



Customer Success Story



Baker Concrete Solves a Complex Problem with a Simple Solution: Beast® Form Stake and Beast® Concrete Accessories

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PROJECT SITE: NEW MEXICO
PROJECT TYPES: DATA CENTER
PRODUCTS USED: BEAST FORM STAKE, BEAST FOOT

No Moisture, No Vapor Barrier Penetrations, No Problem

Spencer Wood had a problem without a solution. The project engineer for [Baker Concrete](#) had a massive data center project in New Mexico that came with a critical demand from waterproofing consultants and the building's owners: absolutely no punctures in the below-slab vapor barrier.

Functionally, the demand made sense. Each server rack in the new data center would cost roughly a million dollars. There would be hundreds of servers per room. Any water – including water vapor diffusion from below the concrete slab – could be catastrophic.

But practically, Wood knew of no way to construct the significant concrete formwork necessary to create the elevation changes in the slab design without driving steel form stakes into the ground, creating countless punctures of the below-slab moisture protection.

"We kept telling the owners, 'This is how forming is done.' In my decade of experience, I had never seen it done any other way," Wood said.



The Baker Concrete project team set about to try to find a way to meet the demand. No idea, no matter how crazy, was dismissed. They investigated several kinds of mastic to support the stakes atop the membrane. They even considered hanging the forms from the ceiling, which they knew would be laughably cost prohibitive.

When Wood attended the [World of Concrete](#) show in Las Vegas in 2019, Beast Concrete Accessories National Product Manager Steve Lutes was holding a prototype of what would

become Baker Concrete's solution: [Beast® Form Stake](#).

The Challenge: A Puncture-Free Vapor Barrier Installation with Concrete Formwork

In his research, Wood discovered [Beast® Foot](#), the peel-and-stick concrete accessory, which adheres to [Stego® Wrap Vapor Barrier](#) and holds a specific type of metal nail stake in its press-fit center hub for concrete formwork.

The problem, however, was that traditional form stakes only have nail holes every few inches. If the nail hole does not align with the form elevation, the solution is to drive the stake deeper into the ground to line it up. With the nail stake attached atop the vapor barrier, neither the form's height nor the nail hole could be adjusted.



The Solution: Beast Form Stake with SpeedTrack™ Fastening Grooves.

Lutes, who invented the entire line of [Beast Concrete Accessories](#), foresaw this problem when bringing Beast Foot to market and immediately started on a complementary form stake to solve the height-adjustment problem.

Beast Form Stake is another innovative, patented contractor solution from Stego Industries. The highly durable, lightweight and reusable form stake can be fastened to a form board at any elevation thanks to its SpeedTrack Fastening Grooves, which also can line up in four different directions.

It was a light bulb moment for Spencer Wood when he held the prototype on the trade show floor.

“When I saw it, I said, ‘Man, why didn’t I think of that!’ It’s a simple solution to a complex problem,” Wood said. “I think for 95 percent of depressed slab work, this is the answer if you’re trying to keep it 100 percent puncture-free to make sure no moisture can penetrate.”

The Results: No Punctures, No Liability and Reusable Material

What started out as an unsolvable problem turned into another successful project for Baker Concrete, a nationwide leader across market segments in the concrete construction industry.

“With the documentation – knowing there were not punctures in your vapor barrier to begin with, that’s huge. We didn’t want any liability coming back on us where our vapor barrier installation was the root cause of moisture coming into the data center,”
Wood said. *“It’s good to know that Stego’s got your back.”*

As a bonus, the prototypes of Beast Form Stake they used on the data center project continue to serve his crew on new projects. Wood was impressed by the stakes’ durability and reusability – the SpeedTrack Fastening Grooves can handle multiple nails or screws, again and again.

“They make it through the entire job and will move on to the next job, probably until they get lost!” Wood said.

Stego and its Beast line of concrete accessories demonstrate our commitment to innovation and problem-solving in the concrete construction industry. Like Baker Concrete, Stego is proud to be an industry leader and prides itself on developing the products that lead to healthier, safer concrete slabs and building environments.

Beast CONTACT

To find out how Beast Concrete Accessories can bring efficiency to your next concrete construction project, contact us to get in touch with your local Stego Representative. We’re looking forward to working with you on your next project.

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