STERLING EQUINE'S STALL PLANNING GUIDE



STERLING EQUINE







INTRODUCTION

Welcome to Sterling Equine's Stall Planning Guide — a comprehensive resource made to assist you in the planning and design of your new horse stalls.

Though management styles and needs may differ, the basics of a safe and comfortable horse stall are the same, and it's important to remember that effective stall design will play a significant role in ensuring the overall wellbeing of your equine companions.

Keep in mind that stall layout will also influence everyday barn life, including the labor hours needed to feed, water, and clean stalls. Each decision you make – from stall size and materials utilized to the overall design and format – will regularly impact your horses and the people who handle them.

This guide begins with the foundational aspects of stall design and planning, including: material selection, stall sizing and configuration, and deciding on your preferred stall door type. From there, we'll invite you to consider additional options that can enhance stall functionality and comfort.

If you have any questions along the way, don't hesitate to reach out to a member of the Sterling Equine team. We are fully committed to providing highquality, customizable stall solutions and are readily available to offer expert service and advice

SAFETY FIRST Why Material Choice Matters

Our stalls are handmade using only the finest materials available, ensuring structural safety, as well as long-term durability and peace of mind. Stalls must be able to withstand the daily demands of housing horses, so choosing reliable materials built to last is critical for the protection of both horse and handler.

Sterling Equine is proud to utilize the following in our standard stall construction:

- 100% American-made high-strength galvanized steel (minimum 14-gauge)
- High-quality track systems and latches
- Powder coating finishes that surpass industry standards
- Rigorous quality control processes and procedures

DESIGN SAFETY CONSIDERATIONS

Stall design directly impacts both horse and human safety. There are several seemingly basic but essential components that will help to prevent accidents or injuries, including:

- **Scale:** Stalls must be wide enough for horses and people to move around comfortably.
- Spacing: Correctly spaced metal work can keep horses from becoming cast or otherwise stuck. We allow for a maximum of 2" between upper section bars and 1.5" between bars on lower sections, with ¼" welded wire galvanized mesh on 2" centers.
- **Hardware:** Our exclusive plunger latch prevents pinched fingers, and keeps doors from becoming difficult to open or close. We also offer heavy-duty adjustable door hinges.

BUILT TO LAST

Investing in premium materials and quality craftsmanship will enhance the longevity of your stalls and reduce both day-to-day and long-term maintenance. At Sterling Equine, we take great pride in designing stalls that will last a lifetime. This is reflected in the meticulous selection of all materials utilized, including:

- Top-quality lumber
- Galvanized steel stronger than anything else on the market
- Zinc powder coating for extra durability (even in humid climates)
- Self-cleaning door track systems







FREESTANDING VS BUILT-IN STALLS

FREESTANDING STALLS

Freestanding horse stalls are a convenient option for those wishing to do less intensive construction, and can be designed in various sizes and configurations to accommodate your specific needs.

Features & BENEFITS

- May be used in nearly any clear span barn design
- · No existing structure required
- No door posts necessary
- More versatile (may be set up by itself, within a structure or attached to posts)
- Can work in nearly any existing barn

- More stall front design options
- Faster, easier installation



BUILT-IN STALLS

Alternatively, built-in stalls can be tailored to fit the exact shape and style of your barn, whether built directly into a new barn structure or attached to existing components, providing a more cohesive and aesthetically appealing look.

Though they require more planning and construction than their freestanding counterparts, built-in stalls offer additional stability and dependability.

Features & BENEFITS

- Smaller sections are lighter and easier to handle
- · Less expensive due to lower material input costs

Making the decision between freestanding or built-in stalls will ultimately depend on your specific needs, overall budget and long-term facility plans.



Regardless of your choice, rest assured that each of our stall systems are entirely handmade by expert craftsmen and designed to last a lifetime. We use only top-tier raw materials, with extraordinary attention to detail in design and production. This includes:

- Exceptionally robust American-made galvanized steel tubing
- State-of-the-art pretreatment powder coating processes
- Industry-leading powder coating application, for exceptional beauty and durability
- 1" round bar grills for equine safety (spaced at 2.5" apart below 49" or 3" apart above 49")
- Heavy-duty galvanized steel mesh, welded into 2" squares



Galvanized Steel Mesh



▲ Feed Door

ADDITIONAL OPTIONS

- Zinc Powder Primer: Clients may also choose to add a zinc powder primer option for extra protection from rust and corrosion.
- Feed Doors: As horse people ourselves, we understand that every barn has a particular routine and feeding situation. We work with our clients to uniquely design features in our equipment that will maximize daily function for them while maintaining a clean and refined look.



STALL SIZING & CONFIGURATION

CHOOSING YOUR IDEAL STALL SIZE

Horse size and facility purpose are some of the primary factors to consider when deciding on your ideal custom stall size. Our stall sizing is fully customizable and can be built to suit your specific needs, but some common sizing options are as follows:

- 12' x 12': The standard recommendation for an average-sized riding horse
- 10' x 10' or 12' x 10': May be suitable for smaller horses and ponies
- 12' x 14' or 14' x 14': Can accommodate broodmares, large warmbloods and/or draft horses

These stall sizes will allow for natural movement, injury prevention and reduced risk of developing unwanted behaviors or vices.

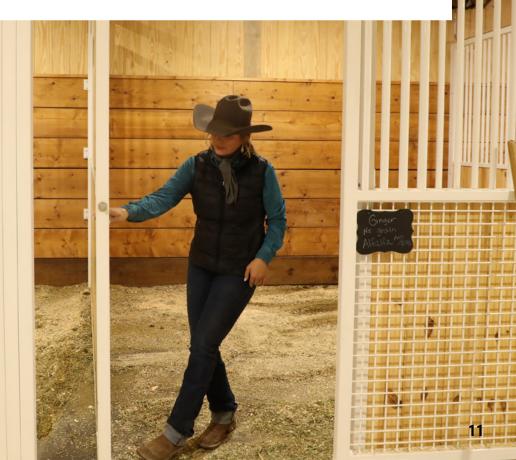


Hinged Partition



FLEXIBLE CONFIGURATIONS

You may also wish to consider whether you might like to include hinged or removable stall partitions in your facility. This can be a particularly useful option for horse breeders, those who wish to offer in-house rehabilitation and/or layups, or others who may simply appreciate additional stall size flexibility.



DOORS, WINDOWS & YOKES



SLIDING DOORS

Sliding stall doors blend practicality with style thanks to their spacesaving design, modern aesthetic appeal and ease of operation, making them a great choice for busy facilities like boarding or training barns.

Key Considerations

- Efficient Use of Space: Doors glide along the wall instead of swinging in or out, making them an ideal option for barns with a lot of traffic or tight aisleways.
- Strong and Durable: Made with heavy-duty steel frames and a self-cleaning track system featuring sealed bearings and a lifetime warranty, these doors are reliable and built to last.
- **Customizable:** Choose from a variety of feed door, yoke and fill options, tailored to match your barn's aesthetic and functional needs.
- Safe and Secure: Easy to open and close quickly with multiple latch options (flip, stainless steel pin, spring bar); also greatly reduces the potential for doors being left unlatched/open.
- **Complex Installation:** Sliding doors require more precise installation than hingebased doors, and will also require a sturdy wall for mounting the sliding mechanism.

HINGED DOORS

Hinged stall doors add a refined look to barns and allow for a more open concept design than a sliding stall door. These doors work best in barns with wide aisleways or minimal traffic, as they require a consistently clear area for an unobstructed swing path.

Nond

Key Considerations

- Increased Ventilation & Lighting: One popular type of hinged doors are Dutch doors, whose top half can be opened separately from the bottom, promoting superior ventilation and natural light while keeping horses secure.
- **Durable & Adjustable:** Heavy-duty steel frames and adjustable steel hinges help these doors hold up to significant wear and tear. Adjustability helps doors maintain functionality and remain level, even as buildings naturally shift over time.
- **Eye Appealing & Customizable:** Hinged doors are classic and attractive, and can be easily customized to complement barn aesthetics and appearance.
- Take Up More Space: Hinged doors need ample space to swing open, which might be challenging for barns with more compact aisleways or a lot of horses coming and going.
- Added Expense: Hinged doors are often more expensive than sliding doors.

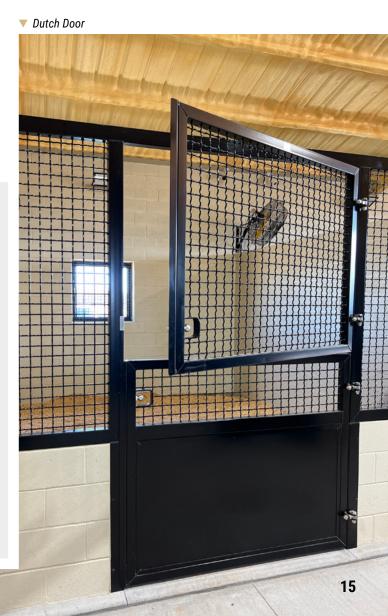
DUTCH DOORS

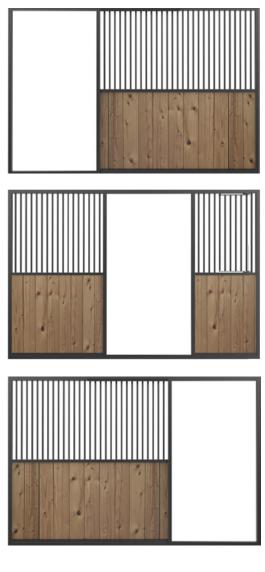
Traditional hinged doors offer classic appeal, but they require a clear swing path area, which can be challenging in more condensed stable layouts. Dutch doors can instead offer a similar aesthetic appeal while also serving as a space-saving solution that provides the added bonus of increased ventilation and socialization.

At Sterling, we offer a custom-formed galvanized door frame that will withstand the elements. Highquality, adjustable stainless steel hinges stop doors from sagging and our galvanized steel frames prevent warping. We also use a two-point contact cane latch to prevent bent lower doors, which are often the result of a high-powered kick.

Features & BENEFITS

- Adjustable hinges offer functionality and adaptability as buildings shift and settle over time
- Easy to open and close, providing handlers with a quick entry or exit
- Improved air flow and temperature regulation
- Increased access to fresh air, light and socialization





• Euro Style Stall Front with Bent Wings

DOOR PLACEMENT centered vs left or right

Though off-center doors are a common choice for many barns, we recommend placing the door in the center of your stall fronts because it increases functionality and opens both ends of the stall up for functional use.

Which Style of Stall Door is Right for You? Your unique barn layout, design preferences, functional needs and budget will ultimately dictate the right stall door choice for you. Rest assured that Sterling Equine's premium-quality materials, superior craftsmanship, and years of expertise will ensure your complete satisfaction with the final installation.



STALL WINDOWS

In our opinion, stall windows are absolutely essential to the mental and physical wellbeing of horses, for a few simple reasons:

- · Increased Lighting: Natural light is essential to proper hormone production and balance
- · Improved Ventilation: Increased airflow will help horses breathe in fewer potential allergens
- Decreased Anxiety: Seeing more of their barn mates and surroundings helps to keep stalled horses' minds at ease

From simple to sophisticated, window design will depend greatly on personal preference and barn style. We often pair windows with window grill guards, yokes or shutters to allow horses to safely socialize. Our windows are also designed with heavy-duty rod end hinges that are durable and adjustable without compromising on elegance and eye appeal.

Window with Mesh Guard



Window Yoke





STALL YOKE OPTIONS

Yokes are openings in stall doors which allow horses to stick their heads over their door to socialize and further take in their surroundings, helping to prevent boredom and improve mental wellness.

Stall door yokes add an elegant aesthetic to any barn, and can also serve a practical purpose. For example, if your stall front doesn't feature a feed door or opening, a yoke can easily be used for feeding hay.

However, we would not recommend yoke doors (particularly open yokes) for barns with tight aisleways and/or heavy traffic. Your horses' unique personalities and dispositions should also be considered when deciding if a yoke is the right choice for your facility.

CUT-OUT/OPEN YOKES

Your unique barn layout, design preferences, functional needs and budget will ultimately dictate the right stall door choice for you. Rest assured that Sterling Equine's premiumquality materials, superior craftsmanship, and years of expertise will ensure your complete satisfaction with the final installation.

Some popular design options include:

- Swooping/European
- Arched European
- Arc
- U-Yoke
- Rectangular



🔺 Swooping European Yoke





▲ Fold Down Straight Style Yoke

REMOVABLE/LIFT-OUT YOKES

Like folding yokes, removable or lift-out yokes offer a great deal of flexibility by giving you the ability to leave yokes open or closed at any time. Keep in mind that inserts will require storage when not in use.

Some popular design options include:

- Removable V-Shape
- Removable Rectangular Shape
- Removable Bent Shape

HINGED/FOLDING YOKES

Hinged or folding yokes offer the best of both worlds since they can be open or shut at your discretion. They can be made in a variety of designs, and typically feature a plunger latch and our heavyduty rod end hinges.

Some popular design options include:

- Fold-Out French Style
- Fold-Down Straight Style
- Fold-Down V-Shape

Removable Bent Shape Yoke



ALL ABOUT PARTITIONS

Stall partitions are essential to equine comfort and safety. Sterling Equine offers a range of horse stall partition configurations, built to your specifications and designed with your horses and barn in mind.

When deciding which partition is right for your facility, we carefully consider individual horse disposition, planned utilization, and overall layout.

While grill or mesh partitions allow for greater socialization and ventilation, solid partitions offer privacy, and can also be beneficial if you are consistently rotating horses.

STALL PARTITION OPTIONS

Some stall partitions feature grills at the top, allowing for optimal airflow and socialization. Others are solid panels that provide total privacy and help to minimize disagreements. In our experience, many horse owners choose partitions that feature a combination of grills and solid panels near the top. From top to bottom: Grill top, solid wood bottom; Privacy partition with grill top and solid wood bottom; HDPE partition; Grill partition









LUMBER & MATERIALS

Lumber choice will greatly impact stall safety as well as strength and longevity. Material choice will also have a large impact on total project expenses. That said, it's important to keep in mind that each barn's needs will be unique based on particular climate and location, as well as personal preference.

Sterling Equine's preferred stall lumber/ material options are as follows:

- Southern Yellow Pine: This softwood is a popular choice for horse stalls, but we recommend using a higher grade of wood if your budget allows. This is because softwoods are prone to warping, twisting or shrinking over time. That said, Southern Yellow Pine lumber is the only type of softwood we would trust to build stalls.
- **Brazilian Hardwood:** This is an exotic hardwood and is very dense when compared to domestic softwoods and hardwoods alike. This makes Brazilian Hardwood an extremely durable choice for stall construction. While this high-quality wood will last longer and provide your barn with a more premium look and feel, it is also one of the most expensive stall lumber options.
- High Density Polyethylene (HDPE): HDPE, a synthetic plastic fill option, is made to look like wood, and is becoming an increasingly popular alternative. The primary benefit of HDPE is its longevity and durability. It is also easy to clean and will maintain its finish longer. HDPE fills are also environmentally-friendly, as they are typically made from recycled post-consumer plastic.

Southern Yellow Pine



Hinged stall doors and Brazilian Hardwood



High-Density Polyethylene Plastic Lumber



CHOOSING Stall Flooring

At Sterling Equine, we have spent decades evaluating products and gathering customer feedback on our products. As a result, we feel that the flooring options we offer are the best on the market. Each is not only easy to clean, but trusted to provide horses and humans with optimal safety and comfort.

Today, horses are spending more time than ever in their stalls, which is why it has become increasingly important to ensure stall flooring is adequately installed. A poorly constructed stall floor can contribute to joint stiffness or potential injury, along with wasted labor and bedding.



We recommend taking the following steps to quality stall floor installation, which will greatly contribute to the long-term health and happiness of your equine companions:

- **Analyze Your Building Space:** If you are constructing a new stall facility on your horse property, you should first identify an area that is consistently dry, well-draining, and fairly level.
- **Prepare Your Base:** Proper drainage is the key to good stall flooring. It is important to dig well into underlying soil to create a path for liquids to drain out and away from your horses.
- Ensure Your Base is Level: A level base layer will keep your stall floor surface level. This is crucial, as an uneven surface will place added stress on horses' legs, which could potentially damage tendons or ligaments.
- **Compact the Base:** Once you have confirmed your base is level, the next step is to build a firm foundation that will withstand daily wear and tear. We recommend adding either two-inch layers of stone dust or three-inch layers of dirt, followed by compressing each layer as you go. You should add enough layers for the stall floor surface to sit 14 to 18 inches above your barn's natural grade.

We believe that stone dust typically results in a better floor when compared to dirt. This is because stone dust tends to compact better than dirt, while still providing ample drainage. Adding a subsurface drainage layer is also recommended as it will further enhance drainage.

Outside of stone dust and dirt, another popular flooring option is concrete. Despite allowing some moisture to seep in, concrete is not nearly as porous as stone dust or dirt, making it an attractive option when utilized in combination with rubber mats or pavers, as well as stall mattress systems.

THE STABLECOMFORT STALL MATTRESS

StableComfort is a revolutionary horse stall flooring system offering superior health, comfort, cleanliness and performance, making it the true global standard in equine flooring.



multi-celled, rubber crumb filled mattress

StableComfort System Components

First Component: A multi-celled mattress made from polypropylene fabric and nylon stitches, filled with recycled vehicle tires broken down into uniformly sized rubber crumb.

Second Component: A 1-piece protective top cover that is fastened to the walls ensuring that it stays in place.

Third Component: A plastic fastening strip that holds the fabric in place, snug against each wall or floor.



Additional OPTIONS

- Upgrade to a ³/₄" premium pad thickness
- Add StallWall, featuring 1-½" thick foam panels and a durable top cover





INTERLOCKING RUBBER MATS

Interlocking rubber mats offer quick installation and the potential for additional expansion. When placed on a solid, smooth base, mats will lie flat without curling, buckling, or rolling. Built with durability in mind, mats are abrasion-resistant and offer excellent traction.

Features & BENEFITS

- 34" thick & 1/2" thick
- Common stall size kits and custom sizes
 available
- 100% American Made
- Made with heavy duty re-vulcanized rubber (not glued or pressed)
- 100% closed cell is completely nonabsorbent, antibacterial & antifungal
- Insulates against cold and dampness
- Won't roll, buckle, or curl
- Reduces bedding expenses
- Has been tested and approved by the American Farrier Association to be used for all hot- or cold-shoeing processes

Conclusion

Effective stall design will play a significant role in ensuring horse and human comfort and safety, in addition to influencing daily barn life. Each stall-related design decision you make – from size and materials to overall layout – will regularly impact your horses and those who handle them. Investing in premium materials and quality craftsmanship will enhance the lifetime of your stalls and reduce maintenance. Moreover, customizing your stalls to meet your unique needs will ensure more complete satisfaction with the final result.

It is our sincere hope that you have found this guide helpful as you consider what type of stalls will work best for you and your horses.

For personalized advice and a complimentary consultation, contact the Sterling Equine team at 573-328-2977 or sales@sterling.one. We can't wait to help you make your stall dreams a reality!



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