

## **SURE STEP Hog Flooring System - Installation Instructions**

SURE STEP hog flooring installation guidelines must be followed to ensure warranty.

SURE STEP plastic flooring will expand and contract according to surrounding climate.

- The flooring should be at room temperature for 24 hours before installation and maintained after installation. Installation in cold or cool weather will cause plastic contraction. Do not install flooring at a temperature below 40°F.
- Store plastic flooring away from exposure to the sun as U.V. rays will diminish the quality of the plastic flooring.
- Use only approved support beams and support brackets.
- Leave distance for expansion at walls. An expansion joint is recommended for every 60 ft. of flooring. Refer to Appendix B: Thermal Expansion.
- Stagger joints for maximum strength and stability. Refer to Appendix A: Floor Staggering.
- Cover all edges around perimeter of the room.
- Never mount gatepost, penning, or coving directly to the plastic floor. Always mount gatepost and penning to the beam or a stabilizer bar underneath the beam.
- Ensure the sum of the fiberglass beam lengths are appropriate to length of room with a minimal gap.
- Make sure J-bolts are not hooked at an angle.
- Use of safety equipment is recommended whenever personnel are over a deep pit.

### Room Planning

- SURE STEP must have a support beam under the supporting sides of the plastic panels. Do not cut the supporting sides of the plastic panels.
- The non-supporting ends of the plastic panels may be cut to fit the room, allowing for expansion at each wall.
- If installing flooring on top of a concrete walkway or alleyway, make sure to secure the beam mounting plates to the concrete. Failure to secure the beam mounting plates to the concrete allows the beam to move off the concrete edge.
- Thermal Expansion
  - Whenever possible, always install hog flooring at the room operating temperature.
  - Do not install below 40 degrees Fahrenheit.
  - If installing below the room operating temperature, allow for floor expansion between walls and flooring (Appendix B: Thermal Expansion).
  - If the floor is longer than 60 feet, an expansion joint is needed. To make an expansion joint, use two support beams side by side and leave a gap between floor parts.
- Tools

- Tape measure
- SURE STEP flooring assemblies by hand, but **if needed use only a rubber mallet.**
- Cutting can be done best with a table saw, or circular saw. Only the non-supporting ends of the plastic panels may be cut.

### NURSERY FLOOR

Step 1 - Install the fiberglass support beams.

- Lay out support beams across the pit 12" apart for 12"x12", 18" apart for 18"x12", and 24" apart for 24"x12".
- Install plastic beam mounting plate on each end of fiberglass beam or wherever the beam comes in contact with the concrete. Ensure mounting plates are flush with the end of the beam.
- The beam must have a minimum of 2" of the concrete ledge to rest on.
- The total gap of distance between beams stacked end to end across the length of the room must not be greater than the distance to prevent the beam from moving off a ledge. Ensure the sum of the fiberglass beam lengths are appropriate for the length of room with a minimal gap.

Step 2 - SURE STEP flooring must have a support beam under the supporting ends of each floor panel

- Lay out the first row on support beams from wall to wall to make sure configuration is adequate.
- Ensure each floor panel is completely laying on the beam. For second row, stagger the flooring at the joints for added strength. (Appendix A: Floor Staggering)
- Do not cut the supporting ends of the floor panels. The non-supporting ends of the panels can be cut to fit the room, allowing for expansion at each wall.
- Cover all edges around perimeter of the room.

### FARROWING FLOOR

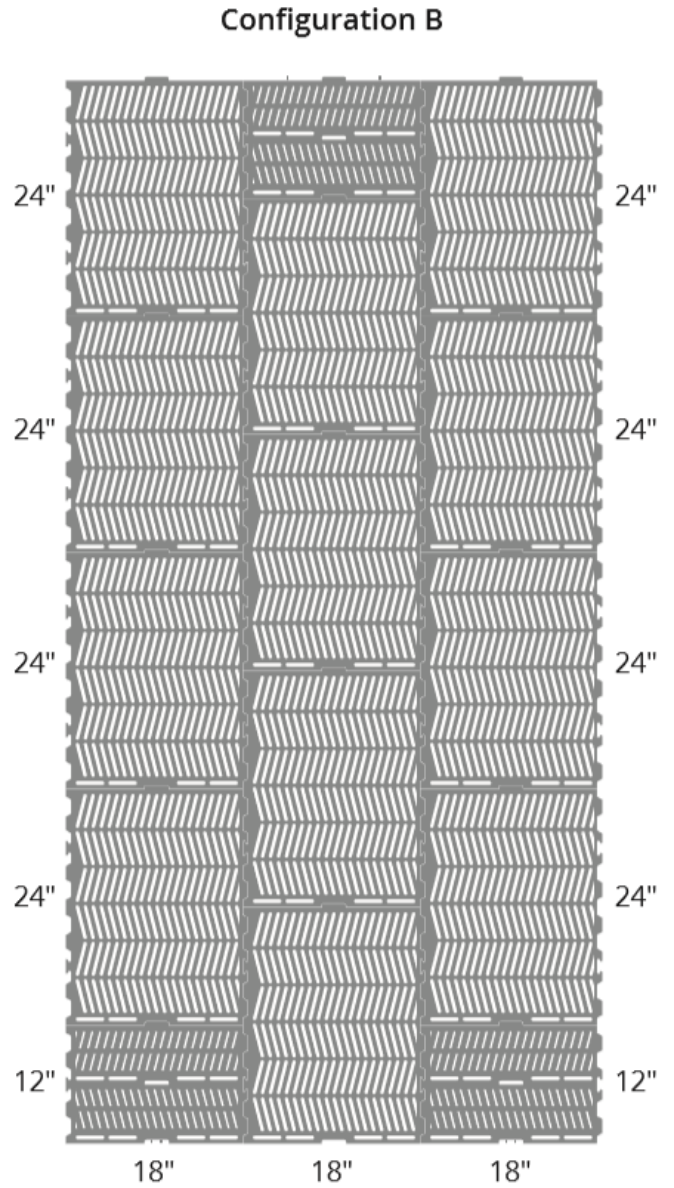
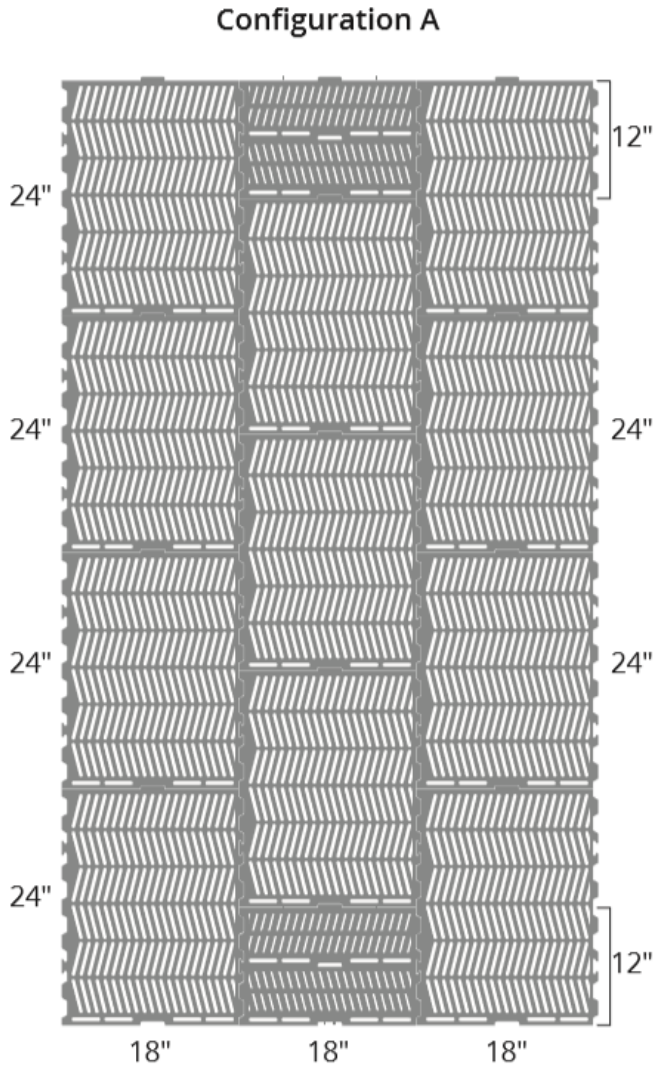
Step 1 - Installing SURE STEP farrowing flooring:

- Lay out four support beams with end mounted end supports across the pit at appropriate spacing to accommodate plastic or cast floor. For example, for a 5'x7' crate the four support beams are spaced at 18", 24", 18".
- Install the plastic creep flooring. For example, for a 5'x7' crate install 7 18"x12" panel rows on each side leaving 24" between the rows for the cast parts.
- Install a 24" inch steel support bracket to be under the cast floor on the front and back.
- Install 24" cast flooring. For example, for a 5'x7' crate use 2 24"x42" flat cast. Bolt the cast pieces end to end using two stainless steel screws, flat washers and nylock nuts. Important, do not over tighten. Over tightening may cause cast iron to crack and result in part failure.
- Use J bolts to secure the farrowing crate to the steel support bracket.

### Appendix A: SURE STEP Floor Panel Staggering

Panel floor staggering for added stability.

18"x24" are offset every other row by 18"x12" panels



JD1824 (18"x24")  
JD1218 (18"x12")

## Appendix B: Thermal Expansion

Install the floor at normal operating temperatures. The table below estimates the thermal expansion gap around all sides of the floor. The amount of gap to leave depends on the floor span and the installation temperature differential below the expected operating temperature. Do not install flooring temperatures below 40°F.

Expansion or contraction of polypropylene is approximately 0.00075 inches per foot per degree Fahrenheit.

The following estimates the approximate expansion by floor length and temp change. A gap should be left on all sides to accommodate the expansion.

Floor Length	Temp Change (deg F)	Aprox. Expansion (in)
20	10	0.16
20	20	0.32
20	30	0.48
30	10	0.24
30	20	0.48
30	30	0.72
40	10	0.32
40	20	0.64
40	30	0.96
50	10	0.40
50	20	0.80
50	30	1.20
60	10	0.48
60	20	0.96
60	40	1.92