

# Making the hard decisions to improve installation safety

## One door dealer's mission to reduce injuries

By Tom Murnan M.S., Omaha Door & Window



**Editor's note:**

Tom Murnan's "Preventing rotator cuff injuries in the garage door industry" article appeared in the summer 2017 issue of Door + Access Systems. It focused on how the injury occurs and practical measures to use for prevention — primarily warmup stretches.

Since that story was published, Omaha Door & Window (ODW) has dedicated extensive time and resources to safety initiatives designed to prevent nagging rotator cuff injuries. Not all the changes ODW implemented were successful, but they are all worth sharing. As these kinds of injuries continue to plague the industry, this story can help door dealers obtain strategies for curtailing the problem.

**R**otator cuff injuries can be alarmingly expensive for both the injured person and business owners. They can have a negative impact on an employee's ability to work and a company's ability to complete jobs and lead to insurance costs and premium coverages.

The down time for a common rotator cuff injury requiring surgery is typically 10 months or more of restricted activity. An experience modification rating (EMR) is used to determine workers' compensation insurance premiums. When we had employees with rotator cuff injuries three years in a row, our EMR started creeping up towards 2.0, which means the insurance company would charge double to provide coverage.

In Nebraska, if the rating gets too high, your company is placed in "the pool" and is flagged as a high-risk business that no one wants to insure, thus making the aftermath of these injuries become even more expensive.

The increase can be 20% or more depending on their assessment of risk. That is expressed as an EMR (mod rate) of 1.15, 1.20, etc. A poor rating can tarnish a company's reputation. When our EMR rose, ODW was viewed as a pariah by commercial customers looking to hire a business with a 1.0 EMR or less.

### It starts with prevention

ODW had a basic safety strategy in place, but it was not enough. For years, we created safety teams based on work duties. Our installers, technicians, shop, and dock workers were divided into their respective teams. We then provided varying safety procedures based on the group's needs.

For example, all employees who work with tools were required to attend a monthly Safety Pay\$ meeting, where OSHA-mandated topics, such as Lock Out Tag Out, were covered.

### Safety committee teams and meetings

In addition, each team was required to have its own monthly meeting, and all teams were expected to send a representative to the company-wide monthly Safety Committee to review how the safety plan is doing.

The Safety Committee investigated all accidents with an emphasis on how the accident could have been prevented. Incentive pay was given to employees who attended Safety Pay\$ and/or team meetings. Despite having this structure in place, major accidents continued.

### Engineering changes

When we continued to have rotator cuff injuries in 2017, we recognized that stretches and safety teams could not solve this problem. We needed widespread change in our safety programs and decided to try what OSHA calls engineering changes to make the work safer. These would require making changes to the environment to increase safety, not just donning personal protective equipment to protect from a harmful environment.

We knew this was the direction we wanted to go. What we didn't know, at the time, was how resistant employees would be to change. Warning: Expect difficulties whenever you initiate change.

### Getting employees involved

In mid-2018, we began revamping our safety program by focusing on safety buy-in from the employees. We took a very practical approach.

First, we stopped requiring upper management (me) to attend the monthly Safety Committee meetings and instead asked employees to facilitate the meetings. That idea immediately increased the probability of ownership of the safety program for employees.

Today, an employee chairs the meetings, and most of the members are rank and file employees. The committee members pick a safety topic that addresses concerns that occurred in the plant or field over the past month. And with me out of the picture, they are able to freely discuss issues and propose improvements. The committee then relays their ideas and concerns to upper management.

### Learning about potential risks

Rather than memorize the OSHA manual, we asked each team to focus on the most common things, based on history and present dangers, that could cause an accident for that group. Each team came up with target areas to narrow our safety focus.

We developed one-page safety sheets with half of the page featuring the same targets and the other half highlighting the job-specific dangers that are most likely to injure that group. For example, the Service department technicians felt that clamping and winding broken torsion springs was a high-danger area, so they targeted that topic.

The Residential department targeted lifting, especially door sections, as its priority. Additionally, we emphasized helping each other with safety, because safety is a team effort as well as an individual one.

We stressed the importance of staying in the present, paying attention, being focused, and assessing each situation for possible safety problems. "What could possibly go wrong?" should be part of your assessment. Working on autopilot, ignoring hazards, and distracted thinking are a recipe for accidents.

### Minimizing the load for installers

Another major initiative we applied was lowering the heights of loads for residential installers. Our technicians had been placing garage door sections, the heaviest part of a door, on the rack above their pickup camper shells.

We noticed that problems would arise in the field when our techs tried to remove the sections from ground level by themselves. Unloading from this height forced them to raise their arms above their shoulders and move them out of a what is considered a safe lifting power zone.

### Tailgate extenders to the rescue

In 2019, we outfitted all our residential installer trucks with tailgate extenders, which fit into the receiver hitch of the vehicle. Using the extenders keeps the load low. We limited the length of the door for this area to 16 feet. For jobs with longer doors, we put the doors on top of camper shells on racks that extended to the windshield and sent two installers instead of one.

The tailgate extender is a true engineering advantage. It allows the installer to load and unload sections and still be in their power zone. However, many techs were used to placing the doors on the overhead rack and resisted the new unloading system.

They said that it was difficult to store old doors, impossible to keep the truck secure overnight, and some of the doors on our half-ton trucks were too close to the ground with the extenders. When backing up on a steep driveway, the door sections would scrape the concrete.

Peace was restored when we sent two installers to jobs and allowed them to place the sections back on top of the truck. If there was only one installer, the tailgate extender was supposed to be used, but this requirement was often ignored.

### The value of spring winders

In 2020, we began purchasing spring winders for a few installers who requested them. By 2021, all our residential techs were using them. Implementing spring winding tools was an

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engineering change that lessened the upward motion of an arm out of its power position and ultimately, helped reduce long term damage. Spring winders are ideal for low headroom situations and help prevent deterioration to the shoulder area when performing this routine but necessary task. Not surprisingly, winders are gaining popularity among installers.

## Recommend physical therapy

We also tried to be more proactive when addressing muscular complaints. We would refer an individual to a local physical therapist before an injury turned into a worker's compensation case.

It is amazing how many impending back or arm issues were nipped in the bud by prompt care. Professional therapists assigned employees targeted therapeutic stretches designed to bring relief to the affected body area, and they often worked.

## Installer down, profits down

Despite new procedures and tools, we had a 42-year-old tech tear his bicep while stacking an 18-foot sandwich door top section with windows by himself, which is not our normal protocol. As a result of the injury, he was limited to 10 months of light duty and permanently reduced to a 20-pound lifting limit. We effectively lost this employee as an installer.



Implementing spring winding tools was an engineering change that helped the company reduce long term rotator cuff damage.

To keep the mod rate down, we have been paying the lost wages (\$79,000) instead of the insurance company. We were also hit with an additional \$50,000 for surgery, physical therapy fees, and crippling restrictions. Most importantly, we lost a hard-to-find trained installer.



ODW employees continue to start each day with warm-up stretches.

## Two is safer than one

In 2021, some of our veteran techs suggested that the existing safety plan was not focusing on the most potential threat for injury. They advocated for two installers on every door installation. With the advent of urethane-filled steel sandwich doors, door sections started to become heavier. We recognized the increasing injury risks for one-person installations.

However, two installers for what we previously considered a one-person job would increase the cost and could decrease efficiency by up to 25%. We concluded that the most important thing is the safety of our installers. If that meant raising prices to cover the extra expense, then so be it.

The ultimate solution for increasing safety and extending the health of door installers is to have a two-person crew on all heavy door jobs. Another benefit is that you have more experienced workers who can teach new hires the ropes.

## Mission accomplished

So, were our safety initiatives effective? Absolutely. ODW's mod rate is just above 1.0, a dramatic improvement from the near 2.0 from five years ago. Most of the high-cost accidents have been purged out of the three-year insurance cost recovery scheme.

We still have some claims for unusual injuries like carpal tunnel and lacerations. But, overall, we have minimized shoulder injuries (and the associated claims that go with them) when we implemented two-person crews.

In a nutshell, we tweaked our safety program so that it focuses on the most likely injury risks for installers. Worker safety is critical in an environment where you can't get replacement workers, which offers long-term value to your company. It's important to retain and keep the workers you have safe and well-paid.

To be successful, we had to change the safety culture and earn employee buy-in by responding

to their concerns. For us, it involved implementing two-person crews for most heavy double car doors and even single car doors. Prevention is better and cheaper than paying for accidents and associated recovery costs down the road.



In 2019, ODW equipped their residential installer trucks with tailgate extenders.

Think this can't happen to your company? Think again. We learned the hard way that injuries can negatively affect any company, so start preparing now.

Warm up stretches are still part of our routine, but it's the individual changes we've added that help us create a more comprehensive safety environment. Employees may be resistance to change, but if the safety plan is focused on accident prevention, then it will be successful and save you a bundle in the end. ■

*Omaha Door & Window was established by Tom Murnan's father, Leo, and his partner in 1959. Tom started working for the company in the eighth grade by sorting parts with his twin brother, Steve. By high school, they were unloading trucks and prepping wood doors for installation by installing glass, carving designs in the Masonite panels, and more.*

*After earning bachelor and master's degrees from Creighton University, Tom returned to the family business in 1979. He currently shares the co-president title with Steve.*