

The Magazine
of Roofing and
Waterproofing
in Illinois
and Beyond



CRCA TODAY

SPRING 2017



I-9 Compliance

New Concrete Decks & Moisture Research

IECC Technical Issues



Chicago Roofing
Contractors Association

CRCA TODAY | 4415 W. Harrison St., #540 | Hillside, IL 60162

Asphalt Shingle Recycling

Be Green & \$ave Green On Asphalt Shingles Disposal Fees

Visit us Online or Stop by our Eco-Facility to Learn more!



ECO-FACILITY
sextonrecycling.com
847.571.1270



22100 S. Central Avenue • Richton Park, Illinois 60471

CRCA TODAY

SPRING 2017

www.CRCA.org



FEATURES

Leadership Message.....	5
The Purpose of Form I-9, What's Required and Why It's Important to Maintain Accurate Records.....	6
Spring Safety Update.....	9
CRCA Research in Action – New Concrete Decks and Moisture	13
IECC 2018 and Technical Issue Update	15
Overview of Building Envelope Projects at ORNL.....	18
CRCA Industry News.....	22
CRCA Contractor Members.....	27
CRCA Associate Members.....	29
Industry Calendar	31



Advertising Contact: Contact CRCA's Office for information at 708-449-3340 or info@crca.org.

Reprints: CRCA Today has extra Magazine reprints available to CRCA Members for a limited time, limited quantity, for free. Contact info@crca.org. Reprints are available from CRCA headquarters; 1-100 - \$.95/issue; 101-500 - \$.90/issue; 501-1000 - \$.80/issue; 1000+ - \$.70/issue. All shipments FOB 4415 W. Harrison St., Suite 436, Hillside, IL 60162.

Online: Archived CRCA Today Issues available at <http://www.crca.org>, Magazine.

On the Cover: CRCA 2017 Trade Show & Seminars Photos: Clockwise to the left: Paul Scelsi, Air Vent; Matt Dupuis, SRI; Big Rock Supply and Garlock Equipment; trade show exhibitors and attendees

CRCA 2017 Board of Directors

George Patterson, President
Bennett and Brosseau Roofing, Inc., Romeoville, IL

Troy Wormley, 1st Vice President
W.B.R. Roofing, Inc., Wauconda, IL

Mark Duffy, 2nd Vice President
Elens & Maichin Roofing & Sheet Metal, Joliet, IL

Jay Adler, Secretary
Adler Roofing & Sheet Metal, Inc., Joliet, IL

David Wehrle, Treasurer
Anderson & Shah Roofing, Inc., Joliet, IL

Tony Roque, Immediate Past President
M.W. Powell Company, Chicago, IL

Brian Cronin, Director
Knickerbocker Roofing and Paving Co., Harvey, IL

Phil Diederich, Director
Waukegan Roofing Company, Inc., Waukegan, IL

Laurie Moore, Director
Kreiling Roofing, Peoria, IL

Bill O'Brien, Jr., Director
Combined Roofing Services LLC, West Chicago, IL

James Peterson, Steep and Shingle Chair
Peterson Roofing, Inc., Mt. Prospect, IL

Ryan Petrick, Director
Ridgeworth Roofing Co., Inc., Frankfort, IL

Jim Prusak, Director
Prusak Construction & Roofing, Inc., Bridgeview, IL

Mitch Rabin, Director
A-1 Roofing Company, Elk Grove Village, IL

Chris Riddiford, Director
G.E. Riddiford, Co., Arlington Heights, IL

Shawn Sullivan, Director
Olsson Roofing Company, Inc., Aurora, IL

Associate Directors
Greg Dedic, Associate Director
North Coast Roofing Systems, Glendale Heights, IL

Kim Kwasiborski, Associate Director
SJ Mallein Co., Inc., Burr Ridge, IL

Bill McHugh, Executive Director
Chicago Roofing Contractors Association, Hillside, IL

Subscription information:
To subscribe, visit www.crca.org, click on CRCA Today, subscribe. For article submissions, information, contact CRCA at 708-449-3340 or e-mail info@crca.org. To unsubscribe, email info@crca.org, unsubscribe to CRCA Today.

CRCA Today, Volume 6, No. 2, is published quarterly by the Chicago Roofing Contractors Association. Information has been obtained from sources believed to be reliable. However, because of the possibility of human or mechanical error by our sources, the Chicago Roofing Contractors Association does not guarantee the accuracy or completeness of any information and is not responsible for any errors or omissions of the results obtained from use of such information. The publisher reserves the right to censor, review, edit, reject or cancel any materials not meeting the standards of CRCA Today.

Editorial Contributions: You are invited to share your expertise and perspectives. Before writing, visit www.crca.org / magazine, or contact CRCA at info@crca.org for writing guidelines & policies.



SB-1 SELF-BOND® ROOF UNDERLAYMENT

Granulated Under Shingles, Slate, Wood Shake, Tile & More

- Totally waterproof & nail sealable
- Maximum flexibility prevents wrinkling & buckling
- Split release film for easier positioning & faster application
- Anti-Slip granular surface featuring Safe-Step™ Technology

Ask About Our New Underlayments
Contact Scott Covelli at (773)484-8634



www.apoc.com



Full Service Commercial Roofing Contractor
Complete Roof Replacements
GREEN Roofing Experts
Roof Leak Investigations
Emergency Repairs
Inspections & Evaluation Reports



43 YEARS OF
DEDICATION, QUALITY
& UNMATCHED
EXPERTISE.

708-598-0039
RidgeworthRoofing.com

CRCA Leadership Message – Leadership Means Being There



George Patterson,
2017 CRCA President
(CRCA Photo)

CRCA's long history of leadership comes from a legacy of innovation, long standing relationships amongst suppliers and contractors, consultants and others as well as a reputation for being there to keep conversations about the industry aimed at solutions for all. CRCA's leaders participate locally, regionally, nationally and internationally. Why would a local trade association work on national and international issues?

In 1969, CRCA's leadership worked with the Construction Specifications Institute (CSI) Chicago Chapter to update its specification manual for built-up roofing. The manual included drawings, specs and text about details for a best practice guide. The National Roofing Contractors Association (NRCA) Roofing Manuals eventually replaced the CRCA Documents as CRCA Members participate in the NRCA's Manual Development Task Force, adding to their knowledge while sharing their own.

CRCA Past-President and Industry Affairs Chair, Tony Roque, stated, "We work nationally to get things done locally and vice-versa." CRCA's Industry Affairs Committee works with NRCA in partnership to bring the field perspective to the code development process at the International Code Council. "ICC's voting membership has no idea what we believe or want unless we talk to them directly." That's why CRCA is active nationally.

"It also helps to get things done locally by bringing a national perspective to the issues we work together to resolve," states CRCA President George Patterson.

CRCA's Vice President and Membership Co-Chair, Troy Wormley adds, "Participating nationally, at the State and local levels means we're ahead of the issues, trying to work on common sense solutions for the building owner and manager." The recent Chicago Code Memorandum is part of that list of solutions CRCA has worked on diligently. "The City of Chicago asked CRCA's Industry Affairs Committee to bring forward solutions to issues that help the building owners in the City in various ways," adds Wormley.

CRCA's Past-President Rod Petrick, travelling with others from NRCA's Technical Operations Committee, went to Germany for the largest roofing convention in the world. "The technologies that I saw were amazing and we're talking to the manufacturers about how we can get the new products here in the USA and Chicago," stated Petrick. "If we don't ask, we don't get what we need that ultimately can help the building owner and manager."

At the end of the day all agree, "It's what we get done together that makes CRCA the very best of the best." Keep an eye on www.CRCA.org to learn more about the resources the Industry Affairs Committee and others have built. There's a lot there!

The Purpose of Form I-9, What's Required, and Why It's Important to Maintain Accurate Records

By Cathy Lindfors

The Form I-9, Employment Eligibility Verification assists employers in verifying individuals who are authorized to work in the United States. Employers must complete a Form I-9 for every new employee hired after November 6, 1986. An individual is deemed as hired upon the commencement of employment. The job applicants need not complete Form I-9. Employers must complete a Form I-9 for all newly hired employees to verify their identity and authorization to work in the United States.

Employee's Responsibility

New employees must complete Section 1 of a Form I-9 at or before the time of hire, but no later than the close of business on the first day of employment. The employee is held responsible for the accuracy of the information provided via their signature.

Someone may assist the employee if the employee cannot complete Section 1 without assistance or if the employee needs the Form I-9 translated. The preparer or translator must read the form to the employee, assist the employee in completing Section 1, and have the employee sign or mark the form in the appropriate places. The preparer or translator must then complete the Preparer/Translator Certification block on the Form I-9. The employee must be given Form I-9 by the employer and asked to provide either one original document on List A or one original document on each of Lists B and C (see www.CRCA.org for lists) within three business days of the date employment began. The employee can choose which documents they want to present from the List of Acceptable Documents.

Employer's Responsibility

Employers are responsible for ensuring the completion of the entire Form I-9, including ensuring that the employee completes Section 1 in full when the employee begins to work. The employer should immediately examine all documents establishing each employee's identity and eligibility to work. Employers must accept any

document(s) (from the List of Acceptable Documents) presented by the individual, which reasonably appear to be genuine and to relate to the person presenting them. Employers may not specify which document(s) an employee must present. However, employers who participate in the USCIS E-Verify Program may only accept List B documents that have a photograph.

Employers may also require that employees make any necessary corrections to ensure proper completion of the form. Employers need not receive any documentation to substantiate the employee-provided information in Section 1. Additionally, and pursuant to § 7 of the Privacy Act (8 U.S.C.A. § 552a), providing a Social Security number on the Form I-9 is voluntary for all employees unless the employer participates in the E-Verify Program, which requires an employee's Social Security number for employment eligibility verification.

The employer must complete Section 2 of the form no later than the close of business on the new employee's third day of employment. If an individual is hired for less than three business days, then Sections 1 and 2 of the Form I-9 must be fully completed at the time of the hire, when the employee begins work. To ensure consistency and accuracy, employers should review the information provided in Section 1 against the documents produced by the employee for Section 2. If there is a discrepancy between the two sections, the employee should be given an opportunity to make necessary corrections.

Employers are not required to make copies of the documents that are produced for Section 2. However, employers may attach photocopies of documentation submitted to satisfy Form I-9 requirements to the employee's Form I-9. This must be consistently applied to every employee, without regard to citizenship or national origin, should employers choose to make and attach photocopies.

In certain circumstances, employers must accept a receipt in lieu of a List A, List B, or a List C document if one is presented by an employee. Examples of receipts and other documents that serve as proof of temporary employment eligibility that employers can accept are the following:

- All employees may provide receipts for the application of a replacement document where the document was lost, stolen, or destroyed, which can be a List A, List B, or List C document. The employee must present the actual document for which the receipt was issued within 90 days from the date of hire, or for reverification, within 90 days from the date employment authorization expires.
- Lawful permanent residents may provide the arrival portion of a Form I-94 or I-94A containing a temporary I-551 stamp and photograph as a receipt for a List A document. When the stamp expires, or if the stamp has no expiration, one year from date of issue the employee must present the actual Form I-551 (*Permanent Resident Card*, or green card).
- Refugees may provide the departure portion of Form I-94 or I-94A with an unexpired refugee admission stamp, as a receipt for a List A document. Within 90 days from the date of hire or for reverification, the employee must present an unexpired *Employment Authorization Document* (Form I-766), or combination of a valid List B document and an unrestricted Social Security card.

A receipt indicating that an individual has applied for initial work authorization or for an extension of expiring work authorization is **not** acceptable proof of employment eligibility on the Form I-9. Additionally, receipts are never acceptable if employment lasts less than three business days.

Reverifying Employment Authorization for Current Employees

Employers must reverify the employment eligibility no later than when an employee's work authorization expires. For reverification, Section 3 of the Form I-9 may be used; however, if Section 3 has already been used for a previous reverification or update, a new Form I-9 must be used. If a new form is used, the employee's name should be written in Section 1, Section 3 must be completed, and employers must retain the new form with the original.

Retaining Forms

Employers must retain completed Forms I-9 for all employees for three years from the date of hire or one year after the date employment is terminated, whichever is later. These forms may be retained in paper, microfilm, microfiche, or electronically.

To store Form I-9 electronically, employers may use any electronic recordkeeping, attestation, and retention system that complies with the DHS standards, which includes most off-the-shelf computer programs and commercial automated data processing systems. However, the system must not be subject to any agreement that would restrict access to and use of it by an agency of the United States.

Note: The form must be available for inspection by authorized U.S. government officials. Employers will be provided with three business days' notice prior to an inspection of the employers' retained Forms I-9.

Paper Retention

The Form I-9 can be signed and stored in paper format. However, employers must reproduce a complete, blank Form I-9 and ensure that the employee receives the instructions for completing the form. When copying or printing the paper Form I-9, employers may reproduce the two-sided form by making either double-sided or single-sided copies. Employers may retain completed paper forms on-site or at an off-site storage facility for the required retention period, as long as the employer is able to present the Form I-9 within three days of an audit request from the DHS, the Office of Special Counsel for Immigration Related Unfair Employment Practices, or the Department of Labor officers.

Retaining Copies of Documentation Provided by Employee

Employers may choose to copy or scan documents presented by an employee, which the employer must retain with the employee's Form I-9. However, retaining copies of documentation does not relieve the employer from the requirement to fully complete Section 2 of the Form I-9. If an employer chooses to retain copies of employee documentation, the employer may not just do so for employees of certain national origins or citizenship statuses, or the employer may be in violation of antidiscrimination laws.

Penalties

The Department of Homeland Security (DHS) is authorized to enforce the employment eligibility verification requirements. Employers who fail to properly complete, retain, and/or make available for inspections Forms I-9 may incur civil penalties between \$216 and \$2,156 for each employee for which the form was incorrect.

Knowingly Hire

Employers who knowingly hired unauthorized aliens or knowingly continue to employ aliens who have become unauthorized to work in the United States may be

ordered to cease and desist from such activity and pay the following for each unauthorized alien:

- **First Offense:** Between \$539 and \$4,313.
- **Second Offense:** Between \$4,313 and \$10,781.
- **Subsequent Offenses:** Between \$6,469 and \$21,563.

The DHS will consider an employer to have **knowingly hired** an unauthorized alien if the employer uses a contract, subcontract, or exchange, which is entered into, renegotiated, or extended to obtain the labor of an alien and knows the alien is not authorized to work in the United States.

Liability is also imposed when an employer uses a contract or subcontract — renegotiated or extended — to obtain the labor of an alien and knew the alien was not authorized to work in the United States.

Criminal Penalties

Criminal penalties of up to \$3,000 in fines and imprisonment for up to six months are possible when a pattern or practice of knowingly employing unauthorized workers is demonstrated. People who use fraudulent identification or employment eligibility documents or documents that were lawfully issued to another person, or those who make a false statement or attestation for purposes of satisfying the employment eligibility verification requirements may be fined, imprisoned for up to five years, or both.

Document Fraud

If a DHS investigation reveals that an individual has knowingly committed or participated in acts relating to document fraud, the DHS may take action. The DHS will issue a *Notice of Intent to Fine* when it intends to impose penalties and persons who receive this notice may request a hearing before an administrative law judge. If the DHS does not receive a request for a hearing within 30 days, it will impose the penalty and issue a Final Order, which is final and cannot be appealed.

Individuals found by the DHS or an administrative law judge to have violated § 274C of the Immigration and Nationality Act (INA) may be ordered to:

- Cease and desist from such behavior.
- Pay a civil penalty as follows:
 - **First Offense:** Between \$445 and \$3,563 for each fraudulent document that is the subject of the violation.

- **Subsequent Offenses:** Between \$3,563 and \$8,908 for each fraudulent document that is the subject of the violation.

Good Faith Defense

If an employer can demonstrate that they have, in good faith, complied with the Form I-9 requirements, then the employer has established a good faith defense with respect to a charge of knowingly hiring an unauthorized alien, unless the government can show that the employer had actual knowledge of the unauthorized status of the employee.

A good faith attempt to comply with the paperwork requirements of the law may be adequate notwithstanding a technical or procedural failure to comply, unless the employer has failed to correct the violation within 10 days after notice from the DHS, or the employer is engaging in a pattern or practice of violations.

Cathy Lindfors is a Human Resources Consultant for Connor & Gallagher OneSource. She brings over 25 years of HR experience and an expertise in the areas of labor law, consulting and compliance. Connor & Gallagher OneSource (CGO) as founded in 1997 and serves mid-sized businesses in the Chicago area, assisting with their Risk Management, Employee Benefits, HR Solutions, Payroll and Retirement Planning. Contact Rob Gaylord (rgaylord@gocgo.com) or Cathy Lindfors (infogocgo.com) for more information.

www.METALDECKSUPPLY.com
On-Line Quoting

Metal Deck Replacement?
PROUD MEMBER

Contact the Experts Today!
800-894-7741 • (Fax) 630-978-7825

For more details... ask us today!

CUBS & CRUISE
CHICAGO WEEKEND Sweepstakes
800.894.7741 Toll Free | 630.978.7825 Fax
www.metaldecksupply.com
March 2017 - February 2018

With each metal deck order placed, your company will be entered into a drawing to win a weekend package for four (4) people:

- ✈ Flights to and from Chicago
- 🚗 Transportation to and from the airport
- 🏨 Hotel for two (2) nights
- ⚾ Chicago Cubs Ball Game
- 🛥 Lake Michigan Private Yacht Cruise
- ☀ Summer in Chicago

Spring Safety Updates

By CRCA Staff

National Safety STAND-DOWN
TO PREVENT FALLS IN CONSTRUCTION
MAY 8-12, 2017

Stop Falls Stand-Down

- ▶ Plan a toolbox talk or other safety activity
- ▶ Take a break to talk about how to prevent falls
- ▶ Provide training for all workers

For more information:
www.osha.gov/StopFallsStandDown
#StandDown4Safety • (800) 321-OSHA (6742)

OSHA, CDC, NIOSH, MOSH, NORA, Safety Pays. Falls Cost.

(OSHA image)

Prepare now for the May 8-12 National Safety Stand Down. For the 4th year in a row, The National Fall Prevention Stand-Down raises fall hazard awareness across the country to stop fall fatalities and injuries. Fatalities caused by falls from elevation continue to be a leading cause of death for construction employees, accounting for 350 of the 937 construction fatalities recorded in 2015. OSHA remind all that **those deaths were preventable.**

What is a Safety Stand-Down?

A Safety Stand-Down is a voluntary event for employers to talk directly to employees about safety. Any workplace can hold a stand-down by taking a break to focus on “Fall Hazards” and reinforcing the importance of “Fall Prevention”. It’s an opportunity for employers to have a conversation with employees about hazards, protective methods, and the company’s safety policies and goals. It can also be an opportunity for employees to talk to management about fall hazards they see.

Who Can Participate?

Anyone who wants to prevent falls in the workplace can participate in the Stand-Down. In past years, participants included commercial construction companies of all sizes, residential construction contractors, sub- and independent contractors, highway construction companies, general industry employers, the U.S. Military, other government participants, unions, employer’s trade associations, institutes, employee interest organizations, and safety equipment manufacturers.

Partners

OSHA is partnering with key groups to assist with this effort, including the National Institute for Occupational Safety and Health (NIOSH), the National Occupational Research Agenda (NORA), OSHA approved State Plans, State consultation programs, the Center for Construction Research and Training (CPWR), the American Society of Safety Engineers (ASSE), the National Safety Council, the National Construction Safety Executives (NCSE), the U.S. Air Force, and the OSHA Training Institute (OTI) Education Centers.

Suggestions to Prepare for a Successful Stand-Down

1. **Try to start early.** Designate a coordinator to organize the stand-down. If you have multiple work sites, identify the team that will lead the stand-down at each site.
2. **Think about asking your subcontractors, owner, architects, engineers, or others** associated with your project to participate in the stand-down.

3. Consider reviewing your fall prevention program. This will help provide a more effective stand-down.

- a. *What types of falls could happen:*
- Falls from ladders
 - Falls from a roof
 - Falls from a scaffold
 - Falls down stairs
 - Falls from a structural steel
 - Falls through a floor or roof opening
 - Falls through a fragile roof surface
- b. *What needs improvement? Is your program meeting its goals? Are you experiencing fatalities, injuries, or near misses? Are employees aware of the company's fall protection procedures?*
- c. *What training have you provided to your employees? Does it need revision?*
- d. *What equipment have you provided to your employees? Is better equipment available?*

4. Develop presentations or activities that will meet your needs. Decide what information will be best for your workplace and employees. The meeting should provide information to employees about hazards, protective methods, and the company's safety policies, goals and expectations. Hands-on exercises (a worksite walkaround, equipment checks, etc.) can increase retention.

5. Decide when to hold the stand-down and how long it will last. Decide if the stand-down will take place over a break, a lunch period, or some other time.

6. Promote the stand-down. Try to make it interesting to employees. Some employers find that serving snacks increases participation.

7. Hold your stand-down. Try to make it positive and interactive. Let employees talk about their experiences and encourage them to make suggestions.

8. Follow up. If you learned something that could improve your fall prevention program, consider making changes.

NEW OSHA Silica Rule DELAYED to Sept. 23, 2017

OSHA has a new rule on silica exposures in the construction industry coming in June. The CRCA and Chicagoland Roofing Council both have helped NRCA fund research on Silica exposures for the roofing industry. The research is underway, according to NRCA's Tom Shanahan.

The new rule from OSHA would require engineering controls to keep workers from breathing silica dust. The rule is comprised of two standards, one for Construction and one for General Industry and Maritime.

OSHA estimates that the rule will save over 600 lives and prevent more than 900 new cases of silicosis each year, once its effects are fully realized. The Final Rule is projected to provide net benefits of about \$7.7 billion, annually.

About 2.3 million workers are exposed to respirable crystalline silica in their workplaces. This includes two million construction workers who drill, cut, crush, or grind silica-containing materials such as concrete and stone, and 300,000 workers in general industry operations such as brick manufacturing, foundries, and hydraulic fracturing, also known as fracking. Responsible employers have been protecting workers from harmful exposure to respirable crystalline silica for years, using widely-available equipment that controls dust with water or a vacuum system.

Key Provisions include the reduction in the permissible exposure limit (PEL) for respirable crystalline silica to 50 micrograms per cubic meter of air, averaged over an 8-hour shift.

The new regulation requires employers to: use engineering controls (such as water or ventilation) to limit worker exposure to the PEL; provide respirators when engineering controls cannot adequately limit exposure; limit worker access to high exposure areas; develop a written exposure control plan, offer medical exams to highly exposed workers, and train workers on silica risks and how to limit exposures.

It provides medical exams to monitor highly exposed workers and gives them information about their lung health and flexibility to help employers — especially small businesses — protect workers from silica exposure.

Both standards contained in the final rule took effect on June 23, 2016, after which industries have one to five years to comply with most requirements. Construction effective date was June 23, 2017, one year after the effective date – but was extended to September 23, 2017.

OSHA Issues Recommended Practices for Safety and Health Programs in Construction

On December 1, the Occupational Safety and Health Administration (OSHA) issued Recommended Practices for Safety and Health Programs in Construction to help industry employers develop proactive programs to keep their workplaces safe. The published recommendations are advisory only and do not create any new legal obligations or alter existing obligations created by OSHA standards or regulations.

The publication encourages contractors to create a safety and health program using several simple steps that include:

- Training workers on how to identify and control hazards

- Inspecting the job site with workers to identify problems with equipment and materials
- Developing responses to possible emergency scenarios in advance

The recommended practices account for new materials, equipment, and techniques; more diversity among workers; more temporary and contract workers; and an increased risk for occupational musculoskeletal disorders resulting from a sedentary lifestyle and aging workers.

From the extension announcement, "OSHA expects employers in the construction industry to continue to take steps either to come into compliance with the new permissible exposure limit, or to implement specific dust controls for certain operations as provided in Table 1 of the standard."

According to OSHA, construction employers should also continue to prepare to implement the standard's other requirements, including exposure assessment, medical surveillance, and employee training. 

To learn more, visit www.OSHA.gov.



FLEXOR™ OFFERS MORE.
More impact resistance and more performance in all weather conditions.





CAN YOU SPOT THE LEAK?

ILD can, all of them.

It takes an exceptional technician to find every leak in a green roof membrane. To weed out the false positives, to isolate the exact location. ILD is renowned for its expertise on green roofs. We find breaches that others don't, and we do the job right the first time.

SAVE YOURSELF SOME GREEN. CALL ILD FIRST.

THE ORIGINAL AND STILL THE BEST.

**Toll Free: 1.866.282.5325
info@leak-detection.com**



CRCA Research in Action – New Concrete Decks and Moisture

By Matt Dupuis, PhD, PE

In the past decade, issues with moisture intrusion into low slope roof systems from concrete roof decks has become a major concern in the roofing industry. The problem we have is that concrete as a construction material arrives at the job site with a large water content (10 – 15 lbs. / ft³). This amount of water is a typical range, and will depend on things like water-to-cement ratio, aggregate type, admixtures and placement method, among others. Of this water, portions of it will either be chemically hydrated into the solid concrete, evaporate from the surface, or remain free moisture to migrate. Our concern in the roofing industry is the free moisture available to migrate. Making this worse, is that this free moisture is almost always latent; remaining hidden below the surface of the concrete roof deck.

Ultimately, the problem comes to a head when someone has to decide when the concrete roof deck is ready to receive a roof system. In typical scenarios, recently, this has been when the General Contractor demands the Roofing Contractor perform. So, what can the roofing contractor do to ensure the concrete is dry enough for a roof?

To check the concrete moisture, historically, a person could use an electronic moisture meter, the mat test (ASTM D4263 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride). All of these methods can and normally will give a false indication that the concrete is dry. The problem is the moisture below the surface of the concrete, even when the surface looks and feels dry.

There is one test method, for determining the moisture inside the concrete roof deck, that has shown some promise. It is the use ASTM F-2170 probes (ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes). These probes are drilled into the concrete deck and assess the moisture inside the slab, not at the surface. The flooring industry has been successfully using these probes for decades now. However, these probes and their returned readings are designed for interior use; basically at room temperature. Adapting them for use on roof decks, outdoors, in all weather, is not a simple task.

So this has left the roofing industry in a conundrum. When is it appropriate to place a roof system of a new concrete roof deck? This situation has led to numerous roof failures and legal actions by any and all involved parties.

With this problem in mind, the roofing industry began a research project in 2016 to begin to answer the question about concrete moisture and roof installation. The project sponsors include The National Roofing Contractors Association, The Chicago Roofing Contractors Association, The Canadian Roofing Contractors Association, GAF Materials Corp and Soprema. The research project is ongoing and will continue through at least 2017. The work that has been done to date can be divided into Phases. These Phases are as follows

Phase 1

Construction of test concrete roof slabs and preparation for instrumentation of temperature and humidity, at depth. These slabs are located at SRI Consultants facility in Wisconsin. The slabs were configured for measuring and examining numerous variables. These variables, were:

1. Aggregate type (Regular weight vs. Light weight)
2. Surface finish (Magnesium float vs Hard steel trowel)
3. Rewetting (Outdoor vs Lab)
4. Drying Capacity (Steel form deck vs Stripped form)
5. Moisture Level in slabs over time
6. Time required for instruments to measure moisture levels

Large scale outdoor slabs were prepared and instrumented for a factorial experiment to evaluate variables 1-5 and compared against slabs prepared and maintained in lab environment. Numerous smaller concrete specimens were prepared for weekly installation of instrumentation to measure variables 5-6; these specimens will be both outdoors and in a lab environment. In total, over 200 instruments were utilized with these slabs over the course of this phase. In addition to the temperature and humidity

measurements of the slabs, an onsite weather station recorded concurrent data during this phase.



Photo 1. A large general contractor was utilized to provide concrete slab assembly, placement and finishing. These slabs are the exterior slabs, exposed to the full weather at SRI Consultants facility Wisconsin. SRI Photo



Photo 2. An overall view of the exterior slabs and smaller sample pans, exposed to the full weather, at SRI Consultants facility Wisconsin. SRI Photo

Phase 2

R&D Services Inc. in Tennessee, provided laboratory measurement of hygrothermal material properties for the concrete utilized in Phase 1. The measured concrete values were made specifically at 28 and 60 days. Hygrothermal numbers for such "green" concrete, to our knowledge, has not been done by others. These hygrothermal material numbers were utilized in Phase 3 of the work.



Photo 3. Specimens of the light weight structural concrete and regular weight concrete utilized to make both the slabs and specimens in Photos 1 and 2. These specimens were utilized for ASTM E96 vapor transmission testing. SRI Photo

Phase 3

This material data was entered into the commercially available WUFI Pro software. WUFI Pro is a finite element heat and moisture transport modeling program. This type of software can simulate the moisture movement to, from and within our concrete roof decks; and then after we roof over it. If properly used and calibrated, these models are very powerful tools to analyze the moisture problems we are seeing in industry.

Using the WUFI software, SRI Consultants, with the assistance of justSmartSolutions, the software vendor's United States partner, prepared and calibrated hygrothermal simulations. These simulations were expanded to a matrix of roof systems and locations in North America.

To date hundreds of WUFI simulations of moisture levels of concrete decks and roofs exposed to simulated weather have been completed. The simulations answered several questions and even raised new ones.

This research effort is ongoing and continues. The work that will be done in 2017 will involve validation of the modeling by utilization of more full scale concrete decks, with actual roofs installed over them and appropriate instrumentation, at SRI's research facility.

Based on the results of these hundreds of simulations, it became apparent that the use of a vapor retarder in northern climates kept the roofing materials at reasonable moisture levels year round. This occurred with both regular weight concrete decks and light weight structural concrete decks. Therefore, given the currently available research data and observations from it, this researcher is recommending that: **Unless the Designer of Record approves in writing otherwise, a vapor retarder of less than 0.01 perm is necessary over new concrete roof decks.** Note this level of vapor retarder (0.01 perm) is relatively strong and some commonly used vapor retarders may not meet this level. As the work progresses more updates and more specific recommendations may become available. 

Matt Dupuis, PE, PhD, is a principal at SRI, Inc., Middleton WI. Matt can be reached at MDupuis@sri-engineering.com

IECC 2018 and Technical Issue Update

Presented by Mark Graham, NRCA

Written by CRCA Staff



Mark Graham

Mark Graham, NRCA's Vice President, Technical Services, presented at the 2017 CRCA Trade Show & Seminars on the changes to the 2015 version that results in the 2018 International Energy Conservation Code (IECC) and various technical issues in the roofing industry.

IECC & IBC 2018

Graham mentioned that the NRCA and other groups including CRCA participated in the 2015 Group A Code Development Cycle. In Group A are the International Building Code (IBC) Fire Safety (F), IBC-General (G), the International Existing Building Code (IEBC), the International Plumbing Code (IPC), and the International Mechanical Code, (IMC). The hearings took place:

- Committee Hearings - Memphis, TN - April 2015
- Public Comment Hearing - Long Beach, CA - September 2015
- Online Governmental Consensus Vote - Fall, 2015

Then, during 2016, the Group B Code Development cycle took place. In the Group B were the IECC, IBC-Structural (S) chapters, the International Residential Code (IRC), and the International Fire Code (IFC). The schedule for Cycle B was:

- Committee Hearings - Louisville, KY - April 2016
- Public Comment Hearing - Kansas City, MO - October 2016
- Online Governmental Consensus Vote
- Publications is estimated to be Fall of 2017
- Adoptions likely beginning in 2018

The roofing related changes in the 2018 International Energy Code include:

- Some editorial/format changes
- No changes in R-Values requirements
- No changes in roof reflectivity requirements

- No changes in air barrier requirements

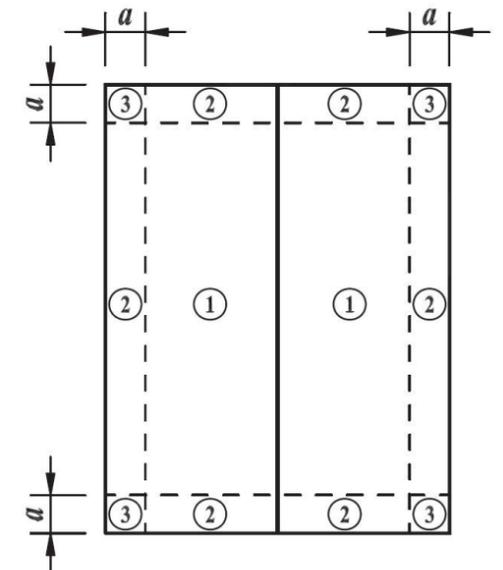
In the ASHRAE 90.1-13 to ASHRAE 90.1-16, a change took place that allowed single-ply membrane roof systems to be a deemed-to-comply air retarder.

In the IBC Structural section, the ASCE 7-16 was adopted into the 2018 version of the Building Code, Chapter 16. In the ASCE 7-16, public review draft, the following items change:

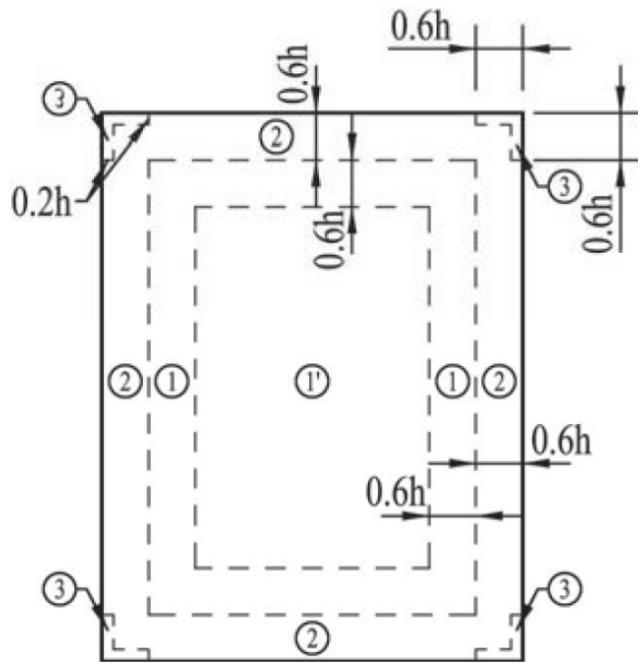
- Revised basic wind speed map
- Changes (and new) pressure coefficients
- Revised perimeter and corner zones

As a result of the new ASCE 7-16 standard in the IBC, expect higher field, perimeter and corner uplift pressures to come as the IBC 2018 is adopted.

As a result, the fastening pattern for roof heights ≤ 60 , gable roofs ≤ 7 degrees, will change the fastening pattern as shown below.



ASCE 7-10



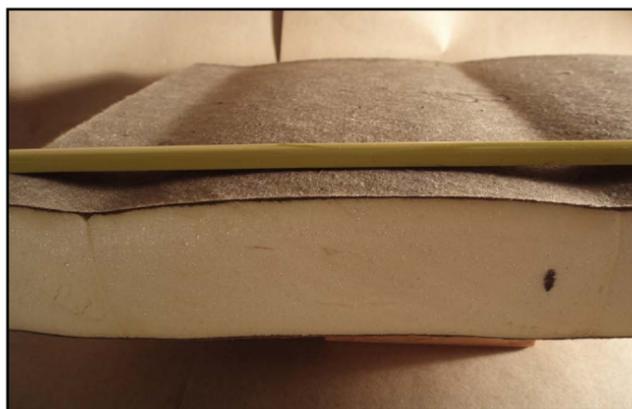
ASCE 7-16 (Draft)

The point about this is that proper wind design – which is oftentimes avoided – is getting even more complicated. Check out NRCA’s Roof Wind Designer Program at NRCA.net for help.

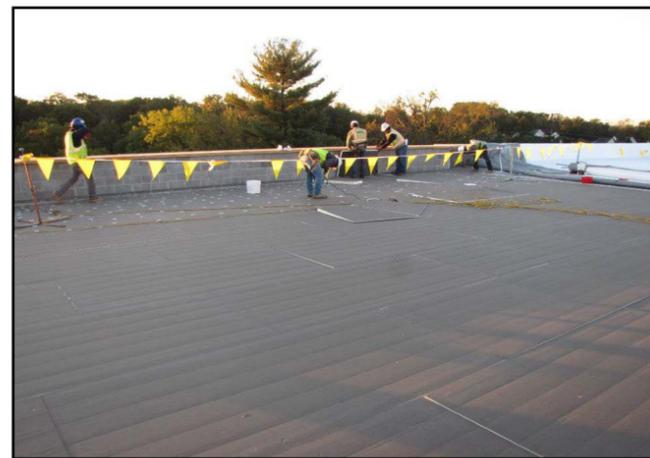
Polyisocyanurate (Polyiso) Insulation

Polyiso discussions included the issues with knit lines, thickness and dimensional stability concerns.

As to knit lines in the insulation, it has been noticed that there seems to be variability appearing in the insulation thicknesses. The ASTM Standard for Polyiso currently allows a 1/8” variance in thickness.



Knit lines close up. (NRCA Photo)



Knit lines on roof. (NRCA Photo)

NRCA’s interim recommendations for handling Polyiso. knit line, thickness and dimensional stability concerns are:

- Measure polyiso. thickness upon delivery
- Look for knit lines and board unevenness
- Contact manufacturer and NRCA if you see any issues

Shingles

NRCA has been testing products for compliance with the test standard results as listed on product data sheets. At times, shingles manufactured to meet certain specs as outlined in standards such as ASTM D3462 may or may not meet the required values. In Sept., 2016, NRCA recommended that users of asphalt shingles should consult with manufacturers and suppliers regarding specific products’ compliance with ASTM D3462.

Manufacturers Installation Instructions

Section 1506, Materials, of the 2015 International Building Code states:

1506.1 Scope. The requirements set forth in this section shall apply to the application of roof-covering materials specified herein. Roof coverings shall be applied in accordance with this chapter and the manufacturers’ installation instructions. Installation of roof coverings shall comply with the applicable provisions of Section 1507. [IBC 1506.1, 2015]

What this means is that it is basically the law, where this code is adopted, to install roofing products to the manufacturers’ installation instructions.

The manufacturers have invested heavily in research and development to invent many products. While many advertisements may say, ‘this product is easy to install’, it’s not that simple. Some manufacturers’ installation instructions for roofing systems can be 200+ pages. That’s a lot to know.

As a result of the new code language stating that the manufacturer’s installation instructions shall be used, NRCA has formed a Manufacturers Spec Review Task Force. The task force will review the manufacturers’ installation instructions.

In the meantime, NRCA’s interim recommendations are:

- Access and file the manufacturers’ application instructions
- Review the instructions
- Exclude not applicable information
- Manufacturers’ instructions should be the basis for quality assurance and quality control
- Contact NRCA with any questions

Mark S. Graham is the Vice President, Technical Services for the National Roofing Contractors Association (NRCA) in Rosemont, IL, 60018

Email: mgraham@nrca.net

Mark holds a Bachelor of Science degree in Architectural Engineering from the Milwaukee School of Engineering. Graham joined the NRCA in 1993. His responsibilities include developing and implementing the association’s technical

positions, responding to inquiries for technical assistance, serving as the association’s liaison with outside organizations, and developing and maintaining the association’s technical publications, including *The NRCA Roofing Manual*. Graham is also a contributing editor for NRCA’s *Professional Roofing* magazine.

He is a recipient of ASTM International’s William C. Cullen Award for distinguished contributions and leadership to the field of roofing and waterproofing. He is also a recipient of the Midwest Roofing Contractor Association’s James Q. McCawley Award for outstanding service and dedication to the roofing industry. Also, he is a recipient of the North/East Roofing Contractor Association’s Clarence J. Carr Roofing Industry Award for his service, contribution, and dedication to the roofing industry.

Graham is an active member of ASTM International and serves on the executive committee of Committee D08-Roofing and Waterproofing. He is also an active member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc., International Code Council, and National Fire Protection Association.

Crane Certifications • PM Services • Equipment Rebuilds • Painting & Restoration

WALTER PAYTON POWER EQUIPMENT LLC

OEM Parts • Onsite Field Service • Shop Service • Third Party Inspections

One Call Gets It All...
For All of your Roofing Equipment Needs
Local 708-656-7700
Toll Free 1-800-922-5508
Fast, Friendly, Knowledgeable
Service Backed By Years Of Experience

WALTER PAYTON POWERING YOUR JOBSITES

PM 26528S

GROVE RT 530E-2

Manitex 26101C

Manitowoc

NATIONAL CRANE

Manitex

GROVE

MANITOU

LIFTKING
Manufacturing Corp.

Talbert
SINCE 1938

Walter Payton Power Equipment • 930 W. 138th Riverdale, IL 60827
www.wppecrane.com **email: info@wppecrane.com**

Overview of Building Envelope Projects at ORNL

Presented by Andre Desjarlais, Oak Ridge National Laboratory's Director of Building Envelope Programs

Compiled by CRCA Staff



Andre Desjarlais

Andre Desjarlais has presented at the Chicago Roofing Contractors Association's Trade Show & Seminars for over 10 years. Rod Petrick, CRCA's Event Co-Chairman states "We have been very pleased to have attracted

such talent to CRCA each January. This year, we ordered weather suitable for a person from Knoxville, TN!" Desjarlais shared what's going on at the USA's basic research facility, the Oak Ridge National Laboratory (ORNL) and the Building Envelope Research that is conducted by its staff, sponsored by both government and industry.

Research Projects

The ORNL is currently researching:

- Web-Based Tools that estimates energy savings associated with air tightness
- Cost savings with cool roofs in northern climates
- Online Tools that defines the hygrothermal risk associated with a building envelope selection

Air Leakage Calculator

The objective of the project is to create an easy-to-use online tool using the simulation results of the best-in-class building energy simulation tool, EnergyPlus, and the whole building airflow simulation tool CONTAM. The Online calculator estimates the potential energy and cost savings from improvements in airtightness of buildings with a goal of further increasing market penetration of air barriers.

CONTAM (1) is a project of the National Institute of Standards and Technology, (NIST). The CONTAM program is a multizone indoor air quality and ventilation analysis computer program designed to help determine:

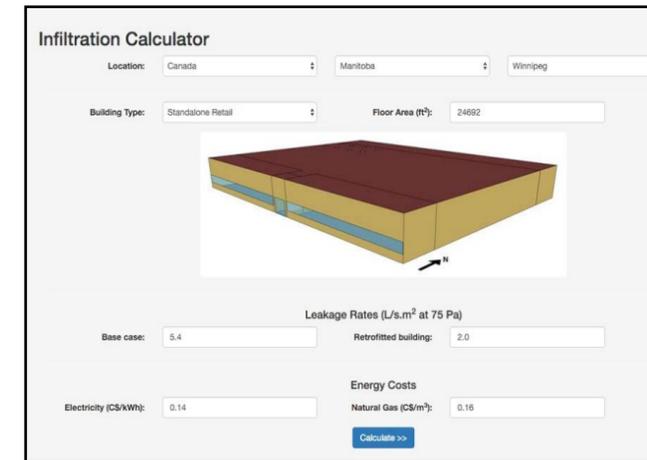
- (a) Airflows: infiltration, exfiltration, and room-to-room airflows in building systems driven by mechanical means, wind pressures acting on the exterior of the building, and buoyancy effects induced by the indoor and outdoor air temperature difference.
- (b) Contaminant concentrations: the dispersal of airborne contaminants transported by these airflows; transformed by a variety of processes including chemical and radio-chemical transformation, absorption and desorption to building materials, filtration, and deposition to building surfaces, etc.; and generated by a variety of source mechanisms, and/or
- (c) Personal exposure: the predictions of exposure of occupants to airborne contaminants for eventual risk assessment.

CONTAM can be useful in a variety of applications. Its ability to calculate building airflow rates and relative pressures between zones of the building is useful for assessing the adequacy of ventilation rates in a building, for determining the variation in ventilation rates over time, for determining the distribution of ventilation air within a building, and for estimating the impact of envelope air-tightening efforts on infiltration rates and associated energy implications. The program has also been used extensively for the design and analysis of smoke management systems. The prediction of contaminant concentrations can be used to determine the indoor air quality performance of buildings before they are constructed and occupied, to investigate the impacts of various design decisions related to ventilation systems and building material selection, to evaluate indoor air quality control technologies, and to assess the indoor air quality performance of existing buildings. Predicted contaminant concentrations can also be used to estimate personal exposure based on occupancy patterns.

The US Department of Energy (DOE) Commercial Prototype Building is run through a 'calculations flow'. Maximum HVAC/ventilation airflow rates based on EnergyPlus, to show building envelope airtightness, while understanding its building details and weather expected where the structure is located. The CONTAM adds the HVAC/ventilation airflow rates. Then, the EnergyPlus simulation puts in the hourly infiltration rates from CONTAM to build the energy use and cost as a function of the building's air tightness. The user specifies the city, building type, size, before and after retrofit airtightness, and energy rates in the area to result in the potential energy cost savings of a tight building envelope.

Why build a tool to research air infiltration?

Research has shown that in 2010, infiltration was responsible for four quads of space conditions primary energy use in both the commercial and residential occupancies. Infiltration accounted for greater energy losses than any other component of the building envelope including fenestration/windows. Infiltration is responsible for over 4% of all the energy used in USA. The research shows that the payback for the addition of air barrier systems would have a payback that is much less than five years.



(ORNL Image Web Tools)

The calculator uses inputs that are straight forward. The analysis covers 52 US Cities, five Canada and China Cities. The cities were selected to give a representative sampling of climate zones. The user can select a city with similar climate to one of the sample cities.

The DOE commercial building prototype represent about 80% of new construction. Moreover, these prototypes cover 16 commercial building types in 17 climate locations. The first phase in the development of the calculator covers three prototype building models: standalone retail, medium office, and mid-rise

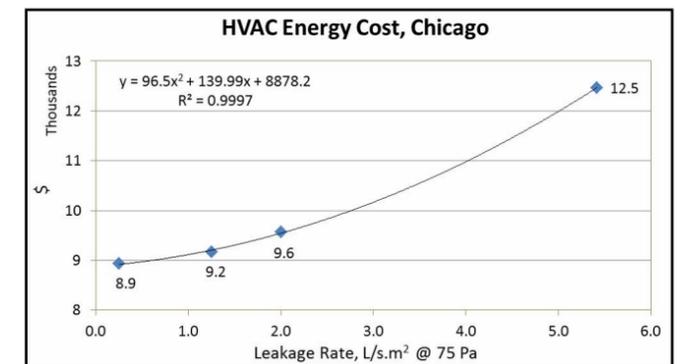
apartment. Models that represent typical commercial buildings in Canada and China are not available in the public domain; therefore, the DOE prototypes are also used in these two countries.

The air leakage calculations have been performed on a building whose size is defined by the DOE commercial prototype building models. However, the energy and monetary savings associated with improved air tightness was calculated on a per unit floor area basis.

To determine the annual savings of a particular building, the actual floor area can be input into this window in lieu of the default floor area from the prototype building.

The tool will interpolate between the baseline air leakage rates 6.2 L/sxm² (1.22 CFM/ft²) and 0.25 L/sxm² (0.049 CFM/ft²) at 75 Pa. No extrapolation is allowed.

The chart below illustrates preliminary results of a building where the calculator has been used to demonstrate HVAC energy cost for a prototype standalone retail building in Chicago.



(ORNL Image)

Cool Roofs and Cost Savings in Northern Cities

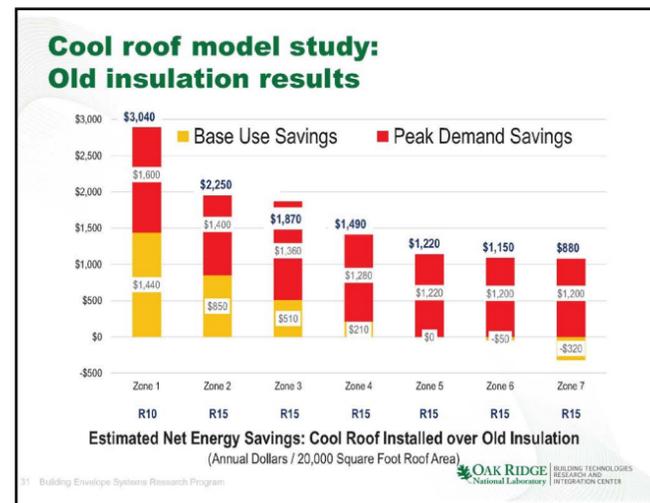
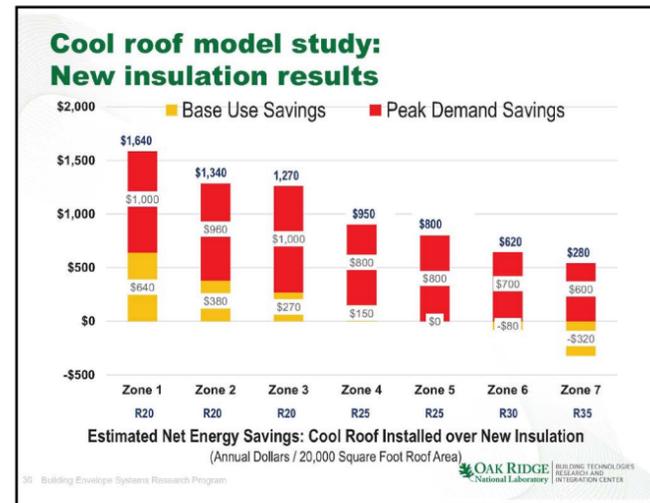
The purpose of this study is to see if lighter colored roofs in northern climates bring quantifiable energy savings to buildings. One way to analyze this concept is by looking at peak energy demand. In some cities, peak energy demand times mean a premium price for the energy. Not all cities have peak energy demand surcharges.

In some cities, peak demand surcharges can be over half of the typical commercial electric bill. It makes sense, for those who live in cities that have such charges, to try and drive their demand for energy into time periods where there is not so much demand for energy.

Part of this discussion is whether or not it makes sense to have a cool roof in a northern climate. The peak demand concept means customers are charged a premium for energy used during times when everyone is using energy.

According to ORNL, peak demand happens in both Phoenix and Minneapolis during the summer months.

The study used two construction conditions and insulation levels at International Energy Conservation Code (IECC) 2012 mandated levels. For Minneapolis, that's zone 6. When installed on a commercial occupancy, low sloped roofs, that translates into about R-30. A roof solar reflectance level of 0.60 with a thermal emittance of 0.90 was set. The savings generated from the pure science experiment for roofs with new insulation is shown below.



(ORNL Images)

Another activity taking place at ORNL is the high-performance moisture-managed envelope systems and the new research on a "Building Science Advisor" (BSA). The idea behind the Building Science Advisor is to provide a tool that helps the building designer assemble a structure that is air tight while avoiding the formation of a sick building along the way.

ORNL and the Building America team are developing an online decision-making tool to mitigate market uncertainty regarding the durability of high-performing building envelope systems.

Using the BSA, subject matter experts input moisture-durable design guidelines based on field data and simulations. The simulations allow probabilistic wall assembly evaluations by considering all possible parameter variations. The BSA then analyzes the builders' proposed design to yield the most robust assembly.

The program asks the user for the location geography of the structure type of wall. The BSA tool results in a better informed decision regarding energy efficient and moisture durable building envelope solutions. The tool provides analysis for the wall assembly and gives suggestions about the wall components.

Summary of your wall options

Climate Zone: Houston, TX
 Exterior Cladding: Brick
 Continuous Insulation Type: None
 Wall Structure: 2 x 4 16" o.c.
 Cavity Insulation: R13
 Cavity Insulation Type: Fiberglass Batt

Recommended wall systems

Cladding	Air gap	Water/Air Barrier	Sheathing	Structure	Insulation	Vapor Retarder	Interior Finish	Air Tightness
01 Brick	Yes, vented	House wrap	OSB	2x4 16" o.c.	Fiberglass Batt	None	Latex paint	5 ACH50
02 Brick	Yes, vented	House wrap	OSB	2x4 16" o.c.	Fiberglass Batt	None	Latex paint	3 ACH50
03 Brick	Yes, vented	House wrap	OSB	2x4 16" o.c.	Cellulose Loose Fill	None	Latex paint	5 ACH50
04 Brick	Yes, vented	Building Paper	OSB	2x4 16" o.c.	Fiberglass Batt	None	Latex paint	5 ACH50
05 Brick	Yes, vented	House wrap	Plywood	2x4 16" o.c.	Fiberglass Batt	None	Kraft Paper	5 ACH50

(ORNL Images)

As a result, the tool shows below through the 'red light', that this wall assembly is not engineered properly. It needs a 2" air space to perform properly and not have issues with moisture condensing in the wall cavity.

Summary of your wall

Map Location: Fort Worth, TX
 Exterior Cladding: Brick
 Structure: 2 x 4 16" o.c.
 Cavity Insulation: Fiberglass Batt
 Continuous Insulation: None
 Air Space: None
 Water/Air Barrier: Housewrap
 Exterior Sheathing: Oriented Strand Board
 Vapor Retarder: Kraft Paper
 Interior Finish: Latex Paint
 Air Tightness: 5 ACH50

Predicted moisture durability performance

The interface shows a traffic light indicator with the red light illuminated, indicating a moisture durability issue.

(ORNL Images)

The wall has absorptive cladding with no air gaps. To ensure moisture durability, add at least a 2" ventilation cavity between absorptive cladding and sheathing. Also consider using low perm sheathing or insulated sheathing.

A wall that has been properly engineered with respect to insulation, cladding, climate, air space and more will provide a 'green light' with the ORNL program tool. The values from these tools can provide guidance to the user on wall design. Wall designs have become much more critical as the drive to save energy builds tighter buildings.

CRCA appreciates Andre Desjarlais spending time with CRCA Members and friends at the 2017 CRCA Trade Show & Seminars.

Want more info on any of the ORNL Building Envelope Program projects? Visit www.ornl.gov/buildings.

This article was compiled by CRCA Staff from Andre Desjarlais' presentation at the 2017 CRCA Trade Show & Seminars. Desjarlais is Program Manager of the Building Envelope Systems Research at Oak Ridge National Laboratory, in eastern Tennessee.

1. NIST.gov, Energy and Environment Division, The Energy and Environment Division develops measurement science, predictive models, and performance metrics to improve the energy efficiency of building components and systems, reduce building related CO2 emissions, enhance the quality of the indoor environment, and improve the building design and construction process through the integration of information, communications, sensing, and automation technologies.

EMERGENT SAFETY SUPPLY

AT EMERGENT SAFETY SUPPLY, OUR PASSION IS SAFETY. WE ARE YOUR TRUSTED SOURCE FOR SAFETY SUPPLIES, SOLUTIONS AND SERVICES SO YOU'RE ALWAYS PREPARED.

YOUR SOURCE FOR:

- FALL PROTECTION
- CONFINED SPACE
- RESPIRATORY PROTECTION
- HAND PROTECTION

VALUE-ADDED CUSTOMER SERVICES:

- SPILL CONTROL
- SIGNS & IDENTIFICATION
- ARC FLASH PROTECTION
- FACILITY MAINTENANCE
- ON-SITE FALL PROTECTION TRAINING
- GAS DETECTION TECHNIQUES AND CALIBRATION
- PROPER RESPIRATORY FIT AND OPERATION
- FACILITY SAFETY TRAINING

1055 KINGSLAND DRIVE
 BATAVIA, IL 60510
 OFFICE: (630)406-9666
 FAX: (630)406-6195
 TOLL FREE: 1(800)877-1390

FOLLOW US ON SOCIAL MEDIA!

Facebook, Twitter, LinkedIn icons.

Certified WBENC Women's Business Enterprise, Certified WBE Women's Business Enterprise.

APOC
 The Choice of Top Professionals®

APOC ROOF RESTORATION SYSTEMS

Looking for high performance, cost effective solutions to roofing challenges? APOC offers proven roof restoration systems, saving money and time while reducing waste over an extensive and invasive tear-off project. The APOC Armor Fluid applied silicone system extends roof life with customized, seamless protection.

Contact Scott Covelli at (773)484-8634

www.apoc.com

Prime It! With Armor Base

- Helps Reduce Bleedthrough
- Prepares Surface for Silicone Coatings

Flash It! With Armor Flash

- Fast & Easy to Use
- Single Component

Coat It! With Armor Flex

- Ultra Strong and Resilient Protection from the Weather
- Helps Lower Utility Bills, Energy Costs & Carbon Emissions

CRCA Industry News

CRCA Helps Save Illinois Roofing Contractor Licensing in Illinois
CRCA and its members have promoted legislation to recognize professionalism within the roofing industry. A proposal was brought forward in February to repeal the roofing industry licensing act. Through CRCA Legislative Consultant Margaret Vaughn and CRCA members' actions, CRCA helped prevent the repeal of the Illinois Roofing Contractor Licensing Act as proposed this spring.

CRCA Members along with Margaret Vaughn, CRCA's legislative consultant, attended a fundraiser for Senator Iris Martinez, IL Senate Licensing Chair, in March. Senator Martinez recognized CRCA members at the fundraiser and shared her negative experience with a contractor that was not licensed.



(CRCA Photo)

2017 CRCA Trade Show & Seminars

Thank you to everyone who attended, exhibited and sponsored the 2017 Trade Show & Seminars. This year's event was a great success with over 2,500 attendees and 135 exhibitors. CRCA's Roofing Industry Breakfast grew to over 375 and welcomed new NRCA CEO, former congressman, NRCA President, and past roofing contractor, Reed Ribble. Ribble presented introductory remarks about the future of the roofing industry both locally and nationally – and the effect that an industry can have speaking with one voice.

CRCA Chicagoland Women in Roofing Active

The CWIR Committee gives a big thank you to CRCA Member Manufacturers, Karnak and Hunter Panels, for the plant tours. In addition to plant tours, they packaged food for African Children through the "Feed My Starving Children" Charity, participated in a fundraising gala at WINGS, held roundtable discussions and had a booth in the lobby at the CRCA Trade Show & Seminars. They visited Bennett & Brosseau Roofing, Inc. to learn about various components of the roof system from CRCA President, George Patterson in April. This CRCA CWIR Committee continues to make a difference in the community and roofing industry. Interested in joining them? Contact Alyssa@crca.org, for more information.

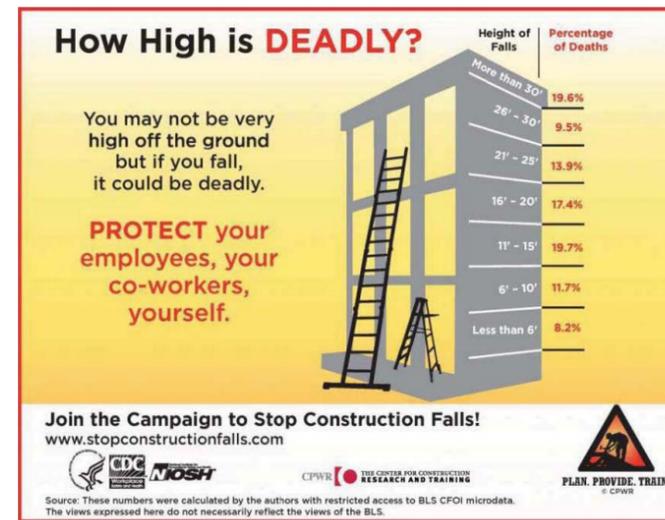
CRCA Emerging Leaders

The CRCA Emerging Leaders group had a great reception to kick off the New Year at Drury Lane Hilton Suites in January. At the March event, CRCA Member companies, Carlisle Waterproofing and Velux, sponsored the event and gave presentations to the group about what's new and coming in the roofing industry.

Visit www.CRCA.org to get a full calendar of all the Emerging Leaders upcoming events. All generations welcome! To get on the Emerging Leaders email list, contact alyssa@crca.org.

CRCA Membership Meeting – February, March, and April

CRCA's Industry Affairs Committee presented the 2015 International Energy Conservation Code and Chicago Code Memorandum to the 130+ members attending the February session. In March, Greg Scannell, from CRCA Member Firm Safety Check Inc., presented a Safety Update. Scannell's report included the Top 10 OSHA Citations issued by the three Chicago Area OSHA Offices as well as Milwaukee. For the 476 violations issued, Residential Construction Fall Protection was the most common cited, with over \$1,147,601 in penalties issued. He also cited an industry publication chart that reminded attendees that almost 20% of all fall fatalities occur from a height of less than 15 feet.



In March, Chris Thomas, from Ogletree Deakins provided I-9 Compliance Education for attendees, including who is required to complete the forms, how to address corrections and the frequent severe penalties for non-compliance.



(CRCA Photo)

New Form I-9 Required as of January 22, 2017

U.S. Citizenship and Immigration Services (USCIS) published a new Form I-9, Employment Eligibility, on Monday, November 14, 2016. The new Form I-9 had a revision date of 11/14/2016 and an expiration date of 08/31/2019. On January 22, 2017, use of the new Form I-9 became mandatory.

The new Form I-9 does present several important changes. For example, employees are only required to identify other last names used in Section 1, rather than all names used.

Also, below the employee's signature line, there is a checkbox for the employee to indicate whether a preparer and/or translator was used to complete Section 1.

Further, in Section 2, employers will find a new "Citizenship/Immigration Status" field in the first line with numbers one through four, which correlate to the employee's selected citizenship or immigration status entered in Section 1. For further information, see the article in the issue of *CRCA Today* or download Thomas' presentation as well as all CRCA Membership Meeting presentations in the Members Only section on www.crca.org. Not a member? Join CRCA for this and many other member benefits.



Michael Good

CRCA Scholarship Dinner

CRCA's Scholarship Committee receives applications for CRCA's Scholarships presented each year at the May CRCA Membership Meeting. Don't miss the presenter, Michael T. Good, a NASA Astronaut, brother of CRCA Member, Dave Good, (S.J. Mallein/Firestone Building Products).

IRE Sets Records

The International Roofing Expo (IRE), Las Vegas, attendance and booth count was very well attended this year. This year's educational sessions from NRCA's Mark Graham and SRI's Matt Dupuis, built upon programs presented at the CRCA Trade Show & Seminars this January. Don't miss 2018's IRE in New Orleans. Watch www.TheRoofingExpo.com for details.

CRCA Thanks Legislators

CRCA's work at the State of Illinois Legislature does not come all by itself. CRCA thanks the many legislators who have helped build professionalism and protected roofing consumers in Illinois through the Illinois Roofing Contractor Licensing Act. The Hon. Dan Burke was recognized recently by CRCA's Industry Affairs Committee for his 20+ year's support of professionalism in roofing through this legislation. Thanks to Burke and many others who support CRCA.

CRCA Covers the State of Illinois

CRCA Leaders traveled to Springfield on April 4th, to provide an Illinois Roofing Symposium to Central Illinois Roofing Contractors, Architects and Code Officials. Presenters included Frank Marino, CSP (Safety Check, Inc.), Bill McHugh, CRCA Executive Director, Rod Petrick, CRCA Past President and member of the State of Illinois Licensing Board and Margaret Vaughn, IL Roofing Legislative Consultant. They spoke on Rooftop Safety, Energy Code and Licensing. These leaders also met with Illinois Legislators for a reception following the symposium, to create and continue dialogue on Illinois Roofing issues.

CRCA has worked on programs affecting the State of Illinois that benefits the whole state including the State of Illinois Energy Conservation Code, International Energy Conservation Code, and State of Illinois Roofing Contractor Licensing programs.

This year's program was quite successful with a great crowd for the education and legislative reception. Watch www.CRCA.org for more education sessions that benefit those involved in roofing in Illinois.

CRCA Industry Affairs Successful at the State of Illinois

"Roof Recover" and "Roof Replacement" are two terms defined in the building code that means extensive work on rooftops. "Roof Repair" is a repair for the purpose of a roof's maintenance. CRCA's Industry Affairs Committee, in conjunction with CRCA Lobbyist Margaret Vaughn and IL Representative Dan Burke, worked on key legislation that amends the Roofing Contractor Licensing Law. Rep. Burke was successful adding that Roof Repairs can be performed by the building owner's employees while Roof Recover and Roof Replacements are to be performed by Illinois Licensed Roofing Contractors. The bill will become law once Governor Rauner signs it, which usually occurs about 45 days after the passage of the bill. Representative Burke won support of both Democrats and Republicans on this key legislation.

CRCA Industry Affairs Meets with Chicago's DOB

CRCA's Industry Affairs leaders Tony Roque, Rod Petrick, George Patterson, and Bill McHugh visited with Department of Buildings (DOB) Commissioner Judy Frydland and staff at the City of Chicago recently. CRCA complimented Frydland on the Roofing Code Memorandum as cutting edge that the rest of the country should follow. Much discussion was held on the Crane Operator Regulations with further to be held. We at CRCA appreciate the relationship with the City's DOB leaders and staff.

ICC Board Verifies 2016 Group B Final Action OGCV Process

In accordance with Section 10.0 of Council Policy CP28 Code Development, the ICC Board of Directors has confirmed a valid 2016 Online Governmental Consensus Vote (OGCV) process as certified by the Validation Committee. The result of this is that the 2018 Versions of the International Family of Codes in 'Group B' will be published.

The Final Action on all 2016 Group B code change proposals, including the vote tallies from the OGCV, are now posted. All totaled, there were 577 code change proposals considered in the OGCV.

The 2016 OGCV concludes the 3rd full cycle of ICC's implementation of the cdpACCESS system. The 2016 OGCV resulted in significant increases in participation over the past two cycles (the OGCV debuted in 2014 with the Group C Cycle and the IgCC).

The following is a snapshot of the progress realized with cdpACCESS.

	2014 IgCC only	2015 Group A codes	2016 Group B codes
Number of code changes	183	424	577
Number of voters	294	305	1247
Total number of votes cast	23,905	45,141	162,035
Max. vote cast per change	200	221	780
Min. vote cast per change	84	46	158
Max. vote cast per day	4600 (approx.)	8424	24,899
Votes cast during extended OGCV period (5 days)	NA	NA	23,836
Number PCH actions overturned	5 (2.7%)	48 (11.3%)	109 (18.9%)

(ICC Chart)

The Code Council would like to thank everyone who has participated and supported ICC's transition to the future of Codes and Standards development.

CRCA Note: All the roofing industry related changes that were successful at the Public Comment Hearings in October, 2016, that CRCA supported were overturned by the Online Governmental Consensus Vote (OGCV).

ICC Schedule for 2021 Code Development Cycle

With the posting of the Final Actions for the 2016 Group B Cycle resulting in the 2018 International Family of Codes, the 2018/2019 Code Development Schedule for the 2021 I-Codes is now available.

The new 2018 ICC Codes, including the International Energy Conservation Code, will be published in the Fall of 2017, according to ICC.

For roofing, R-Values seemed to stay the same as they did in the 2015 IECC. Check out CRCA's Trade Show Report in this issue. And, visit www.ICCSafe.org for info.

NFPA Standards Development Process

NFPA develops standards such as NFPA 101 through its Technical Committees. Interested in getting involved? Apply for an NFPA Technical Committee or Panel through NFPA's online Technical Committee area. Committee meetings are open to the public. NFPA develops and revises NFPA's codes and standards every three to five years. Visit www.NFPA.org for more info.

National Green Building Standard™ Update Process Underway

The 2018 National Green Building Standard (ICC/ASHRAE-700) development process is now underway. The first meeting of the Consensus Committee will be held April 18-19, 2017, in Washington, D.C.

Want more info? Visit http://www.homeinnovation.com/about/news_and_events/home_innovation_news/2017_0105_home_innovation_begins_preparations_for_national_green_building_standard_update to see the details.

U.S. District Court Ruling – Codes and Standards & Copyright Infringement

The United States District Court for the District of Columbia (Hon. Tanya S. Chutkan) granted a motion for summary judgment filed by a number of standard development organizations (SDOs), including the National Fire Protection Association (NFPA), ASTM International and ASHRAE.

The court's ruling permanently enjoins Public.Resource.org from its previous systematic infringement of numerous SDO copyrighted codes and standards. The Public.Resource.org website took the codes and standards that are normally purchased and simply published them online, which is where the infringement took place.

The ruling vindicates the long-standing public-private partnership pursuant to which government entities may, if they choose, incorporate, by reference, high quality safety codes and standards.

The history of not-for-profit SDOs developing voluntary consensus standards goes back more than a century. SDOs, not resource-constrained governmental agencies, underwrite the substantial costs of developing standards.

SDOs pay for the standard development process and invest in new standards with the money earned selling and licensing their copyrighted works.

OSHA's Anti-Retaliatory Rule Became Effective on December 1, 2016

OSHA's electronic injury submission rule titled, "Tracking of Workplace Injuries and Illnesses," includes an anti-retaliatory provision which was to become effective on August 1, 2016.

OSHA announced it would delay implementation of this portion of the rule until November 1, 2016, in order to allow it more time to conduct additional research and provide education to employers.

The new deadline was published by OSHA in response to a request from a federal judge who is presiding

over a lawsuit challenging the rule. Significantly, on November 28, 2016, the federal judge presiding over the lawsuit denied the request for the preliminary injunction. Consequently, the anti-retaliatory provisions of the new rule became effective on December 1, 2016.

Contractors should carefully review their policies concerning post-accident drug and alcohol testing policy and the reporting of accidents, as well as their safety incentive programs, to ensure compliance with the new rule.

Firestone Acquires Gaco

Firestone Building Products Company, LLC ("Firestone") announced that it has reached a definitive agreement to acquire Gaco Western ("Gaco"), a silicone roofing systems and provider of waterproofing and spray foam insulation solutions for a variety of commercial and residential applications.

The acquisition strengthens Firestone's industry leadership in commercial roofing and offers positions in residential and commercial building products.

Founded in 1955, Gaco is privately-owned and headquartered in Seattle, Wash. With brands including GacoFlex, GacoRoofFoam and GacoWallFoam, the Company produces silicone polyurethanes, epoxies and acrylic liquid coatings for roofs; decking and waterproofing products that protect pedestrian surfaces, concrete, metal and plywood; and open- and closed-cell foam products which protect and insulate buildings. All Gaco products are made at its manufacturing, research and development facility in Waukesha, WI.

For more information, visit www.firestonebpc.com.



Kathie Morgan (ASTM Photo)

New ASTM President

Katharine "Kathie" Morgan has begun serving as president of ASTM International. Morgan leads a team that supports thousands of members, customers, partners, and other stakeholders worldwide. She succeeds James A. Thomas, who served in the role for 25 years.

Morgan is a 33-year veteran of ASTM International. She served as executive vice president for the past two years. Prior to that, she was vice president of Technical Committee Operations.

Morgan is a board member of the American National Standards Institute's Board of Directors, the Council of Engineering and Scientific Executives, the International Consumer Product Health and Safety Organization, the Society for Standards Professionals (SES), the American

Society of Association Executives, and a former member of the Standards Council of Canada's Standards Development Organization Advisory Committee.

NEW ASTM Standard

A new ASTM International standard will help reduce the amount of used roofing materials that go to landfills. ASTM's Committee on Roofing and Waterproofing (D08) developed the standard, which is available as D8013-16, "Standard Guide for Establishing a Recycle Program for Roof Coverings Roofing Membrane and Shingle Materials".

According to ASTM member, Joseph Schwetz of Canton, MA, the new guide will help building owners who want to minimize their environmental impact by eliminating waste during roof replacement. The standard will help them and their contractors compare the costs for disposal versus recycling.

In addition, manufacturers will use the standard to determine whether recycled roofing materials could be a cost-effective ingredient in creating new roofing products. Visit www.ASTM.org to buy the new standard. 

NRCA App for Members

From tablet and smartphone: NRCA app—Free access for members! Only NRCA members have access to the most up-to-date resources and publications on the go.

Download the NRCA app and gain access to valuable NRCA publications. Need the new NRCA Steep Slope Roofing Manual? The whole set of Roofing Manuals? Join NRCA and get it free on the NRCA App. Visit www.NRCA.net for more info.



RUNNION

For All Your Truck Mounted Cranes & Equipment Needs



Dependable Cranes—New, used and rental equipment
Knowledgeable Technicians—Factory trained for prompt service, on time and on budget
Available Parts—Over \$500,000 of parts in stock

Call Us Today! 800-824-6704

Runnion Equipment Company

Serving roofing contractors since 1975

7950 47th St. • Lyons, IL 60534 | www.runnionequipment.com

JJS SUPERIOR METAL INC.

FAST TURNAROUND!

CUSTOM SHEET METAL FABRICATION FOR THE ROOFING INDUSTRY



if you can draw it, we can bend it!

WWW.JJSUPERIOR.COM

4302 Warren Ave., Hillside, IL 60162

Galvanized Steel - Pre-Painted Steel (Kynar) - Copper
 EXPERTLY FABRICATED MADE TO ORDER FLASHINGS

708-544-3757 • Fax: 708-544-3761



CRCA Contractor Members

The Contractor Members of the Chicago Roofing Contractor Association install all types of roofs, including reflective single ply, modified bitumen, built up, gravel, reflective coatings, shingle, shake, slate and tile, vegetative garden or photovoltaic coverings. From formation following the Great Chicago Fire of 1871, CRCA Members have moved with the times and technology, yet continue to maintain some of the same goals set forth over 140 years ago. To find a CRCA Professional Contractor, visit www.CRCA.org.

A+ Roofing Co., Inc. (630) 227-1111	Crawford Roofing Experts, LLC (708) 385-5555	Lindholm Roofing (773) 283-7675
A-1 Roofing Co. (847) 952-3600	Crowther Roofing & Sheet Metal & HVAC (815) 726-2400	Local Roofing Co., Inc. (847) 244-0500
Active Roofing Co., Inc. (773) 238-0338	Czar Renovations Inc. (773) 622-6772	M. Cannon Roofing Company, LLC (847) 519-0698
Adams Roofing Professionals, Inc. (847) 364-7663	DCG Roofing Solutions Inc. (847) 296-6611	M. W. Powell Company (773) 247-7438
Adler Roofing and Sheet Metal, Inc. (815) 773-1200	DFC Roofing, Dyna-Flow Corporation (630) 289-2224	Malcor Roofing of Illinois, Inc. (630) 896-6479
Advanced Roofing & Woodworking Inc. (630) 231-7663	Distinctive Roofing, Inc. (815) 986-0831	Matthews Roofing Company, Inc. (773) 276-4100
Aegis Construction Group, Inc. (630) 709-8121	Domain Corporation (773) 628-0001	McDermaid Roofing & Insulating Company (815) 963-8458
Air Pressure Damp Proofing (847) 394-4100	Dunne Roofing Company (847) 696-1643	Metalmaster Roofmaster (815) 459-6415
All American Exterior Solutions (847) 438-4131	DuSable Construction Co. (773) 463-9290	MidAmerica Roofing, Inc. (630) 759-7500
All Sealants, Inc. (708) 720-0777	Elens & Maichin Roofing & Sheet Metal, Inc. (815) 727-2689	Mortenson Roofing Co., Inc. (815) 464-7300
All Storm Solutions (630) 541-5913	F&G Roofing Company, LLC (708) 597-5338	NIR Roof Care, Inc. (800) 221-ROOF
Allendorfer Roofing Co., Ltd. (773) 463-7808	F. E. Rooftec Corporation (847) 455-4766	Nombach Roofing & Tuckpointing (708) 388-1090
Allied Waterproofing, Inc. (630) 654-9700	Feze Roofing, Inc. (630) 530-5944	Norton Sons' Roofing Company, Inc. (630) 257-8180
Anderson & Shah Roofing Inc. (815) 741-0909	Filotto Construction (815) 740-5461	Olsson Roofing Company, Inc. (630) 892-0449
Anthony Roofing Tecta America LLC (630) 898-4444	Freeport Industrial Roofing (815) 235-5350	ONeill Contractors, Inc. (773) 774-2029
Apex Exteriors, Inc. (847) 531-8960	Funderburk Roofing, Inc. (630) 622-4100	Peterson Roofing, Inc. (847) 590-5290
Armor Shield Construction Inc (630) 916-7100	Galewood Tuckpointing & Roofing Co., Inc. (708) 452-7900	Pine Roofing Company (773) 539-9595
Bald Eagle Construction, Inc (773) 505-	H.C. Anderson Roofing Company, Inc. (815) 624-4129	Pine Waterproofing & Sealants (847) 678-5700
Bennett & Brosseau Roofing, Inc. (630) 759-0009	Huebner Roofing Inc. (630) 257-9394	Prate Roofing & Installations LLC (847) 526-6402
Biofoam Inc. (866) 356-3626	Illinois Home Improvement Corp. (773) 794-1400	Preservation Services, Inc. (815) 407-1950
Blue Sky Roofing, Inc. (773) 237-7730	J. P. Larsen, Inc. (708) 293-7662	Pro-Tech Roofing, Inc. (847) 759-1970
R.E. Burke Roofing Co., Inc. (847) 675-5010	Jones & Cleary Roofing / Sheet Metal Co., Inc. (773) 288-6464	Prusak Construction & Roofing, Inc. (708) 422-2624
C.P.R. Roofing, Inc. (815) 399-6989	Knickerbocker Roofing & Paving Co., Inc. (708) 339-7260	R. B. Crowther Company (815) 942-6623
Care Sheet Metal & Roofing, Inc. (708) 387-9784	Knorr & Myers Roofing Co. (815) 654-1878	R. Commercial Roofing Solutions .. (847) 995-0555
Clark Roofing Co. (708) 681-2200	Korellis Roofing, Inc. (219) 844-1400	Raincoat Roofing Systems, Inc. (708) 681-5757
Coleman Roofing, Inc. (708) 755-6800	Kreiling Roofing (309) 673-3649	G.E. Riddiford Company (847) 437-5771
Combined Roofing Services LLC (630) 231-4422	Kremer & Davis, Inc. (630) 699-5997	Ridgeworth Roofing Co., Inc. (708) 598-0039
..... (708) 596-9600	L. Marshall Roofing & Sheet Metal, Inc. (847) 724-5400	Roofing Systems, Inc. (815) 654-9540
Complete Building Maintenance Co. (630) 932-7890	Langlois Roofing, Inc. (815) 933-8040	Roofs, Inc. (708) 447-9300
Countryside Roofing, Siding & Windows, Inc. (847) 221-5600	LEAK STOP Roofing, Inc. (847) 719-2775	Sager Sealant Corporation (708) 354-9300
	Licitra Roofing Inc. (708) 485-4848	Seal Tight Exteriors, Inc. (708) 755-3555
		Showalter Roofing Service Inc. (630) 499-7700
		SMART Roofing, Inc. (773) 992-5100

CRCA Contractor Members

- Solaris Roofing Solutions, Inc. (630) 639-5400
- Sta-Dry Roofing (770) 849-0079
- Stan's Roofing & Siding (708) 448-4100
- Star Roofing & Siding Co. Inc. (773) 588-6550
- Sterling Commercial Roofing (815) 626-7744
- Stewart Roofing Company (773) 264-1754
- Style by Carden Exteriors Inc. (847) 865-3069
- Style Construction Inc. (847) 934-9690
- Sullivan Roofing Inc. (847) 908-1000
- Tidwell Roofing & Sheet Metal (847) 437-2710
- Total Roofing & Construction (708) 201-7550
- Trela Roofing & Remodeling (708) 422-7204
- Trinity Roofing Service, Inc. (708) 385-7830
- Unified Roof Restoration Inc. (708) 788-2019
- Union Roofing Co., Inc. (815) 945-2141
- Van Doorn Roofing Inc. (847) 228-5800
- W.B.R. Roofing Company, Inc. (847) 487-8787
- Waukegan Roofing Company, Inc. (847) 623-1625
- Weatherguard Roofing Company (847) 888-3008
- Windward Roofing & Construction Inc. (773) 638-6580
- Zera Construction, Inc. (847) 966-8100



Serving Roofing & Metal Building Contractors for Over 20 Years.

231-861-0050

info@advarchsm.com

www.advarchsm.com




- Gutters • Downspouts
- Elbows/Offsets
- Gutter Accessories
- Architectural Brake Metal
- Standing Seam Roof Panels
- Flush or Reveal Wall Panels



Nationwide Shipping Available



CRCA Member

NRCA Member

MRCA Member

HACIA Member

M.W. Powell Company

Established 1847
Certified MBE Contractor

All types of low slope roofing

High-Rise work

Vegetative Roof Systems

Architectural Sheet Metal




3445 S Lawndale Ave
Chicago, IL 60623
P: 773-246-7438
F: 773-247-7441
Illinois Licence #104.000206

CRCA Associate Members

The Associate Members of the Chicago Roofing Contractors Association are a vital part of the association and actively support the activities. Besides their generosity, they are represented on the CRCA Board of Directors, Co-Chair the Membership and Trade Show Committees and serve on the Health & Safety, Contracts & Insurance, Industry Affairs, Program and Scholarship Committees.

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> 838 Coatings (763) 972-9441 a & d Products (630) 921-2022 A.C.T. Metal Deck Supply (630) 978-7800 ABC Supply Company, Inc. <ul style="list-style-type: none"> Alsip (708) 396-1414 Aurora (630) 844-1700 Cicero (708) 222-8222 Joliet (815) 723-9880 Mundelein (847) 949-2440 W. Chicago (630) 293-1222 Wauconda (847) 487-7810 ACH Foam Technologies (920) 924-4050 Acme Cone Company, LLC (866) 516-4079 Adroit Marketing, Inc. (630) 885-5447 ADVANCED Architectural Sheet Metal & Supply (231) 861-0050 ADVANCED Polymer Technology Corporation (724) 452-1330 ALCO Products, LLC (313) 823-7500, x102 Allied Building Products Corp. <ul style="list-style-type: none"> Arlington Hts. (847) 357-0433 Chicago/84th (773) 873-2300 Chicago/Pulaski (773) 772-6500 Oak Forest (708) 802-6123 Tri-State Wholesale HH (708) 599-9770 Tri-State Wholesale WC (630) 513-0505 APOC (773) 484-8634 Architectural Building Solutions (630) 402-9988 Arvinyl Laminates, LP (951) 371-7800 ATAS International, Inc. (610) 395-8445 Atlas Roofing Corporation (800) 677-1476 Barge Terminal Trucking, Inc. (630) 499-5565 Barrier Corp. (847) 921-3491 Berridge Mfg. Co. (800) 488-7415 Big Rock Supply (630) 350-2300 Bitec, Inc. (501) 354-8585 Bitumar Inc. (410) 610-5953 Blue Ridge Fiberboard, Inc. (866) 850-8834 Bone Roofing Supply, Inc. (630) 628-8170 BPM Insurance (816) 695-1306 | <ul style="list-style-type: none"> Carlisle SynTec (800) 479-6832 Castle Metal Products (847) 806-4540 Cedar Shake & Shingle Bureau (604) 820-7700 Certainteed Roofing Products (630) 383-6741 CHEM LINK Inc. (800) 826-1681, x204 Chicago Metal Supply & Fabrication (773) 227-6200 Chicagoland Roofing Supply, LLC .. (630) 489-8285 Chris Architectural Metals (847) 729-9292 Classic Gutter Systems LLC (269) 665-2700 CLEANWRAP Interior Protection Systems (888) 597-3334 CNA Insurance Lombard/Chicago. (630) 719-3006 Columbia Green Technologies (503) 964-3218 Comprehensive Roofing Solutions Inc. (815) 498-9485 Construct Sales, LLC (847) 922-3520 Connor & Gallagher Once Source .. (708) 712-4793 Cordeck (262) 857-3000 Crissie Insurance Group (847) 296-0655 D & P Construction Co., Inc. Roll Off & Recycling (708) 338-3534 D-MAC Industries (800) 878-3622 DA Sales & Marketing, Inc. (630) 370-7747 Dataforma, Inc. (866) 764-9992 DaVinci Roofscapes (913) 599-0766 DECRA Roofing Systems (800) 258-9740, x189 DERBIGUM Americas, Inc. (708) 380-5045 Disposal Alternatives (617) 975-2000 Division 7-23 Group, LLC (414) 645-8400 DSP Insurance Services, Inc. (847) 934-6100 Durapax (610) 579-9075 Duro-Last Roofing, Inc. (Chicago) (800) 248-0280 Eagleview-Pictometry (866) 659-8439, x5561 ECO-Roofs, LLC (269) 471-7408 EcoStar LLC (800) 211-7170 Emergent Safety Supply (630) 406-9666 Epilay Inc. (310) 320-6300 ERSystems (800) 878-7876 Everest Systems (763) 333-4839 | <ul style="list-style-type: none"> Everroof Products (702) 966-9961 FCS Control (DBA Encite Development Group) (815) 345-4282 Firestone Building Products (800) 428-4442 FlashCo Manufacturing Inc. (707) 824-5858 FleetMatics (866) 844-2235 Franklin International/Titebond .. (614) 445-1855 Gaco Western (262) 951-0237 GAF Materials Corporation (630) 296-1969 Garlock Chicago (630) 521-9645 Garth Building Products & Services Corp. (708) 757-6733 GCP Applied Technologies (617) 498-4470 Gemco Roofing & Building Supply (708) 544-1444 Geocel / Kool Seal (800) 348-7615 Georgia-Pacific Gypsum LLC (404) 652-2592 Giuffre Brothers Cranes (708) 656-9200 Gulfeagle Supply (630) 773-0997 Hapco Inc. (800) 345-9353 Hart & Cooley Roof Product Systems-Portals Plus, RPS & Milcor (800) 624-8642 Henry Company (513) 300-2663 Hines Supply (847) 353-7700 Houseworks Daylighting Solutions, LLC (847) 729-0255 Hub International (815) 485-4100 Hunter Panels (888) 746-1114 ICP Group (978) 623-9980, x288 IKO (248) 804-9965 Illinois Custom Copper Install Copper & Sheet Metal Fabrication (815) 409-7414 Industrial Cork Company, Inc. (630) 832-2803 Inland Coatings (515) 993-4251 InSpire Roofing Products (404) 952-9704 Insulation Solutions, Inc. (866) 698-6562 INSULFOAM (402) 624-6611 Interior Protection Inc. (630) 530-4920 International Bildrite, Inc. (800) 641-2453 International Leak Detection, LLC (866) 282-LEAK (5325) JJ Superior Metal, Inc. (708) 544-3757 |
|--|--|--|

CRCA Associate Members

Johns Manville Roofing Systems.. (224) 325-2524
Karnak Corporation..... (732) 388-0300
Kemper System..... (630) 442-4997
Kirsch BP/Sharkskin Roof
Underlayments..... (805) 750-0084
Lakefront Roofing Supply..... (773) 509-0400
Lakeshore Recycling Systems..... (773) 681-8811
Leister Technologies..... (630) 760-1000
Liengard Inc..... (630) 990-8778
Lift Works, Inc..... (630) 833-4626
LiveRoof, LLC..... (800) 875-1392
Lomanco, Inc..... (800) 643-5596
R.M. Lucas Company..... (773) 523-4300
MACK Construction Services, LLC..... (773) 525-3411
Malarkey Roofing Products..... (847) 909-7010
McElroy Metal, Inc..... (219) 221-2497
MEP Insulation Recycling..... (317) 894-2763
Mid-States Asphalt..... (630) 730-1689
Midwest Diversified Products Inc..... (815) 520-3004
Midwest Roofing Supply
Naperville..... (630) 637-0750
Schaumburg..... (847) 241-2000
Waukegan..... (847) 249-3328
Midwest Siding Supply, Inc..... (630) 897-2333

Mule-Hide Products Co., Inc..... (815) 641-8548
MVP Sales & Marketing..... (219) 712-0099
NordBitumi / Nordtec..... (678) 489-4762
North Coast Roofing Systems
Chicago..... (773) 530-1707
Des Plaines..... (847) 795-9378
Glendale Heights..... (630) 790-3400
Novagard Solutions..... (800) 380-0138
NPC Colored Sealants..... (708) 681-1040
OMG Roofing Products..... (800) 633-3800
Omni Ecosystems..... (312) 337-3196
Panasonic US..... (201) 423-3154
Petersen Aluminum Corporation..... (800) 722-2523
Pinnacle Sales Corporation..... (262) 514-2181
Polyglass U.S.A., Inc..... (773) 844-6684
Prairie State Exterior Products..... (708) 754-9339
Pro Fastening Systems Inc..... (847) 577-7185
Progressive Materials..... (812) 725-5833
Protecto Wrap..... (800) 759-9727
Quality Building Supply Company..... (773) 237-4436
Quality Edge..... (630) 730-6658
Quarrix Building Products..... (800) 438-2920
Raindrop Gutter Guard..... (800) 816-0199
RainTrade Corporation..... (847) 283-0006

Raisman Catastrophe Claims
Group..... (888) 556-HAIL (4245)
Richards Building Supply Company
Calumet City..... (708) 891-2211
Chicago/Belmont Ave..... (773) 499-7177
Company-Corporate..... (773) 586-7777
Joliet..... (815) 725-2458
Riordan & Scully Insurance
Service LLC..... (630) 468-5400
Roofmaster Products Company..... (800) 421-6174
Roxul USA..... (905) 878-8474
Royal Adhesives & Sealants..... (630) 465-1987
Runnion Equipment Company..... (708) 447-3169
Safety Check, Inc..... (815) 475-9991
Safety Rail Company LLC..... (888) 434-2720
Schwab Group LLC..... (630) 326-9444
Scout Services..... (866) 504-3888
Sexton Properties R.P. LLC..... (224) 212-1250
SFS intec..... (610) 376-5751
Sheet Metal Supply LTD..... (847) 478-8500
Sievert Industries, Inc..... (815) 639-1319
Sika Sarnafil..... (800) 532-5123 x7222
SJ Mallein Co., Inc..... (630) 570-0301
Sky Measure by Corelogic..... (217) 685-1562

BENNETT & BROSSAU ROOFING INC. www.BennettandBrosseau.com

24 Hour, 7 Days a Week Availability
 General Roof and Emergency Roof Repairs
 Reroof, Replacement, New Construction
 Roof Inspections and Comprehensive Reports
 Custom Preventative Roof Maintenance Programs

Standing Seam, Slate, Shingles, Garden/Green Roofing
 1-800-339-8327



Commercial ~ Industrial ~ Institutional
 Illinois Roofing License # 104-000207



Industry Calendar

Sno Gem, Inc..... (815) 477-4367
Soprema, Inc..... (630) 743-3462
Southwind RAS, LLC..... (630) 233-5700
TAMKO Building Products Inc..... (800) 641-4691
Tarco..... (800) 365-4506
The Estimating Edge, LLC..... (561) 276-9100
The Horton Group..... (708) 845-3000
Tile Roofs, Inc..... (888) 708-8453
Titanium by InterWrap..... (778) 945-2888
Tremco Inc..... (800) 282-4343
TRS Group..... (815) 521-1194
TRUFast..... (800) 443-9602
United States Gypsum..... (312) 961-9935
Velux America..... (864) 941-4770
Versico..... (815) 508-2845
Walter Payton Power
Equipment LLC..... (708) 656-7700
Weible & Cahill..... (630) 245-4600
WickRight, Inc..... (312) 720-1467
XL Catlin..... (312) 444-6514

Architects & Roof Consultants
Building Technology
Consultants, Inc..... (847) 454-8800
Century Roof Consultants..... (847) 202-8500
Flood Testing Labs, Inc..... (773) 721-2200
Hutchinson Design Group..... (312) 343-9595
Illinois Roof Consulting
Associates Inc..... (815) 385-6560
Interstate Roof Systems
Consultants, Inc..... (847) 695-1460
K2N Crest..... (630) 990-9595
Kellermeyer Godfryt Hart, P.C..... (847) 318-0033
Klein and Hoffman, Inc..... (312) 251-1979
Legat Architects..... (630) 645-1906
Raths, Raths and Johnson, Inc..... (630) 325-6160
STR Building Resources LLC..... (847) 952-9668
Vacuuming
Dietz Vacuum Service, Inc..... (708) 301-9127
Ready Vac, Inc..... (847) 437-5771
RK Hydro-Vac, Inc..... (800) 754-9376
Vac-It-All Services, Inc..... (314) 487-5600
Velocity Roof Vac Service Inc..... (630) 936-2421

May 4
 CRCA's CWIR Anniversary Celebration
 Crazy Pour
 Villa Park, IL

May 16*
 CRCA Scholarship Dinner
 Maggiano's Little Italy
 Oak Brook, IL

May 19
 CAC-RCI Spring Meeting/Program
 Glen Ellyn, IL
 www.cac-rci.org

July 13*
 CRCA Industry Day Golf Outing
 Silver Lake CC
 Orland Park, IL

August 12*
 CRCA at Kane County Cougars
 Fifth Third Ballpark
 Geneva, IL

September 12*
 CRCA Membership Meeting
 Schaumburg, IL

October 3
 ALA - Association of Licensed Architects
 Trade Show & Education
 Drury Lane, Oakbrook Terrace, IL
 www.LicensedArchitect.org

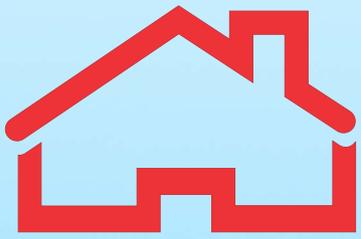
October 19
 CRCA's Emerging Leaders Event
 Topgolf
 Naperville, IL

November 14*
 CRCA Membership Meeting
 Oak Brook, IL

Dec. 2*
 CRCA Annual Awards Dinner
 Location TBD

*CRCA Members only and their guests.

Not a CRCA Member? Visit www.CRCA.org for membership information. v



Richards

BUILDING SUPPLY CO.

Honored to be your first call since 1978



Chicago Based, Chicago Owned.

ROOFING • SIDING • WINDOWS • DOORS

www.Facebook.com/RichardsSupply

www.Richards-Supply.com