENTION ATTENDEES

| ROOM TYPE | Single/Double | Single Executive Level | Double Executive Level |
|-----------|---------------|------------------------|------------------------|
| COST | \$190 | \$230 | \$250 |

Please Note: Room availability is limited. Be sure to make reservations as soon as possible to receive the best selection of available rooms. Room tax is 15%.

Standard hotel check-in time is 4:00 PM. Check-out time is 12:00 PM. Guests wishing to avoid an early departure fee of \$190.00 (equal to one night room and tax) should advise the Hilton Anatole at or before check-in of any change in planned length of stay.

**RESERVATION DEADLINE
 FEBRUARY 20, 2012**

Make your reservation directly with the hotel by the date above to receive these special room rates.

**Hotel Reservation Phone Numbers
 214-748-1200 or 800-445-8667**

TRANSPORTATION TO/FROM DFW AIRPORT

Directions from DFW Airport: Take south airport exit (Hwy 183 East), merge with 35E South, go about four miles, then exit Market Center Boulevard. The hotel is on the right-hand side. The travel distance is 14 miles; travel time is approximately 10 minutes.

| Transportation Type | Typical Minimum Charge |
|---------------------|------------------------|
| Limousine | \$125 |
| Super Shuttle | \$19 |
| Taxi | \$40 |
| Rental Car | prices vary |

TRANSPORTATION TO/FROM DALLAS LOVE FIELD AIRPORT

Directions from Love Field Airport: Exit the airport and turn right onto Mockingbird, make a left to get onto 35E South, exit Market Center Boulevard. The hotel is on the right-hand side. The travel distance is 6 miles; travel time is approximately 20 minutes.

PARKING AT THE HOTEL

- Valet parking - \$26.00 per 24 hours with in-out privileges
- Self parking - \$17.00 with in-out privileges

TRADE SHOW EXHIBITION, GRAND OPENING, AND RECEPTION

Saturday, March 17 — 3:15 PM to 7:15 PM

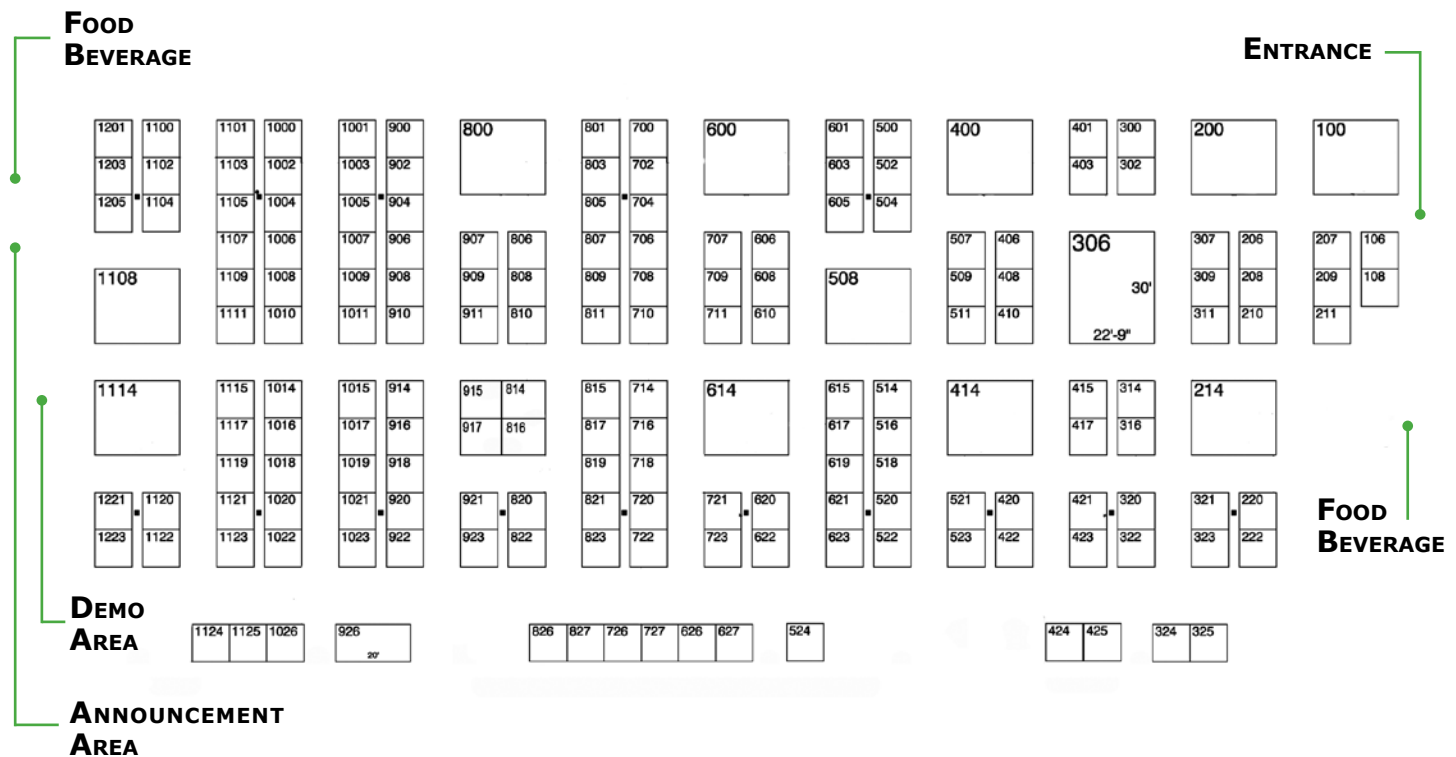
TRADE SHOW EXHIBITION WITH FULL BREAKFAST BUFFET

Sunday, March 18 — 9:00 AM to 12:15 PM

Discover the latest products and services on display by exhibitors and sponsors. Don't miss your chance to win some of the many exciting cash prizes that will be given away to those present in the exhibit hall on Sunday. Live product demonstrations will occur each day. There will be a complimentary reception on Saturday and a full breakfast buffet on Sunday.

Earn CEHs for attending the RCI Trade Show. Attendees will earn 1.0 CEH for spending up to three hours on the trade show floor. Attendees who spend more than three hours at the trade show will receive 2.0 CEHs.

EXHIBITS MAP - TRINITY ONE EXHIBIT HALL



DOCUMENT COMPETITION

Be sure to visit the display of the RCI Document Competition entries and winners during the trade show. Winners will be recognized at the Awards Luncheon.

Competition Categories include

- Small Projects (projects less than \$500,000 in scope)
- Large Projects (projects greater than \$500,000 in scope)
- Reports (any written document pertaining to roofing, waterproofing, or building envelope)

SUGGESTED ATTIRE

Convention and Trade Show
Business Casual

Awards Luncheon
Business Casual

RCI Foundation Event
Casual

President's Reception/ Banquet
Business Casual

- 2001 Company
- 3M
- ADCO Products, Inc. | EternaBond
- Alpha Pro Tech Engineered Products, Inc.
- ALT Global, LLC
- American Hydrotech, Inc.
- APOC Division of Gardner-Gibson
- Architectural Building Components
- ATAS International, Inc.
- Atlas Roofing Corp.
- Barrett Company
- BASF Corp.
- Berridge Manufacturing Company
- Bitumar USA, Inc.
- BondCote Roofing Systems
- Carlisle Construction Materials
- Center for Environmental Innovation in Roofing
- CertainTeed Corp.
- Chem Link, Inc.
- Cosella-Dörken Products, Inc.
- DERBIGUM
- Dow Building Solutions
- Durapax, LLC
- Duro-Last Roofing, Inc.
- EagleView Technologies
- Elastizell Corp. of America
- ER Systems
- ES Products, Inc.
- Fibertite Roofing Systems | Seaman Corp.
- Firestone Building Products
- Flex Membrane International
- Fortuna Logistics | MaxCon
- Froet Industries, LLC
- GAF Materials Corp.
- Georgia-Pacific Gypsum, LLC
- Grace Construction Products
- Hail Alert Technologies
- Hanover Architectural Products
- Hartsfield & Nash Agency, Inc.
- Henry Co.
- Hunter Panels
- IB Roof Systems
- Infra-red Analyzers, Inc.
- Insulfoam
- Interwrap, Inc.
- Johns Manville
- Johnson Roofing
- JR Jones Roofing
- Karnak Corp.
- Kemper System America, Inc.
- Lightning Protection Institute
- Malarkey Roofing Products
- MAPA Products
- Metal-Era, Inc.
- MIRO Industries, Inc. | Rooftop Anchor, Inc.
- Momentive Performance Materials, Inc.
- National Coatings Corporation
- NCFI Polyurethanes
- Neogard
- Norman-Spencer
- North American Roofing Services, Inc.
- OMG Roofing Products
- Owens Corning Trumbull Asphalt
- Peach State Roofing, Inc.
- PHP Systems/Design
- Plasteco, Inc.
- Polyglass USA
- Polyguard Products, Inc.
- Premier Rail Systems
- PROSOCO, Inc.
- Quest Construction Products
- Revere Copper Products, Inc.
- RoofConnect
- RoofLogic | True North Estimating Systems
- Roxul, Inc.
- SafePro, LP
- Safety Rail Source, LLC
- SFS Intec, Inc.
- Sika Sarnafil, a Division of Sika Corporation
- Siplast
- Situra, Inc.
- Soprema, Inc.
- SPRI, Inc.
- Stockton Infrared | Roof Scan IR
- STS Coatings
- T Clear Corp.
- TAMKO Building Products
- Thaler Metal Industries, Ltd.
- TopHat Framing Systems
- Tremco, Inc.
- TRUFAST, LLC
- Uniflex Industrial Roof Coatings
- United States Gypsum Company
- US Ply, Inc.
- Vaproshield
- Versico Roofing Systems
- VP Buildings, Inc.
- W.R. Meadows, Inc.
- Wausau Tile, Inc.
- Weather Fusion, LLC | LiveHailMap.com
- W.P. Hickman Company