Support Post Stabilizes Sliding Doors

For large farm buildings with sliding doors, Midwest Perma-Column produces pre-cast center posts for better door control and support.

"The tops of these doors have a track that holds them securely where they should be, but the bottom doesn't have anything," says owner, Phil Ehnle. "Our concrete columns keep the lower doors stable and in line even when the wind is strong."

In the past, many people would use a wooden post with an attached bracket, but after a time, wood rots in the ground or heavy equipment damages it as it's driven over.

To install the adjustable concrete columns, first, a minimum 12-in. hole is drilled in the center at a depth of 44-in. The column is equipped with a threaded rod and foot plate to adjust it to the correct length to reach ground level. A metal bracket is attached to the top of the post to act as a stop for the doors and keep them aligned. The void at the bottom of the hole is filled with concrete, and the remainder is packed with soil or gravel.

"We're getting a good response to the product," says Ehnle. "It can handle any size of sliding door."

All pre-cast columns are produced at the Illinois shop, with shipping available across North America.

The column and bracket are priced at $225 plus S&H.

Concrete support post with foot plate keeps the bottom of large doors aligned.

Contact: FARM SHOW Followup, Phil Ehnle, Midwest Perma-Column, 7407 N Kickapoo Edwards Rd., Edwards, Ill. 61528 (ph 800-798-5562; dehnle@midwestpermacolumn.com; www.midwestpermacolumn.com).

Collapsible Kennel Combines Strength With Versatility

The K9 Kennel Boss, a collapsible and secure aluminum dog kennel, is the latest venture for a Washington family that also makes furniture and the Mail Boss, a locking security mailbox (Vol. 46, No. 1). Both the mailbox and kennel were developed to solve challenges that are part of their lives.

"My wife Jenny started a dog rescue, and Dog Gone Seattle has become the largest in the state," says Jonathan Nordin, operations manager for the family business. "We used every crate on the market, and collapsible aluminum is the best, except it's expensive. Our mission was to make them more affordable."

After research, development and real-life testing, Nordin says they came up with a grade of aluminum with the right blend of strength and flexibility. A 36-in. kennel for a medium size dog weighs 40 lbs. and uses a collapsible accordion design to fold down to a suitcase size with a handle.

Unlike wire cages that bend easily or break welds during transportation or under pressure from active dogs, the Kennel Boss is designed to last for years.

"It's not a substitute for proper kennel training," Nordin emphasizes. But the K9 Kennel Boss will securely hold large dogs and dogs with separation anxiety.

"One of the innovations we built into the crate is how we make it a rigid structure. It's very easy, once you know how, to set it up in less than a minute. There are threaded inserts that take screws with knurled nuts, so it's locked in place," Nordin says, for added security.

Kennel for a medium size dog weighs 40 lbs. and uses a collapsible accordion design to fold down to a suitcase size.

Discounts are available off the price ($649 for the 36-in. kennel and $750 for the 41-in. kennel) for 501c3 rescue organizations, and 10 percent of all sales are donated to Dog Gone Seattle.

Contact: FARM SHOW Followup, Kennel Boss 5927 172nd St. NE, Arlington, Wash. 98223 (ph 800-589-7990; info@k9kennelboss.com; www.k9kennelboss.com).

Stout "Smart Cultivator", pulled by a 100-hp. tractor, identifies weeds by cameras using Artificial Intelligence software, then plucks them out from around productive vegetables.

Smart Cultivator Sees Weeds, Eliminates Them

A mechanical cultivator that's as effective as the human eye at identifying weeds in productive crops, then selectively removing them without harming the vegetable seedlings, is being produced by Stout Technologies. The Smart Cultivator uses ultra-sophisticated cameras driven by AI (Artificial Intelligence) to capture high-resolution plant images as it moves through a field, then it instructs mechanically activated blades to remove the harmful weeds.

The Smart Cultivator evolved because a large grower/shipper in the Salinas Valley had several thousand acres of vegetables with a huge weed problem and couldn't get the labor to work the fields," says Stout CEO Brent Shedd. "They tried automated weeding machines, which didn't work because the crop cameras used blob technology that couldn't differentiate weeds from good plants and did more damage than good. That led them to essentially 'build their own version of a better mousetrap,' a prototype of what we're now producing."

The Smart Cultivator uses state-of-the-art AI technology that Shedd describes in very simple terms. "Basically, we put the hoe that manual labor uses to weed the fields on a robot and gave it AI, so it knows the difference between weeds and the good crop. The machine is built like a tank, engineered to run hard because it gets kicked around in all types of terrain. It can even be pressure washed without damaging any of the high-tech components."

The Smart Cultivator mounts on the 3-pt. hitch of a 100-hp. tractor, is coupled to the pto, and can effectively clean and cultivate 1 to 2 acres an hour depending on soil conditions. "The key to our machine is an AI system that identifies weeds with 99.9 percent accuracy, and then mechanical blades eliminate them," Shedd says. "It doesn't harm the growing crop."

Better yet, the Smart Cultivator doesn't need water breaks, doesn't get a backache, and can work 24 hours a day because it carries a sophisticated LED lighting system. Strobe lights beside the machine's vision cameras are timed to fire at the same frame rate at which the machine snaps images, giving the camera the same level of illumination at all levels of light, including darkness. The machine's modular design allows configurations for vegetable crops such as romaine, leaf lettuce, cauliflower, broccoli, kale, chard, celery, melons, and tomatoes. Single and double-bed models are being produced now, and a larger triple-bed model is being developed. "We sold our first machine in 2020 and now have them working in the U.S., Mexico, Europe and other countries," Shedd says. Case New Holland recently acquired a minority interest in the company and now provides sales and service to producers around the globe through New Holland dealerships.

Artificial Intelligence identifies weeds with 99.9 percent accuracy and then uses mechanical blades to eliminate them.

"The engineers and technicians who built the machine have diverse backgrounds, with experience in automotive racing, aerospace, defense systems, medical equipment, and agricultural equipment," Shedd says. "They've worked on space telescopes, virtual reality headsets, automated farm equipment, and specialty manufacturing lines. Skills from all these very technical areas were needed to develop the machine."

The developers beat up the prototype machine over many acres, Shedd explained, then "fixed the weak points, and the machines we're producing now seldom have issues. The tractor pto charges an alternator to run the electronics. The hydraulics are all self-enclosed, so there are no hoses to hook up."

Pricing for the machines varies depending on how they're configured for specific crops. Shedd says cost hasn't been an issue for selling a machine because once growers see how efficient it is, they realize it can easily replace the equivalent amount or more money that's being spent on manual labor.

Contact: FARM SHOW Followup, Stout Industrial Technology, 90 Monterey Salinas Hwy., Salinas, Calif. 93908 (www.stout.ai).

Their Brome Grass Is Great For Northern Farms

For hay or pastureland ranchers and farmers in the northern U.S. and Canada, MacBeth Meadow Brome has become an excellent grass choice.

The highly palatable brome can be used in a rotational pasture system or grown in combination with alfalfa for baled forage.

"Many customers in the Midwest and Canada like it because it's deep-rooted, great in dry conditions, and very cold tolerant," says Fred Fowler, Ampac Seeds assistant general manager. "It produces excellent quality and quantity. Often, it's mixed with meadow fescue or orchard grass to make lush pasture."

The long-lived, rapidly developing, leafy, and cool season grass spreads by short rhizomes, excelling on dryland and low-water soils. Yields of up to 5 tons per acre have been reported on the first cuttings.

Since the brome gets established slowly, it's recommended plants aren't grazed too early. To help eliminate damage, forage harvesting rather than grazing is suggested during the first year of growth.

For long plant life, the grass should be allowed to mature and produce seed periodically.

Fowler says customers should check the company's website for nearby Ampac distributors and current seed prices.

Contact: FARM SHOW Followup, Ampac Seed Company, 32727 Hwy. 99E, P.O. Box #318, Tangent, Ore. 97389 (ph 541-928-1651; www.ampacseed.com).

MacBeth Meadow Brome grass yields up to 5 tons per acre.