



Gestation Stall Manual

Identification of Stall Components

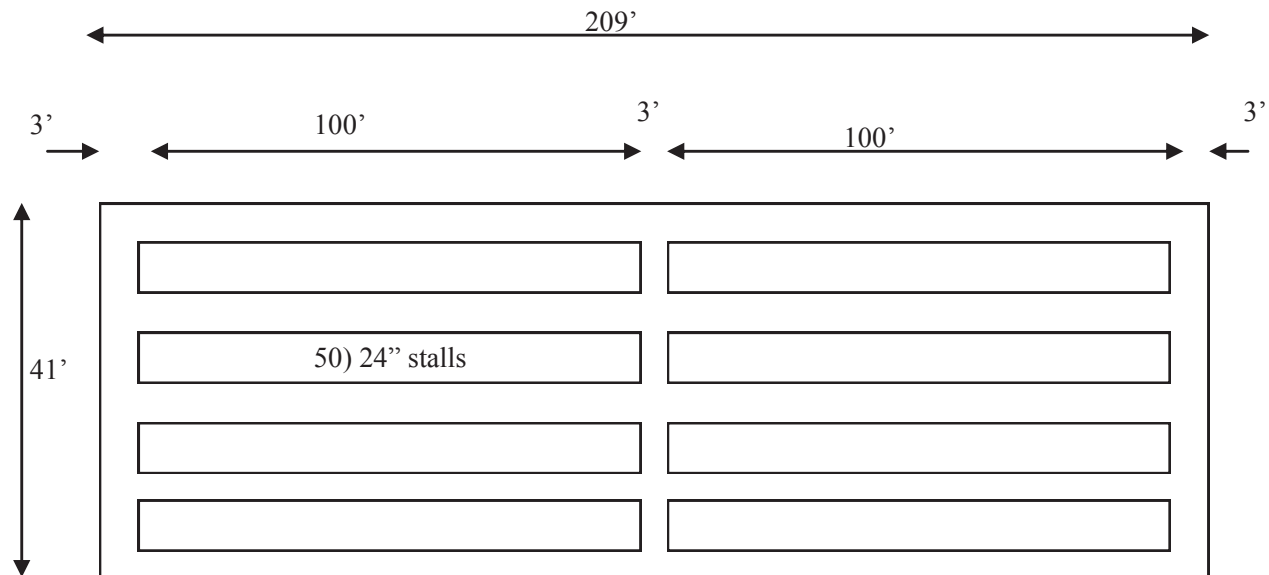


ILLUSTRATION 1A

ILLUSTRATION 1A is floor plan of a typical gestation building that will serve as an example of the installation of gestation stalls through out this manual. Our example building has eight rows of 50 stalls that are 24" x 7'0" long. The length of the building is 209' ID (ID stands for Inside Dimension) and there are three alleysways 36" wide. The width of the building is 41' ID. There are two 36" feeding alleys located along the outside and another 36" alley down the middle. In addition there are two 24" access alleys located at the back of the stalls over the slats. **ILLUSTRATION 1B** and **1C** are close-ups of top and side views.

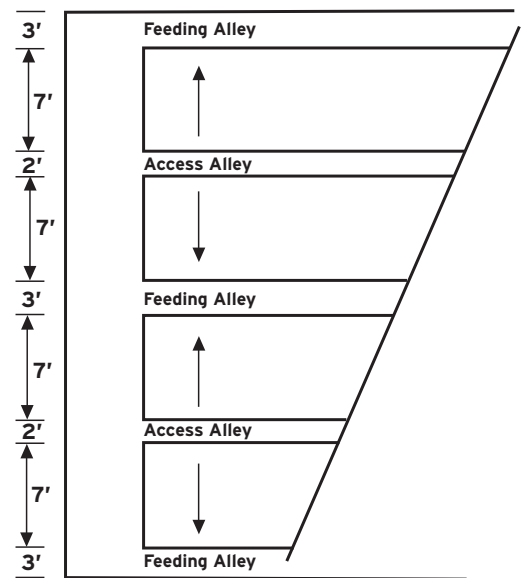


ILLUSTRATION 1B

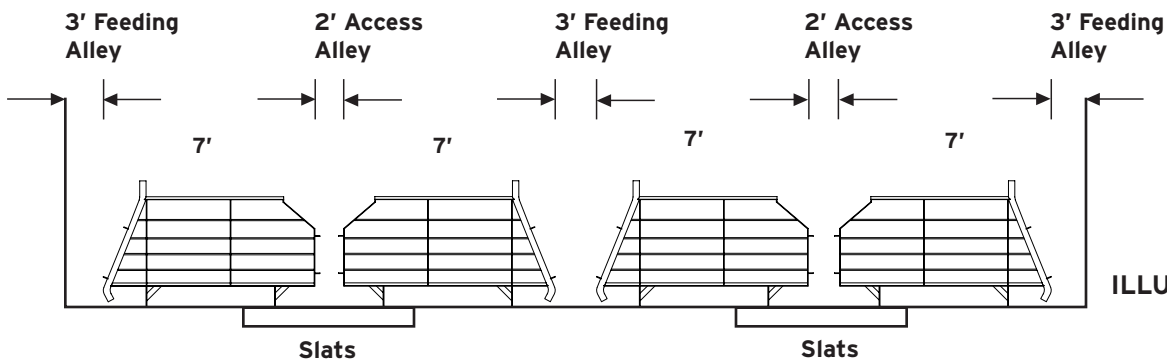
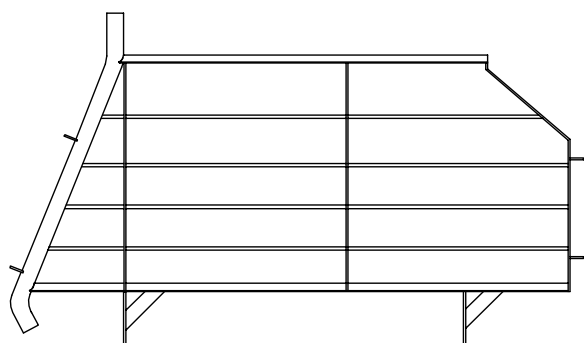
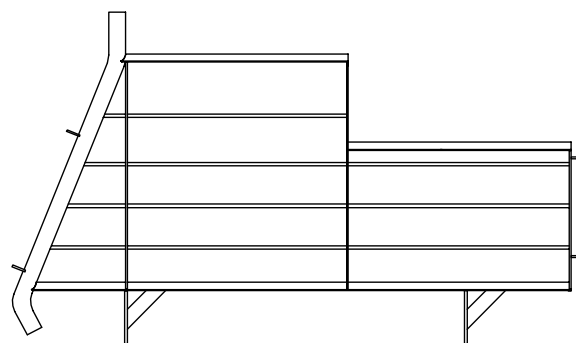


ILLUSTRATION 1C

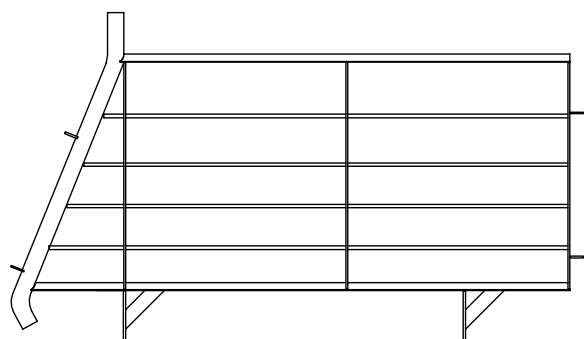
Identification of Stall Components



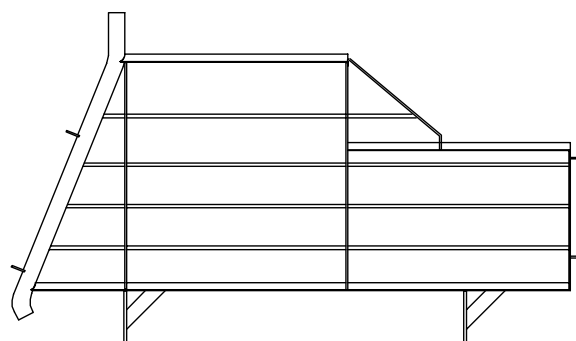
Slope Front/Slope Back



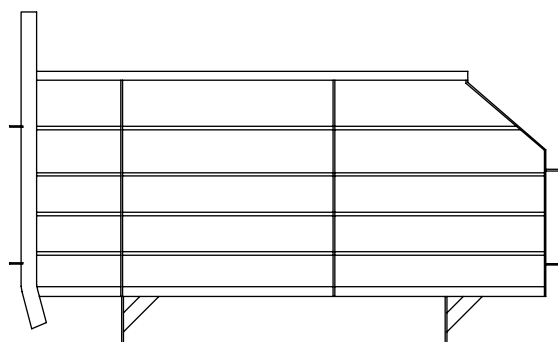
Slope Front/A.I. Back



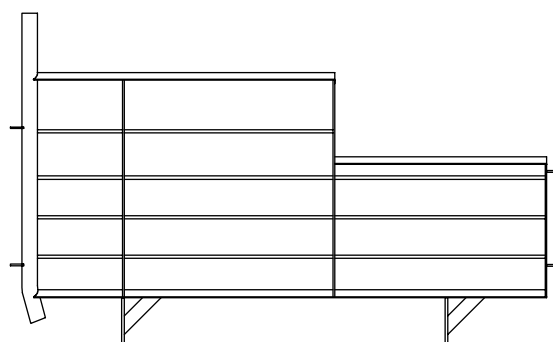
Slope Front/Straight Back



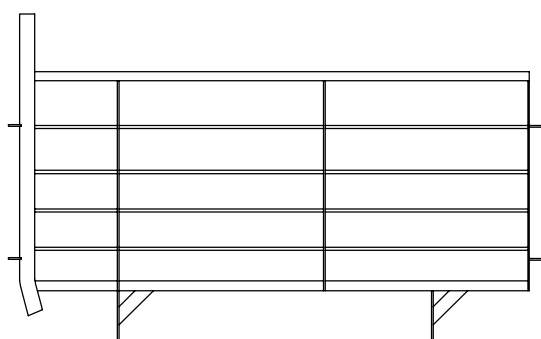
Slope Front/Modified A.I. Back



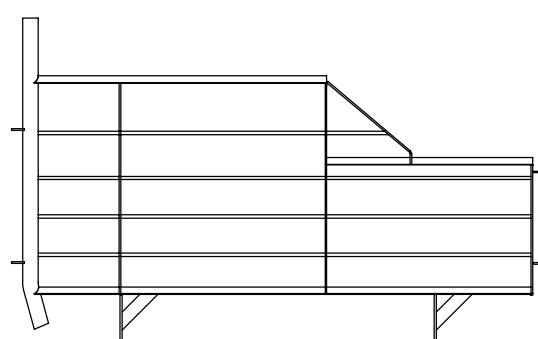
Straight Front/Slope Back



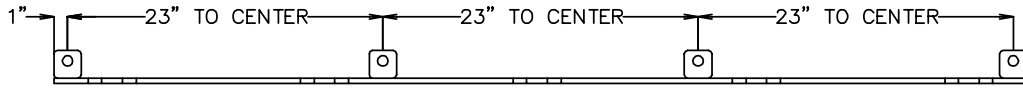
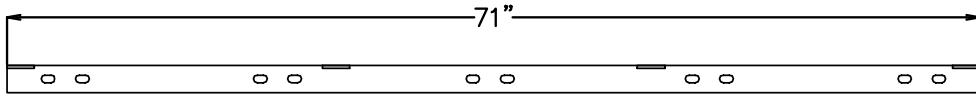
Straight/A.I. Back



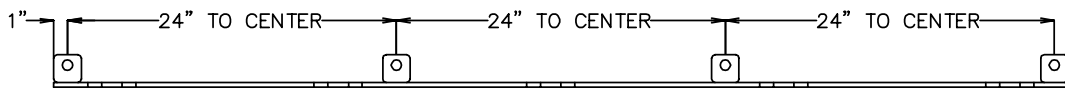
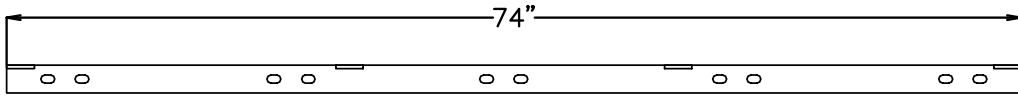
Straight Front/Straight Back



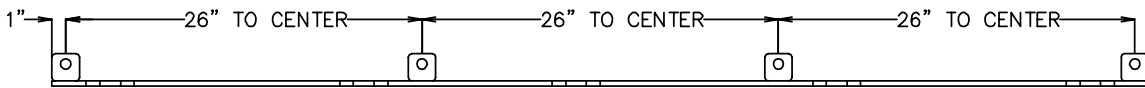
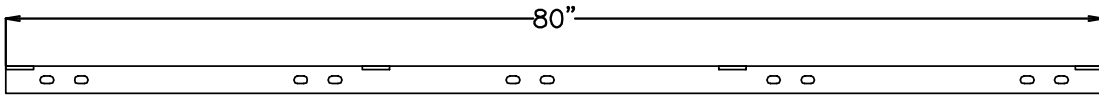
Straight Front/Modified A.I. Back



Floor Spacer (23" Centers)

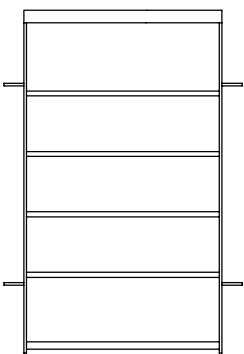


Floor Spacer (24" Centers)

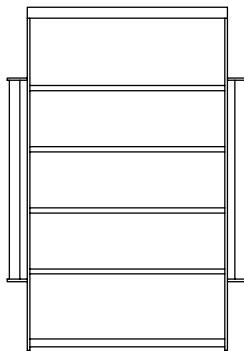


Floor Spacer (26" Centers)

FLOOR SPACER ILLUSTRATION 3A

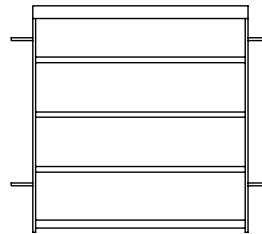


Front Door

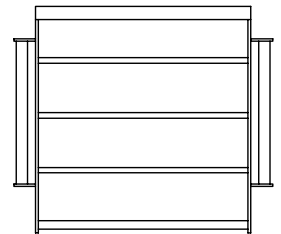


**Front Door
(w/ pipe)**

ILLUSTRATION 3B



Rear Door



**Rear Door
(w/ pipe)**

ILLUSTRATION 3C



ILLUSTRATION 3D

**LONG DOOR GATE
ROD**

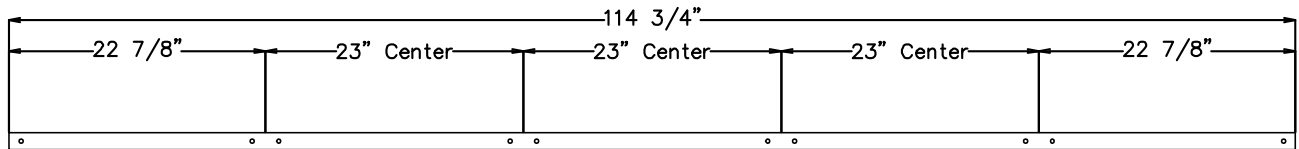
PART # 5000100100
24 5/8" below bend



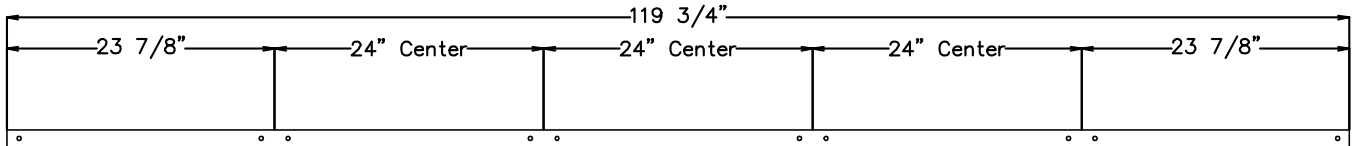
ILLUSTRATION 3E

**SHORT DOOR
GATE ROD**

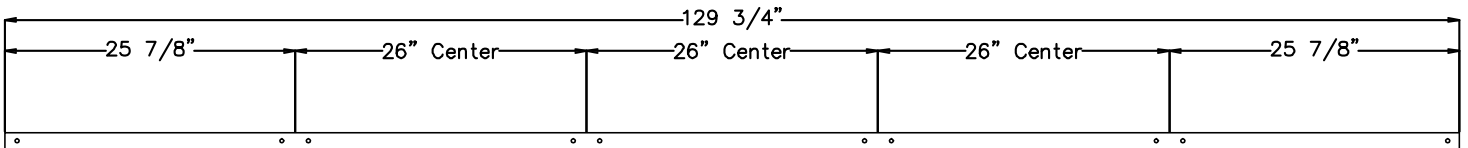
PART # 1000100100
19 3/4" below bend



Top Spacer (23" Centers)

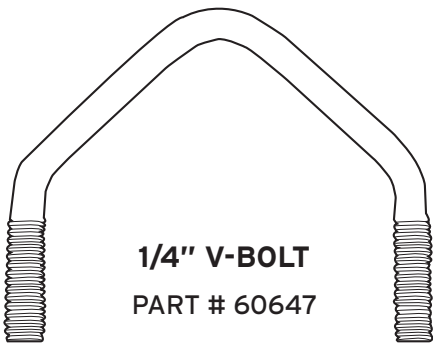


Top Spacer (24" Centers)



Top Spacer (26" Centers)

TOP SPACER ILLUSTRATION 4A



1/4" V-BOLT
PART # 60647

ILLUSTRATION 4B



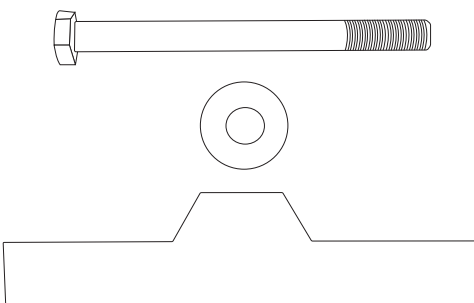
GESTATION TOP SPACER CONNECTORS
PART # 5000920100

ILLUSTRATION 4C



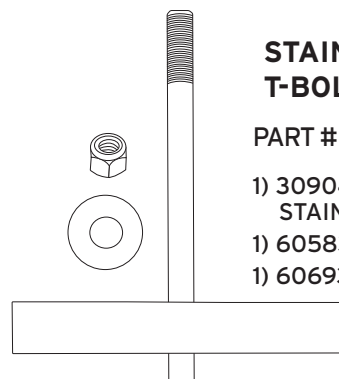
1/4" LOCKNUT
PART # 60680

ILLUSTRATION 4D



CAST T-BOLT
PART # 309045100
1) 3090700000 CAST IRON TEE ONLY
1) 60831 SS BOLT 1/2" X 4 1/2"
1) 60583 1/2" SS FLAT WASHER

ILLUSTRATION 4E



STAINLESS STEEL T-BOLT
PART # 3090100500 S.S. T-BOLT
1) 3090441500 1/2" X 5 1/2" STAINLESS STEEL T-BOLT
1) 60583 SS FLAT WASHER
1) 60693 SS LOCK NUT

ILLUSTRATION 4F

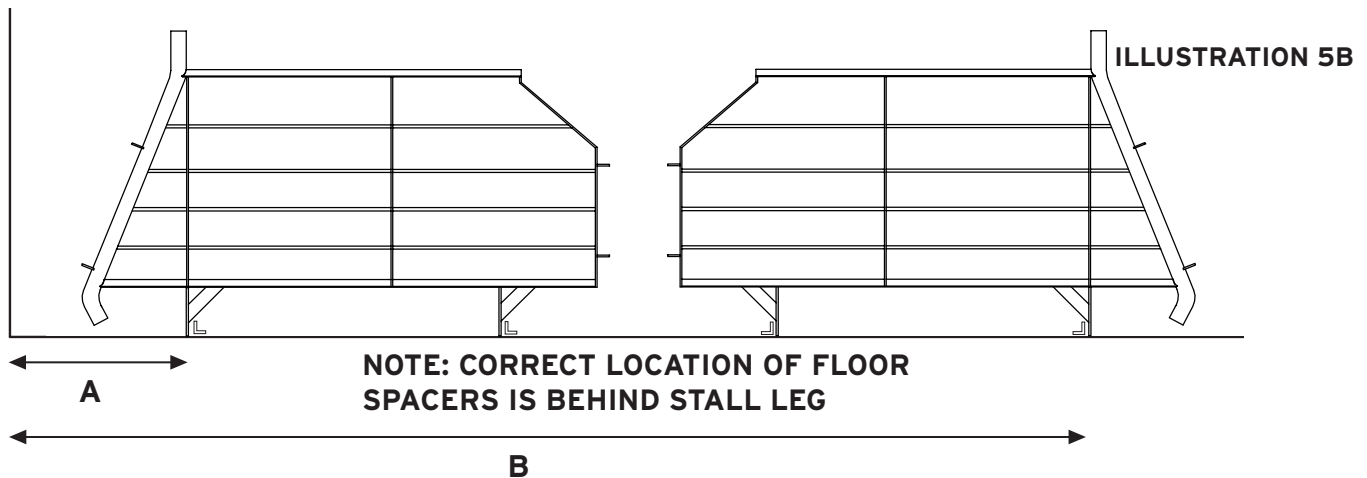
A) Preparation of Barn



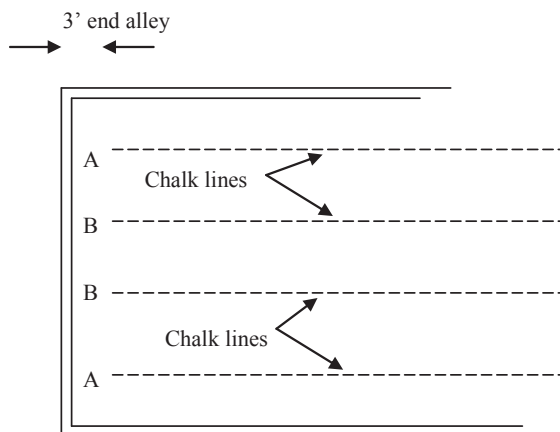
ILLUSTRATION 5A

ILLUSTRATION 5A represents the same building as in ILLUSTRATION 1A . The first step is to measure the building to verify its inside dimensions. If the building measurement is different than expected, you may be able to adjust the width of the alleys to compensate.

B) Layout of Stalls



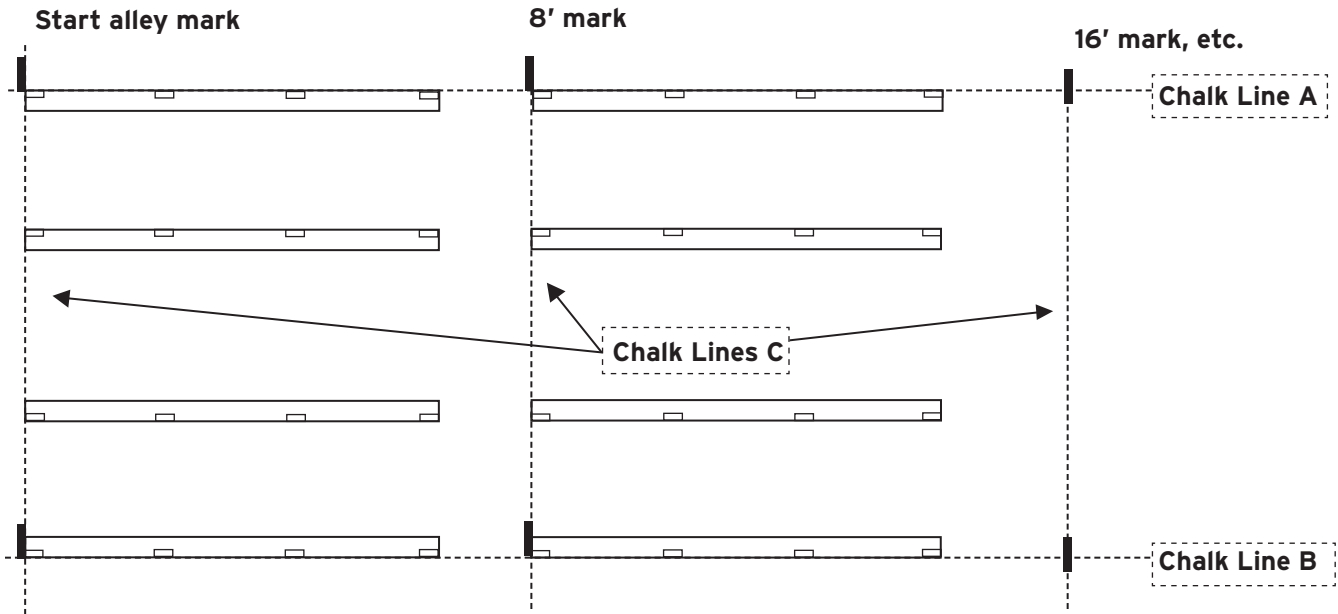
Position two stall sides (see p.2 ILLUSTRATION 2A) in place laying out the correct alleyway widths across the building width.. After the position of the stalls is determined, mark the location of the front legs from the outside walls. These measurements are represented by the A and B arrows in ILLUSTRATION 5B. It is not necessary to mark the back legs. Repeat on the opposite side of the building.



Measure the desired end alley from the end wall of the building. Starting from this location, mark the A and B point down the length of the building. Using a chalk line, establish a line down the length of the buildings for both the A and B measurement as shown in ILLUSTRATION 5C.

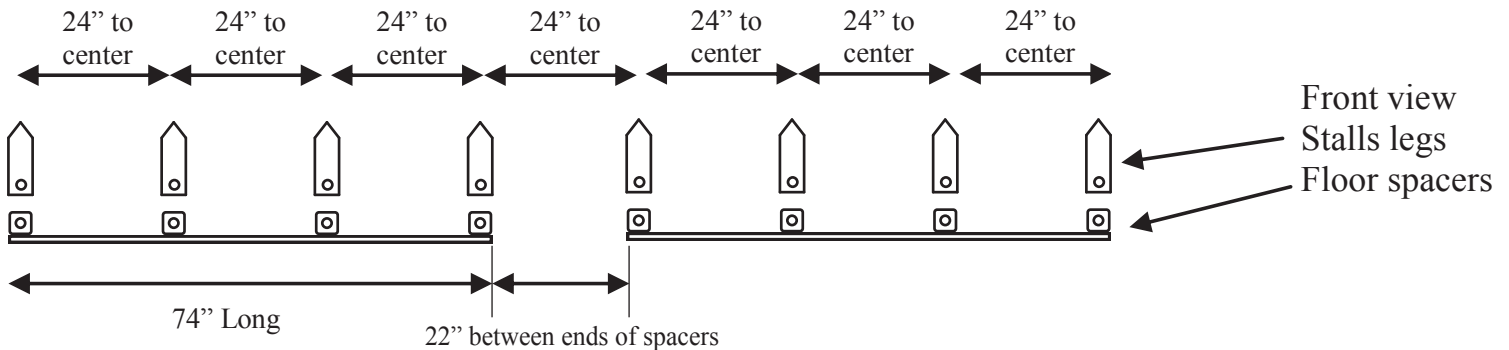
C) Layout of Floor spacers (see p.3 ILLUSTRATION 3A)

Using a 100' tape, mark the chalk line every 8 feet. **ILLUSTRATION 6A** shows the marking sequence on the chalk line at 8', 16', 24', 32', 40', 48', until we reach the 100' mark which is the beginning of the center alleyway. **NOTE: DO NOT MARK THE LINES WITH A SHORT 8' TAPE MULTIPLE TIMES BUT INSTEAD USE A LONG TAPE.** If you mark the 8' distance using a short tape, a mistake in marking will mean you have the wrong measurement for the rest of the line. **NOTE: USE THE 8' MARKING SEQUENCE FOR 24" STALLS ONLY.** For 23" stalls mark the chalk line every 92", for 26" stalls mark the chalk line every 104"



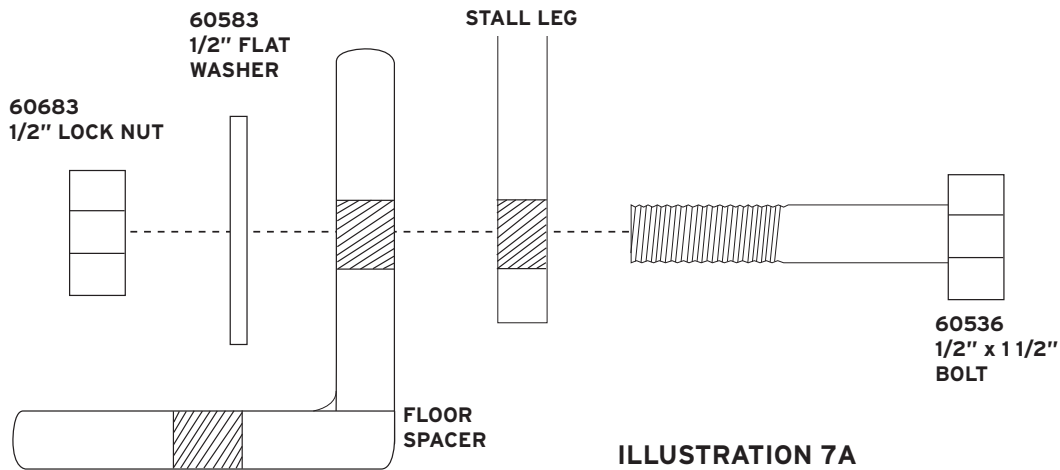
TOP VIEW FLOOR SPACERS ILLUSTRATION 6A

It will be necessary to snap additional chalk lines (shown as C lines in **ILLUSTRATION 6A**) across from Line A to Line B to mark the starting position of the rear floor spacers. Place floor spacers along the chalk line locating them first at the beginning and every 8' mark. Fasten all the spacers to concrete floor using three 1/2" x 2 3/4" concrete anchors on solid floors. Use T-bolts if mounting to slatted floors. Next bring rear floor space and place against cross marked chalk line in the general position they will be used at. Another view of the floor spacers layout is shown in **ILLUSTRATION 6B**.



FRONT VIEW FLOOR SPACERS ILLUSTRATION 6B

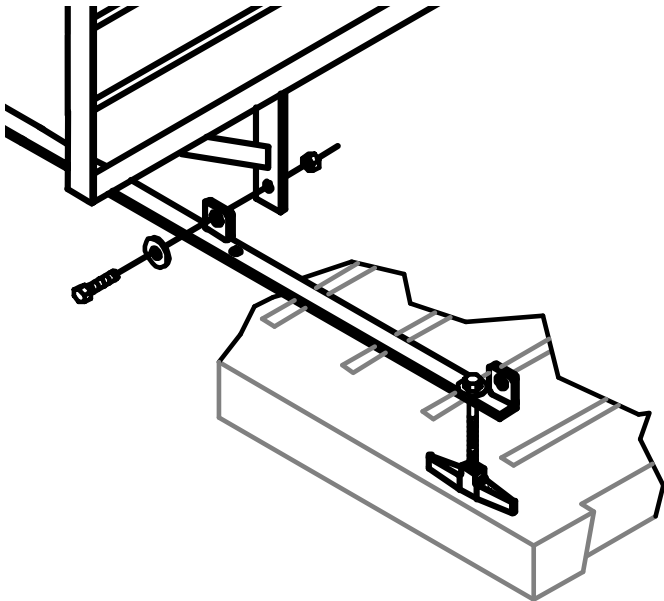
D) Attaching Stalls to Floor Spacers



Carry in all the front doors (see p.3 ILLUSTRATION 3B) and long drop rods (see p3 ILLUSTRATON 3D) and place them along the front of the stalls. Carry in the stall sides and stand them up installing the front doors to the stalls sides with drop rods. After stall are stood in place with front doors installed, connect stall sides to front and back floor spacers using 1/2" x 1 1/2" bolt, 1/2" washer and 1/2" lock nut as shown in ILLUSTRATION 7A. DO NOT TIGHTEN.

NOTE: Check back floor spacers to assure they are aligned with Chalk lines C as shown on page 6 ILLUSTRATION 6A before proceeding to next step.

E) Attaching Rear Floor Spacers to Slats



Install three of either (a Cast Iron T-Bolt (see p4 ILLUSTRATION 4D) or a Stainless Steel T-Bolt (see p4 ILLUSTRATION 4E) per back floor spacers to fasten them to slats as shown in ILLUSTRATION 7B. It will be necessary to drill new holes in the floor spacers if the existing holes do not line up over a slat opening. Drill 1/4" pilot holes and then use a 5/8" bit to drill holes towards the ends of the floor spacers. After rear floors spacers are fastened down, tighten both the front and back leg bolts. Visually check the vertical alignment of the stall sides after tightening the leg bolts.

NOTE: Care should be taken not to damage either type of T-Bolt by over tightening. Recommendations are to not exceed 60 foot lbs. of torque for the Cast Iron T-Bolt and 50 Ft lbs. for the Stainless Steel T-Bolt.

ILLUSTRATION 7B

F) Installing Top Spacers (see p3 ILLUSTRATION 3B)

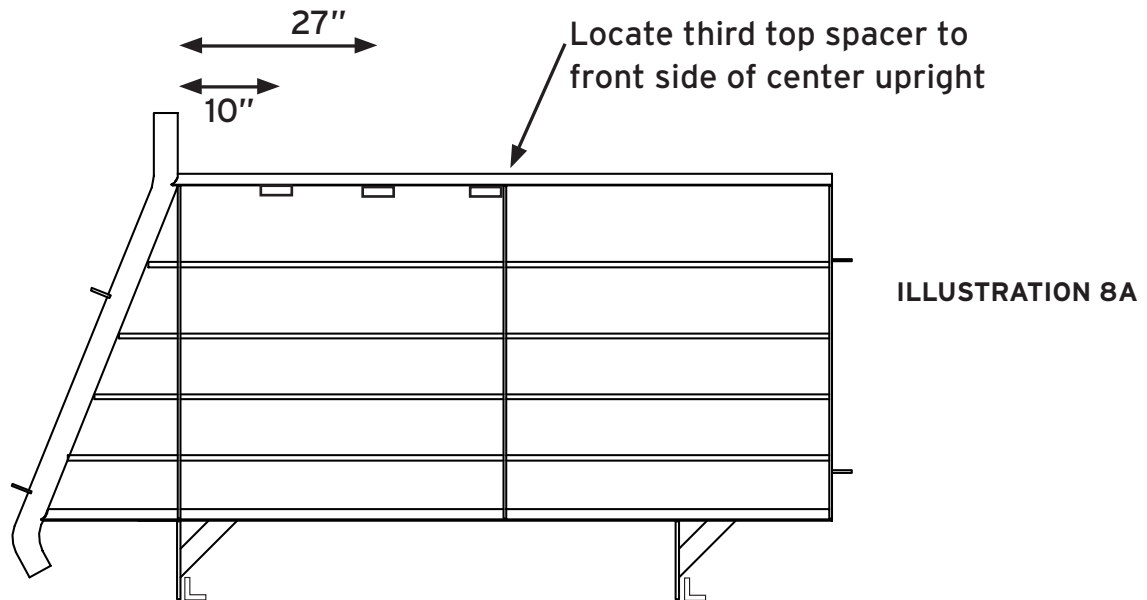


ILLUSTRATION 8A

From the back of the feed pipe ,chalk line at 10" and 27" and against the middle upright to mark the location of the top spacers. The chalk line will mark the position of the V-bolt as shown below.

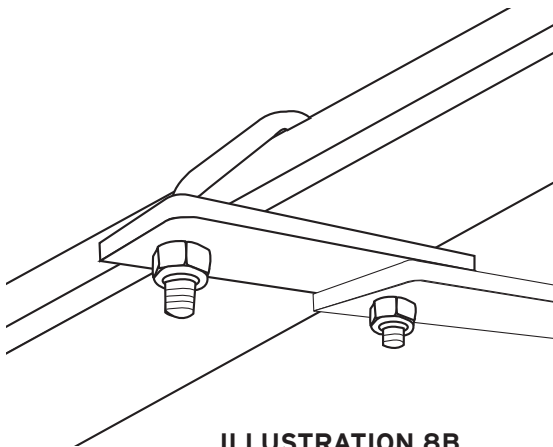


ILLUSTRATION 8B

Start the end of the each run of top spacers with a top spacer connector (see p.4 ILLUSTRATION 4B). There are always six top spacer connectors per row of stalls no matter how the long the row is. Three on each end.

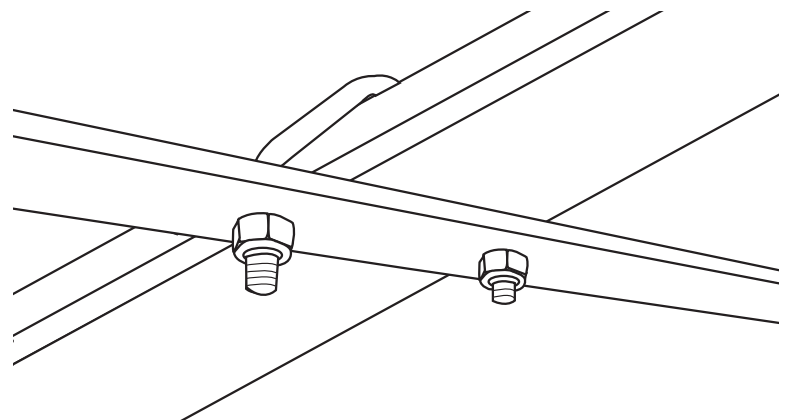


ILLUSTRATION 8C

Place top spacers under the stall top angle and secure with a 1/4" V-bolt (see p.4 ILLUSTRATION 4D) and two 1/4" lock nuts (see p.4 ILLUSTRATION 4C).

G) Installing Rear Doors

Bring in rear doors (see p3 ILLUSTRATION 3C) and short gate rods (see p3 ILLUSTRATION 3E). Attached rear doors to stalls sides with two gate rods.