

Mid-South Engineering Company

Issue 4

Working Together

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Surviving Nature

Call it the earliest warning system ever...a flashing light and a booming alarm of thunder. The average lightning bolt contains 500 million kW, or enough to power a 100-watt bulb for 17 days. Awesome power is not as rare as you might first think. Lightning strikes in the Continental United States 100 times per second. Roughly 8 million direct hits each day. And while each strike only lasts a fraction of a second, the temperature generated soars over 50,000 degrees Fahrenheit.

Between 80 and 100 deaths occur each year from these bolts of tremendous power in the U.S. Another 1000 survive the indirect hits. But those who survive may have to live with severe burns or disabling nerve injuries.

The odds of being on the wrong end of a lightning bolt are about 600,000 to one. Yet you and your employees can affect the odds by how you approach this natural phenomenon. Ninety percent of lightning related deaths occur between May and September. The link between golf and lightning strikes is justly infamous. Golfing great Lee Trevino nearly had his career and his life end abruptly during the 1975 Western Open because of a freak storm. Taking shelter and limiting outside activities during storms is simple common sense.

When you see a flash of lightning, count the seconds until you hear the thunder. Divide that by five and the distance in miles will result. Six miles or less (a count of 30) means its time to head for cover. If you can't find shelter, avoid tall, isolated objects. Get rid of metal objects. Stay at least 20 feet from others to help reduce the risk. Don't think of you golf cart as shelter, while your car is a better choice. And just because



you're inside a building, doesn't completely eliminate the danger. Corded telephones and contact with electrical appliances or metal window frames is something to avoid. Finally, allow at least 30 minutes past the last lightning flash before going back out.

The Do's and Don'ts

Why do some projects and businesses succeed while others fail? A forensic look at how reveals some basic answers that are always true to any job, whether small or large.

• **Do** maintain your ethics and choose partners (engineers, contractors, and coworkers) who have similar moral character and high standards. Once you start compromising your ethics, you can never regain the ground you've lost.

• **Don't** let your mouth overload your capabilities. Asking for help from someone with experience exhibits wisdom. More projects fail because someone went into a job that was too risky or too big for them and the plan was flawed from the start.

• **Do** reinvest your profits in people and training at all levels of an organization. People are always the most important resource. Good people are worth the investment and everyone deserves to make a profit.

• **Don't** let your ego get in the way. Having people who are smarter than you are, and who do their job, reflects well on everyone involved.

• **Do** make work fun for yourself and others. Put God first, family second, and work third. The projects and businesses with these priorities continually succeed.

• **Don't** expect subordinates or partners to follow the rules any more, or any less than you do. Setting the standard is by action, and not by words.

• **Do** focus on the details. Paying a little more to get the details and design correct saves many times more than the cost. It's the details that make or break a job.

• **Don't** complain about loosing. Learn from the losses, so that next time you can win. Anyone can be knocked down, it's how you get up that matters.

• **Do** invest in the future. Once you stop investing time and money on long-term improvements you start loosing to the competition.

• **Don't** forget to be thankful and complimentary of those who help you succeed.

• **Do** serve the total need of your clients and customers. Doing more than your asked makes you distinctly different in the business world.



"The Barn" built in the 1930's to house Welsh ponies, serves as Mid-South's offices. →

Life's Lighter Moments

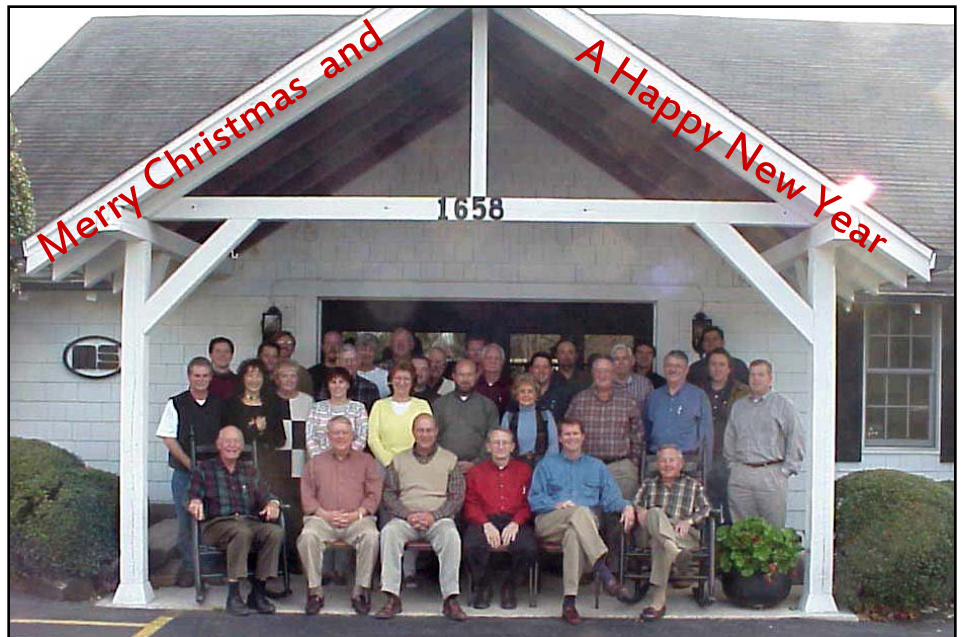
All I Really Need to Know I Learned From Noah's Ark

- Plan ahead. It wasn't raining when Noah built the ark.
- Stay fit. When you're very old, someone might ask you to do something REALLY big.
- Don't listen to critics - do what has to be done.
- Build on high ground.
- For safety's sake, travel in pairs.
- Two heads are better than one.
- Speed isn't always an advantage. The cheetahs were on board, but so were the snails.
- If you can't fight or flee - float.
- Take care of your animals as if they were the last ones on earth.
- Don't forget that we're all in the same boat.
- When the doo-doo gets really deep, don't sit there and complain - shovel!!!
- Stay below deck during the storm.
- Remember that the ark was built by amateurs and the Titanic was built by professionals.
- If you have to start over, have your family by your side.
- Remember that the woodpeckers INSIDE are often a bigger threat than what's outside.
- Don't miss the boat!
- No matter how bleak it looks, there's always a rainbow at the end.
- Stop what you're doing, and do what GOD says!!!

Author Unknown

Wire Mesh Reinforcing

Most of you are probably very familiar with Welded Wire Fabric (WWF) reinforcing that is used in concrete slabs. In fact, lots of you have probably used it at some point or another whether it was at home or in paving projects. If so, how did that pavement perform? Maybe it did just fine. In fact, we really hope it did. However, there are some issues concerning WWF that you should be aware of. In examining concrete that has been reinforced using WWF, many times we have found that the reinforcing ends up at the bottom of the slab, contacting the earth. This is not where the reinforcing is intended to be placed, because the reinforcing which falls to the bottom of the slab is basically ineffective in preventing or controlling cracks in the slab. So, why would your contractor let the fabric fall to the bottom of the slab? It was probably accidental or a by-product of construction. Concrete workers generally have to get inside the forms to work the concrete into place. While they are doing their work, they are also stepping on the WWF, mashing it down into the ground if it isn't properly supported. Then when the weight of the concrete is on top of it, it is very unlikely the WWF will rebound to its original position...leaving you with a non-reinforced slab. Before those producing WWF get upset, we should point out that the fabric works just fine if it is installed and supported properly. Generally speaking, normal deformed reinforcing bars tend to work much better for slabs-on-grade applications. For elevated floor slabs, the fabric seems to work really well. Next time you are pouring concrete slabs, think about the construction process and which type of reinforcing is best suited and sized for the situation. Also, watch for proper installation so that mistakes don't get buried, and you find out too late that the fabric was improperly installed.



From All of Us!



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