

CREATURE COMFORTS

When it comes to stalling horses, paying close attention to flooring, the stall design and ventilation is a must.

BY CHARLENE STRICKLAND

Boarded horses tend to spend a considerable amount of time in a stall. That's why it's important to make the time they spend there as comfortable and safe as possible.

Your horses set the basic requirements for your stalls. You need them to be strong and durable enough to confine a 1,200-pound animal. Yet they should add value to the barn through their visual appeal, affordable costs and efficient design.

We report here on the latest designs and products that enhance safety and efficiency in the stall environment.

FLOORING

For a safe stall, flooring and partitions must lessen the chances of injury. "The biggest issue is the flooring," says John Blackburn of Blackburn Architects, P.C. He also notes that flooring choice depends on the hours the horse is stalled: "If a horse is turned out, then the stall doesn't get as much wear and tear."

For stalled horses, he recommends "the interlocking rubber brick floor and the rubber mats." Flooring inside and outside the stall supports the horse for comfort and traction, and rubber is a great way to gain both.

Options on this front include nylon-reinforced rubber mats from Linear. Dick Payette explains, "We use a standard base and add chemicals to guard against deterioration. It's 100 percent non-absorbent." These mats are in two pieces for a 12 x 12 stall.

Improve aisle safety with new flooring, such as rubber bricks, or the new colored aisle mats from Humane Manufacturing that match your barn's color scheme. "The Big Lok mats have bigger interlocking teeth to stay together in high-traffic areas," says Humane Manufacturing's Tonya Frenzel. The teeth are 2¼-inches wide for a stronger interlock.

Another option is the Comfort Stall, which Joy Koch of Comfort-Stall Stable Supply Company describes as "a padded and seamless anti-fatigue flooring system." The soft floor encourages the horse to lie down. "His hipbone has a great place to go, and his hocks are on a soft bed," says Koch. This flooring also reduces bedding: "The need for bedding is reduced to absorbing urine output," says Koch. And as with the rubber flooring products, less bedding reduces the time it takes to clean the stall and saves money.

Equustall, a grid system formed of blocks with round open cells, is another good flooring option. The Equustall blocks are formed of polyethylene; filled with drainage material that's tamped, the blocks make a permanent non-slip floor. Equustall's Linda DiLoreto explains, "Because you use a cell, it's permeable. With the air flow, the stall dries faster."

THE STALL

To keep horses happy, stall grilles allow them to see their neighbors as well as activity in the barn aisle or

outdoors. But they also set boundaries between horses and the aisle. Choose heavy-duty partitions made with a steel frame for sliding stall doors. Compared with wood, steel is less likely to warp and is lighter in weight.

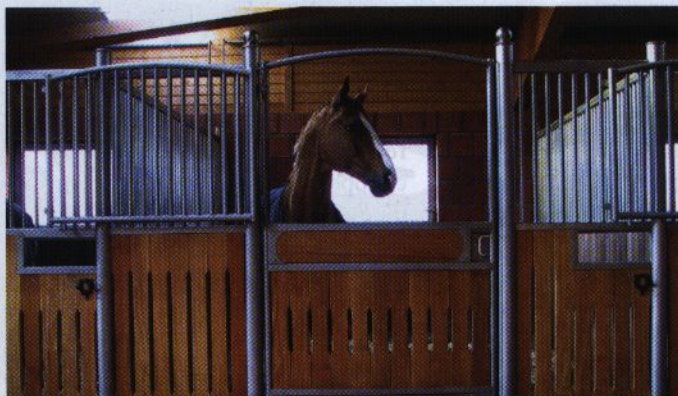
You may need solid partitions between horses to reduce fighting, but you can let horses put their heads out the stall fronts with a drop-down yoke grille or a hinged grille on the top half of the door.

Look for safety in door latches. From Innovative Equine Systems, Dennis Marion explains, "A common injury is due to bolt latches that stick out on either a hinged or sliding door. We have mortised finger latches on our hinged doors." The latches are recessed, and open from either inside or outside.

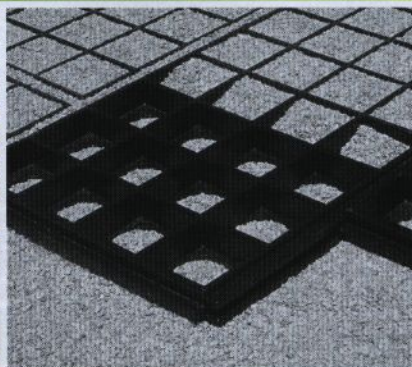
You can install a modular stall system sold as a kit, or have a builder fit custom stalls. For stall fronts, metal bars, either round tubes or square bars, form a grille. Look for heavy steel that won't bend or allow a horse to catch a hoof—two-inch spacing is a good rule of thumb.

If partitions are grilles, Marion describes another trend—a privacy panel in the partition. "We put feed holes in the left wing of every stall with the panel so the horse doesn't see his buddy when he's eating."

Another safety option is a rounded, not a 90-degree square edge, on the top of a stall divider. Some horses may try to reach over the top of a divider. "The Laake stalls have a rounded top for safety between two



This stall on the left, designed by Blackburn Architects, is well ventilated all around and allows the horses to see one another. On the right, this stall door from Woodstar Products also has the benefits of full ventilation, as well as a removable piece for the more curious horse's head.



Left: This barn aisle uses a Big Ass Fan to improve ventilation year round and to help keep the barn cooler in the summer. Middle: The Equustall system uses interlocking panels filled with drainage material to keep stalls dry. Right: The Stable Grazer allows for easy feeding and less mess on the stall floor.

horses," says Koch.

Casting rails added to a stall help a cast horse regain its footing. Blackburn describes the add-on: "We use a 2 x 6 board bolted low, with recessed bolts and angle-cut so there's no sharp edge for the horse to chew on." Another option he uses is a casting groove: "It's a recess, where the foot can be pushed against the wall."

To protect both horse and stall walls, you can add stall padding from Dandy Products, Inc., or a wall guard from Linear Rubber Products, Inc. Such safeguards make the stall safer for a horse that kicks or rubs against the wall.

VENTILATION

A light, airy stall design can stimulate well-being. Horse-friendly stalls allow fresh air to circulate to reduce respiratory problems.

On the stall door, Blackburn says, "We recommend mesh or bars over half the door for ventilation. Some-

times the entire front is steel bar or mesh from corner to corner, such as in foaling stalls, for visibility."

He explains, "We want the stall more open for light, ventilation, and visibility. If the horse is down, you can look in and see if it's all right."

"The benefit of the open stall front is the socialization of the horses," adds Marion. "It doesn't look like a jail cell."

If you prefer wood stall fronts,

promote air circulation through a mesh grille on the bottom of the wooden door. Air flows through the grille and rises in a chimney effect.

Also keep in mind that a more open barn means less ammonia smell. Matt Gailloro of Woodstar Products, Inc., agrees, saying, "You should open up the stall to get the fresh air in, and the bad air out. Keep the barn dry and fresh."

He describes their latest design as

MAKING YOUR STALLS GREEN

Yes, barns can be built "green." Your stall walls and floors can be constructed of post-consumer waste—recycled rubber and plastics. "We're using more and more recycled materials—the rubber bricks and the walls—to make the barn more green than we have in the past," says Blackburn.

He suggests building stall walls with recycled high-density polyethylene (HDPE) lumber. "We're looking into using sustainable recycled materials. They don't deteriorate, are durable, and can take the impact of a horse kicking."

Horses don't like the taste of HDPE, which eliminates chewing. The material resists dents, cracks, or splintering. The solid plastic lumber is made in standard sizes and a variety of colors.

"the fully ventilated door and ventilated panels in partition walls for the lower partitions. An all-steel grille can go in new stall construction, or you cut a hole in the existing stall and put it in place."

Many stall companies offer different shapes of grilles, such as arched grilles on stall doors for an upscale look. Choices of metal frames and grilles include galvanized steel or colored in powder coating over galvanized steel. Koch describes the metal in the Laake stalls as "electropolished stainless steel."

Adding windows or exterior doors to stalls also improves ventilation. You can choose a window, Dutch door, or sliding door open to a runout pen.

"We put Dutch doors on the outside, for light and ventilation," says Blackburn. "Have them centered across from the aisle door for cross ventilation, and you can open the bottom half to get more ventilation into the stall." On the inside, install a steel mesh door, sliding or hinged, so you can open one or both exterior Dutch doors.

You can control your stalls' temperature through evaporative cooling. Take fans, for example. "Our fans are designed to take advantage of humans' and animals' natural cooling systems," says Heather Henley from Big Ass Fans. "The benefit is that the fans improve the air quality so that the horses are not constantly inhaling unhealthy fumes like urine or even ammonia. The air circulation immediately progresses, making it much easier for horses to be comfortable and stay comfortable, especially in the heat."

Jaybird Manufacturing, Inc., also makes fans for either a single stall or a larger fan to cool down a breezeway barn. "For every gram of water you evaporate, you absorb 540 calories in heat," explains Darren Figart. These fans make water into a fine mist that evaporates, which can drop the temperature an average of 15 degrees.

Of the AquaFog 400, Figart says, "It's suitable for one individual stall. Hang it high enough so it's out of the

way. Cold air descends, and you keep the bedding and floor dry." The fan is a centrifugal atomizer which connects to a water hose.

MAXIMUM EFFICIENCY AND BARN APPEAL

Simplify barn chores and reduce maintenance with improved stall features. Opening and closing doors takes time; Blackburn explains that sliding doors are safer and faster. "The sliding door takes less hand action. With a hinged door, you have to close the door, turn around to get the horse, and open it to lead the horse out." He adds that a sliding door can be left open, so you can see which horses are not in their stalls.

Outfit your stalls with feeders and waterers accessible through the stall front. Feeder doors can be solid panels or a hinged grille section.

You can also add a swingout door, with feeder or water bucket attached on the inside. Chad Chattin of Country Manufacturing describes the door: "It's a heavy-duty plate door on its own frame, 22 x 20 inches, meant to hold a five-gallon bucket of water. With watering, you make more trips in and out than feeding—so you save time with this door."

HayDay LLC automatic feeders can be added to the stall. Dan Fehringer described the brand-new Generation II Stable Grazer: "It's a

one-piece molded plastic cabinet, and the outside door is aluminum." Fill the feed chute using the outside door. You can program the battery-operated feeder to feed flakes of hay, or chopped hay, hay cubes, grain, or supplements.

Nelson Manufacturing Company has added a new series of 500se feeders, made of stainless steel with an easy-to-clean, removable feed bowl. Feeders bolt to the stall wall or a swingout feeder door. Nelson's Scott Torticill says, "We have a 13-inch bowl and a 16-inch bowl for larger-headed animals to fit on the wall or corner. The horse eats from a safe, round, animal-friendly design. A feed retention lip on the top cover helps minimize feed waste."

Prevent chewing with metal frames on stall doors, or add the Chewer chew guard from Silk Tree Manufacturing, Inc. Hank Hagenau says of this metal capping, "It's all 20-gauge galvanized steel. We can cover up wood before it gets chewed, or do spot repairs."

"We bend it up when it's ordered, so we can make odd shapes. Also, we can punch holes in the guard for the grille bars to fit through."

Making your stalls more horse-friendly can reduce the effects of confinement. Blackburn notes, "When you bring a horse into the stall, you've taken over their health and safety. You control the environment." [sm]

FOR MORE INFO

Big Ass Fans
Blackburn Architects, P.C.,
Comfort Stall
Country Manufacturing
Dandy Products, Inc.
EquiStall
HayDay LLC
Humane Manufacturing Company
Innovative Equine Systems
Jaybird Manufacturing, Inc.
Linear Rubber Products, Inc.
Nelson Manufacturing Company
Silk Tree Manufacturing, Inc.
Woodstar Products, Inc.

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