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Creating a Safety Culture for Construction Sites

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Rosendin Electric demonstrates how it has achieved such a successful safety record and created a company-wide safety culture

Construction work has always had a reputation for being a dangerous profession, and for good reason. In fact, only the fishing, logging, and airline industries have higher fatality rates, notes a 2010 article in *The New York Times* on □ The Most Dangerous Jobs in America. □ According to the most recent data (2009 statistics) from the Bureau of Labor Statistics, □ construction laborer □ ranks as the 10th most dangerous profession □ with 18 fatalities per 100,000 workers in 2009, compared to 200 per 100,000 for commercial fishing, 62 per 100,000 for logging, and 57 per 100,000 for pilots and flight engineers.

When times are good □ and there is pressure to meet deadlines and control costs □ safety procedures in the electrical construction industry can suffer, largely due to the lack of safeguards on the job site and absence of proper training. No matter if times are good or bad, promoting safety on the job site should be the primary objective of any construction firm, not only in making sure the project adheres to the latest safety codes, but also to avoid the economic consequences that go with an accident.

Accidents can lead to tremendous losses, even when there isn't a personal injury involved. When people get hurt, costs quickly escalate from lost working hours for the injured employee, compensation fees, and increases in insurance premiums. Promoting on-the-job safety is not only good for business, it's also good for worker morale.



The Rosendin Electric safety team on the site of the Nogales Wastewater Treatment Plant Project in Arizona. The safety protocols on this project included a three-week schedule and preplanning/training sessions before tasks were assigned, an apprenticeship safety portfolio program, and a safety recognition component with monthly awards and a barbecue. The result was 800 days on the job without a single injury.

Setting the stage

A number of factors contribute to lack of safety on a construction site. Of course, there's the rush to meet completion deadlines. In many cases, there is also an ill-defined chain of command; therefore, you aren't sure where to go for safety decisions. Lack of planning contributes to unsafe practices, as does a lack of training. Similarly, there's also a lack of safety mentoring in this industry, including establishing safety protocols as part of an apprenticeship program. One of the greatest challenges in the pursuit of an effective safety culture is overcoming indifference from senior management, as safety all too often tends to take a back seat to other priorities.

As an employee-owned construction company, Rosendin Electric, headquartered in San Jose, Calif., has found that the best way to promote on-the-job safety is to make it an ingrained part of the company's culture. You need to be able to embrace a top-down commitment, making safety a core value so everyone understands they have a vested interest in creating a safe work environment. You also must empower everyone on the job site to oversee safety procedures and protect themselves and their coworkers.

By creating a culture dedicated to safety, Rosendin Electric has realized benefits in both its safety record and lost revenue due to lost man-days. Its □ Lost Day Prevention Program □ was implemented in 2006 as part of an aggressive □ Return to Work Program □ that was created as a partnership between Rosendin Electric, treating doctors and facilities, and its insurance carrier. Since creating the program, Rosendin Electric has seen a steady decrease in lost day cases. In fact, it has only had one lost day case in the last two years ([click here to see Table 1](#)). What makes this even more impressive is the fact that Rosendin Electric has substantially increased the number of overall man-hours worked from 2.9 million in 2006 to 4.5 million in 2009 □ all the while seeing a steady decline in lost day cases ([click here to see Fig. 1](#)).

Taking action

Creating this kind of safety record is no accident. This large electrical contracting firm has identified five crucial factors required to build a safety culture that protects everyone on the job site.

- *Safety starts at the top.* Your safety program won't get very far without the support of senior management. Everyone in the company needs to see that the president, vice presidents, and project managers are all committed to promoting on-the-job safety. They not only have to talk the talk, but they also have to embrace it in demonstrable, public ways.

One way to do this is to use visual management tools to promote safety. That not only means putting up posters around the office, but also making safety a visible executive mandate. Open each meeting with a safety topic. Make sure all safety rules are followed, and institute a "no exceptions" policy — complete with consequences for those who ignore safety protocols.

If you can, create a visible symbol of senior management's commitment that reminds workers safety is a value. For example, Rosendin Electric's CEO signs "Stop Work" safety cards given to every new employee as a way to demonstrate he is committed to safety — and that he is empowering everyone in the company to share in that commitment.

- *Enhance your current work culture.* You can't just reinvent a corporate culture and choose to make it something different. Creating a safety culture needs to be evolutionary, not revolutionary. So look at the work environment you already have in place, and identify areas where you can add safety as a value.

Every company has a culture in place that contributes to its success. Whatever values and principles are already in place contributed to that success, because the employees believe in those values and what the company represents. You need to identify those values and determine how you can enhance them with safety messages.

For example, if your value statement is something like "We Build America," you can enhance it with the new statement, "We Build a Safe America." The objective is to add to the current culture so employees understand that they maintain a safe work environment not just because someone tells them to, but because it's the right thing to do for themselves and their families.

When employees see how positive making safety a value can affect the end results at the end of the day, it also opens the door to apply the value concept to other areas within the company. Everything from your quality control to following building codes can be enhanced.

- *Maintain open lines of communication.* As part of management's commitment to safety, all senior staffers must maintain open lines of communications with everyone on the job site. You can't create a safety culture without getting intelligence from the field. You have to create a work culture where it is not just safe for employees to report back to management, but it is encouraged.

Management has to be humble enough to listen and acknowledge what they hear. Although you obviously can't act on every complaint from the job site, you need to make it clear you will listen and take every report seriously.

- *Create accountability.* Every employee — from the president down to the starting apprentice — has to be held accountable for doing his or her part to promote and support safety within the company. That means safety goals need to be part of each employee's job description.

Establish safety objectives for everyone and create metrics to measure performance. Share lessons learned about on-the-job safety through regular safety meetings and other means, such as company presentations or the company newsletter. Acknowledge those who take responsibility by rewarding them for meeting their safety goals.

Safety and accountability to maintain a safe workplace has to be part of an overall master plan for the company. The primary objective is to keep people safe on the job, but the spirit of safety has to be part of the spirit of accountability. It's this spirit that will keep the safety culture alive.

- *Promote ownership.* As an extension of accountability, you need to promote a sense of ownership as well. Every employee must feel a sense of personal responsibility to take charge of safety.

Use the analogy of renting a car as an example. How often have you stopped to have a rental car washed and waxed before you returned it? Of course you don't — because you don't own the car. The same is true for safety. You have to find a way to give each employee a sense of ownership over safety.

Another way Rosendin Electric promotes employee's ownership is by using pre-task-planning (PTP) cards. Its crews fill out a PTP for each new task they perform. By using PTP cards, they identify the steps to complete the task, hazards associated with each step, and ways to mitigate or eliminate those hazards. After the crew finishes filling out the card, everyone signs it — as a sign of visual ownership.

Let the construction team have a say in creating safety rules. Make them responsible for putting safety measures in place. Provide a self-auditing mechanism so they can measure their own performance, and give them a voice in enforcing safety

measures on the job. If you take ownership in something, you're more likely to take care of it.

Putting principles into practice

As part of its safety best practices, Rosendin Electric holds daily safety meetings on the job site, reviewing activities for the day and safety procedures that need to be considered. Employees also start each day with stretching exercises to limber up the crew, followed by a second set of stretching exercises after the lunch break. This is not only a good physical exercise, but it also makes the crew better prepared for tasks that lie ahead — and serves as a routine that reinforces the company's commitment to safety in the process. In fact, on many projects, the firm's morning stretching exercises serve as an example to crews working for other contractors. Although they might get some strange looks at first, by the end of the project other crews are often stretching too.

Rosendin Electric rolled out its mandatory "Stretch and Flex" program in 2006. For the three years prior to its implementation, back, knee, and shoulder injuries accounted for 32% of all lost time injuries. Since implementing this program in 2007, the company has had no lost time due to back, knee, or shoulder injuries. Because of the extremely physical nature of the business, coupled with the reality of an aging workforce, Rosendin Electric knows it won't eliminate injuries; however, it has seen a dramatic decrease in the severity of overall sprains and strain injuries ([click here to see Table 2](#)).

The company motto, "Plan the work and work the plan," reinforces this mentality. By planning each project three weeks in advance, the company can offer skills training for each phase of the project, allowing it to build safety protocols into each stage of construction and making sure the workers assigned are properly trained. Rosendin Electric also maintains an apprenticeship program that includes safety mentoring to train younger workers. Plus, the project management team conducts regular site safety audits, which typically involve weekly tours of the job site in which managers talk to the crew and review safety issues.

To help the crew take ownership of on-the-job safety and maintain open communications, the company has an open door policy — where any member of the crew can report a safety issue without fear of reprisals to the on-site safety professional. As mentioned previously, the "Stop Work" cards are another step that clearly puts job-site safety in the hands of the work crew.

In an ongoing effort to ensure the firm recognizes safety performance, Rosendin Electric issues safety awards to employees who visibly demonstrate support for its safety program. In addition, the company holds regular safety barbecues on the job site to reward the crew for maintaining a safe work environment.

Another critical part of its safety culture, Rosendin Electric publishes a regular newsletter, the "Rosendin Recognition Recorder," which highlights the latest safety success stories and best practices in action. For example, stories in a recent issue recognized crew members for safely installing lights on a construction crane, following the emergency pipeline procedure during an excavation where there was a suspected pipeline rupture, and for inventing new tools to eliminate pinch hazards for PVC pipe couplings. The company has also implemented a new REI Safety Volt program — where workers are recognized for safety in the field with stickers they can put on their hard hat and a \$25 gift certificate. As part of senior management's commitment to the safety culture, employees who demonstrate outstanding safety procedures are recognized with gift certificates or special awards as a tangible reminder of the importance of site safety.

When it comes to safety, the bottom line is creating a work culture of on-the-job safety requires participation and commitment from everyone, in addition to creating a system of safety protocols and public safety acknowledgements that helps keep safety top-of-mind. If you really want to make safety a part of your core corporate values, it's time to identify your own tools and techniques to promote it on the job site.

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