



2014 AGC-Willis CSEA

Construction Safety Excellence Awards

Safety Management Showcase

Introduction

On March 5th, 2014 the AGC-Willis Construction Safety Excellence Awards (CSEA) breakfast was held at the AGC National Convention in Las Vegas, Nevada. Over 800 contractors attended the awards breakfast. AGC's Construction Safety Excellence Awards (CSEA) program is the industry's elite safety excellence awards program for companies of all sizes and occupational divisions. It is unique because finalist contractors make 5 minute presentations to 5 finalist judges who then ask each finalist contractor a series of unknown questions for 10 minutes. CSEA recognizes companies that have developed and implemented premier safety and loss prevention programs and showcases companies that have achieved continuous improvements and maintenance of their safety and health management system. For 2014 there were 54 total finalists among six divisions and 28 categories.

AGC-Willis presented the Grand Award for Construction Safety Excellence to Gray Construction. Each category's first-place winner was included in the evaluation that determined the "Best of the Best" of the 2014 Construction Safety Excellence Awards finalists.



During the post-competition exit interviews many contractors shared the value that the CSEA process brought to their organization:

"Believe that this process has caused them to raise the bar and become a better and safer contractor"

"Forces you to look at the big picture, specific questions require you to answer honestly about your processes"

"The process has forced us to look at and improve our safety processes"

"Giving the presentation with president of the company"

"The process validates years of safety improvements made within the organization"

"Opportunity to show your program so others can learn and vice versa"

"Makes you look at your program and how to improve it. Makes you refine your goals"

The 2014 AGC-Willis Finalists judges were Tony Militello, Bob Fitzgerald, Bill Parsons, Mike Sterrett and Mike Fredebeil. The following items were noteworthy Safety Management items presenters highlighted and the judges noted during the final competition:

Management Ownership and Involvement

- CEO/President lives & breathes safety. Sets, expects, and accepts only the highest of safety standards from all company personnel without compromise. One of the most important aspects of a distinguished and effective safety program.
- CEO, Operational Manager and Director of Safety meet monthly to discuss and measure the effectiveness of safety efforts.
- CEO/President visits projects at least at milestones – helps establish a “When” to visit.
- A “Safety Week” for the company’s 4,000 employees is planned each year at the peak of the construction season, not during slow parts of the season, and includes significant CEO support and emphasis on safe production.
- Senior operations management brings their own bagged lunch once per month to sit down and eat with a crew and discuss operations, quality, and safety
- Senior Superintendent designated as "Safety Lead" for safety performance.
- "No Budget for Safety" policy. Pay for whatever it takes.
- Employee level team has the task of designing and delivering supervisory training for 1st and 2nd level management.
- CEO sends a daily email to 500 employees outlining the previous day’s safety results (incidents, observations, and near misses).
- Weekly all field staff safety call conducted by the CEO every Tuesday at 2pm for 20 minutes
- Business Unit Leadership Incident Reviews. Group consists of Managing Director, and the Executive GM's reviewing all Lost Time and Near-miss incidents with the project leadership teams.
- President and CEO go through the same orientation and on-going safety training as all levels of management and employees.
- Owners conduct Safety training sessions for management and employees
- Supervisors sign an acknowledgement that they will set a safe example for others and sign a banner at the project entrance for all to see.
- Quarterly safety Summit planned and facilitated by the Owner and President for all operations management
- Measuring leading indicators, using a new software system, at the executive level and can measure anyone's participation in the safety effort



- President is also the chief safety advocate for the company...it's in his title
- President gets a call of any reported incident
- Job as CEO is to hire the right senior people who understand safety
- Anonymous safety hotline system that goes through our legal team and management
- Servant leadership
- Superintendents are required to have 20 hours of continuing safety training each year
- Ethics Awareness program for field level employees and supervision.
- Annual Safety improvement plan part of the corporate strategic planning process
- "Matrix of Responsibility"- Company developed a matrix with rows identifying various tasks that contribute to safety work (i.e. Annual plan, purchase PPE, training, tool-box talks, recognition, discipline, investigation, etc.) and columns that identify company members (management, employees, specific trades,) and whether they have a lead role, contributory role, participatory role, or potentially no role.

Risk Identification and Analysis

- Addition of hand drawn pictures to Job Hazard Analysis to facilitate better understanding of work to be performed, especially in a multi-lingual work environment
- Cross functional teams meet to discuss all aspects of the business. Members are those who manage and perform the work, those who sell the work, and those that design the projects.
- Use of Enablon, a global on-line reporting system for key safety reportable events and incidents. Program helps identify major risk areas across all business units. Link: <http://enablon.com/solutions/ehs-management> and <http://enablon.com/applications/audit-compliance>
- Executive leadership "SafeRing" program - Planning - Communicating - Observing - Improving. Subcontractors are also involved in the SafeRing process.
- SSE "Short Service Employee" employees with less than 30 days on the project. Special emphasis and observation process for these employees.
- Change job assignment during day to avoid repetitive injuries – but be sure employee is oriented properly for new job assignment to ensure employee is proper safety trained possesses adequate skills to accomplish task safely.
- Cross functional teams that go through a "Learn After Doing" post project learning process. Documented and used in pre-job planning meetings down the road.
- "Unplanned Events" and "near misses" are investigated with the Superintendent to integrate Safety, Quality, and Production in the Superintendent's mind. It is used to illustrate that something in the system needs adjustment.
- Use of the "Charrette" team analysis process to quickly come up with solutions for risks using a cross functional team including subcontractors. The structure of a charrette varies, depending on the problem and the individuals in the group, charrettes often take place in multiple sessions in which the group divides into sub-groups. Each sub-group then presents its work to the full group as material for further dialogue. Such charrettes serve as a way of quickly generating a solution while integrating the aptitudes and interests of a diverse group of people.

- We use a lot of data to help us make safety decisions
- We teach our safety people risk management
- Process to Identify Project risks then a further analysis to determine how risky on a scale from Less Risky to highly risky
- "Mining the Diamond" process to focus on target injury types vs incident rate
- "Extend the pyramid" – safety related data is investigated down to the audit level in effort to be as predictive as possible using data that is already being collected.
- Leveraging insurance carrier expertise – small businesses leverage the expertise, best practices, and experience of their insurance carrier's safety team to improve their compliance and performance.

Task Design – Engineering Controls and Design for Safety

- Safety Planning is used during the design phase and a database of Lessons Learned is maintained and used to prevent future errors from past errors in the design, planning, and execution of work.
- The "Shark Cage" to protect workers and provide more effective fall protection while working inside beams on long span decks. Also has guard rails that roll with a tied off worker from column to column.
- GPS and Robotic systems on earthmoving equipment require less personnel on the ground around the equipment significantly reducing the potential for run over and back over incidents and fatalities. More efficient, better quality and safer.
- Blocked the texting feature on Company provided phones
- Architect outreach program to train and discuss Design for Safety (DfS) with architects. Architects need CEU's and GC put together an hour DfS presentation and over 90 architects went through the training.
- "Dead Man" block for Fall Protection



- Permanent Tie-Off is installed and used during construction and then left in place for use by maintenance personnel.
- Badging system for site access control...called My Time Station
- Ladders with transport casters and ladders with assembly trough so a person move ladder easily and climb with hands free
- We have changed wheels on dollies so that they roll better. We also have our guys working on toolboxes at waist height instead of working on the floor
- Use of Cut Level 5 Gloves



"Cantilever Cargo Platform" allows for safe movement of material using passive Fall Protection



"Wall Panel Storage Rack" to facilitate the storage and safe access of wall forms

Safe Work Methods (Planning and Validation)

- STA - Safety Task Analysis process. The tasks are planned each morning and the Supervisor and Superintendent complete a daily post task analysis and coaching session at the end of the day.
- Daily time is built into the project schedule to clean up, remove construction wastes, and organize the work areas on a shift by shift basis.
- Encourage employee participation through Safe, Time saving installation methods "Pick of the Month" with a monetary award. Approved methods are placed on the company intranet's Best Practices online manual
- 2 sided pocket pre-task planning card to keep in the work area for changes throughout the day
- No crew left unsupervised
- No one can ever lift more than 50 lbs. by themselves. Disciplinary offense
- Safety Academy is made up of young engineers to educate these folks.....they study to topic for a month and then take an exam at the end of the month
- Best Practices Catalog that is used to be the standard bearer of best safety procedures above and beyond OSHA
- We uphold our best practices and work hard on our "next" practices

- To address age issues, we match younger employees with older employees, and stipulate limits to lifting materials, tools, etc. – no weight over 50 pounds lifted by one person.
- Single page safety procedure talking points for low frequency operations
- Redesigned Hard Hat – Looked Sharp – No unnecessary stickers allowed.
- Brains over Brawn program for working smarter with ergonomics and more recently employee health and wellness efforts
- “Minimum Global Requirements” – minimum standards based on known best practices and risk mitigation strategies that are set by an international firm for their global workforce.

Worker Engagement, Involvement, and Participation

- "Extra Effort Bucks" program to catch employees in the act of doing their job safety.
- "Maintenance Bucks" program to recognize employees for going above and beyond with the proper care and safe use of motorized or non-motorized equipment.
- Useful Slogans:
 - “My Brother’s Keeper” – Watch out for fellow worker, vendor, subcontractor and public.
 - “If you see; You own it”. Never walk past an unsafe condition without addressing the issue.
 - “Slow down to see safety”. Don’t rush and fall into unsafe practices.
 - “Leave a Legacy of Safety” – Make an impact on others how important safety is to you. Are you making a memorable positive difference?
 - “Walk with Determination” – be confident about what you know is the safe way to do things and don’t be deterred.
 - “Embark on a Journey” – How can you learn do to something safer?
 - “Change happens at a personal level” – What motivates you; What are you passionate about? Use that to set the elevated standard for your commitment to safety.
 - “Safety is a Lifestyle” – Are you “Living” the safety you are preaching?
 - “Focus on the Basics” – complexity can complicate construction activities – break the activity into tasks and focus on making each task safe.
 - “Can’t hand out **Safety Culture** like PPE. It needs to be developed”. – Are you advancing the safety culture within your organization and on your project”?
- Anonymous Near Miss reporting program. When an employee reports a near miss or misses during a month they receive a numbered stub which goes into a monthly drawing for \$100. The senior management team reviews all near misses as a group to learn from the process.
- "Project Comment Boxes" allow for a more project focused employee feedback process. Subcontractors are also part of the process.
- Field employees attend the corporate safety review meetings each month.

- Annual Safety Academy Award program for all employees. 20 finalists from nominations. Recognition and public reward by CEO for winner. The story behind each nomination is shared with all.
- Employee involvement in the safety process like giving presentations, designing tool box talks, suggesting improved ways to complete a job safely are tallied, measured, and used as a basis for promotions and pay increases.
- Tradesmen who no longer work with their tools are encouraged to accept positions in the safety department. Their dedication and knowledge is respected by tradesmen and they can connect better than some non-trade background safety professionals
- Safety Audit "Tag-a-Long" program - a list of all supervisors and subcontractor supervisor is maintained and on each safety audit completed by Risk Management/Safety an individual on the list is selected to tag a long on the audit for safety management training and development.
- Gym memberships to in and out of town workers
- "Monthly Safety Role Model" process where an employee is nominated, selected, gets a call from the president, and a monetary award. Selection is based on proactive safety behavior. Photo is placed on corporate office Safety Wall of Fame
- "Employee Bonus Dollars" program which rewards employees for any of: Safety, Training, Attitude, Efficiency, Planning, Accountability, Goals, Team Player, Leadership, and Innovative thinking.
- 6 Hour New Hire Orientation
- Use of Twitter and LinkedIn to stay connected with employees and their families and deliver periodic on the job and at home safety tips.
- Internet SharePoint interactive site that all company employees can access to ask questions and share best practice ideas. Highlights from the website are used in the monthly newsletter.
- On-site computers for employees and management to access safety related information and training.
- Hard Hat stickers that say "I'm Bilingual"
- Have a safety week where the craft workers highlight safety for an entire week. One example is employee generated an idea to get management to back a towed generator on a jobsite. The point being that it is hard to do a job for which one is not trained.
- Worker participation through "design a sign"
- Reward workers financially for good safety ideas. We love field feedback.
- Safety program isn't changed by executives without collaborative input from craft workers
- Teach the safety team how to train, how to teach, etc. before certifying them as competent
- Lots of conversation with employees when we have long difficult days
- Non-English speaking safety committee with bi-lingual chair
- Pre-Hire pre-promotion skills assessment. Problem solving, analytical, people, communication, etc. to find a better fit for job.
- Develop and use safety example word problems to have small groups of employees discuss what is wrong. Interactive training.

- 5+ year employees are designated and identified as "Senior Employees" and they receive a gold fiber hardhat. They are looked upon to help coach and guide less experienced employees.

Safety Training and Validation of Training

- CEO and Operational managers make monthly job visits and interview all employees who have been on the job for less than 30 days to evaluate quality of their orientation and to solicit suggestion for orientation improvement.
- Employee level team has a the task of designing orientation safety training and ongoing training for company
- All workers who will be exposed to Falls greater than 6 feet must attend a site specific fall protection orientation where they are tested and certified before they begin work.
- GPS monitoring and driver safety training on all company owned vehicles
- Supervisory educational and emphasis program that focuses on 4 key groups of workers: 1.) New to the Trade 2.) New to the Project 3.) New to their tools/equipment 4.) New to the company
- "Safe Man" mannequin at the entrance to each project to demonstrate proper PPE needed on site.
- Trained competent persons wear a badge on the outside of their high visibility vest noting what they are competent in.
- Mid-term training exams. Employees with hazard specific/competent person training greater than 2 years ago must take an exam and score 85% or better or training must be completed again.
- Company Safety professionals are routinely tested using written exams and field performance observations for evaluation of competence and knowledge of safe work practices.
- Foreman/Supervisor conducts weekly documented safety meetings with their crews. The subject must apply to the 3 week Look Ahead schedule. The quality of the meeting is scored on a scale of 1-5 and use as a Leading Indicator measurement.
- Monthly jobsite safety exams designed by a team of workers and given to all site personnel. The exams are graded and an interactive meeting to discuss the results is completed after scoring. Results are posted project wide.
- IMPACT: Immediately Making Progress Aggressively Creating Teamwork which uses iPad technology to immediately show demonstrate unsafe/safe behavior using a photo/media.
- Safety college, starting with personality and character
- When we train and the EE doesn't get it, we don't look at him as being the problem, we look inward to see what we did wrong presenting the training
- Sent 140 supervisors to a 5 day intensive training session led by former Navy seals to deal with teamwork, communication, performance
- 45 day mentoring program
- "First Move Forward" to focus on run over and back over hazards around heavy equipment.
- Experienced employees training other employees.

- Focus on a particular area for safety training; like hands and feet. Once that is well engrained pick another focused topic
- Employees are encouraged/incentivized to achieve competency certification (CHST, OHST, STS, CSP, etc.)
- ["XYZ Construction University"] A library of training courses is offered to employees, who are encouraged to take them on their own time for skills, knowledge, and ability enhancement. The dissociated learning environment enables employees to learn on at their own pace and at a time that is convenient for them
- Designing and communicating with employees the company's professional and career development ladder – identify positions available in the company and minimum training/experience requirements needed to get there

Subcontractor Management

- CEO Subcontractor Summit. The senior company leaders of all subcontractors attend and discuss communication, relationships, ideas, and how to work together effectively on safety, productivity, and quality. Allows better alignment of GC's safety program to specific subcontractors, rather than a blanket safety program aimed at all subcontractors.
- Teamed with local college or university with a safety and construction curriculum to conduct research on safe decision making. 1,000 + internal and external surveys were completed on GC, subcontractors, and their employees. Totally redesigned how GC communicates with Subs on a daily, weekly, and monthly basis.
- Subcontractor Management Skills University to help subs understand their role in conducting safe work. Costs money, but develops a higher quality, more loyal subcontractor.
- "3 Strike" policy for subcontractor safety issues. On the 3rd strike the owner of the sub must come and sit down with GC's owner and immediately develop a measurable corrective action plan.
- Subcontractors are pre-qualified using a variety of lagging indicator data. If negative data is received the Sr. VP conducts subcontractor executive interviews to understand the root causes of the negative data and to determine what has been put into place to move the data in a safe direction.
- When repeated subcontractor issues take place the GC calls for a supervisor replacement. This requirement is communicated up front in the safety section of the subcontract agreement.
- Peer pressure near miss reporting program for other trades, not your own. Anonymous process with Gift card incentives.
- Subcontractor Safety Culture Evaluation Matrix - 10 item Subcontractor questionnaire is completed by all levels of project management including safety professional.
- Bi-Annual Subcontractor safety summits hosted by the GC where a variety of topics are discussed in a 3 hour lunch and learn format.
- The estimating department uses a predictability matrix of hazards by trade and specific necessary controls are listed in the subcontract.
- GC attends subcontractor JHAs so that we can be sure it is more than just a foreman talking to a crew

- CFO, operations, and safety are required to sign off on pre-qualification before a sub can work. Subcontractor is issued a “Safety Passport” upon final sign-off to indicate their acceptance to work on site.
- We score subs who have struggled in the past, we work with them to improve
- Random drug testing 2x per year...including subs
- Annual Subcontractor Safety Management development conference and safety certification for supervisors and sub project management. All active subs are required to attend and maintain the annual safety training certification.
- Process where Subs speak up to address other trades safety issues

911 – Emergency and Crisis Management

- Grab and Go Packet to includes incident paperwork
- Muster app for smart phones. Enables employees to pre-program phones or smart devices with contract information of those (i.e. supervisor, spouse, neighbor) who you would want to notify of your whereabouts or safety in the event of an emergency