

That's a Killer Gate...No Joke

The American Fence Association is proud to support the campaign for life-saving manual gate safety regulations

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On January 1st new regulations surrounding manual gate installation and maintenance went into effect in the Californian cities of San Rafael and Larkspur. These changes are a powerful victory for innocent victims and their families, who paid the ultimate price for manual gates with poor design, poor workmanship, lack of fall-over posts, lack of adequate gate stops, unauthorized hardware modifications and lack of ASTM building standards. This story is about those who have suffered, those who have risen to the challenge of bringing about positive change from tragedy, and those who have stepped up to support them. The American Fence Association is honored to have a voice in this story, and proud to champion the cause for manual gate safety standards across the country.

This page and top of pg. 29:
An industrial park slide gate
in Sacramento, CA, that fell
over and pinned a young
child to the hot pavement,
causing extensive injuries.



DECEMBER 19, 2019 — SAN RAFAEL, CALIFORNIA

The call came to Eric and Dayna Quanbeck just six days before Christmas, and it was every parent's worst nightmare: their seven-year-old son, Alex, had just been in a serious accident.

While playing football with a fellow first grader during recess at private school, Alex noticed the large iron gate at the school entrance was open. As the 60-pound boy pulled to close it, the enormous gate fell off its track directly on top of him. The 30-foot-long, 8-foot-tall structure weighed approximately 400 pounds, and it fell at the speed of gravity. There was no chance of survival with such terrible odds; Alex entered cardiac arrest and died shortly after.

Piling tragedy upon tragedy, the Quanbecks would learn several disturbing facts as they investigated the circumstances surrounding Alex's death. First, the gate had been installed without a permit. Second, it had already fallen once before — only a month earlier — and was put back up without any maintenance afterward. Third and worst of all, their son's death could have been easily prevented, if only a crucial (and very affordable) gate

safety component had been part of the installation.

"It's a struggle as a parent," said Eric Quanbeck. "A \$50 addition would have saved Alex's life."

It's a painful point that bears repeating: *fifty dollars*.

The Quanbecks had no idea at the time that they were not alone; other cases of injuries and deaths due to manual gate failures had been reported in California and beyond. In Richmond, CA, one experienced access control professional was investigating several such cases. His name is Eric Bledsoe, and soon both he and the American Fence Association would become strong allies in the fight to make manual gates safer.

Bledsoe, an AFA member and President of Electronic Innovations, Inc., is well-versed in the code standards and installation requirements of the access control industry. His experience was called upon in two manual gate failure cases before he crossed paths with the Quanbecks.

MAY 10, 2017 — SAN JOSE, CALIFORNIA

Bledsoe was contacted by one of his company's automatic gate clients, an attorney. His law firm was representing a truck driver who had been



PHOTO COURTESY OF THE QUANBECK FAMILY

Alex Quanbeck was a precocious and loving seven-year-old, before he was killed by a malfunctioning manual gate at his school.

severely injured by a manual gate on company premises in San Jose. While the driver was closing the gate, it over-travelled the gate stops and fell on him, pinning him to the roadway. The accident occurred after hours, and it was by sheer luck that the man was able to reach his cell phone and hit redial on the last number — his supervisor, who immediately called 911 and drove to the site to help free his employee. The man was taken to the hospital and recovered, but unfortunately, he sustained spinal injuries

that permanently changed his physical capabilities.

When the attorney asked Bledsoe about manual gate safety standards Bledsoe said he was knowledgeable about automatic gate systems and code compliancy standards (specifically, UL325 and ASTM-F2200) but knew less about manual gate standards. Still, he offered to do some research for his client.

It was an unusual case to begin with, but the real surprise came after Bledsoe made a concerning discovery: manual gates were largely flying under the safety regulations radar.

"I began my research with the ASTM standards and was surprised to learn that there are no requirements for manual gate fall-over protection," Bledsoe recalled. "There is such a requirement for automatic gates, but surprisingly, the ASTM-F2200 specifically states the standard is not applicable to manual gates."

Bledsoe reviewed the photos of the accident, read the incident reports and documentation, and

discovered that the gate had been modified less than 45 days before the incident. "The documentation provided showed that work done by the modifying contractor was the cause of the accident, due to inadequate gate stops and lack of fall-over posts," Bledsoe said. This conclusion was also supported by a Forensic Accident Engineer.

The law firm secured the injured worker a seven-figure out-of-court settlement, but the damage was done.

JUNE 28, 2015 – SACRAMENTO, CA

During proceedings for the injured truck driver's case, the defense attorney asked Bledsoe for his input on another case he was handling, which involved a rolling bi-parting slide gate and a scorching hot Sacramento day. A truck driver took his two sons along for a delivery, after which they returned the truck to the trucking yard and hopped into the father's personal vehicle to leave. At the gate, the father and older son got out and began pulling one side of the bi-parting slide gate



PHOTO BY UNIVERSAL SECURITY, SHARED WITH PERMISSION FROM ELECTRONIC INNOVATIONS, INC.

Above and pg. 32: Failure of the post on a commercial park slide gate in Sacramento, CA, which fell over and severely injured a child.

ADDITIONAL MANUAL GATE SAFETY INCIDENTS

Eric Bledsoe and Eric Quanbeck discovered a number of manual gate failure incidents dating back over a decade. Deaths were almost certainly preventable in all cases*

- **2012: Tampa, FL** — 7-year-old girl killed after swinging on a gate at her apartment complex that fell over on top of her.
- **2013: Sacramento, CA** — 5-year-old boy killed by a manual wrought iron gate that fell off its track. Family suspected that a back stopper might have bent and allowed the gate to come apart.
- **2013: Norwich (U.K.)** — 56-year-old woman crushed to death by an iron security gate that fell on her when she tried to close it manually after pulling into her driveway.
- **2015: North Las Vegas, NV** — 8-year-old boy crushed to death while playing near a gate and climbing through the opening.
- **2017: Mukilteo, WA** — 10-year-old boy killed after a 20-foot wrought iron gate fell and crushed him.
- **2019: Fort Bend County, TX** — 74-year-old woman killed by a wrought iron manual gate when it jumped its track and crushed her in front of her home.

Bledsoe and Quanbeck believe there are more manual gate failure incidents that have yet to be uncovered.

***Incidents above confirmed through the following sources:**

ABC30 Action News

NBC Bay Area

Fox KTVU

Fox News.com (CA)

KHOU 11

Kiro7

KTNV Channel 13

Marin Independent Journal

San Francisco Chronicle

leaves closed behind their vehicle. Suddenly the gate stop failed, and the gate continued rolling into the opening and toppled over on the boy, pinning him to the ground.

"The gate leaf weighed hundreds of pounds and the father and his other son could not lift the gate off the pinned boy," Bledsoe said. "The boy was sandwiched between the gate and the asphalt roadway. The surface temperature was so hot — the boy was screaming because he was being burnt by the roadway and the hot metal gate was not budging."

The father drove his truck to the front gate guard booth of the industrial complex to get help and call 911. Security personnel hurried back to the site with the father and together, they were able to lift the gate and pull the boy out. He was taken to UC Davis Medical Center, where doctors found he had sustained head trauma, burns and other injuries. In addition, the father and brother experienced mental and emotional trauma: they watched the gate fall, listened to the



boy's screams, and felt completely helpless to rescue him as he suffered.

The case was settled out of court, but the family will carry the fear and pain of that experience for the rest of their lives, and no compensation can erase it.

DECEMBER 20, 2019 — SAN RAFAEL, CA

Bledsoe was watching the evening news one night when an eerily familiar story came on: a young boy had been killed by a falling manual gate in San Rafael. That boy was Alex Quanbeck. What, Bledsoe wondered, was going on with all these manual gate failures, and all within such a short period of time? He called the San Rafael Police Department and left a voicemail for the detective handling the case.

"I said I was a local resident who had trade and professional experience

with gate systems and had participated in reviewing other manual gate accidents," Bledsoe explained. "I offered my help."

When another detective on the case called back inquiring about his qualifications and fee, Bledsoe said he wasn't interested in being paid; he just wanted to determine the cause of the accident.

The detectives invited him to join the ongoing investigation, with a clause of confidentiality, and brought him up to speed. The police were able to re-create the accident, but they were still trying to determine why the gate fell. So, Bledsoe asked to go to the evidence locker where the gate was being held and examine it with the detectives and the school's attorney.

"After inspecting the gate, I could tell that someone modified its

hardware, and that is what caused the accident," Bledsoe explained. During the investigation, he added, it was determined that rear wheel retaining hooks had been cut. Given the circumstances, manslaughter could be applicable, Bledsoe stated to the group:

"I'm not an attorney, but I understand the definition of manslaughter, and based upon what I learned, there were unnecessary modifications made that caused or contributed to this accident that took the life of a young boy playing ball at his school."

Covid roared into the States shortly after Bledsoe shared his conclusion with the investigative team, and the case was put on hold for a time.

A NEW ALLIANCE

In 2021, the Quanbecks settled their lawsuit with the private school



PHOTOS COURTESY OF THE SAN RAFAEL POLICE DEPARTMENT — SAN RAFAEL, CA

Above (left and right): J-hooks were cut from this manual gate at Alex Quanbeck's private school, allowing the gate to jump its track and fall over on top of him.

and the fence installer, and the Quanbecks reached out to Bledsoe, saying they wanted to help educate the fence and access control industry. Bledsoe was eager to support them and wanted to bring the American Fence Association and its members on board. Most of all, he wanted to work together to make

meaningful changes to manual gate safety protocols.

The Quanbecks had recently founded The Hummingbird Alliance (named for Alex's favorite bird), a not-for-profit entity with the stated purpose of raising awareness for, and addressing, safety issues at schools. Working with Bledsoe, they could

bring critical gate safety issues to a wider audience.

As part of the Quanbecks' private settlement, the installer of the gate that killed Alex was required to issue a safety recall for other similarly designed gates it had installed. It fixed approximately 40 other gates with similar deficiencies — an alarming revelation to the Quanbecks, and further confirmation that drastic changes were needed.

"We want to change the industry's mindset of how gates need to be designed," Quanbeck added. "Our work isn't to shame anyone; it's to create an awareness mechanism so that people in the industry — both those who oversee at a building official level and those who complete the work at a fence contractor level — understand the danger of these gates if the proper safety mechanisms aren't put into place and they fail."

This work led them back to San Rafael one evening late last year.

CAUSE AND EFFECT

What caused the manual gate safety accidents in this story, and how can the fence industry help prevent them in the future? Bledsoe shares his theories and takeaways.

Possible causes of manual gate failure:

- Lack of fall-over stops.
- Lack of adequate gate stops. In two of these incidents, a flat bar was used at the back of the gate that bends after repeated hits, allowing the gate stop to bend and the gate to travel through the stay roller posts and fall down once unsupported. A steel tube or channel that will not bend must be used.
- As gates travel to the open position, they must run level, so gravity does not move them or allow them to run on their own.

Next steps:

- Have a policy that educates both gate installers and end users about these fall-over accidents. Should the gate ever fall over, they must take action to prevent it from happening again, rather than just reinstalling it so it can fall off again.
- Strictly prohibit the removal or cutting of "J" hooks on rear wheels or any other safety devices. These "J" hooks are safety devices to prevent the gate from jumping off the rails.
- Create a campaign to address existing gates that your firm could make safer and educate the property owners on the incidents in this article. It is the responsible thing to do, and your efforts could save a life.
- As leaders in your company, make a commitment to keep gate safety at the forefront of your employees' and customers' minds. It should be continuously discussed as a company, and unsafe gate installations should be shared with the location's ownership. Use some of the same awareness that the UL325 and ASTM-F2200 standards provide us.

NOVEMBER 21, 2022 — SAN RAFAEL CITY COUNCIL MEETING

In November 2022, The American Fence Association's Executive Director, Michael Reed, joined Quanbeck and Bledsoe at a pivotal San Rafael City Council meeting to make their case for introducing life-saving amendments to the triennial building code.

By way of introducing the issue at hand, San Rafael City Attorney Robert Epstein, a strong partner for Bledsoe and the Quanbecks, told

the committee that Quanbeck had alerted him to the fact that “the cause of [Alex’s] accident isn’t addressed in the building code — not in our building code, not in the uniform building code, not in the building code anywhere.”

Don Jeppson, Chief Building Official for the city of San Rafael, laid out their amendment requests: to adopt the ASTM F1184 standard for large manual gates, and to require property owners to inspect their automatic and manual

gates once every five years. Existing gates that fail to meet standards must be retrofitted by 2025.

“The cost is minimal,” Bledsoe said. “Thirty to fifty dollars per gate. For existing gates, the cost is also minimal.”

Reed underscored the importance of passing the amendments as a powerful first step toward educating the fence industry and preventing future tragedies. “On behalf of myself, our

board of directors, and our fence professional members all across the country, we rise in support of the change that you’re considering,” he said.

Making the change, Reed emphasized, would allow the AFA to work with its volunteers across chapters and in turn, “to have them work with their inspectors and their code officials and partner with them so that gates are safer and less likely to cause serious injury and death.”

That night, San Rafael became the first city in Marin (and potentially the entire nation) to approve a crucial ASTM building code amendment that adds life-saving manual gate safety requirements necessary to prevent severe injury or death. The amendment applies to gates more than 4 feet wide and 7 feet tall.

In December, Larkspur City Council followed suit, voting to implement similar safeguards for large manual and automatic gates by adding a new chapter on gate regulations.

THE STORY THAT’S BECOMING A MOVEMENT

These two noteworthy changes are just the beginning: Quanbeck hopes to see all Marin County cities pass this same legislation in the future. The American Fence Association is continuing its collaboration with Bledsoe, the Quanbecks, and its members around the country to raise awareness for manual gate safety. Plans are underway for new educational opportunities for fence professionals, including a virtual conference for building code officials and specifiers, to be announced in the coming months.

AFA has also invited Eric Quanbeck to be a keynote speaker at FENCETECH 2023 in Oklahoma City. The association is excited to provide him with a platform to share his story face to face with a large tradeshow audience.

Bledsoe sums up the heart and soul of the manual gate safety initiative in 11 powerful words.

“Be proactive about gate safety — if it moves, it can fall.” ■



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