

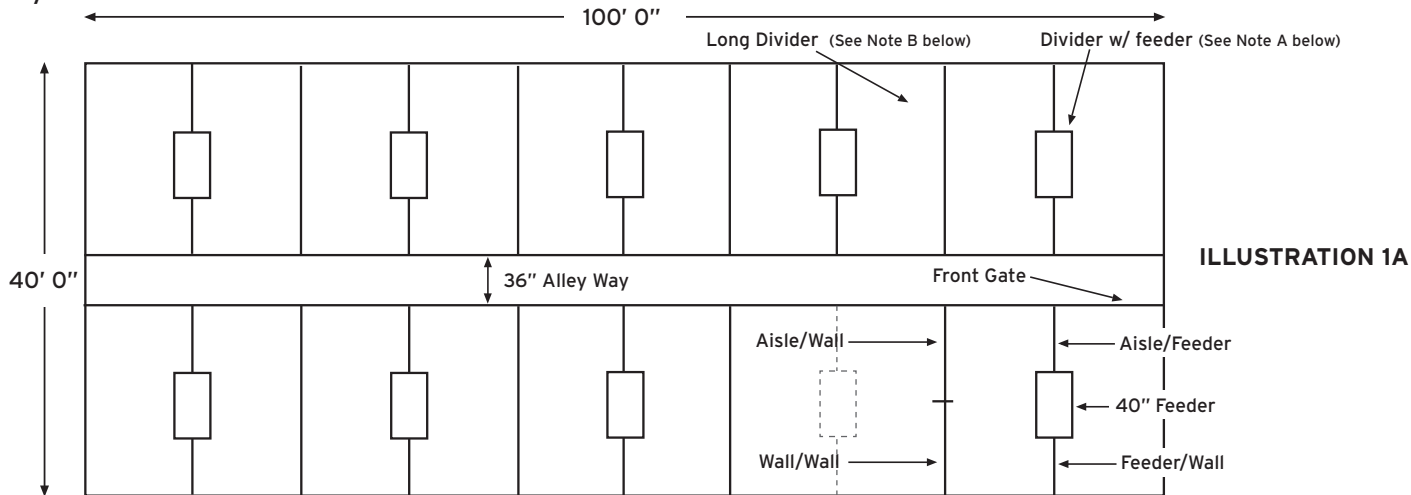


# **Panel Installation Manual**

## **Nursery/Finishing Panels**

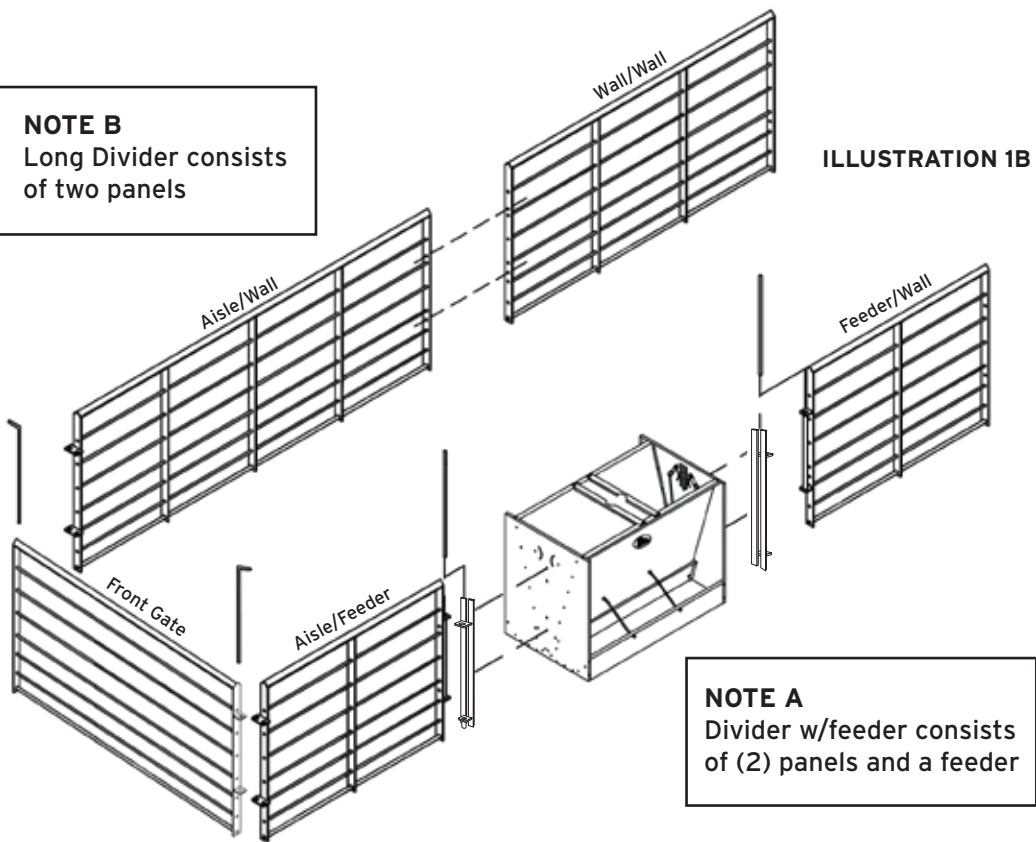
# Identification of Panel Components

**ILLUSTRATION 1A** is a floor plan of the building that will serve an example for the installation of Nursery/Finisher Panels throughout this manual. The building in this illustration is 40'0" ID wide x 100'0" ID long (ID stands for Inside Dimensions) with 36" alley way down the middle. There are 10 pens on each side that are 10'0" wide and 18'6" long. There are five feeders in each row that are 40" long. This illustration is used to show how the pen work will lay out after the feeder and panels are properly installed.

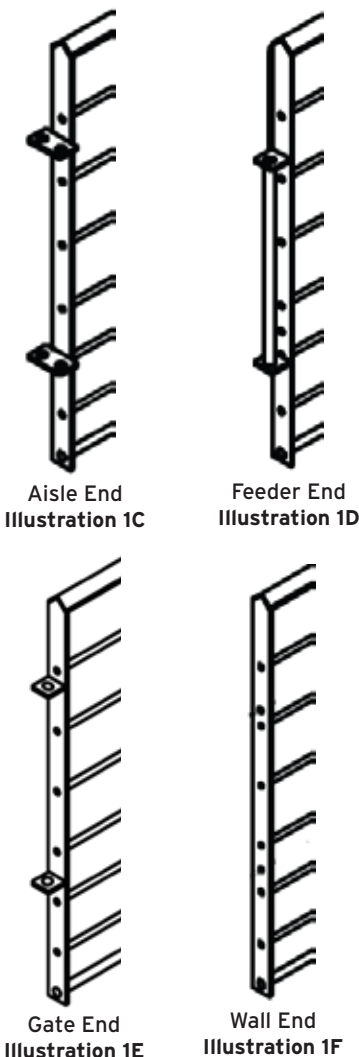


**ILLUSTRATION 1B** is a three dimensional drawing of the feeder as well as the panels that are used to create the pen work. This illustration, along with **ILLUSTRATION 1A**, are also used to visualize the terminology used throughout this manual.

**NOTE B**  
Long Divider consists of two panels



**NOTE A**  
Divider w/feeder consists of (2) panels and a feeder



**ILLUSTRATIONS 1C, 1D, 1E, and 1F** are three dimensional drawings of the ends that are found on each panel. It is helpful to understand what each end looks like so they can be matched together correctly during installation.

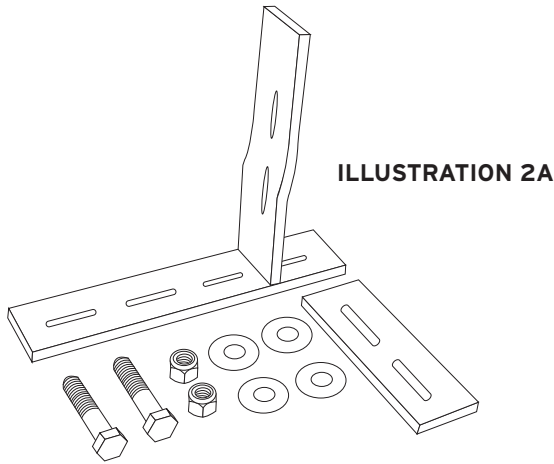


ILLUSTRATION 2A

**STANDARD BOLT ON LEG**

PART # 5000401200

- 1) 5000010210 GALVANIZED LEG
- 2) 5000030100 PAINTED 2" X 4" BACK UP PLATE
- 4) 60583 1/2" STAINLESS STEEL WASHERS
- 2) 60538 1/2" X 2 1/2" BOLT
- 2) 60683 1/2" LOCK NUT

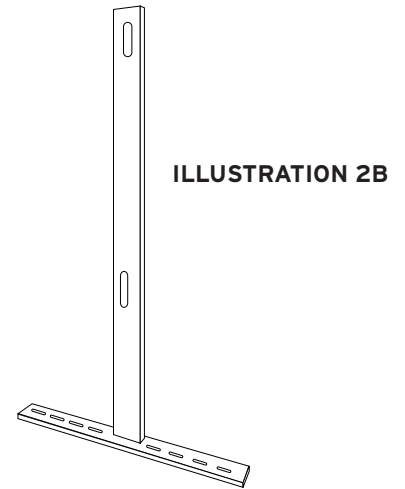


ILLUSTRATION 2B

**FLAT BAR POST**

PART # 2020290200

• NOTE HARDWARE IS NOT PACKAGED WITH POST



ILLUSTRATION 2C

**WALL BRACKET WITH FLAT BAR**

PART # 2020880100

USED AT FRONT GATES AT END OF ROW

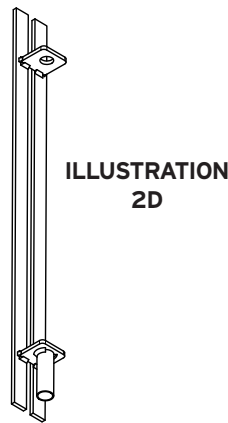


ILLUSTRATION 2D

**FEEDER BRACKET WITH 3" PIPE**

PART # 2020760100

USED ON FEEDER TO MATCH UP TO CLIPS FEEDER END ON PANELS

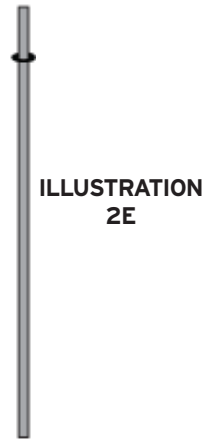


ILLUSTRATION 2E

**STRAIGHT GATE ROD**

PART # 2020100100

USE WITH FEEDER BRACKET

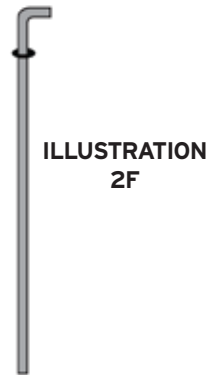


ILLUSTRATION 2F

**BENT HANDLE GATE ROD**

PART # 2000060100

USE WITH FRONT GATES

**CAST IRON 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

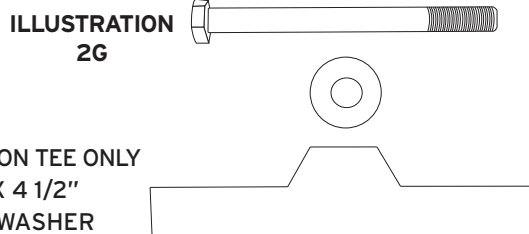


ILLUSTRATION 2G

**STAINLESS STEEL T-BOLT**

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

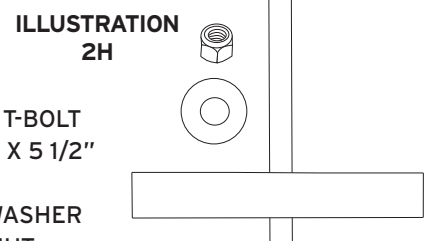


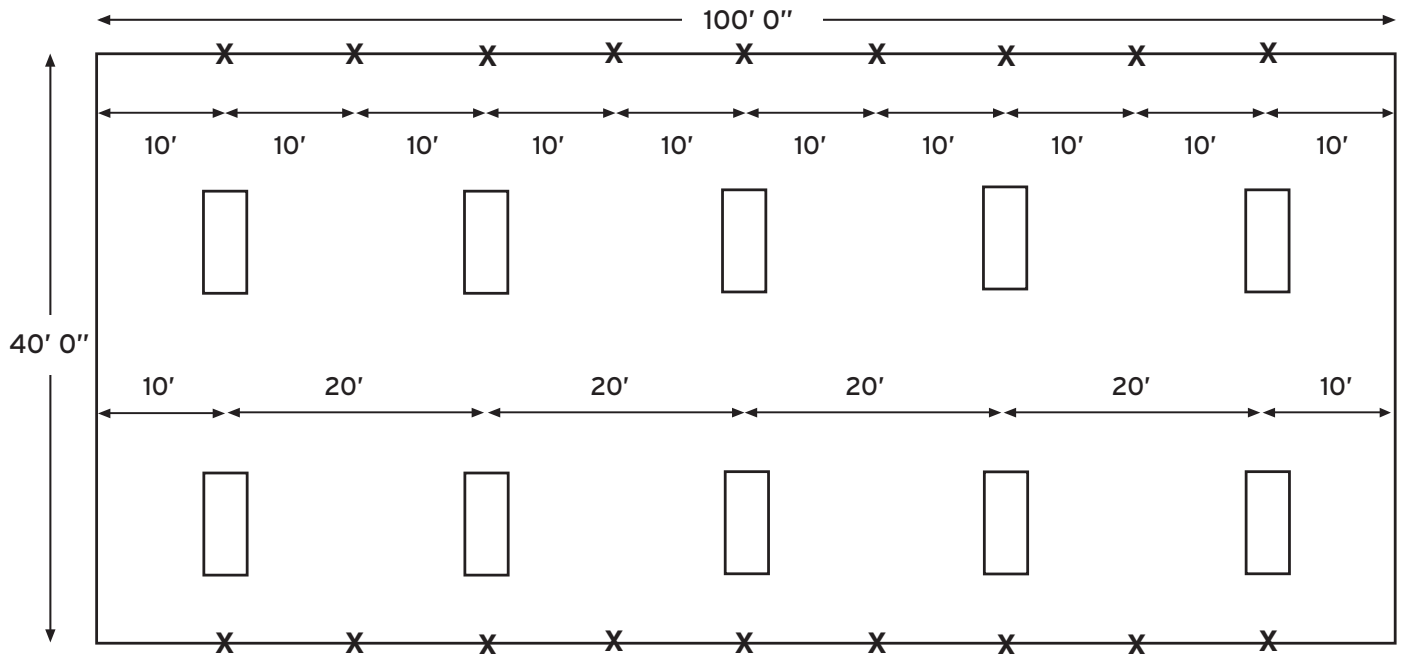
ILLUSTRATION 2H

# Installation Instructions

## A.) Preparation of Barn

Prior to installing panels, you will need to mark the outside building walls to guide you in proper placement of both the feeders and panels for your pens. **ILLUSTRATION 3A** represents the same barn used in **ILLUSTRATION 1A**. In **ILLUSTRATION 3A** an "X" is used to indicate the spots at which marks should be placed every 10' along the outside building wall.

**REMINDER:** These measurements are based on a 40' ID wide x 100' ID long barn.  
Your measurements will vary based on the size of your barn.

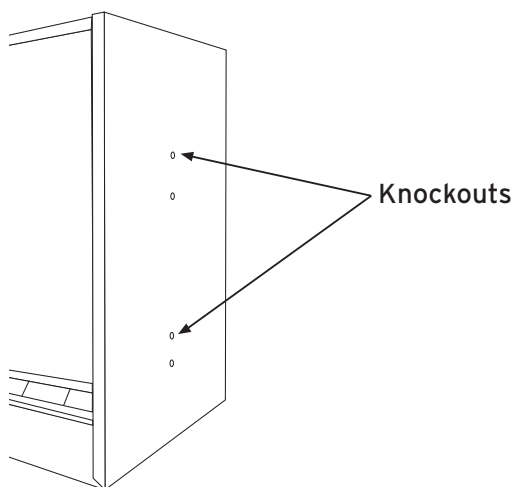


**ILLUSTRATION 3A**

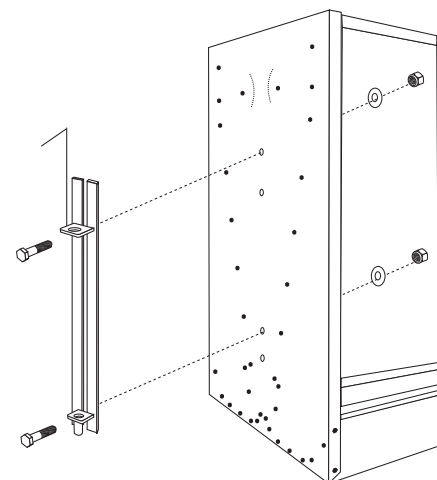
**ILLUSTRATION 3A** also shows how to correctly place feeders. Based on the measurements of our sample barn, the feeders should be placed 10' from each end wall and 20' from each feeder.

## B.) Feeder Preparation

In order for the feeders to properly attach to the panels, you must first install brackets. **ILLUSTRATION 3B** indicates four 1/2" knockouts located on the ends of each feeder. Punch out the top one of each of the sets of knockouts. Attach **Feeder Bracket** (see p.2, **ILLUSTRATION 2D**) to the feeder using a 1/2" x 1 1/2" bolt. Place a 1/2" stainless steel washer on the bolt (inside the feeder) and secure with a 1/2" locknut. **ILLUSTRATION 3C** shows how the bracket is attached to the feeder.



**ILLUSTRATION 3B**



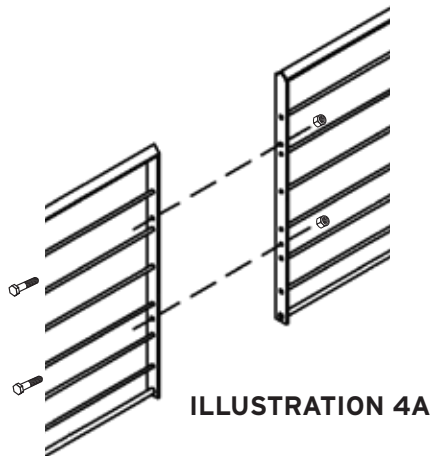
**ILLUSTRATION 3C**

## C.) Panel Installation

Carry all panels, except Front Gates, into the barn. Lay them on the floor close to where they will be placed.

### AISLE/WALL AND WALL/WALL PANELS

**ILLUSTRATION 4A** demonstrates how the AISLE/WALL and WALL/WALL Panels bolt together.



If using a **Standard Bolt-On Leg** (see p.2, ILLUSTRATION 2A,) bolt the **Aisle/Wall** and **Wall/Wall** panels together using two  $\frac{1}{2}$ " x  $1\frac{1}{4}$ " bolts and two  $\frac{1}{2}$ " locknuts. **NO FLAT WASHERS ARE USED**

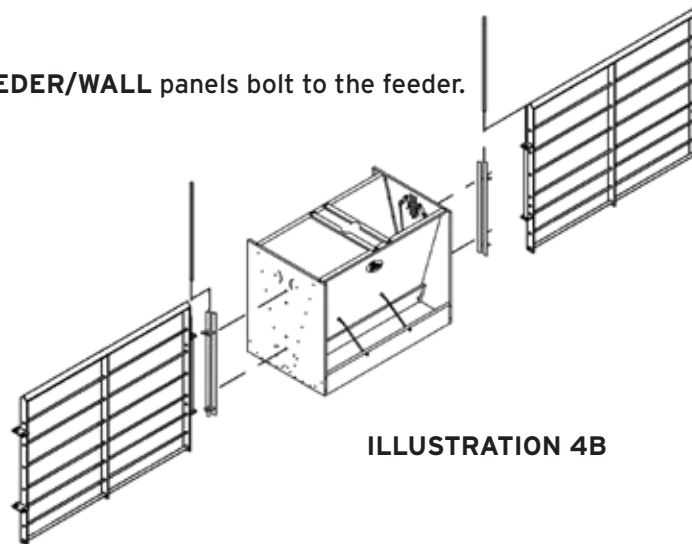
If using a **Flat Bar Post** (see p.2, ILLUSTRATION 2B,) stand the **Aisle/Wall** and **Wall/Wall** panels, insert the **Flat Bar Post**, and bolt all three together using two  $\frac{1}{2}$ " x  $1\frac{1}{2}$ " bolts and two  $\frac{1}{2}$ " locknuts. **NO FLAT WASHERS ARE USED**

### AISLE/FEEDER AND FEEDER/WALL PANELS

**ILLUSTRATION 4B** demonstrates how the AISLE/FEEDER and FEEDER/WALL panels bolt to the feeder.

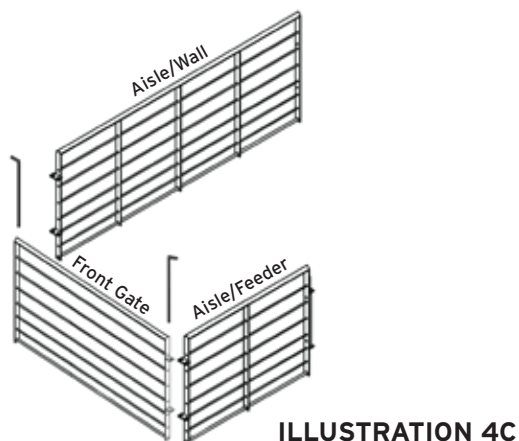
Start by standing the **Feeder/Wall** panel so that it fits between the feeder and the wall. Make sure to place the **Wall End** (see p1, ILLUSTRATION 1F) against the wall. Attach the panel to the **Feeder Bracket** with a **Straight Drop Rod** (see p.2, ILLUSTRATION 2E.)

Next, place the **Aisle/Feeder** panel on the opposite side of the feeder. Make sure that the **Aisle End** (see p.1, ILLUSTRATION 1c) is facing away from the feeder. Attach the panel to the **Feeder Bracket** with a **Straight Drop Rod**.



### FRONT END PANELS

**ILLUSTRATION 4C** demonstrates how the **FRONT GATE** is attached to the **AISLE/WALL** and **AISLE/FEEDER** panels.



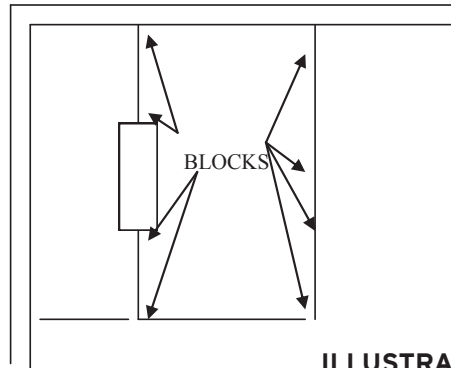
Stand **Front Gate** panel between **Aisle/Wall** panel and **Aisle/Feeder** panel. Attach each end of the **Front Gate** to the panels using two **Bent Handle Gate Rod** (see p.2, ILLUSTRATION 2F)

**NOTE:** Gate clips fit between divider clips.

If using a **Flipper Latch System**, turn to page 7 for installation instructions.

### D.) Setting Panels to Correct Height

Before attaching panels to the wall and floor, it is important to ensure that they are set at a uniform height of 1 1/2" under the panels. Cut 2x4 blocks to place under the panels. **ILLUSTRATION 5A** demonstrates block placement for each type of dividers



**ILLUSTRATION 5A**

**ILLUSTRATION 5B**



**ILLUSTRATION 5B** is a three dimension drawing of the 2x4 block placed under panel to achieve the desired height off the floor of 1 1/2".

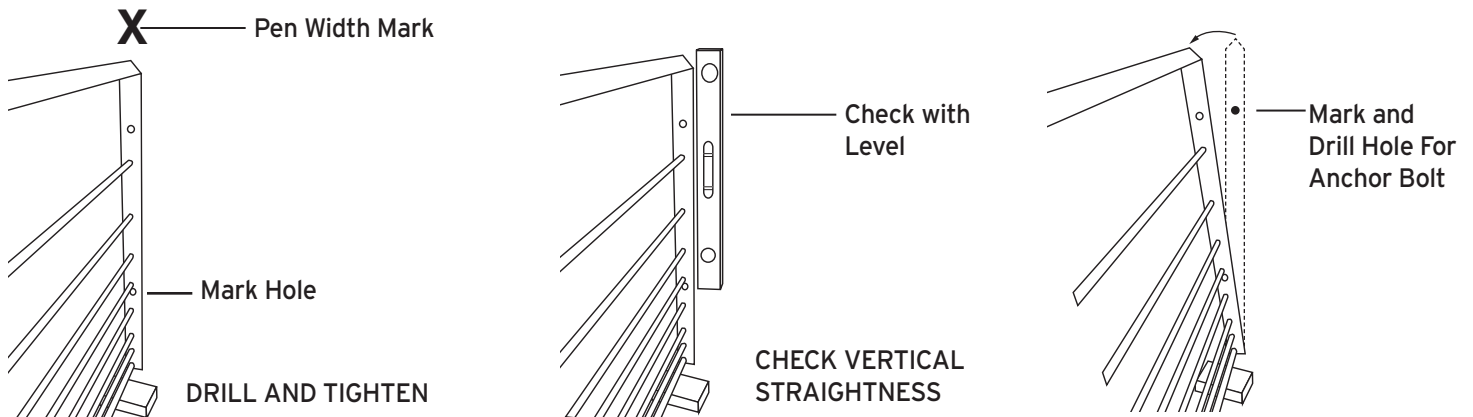
### E.) Attaching Panel to Wall

In order to attach panels to the wall, you will need to first mark and drill holes for **Anchor Bolts**. **ILLUSTRATION 5C** demonstrates the proper procedure for marking and drilling holes.

First, line the panel up with the closest "X" that you placed on the wall during the "Preparation of Barn" stage. The **Wall End** (see p.1 **ILLUSTRATION 1F**) will have two holes. Mark the bottom hole in the panel. Move the panel to the side to allow access to drill a hole in the wall for fasteners. After drilling the hole replace the panel, insert an **Anchor Bolt**, and tighten the bolt and panel to the wall.

**NOTE: Don't tighten anchor bolt all the way to the wall.**

Next, use a level to check the vertical straightness of the panel. Once it's perfectly straight, mark the top hole in the panel. Rotate the top of the panel away and drill the top hole. Now, replace the panel so that the top hole lines up with the new hole in the wall. Secure the top with an anchor bolt. Tighten the bottom anchor bolt once the top is secure.

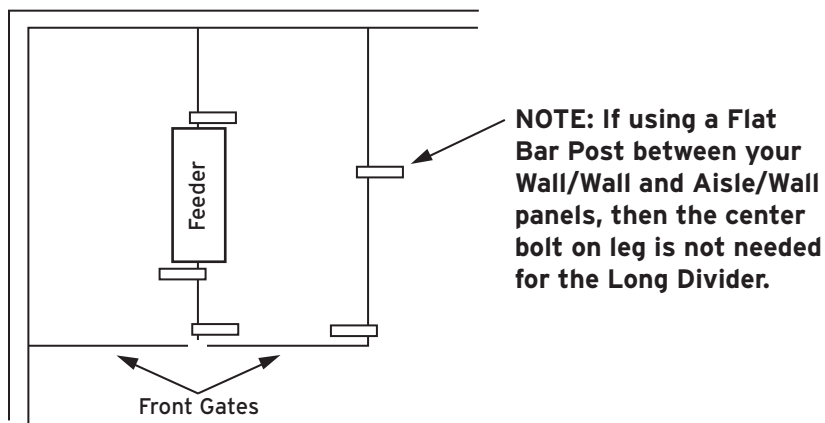


**ILLUSTRATION 5C**

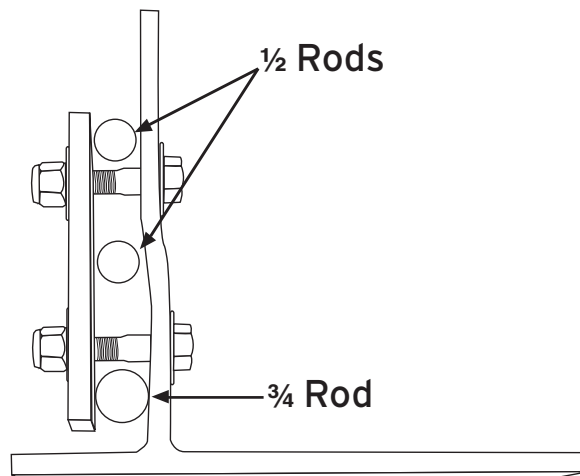
## F.) Attaching Bolt-On Legs

### TYPICAL BOLT-ON-LEG LOCATIONS

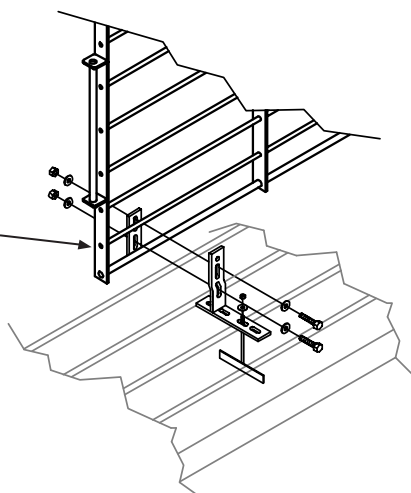
After securing all panels to the wall, the next step is attaching the bolt-on legs to the panel. It is typical to use two bolt-on-legs for each **Long Divider** and three bolt-on-legs for each **Feeder Divider**. As shown in **ILLUSTRATION 6A**, you should alternate the direction of the leg placement.



**ILLUSTRATION 6A**



**NOTE: Bolt-On-Legs should be attached as close as possible to the panel's flat bar uprights for maximum strength.**



### INSTRUCTIONS

For finishing systems on **concrete slat flooring** use either a **Cast Iron T-Bolt** (see p.2, ILLUSTRATION 2G) or a **Stainless Steel T-Bolt** (see p.2, ILLUSTRATION 2H) fasteners. 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 foot lbs for the Stainless Steel T-Bolt.

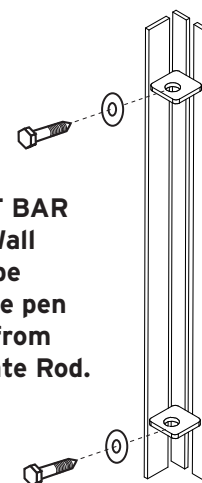
Fasteners for nursery systems will vary depending on the type of flooring used.

Secure all Bolt-On-Legs. Then, check all Drop Rods on the front gate to assure that they can be removed and replaced without binding. Once the bolt-on-legs are secured to the panels you can remove the wood blocks from under the blocks.

## G.) Installing Wall Brackets

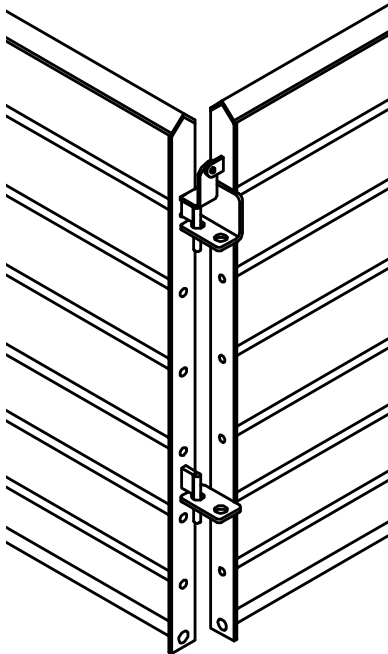
**Wall Brackets** (see p.2, ILLUSTRATION 2C) should be installed on the end of each row where the **Front Gates** meet the wall. First, attach the Front Gate to the last panel on the row. Then, swing the opposite end so that it meets up with the wall. Place one of the wood blocks to set the Front Gate at the appropriate height. Attach the **Wall Bracket** to the **Front Gate** with a **Bent Handle Gate Rod** (see p2, ILLUSTRATION 2F.)

Mark the location of bottom hole on the wall. Remove the bracket and drill on your mark. Replace the Wall Bracket and fasten with an Anchor Bolt. Align the Wall Bracket vertically for straightness and mark the top hole. Drill the top hole. Replace the **Wall Bracket**. Insert the anchor bolt and tighten. Repeat this process for **Wall Brackets** at the end of each row.

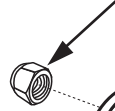


**NOTE: The FLAT BAR SHIELD of the Wall Bracket should be facing toward the pen to prevent pigs from removing the Gate Rod.**

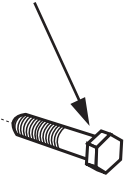
# Details When Installing Flipper Latch System



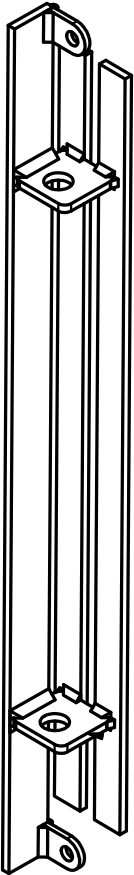
3/8" LOCK NUT  
PART# 60682



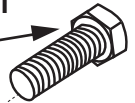
3/8" X 1 1/2" BOLT  
PART# 60517



FLIPPER LATCH  
PART# 8951860101



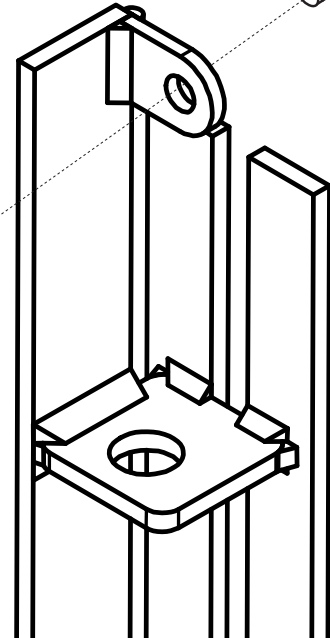
3/8" X 1 1/2" BOLT  
PART# 60517



3/8" LOCK NUT  
PART# 60682



FLIPPER LATCH  
PART# 8951860101



WALL BRACKET WITH FLAT BAR AND FLIPPER LATCH

PART# 8950930000