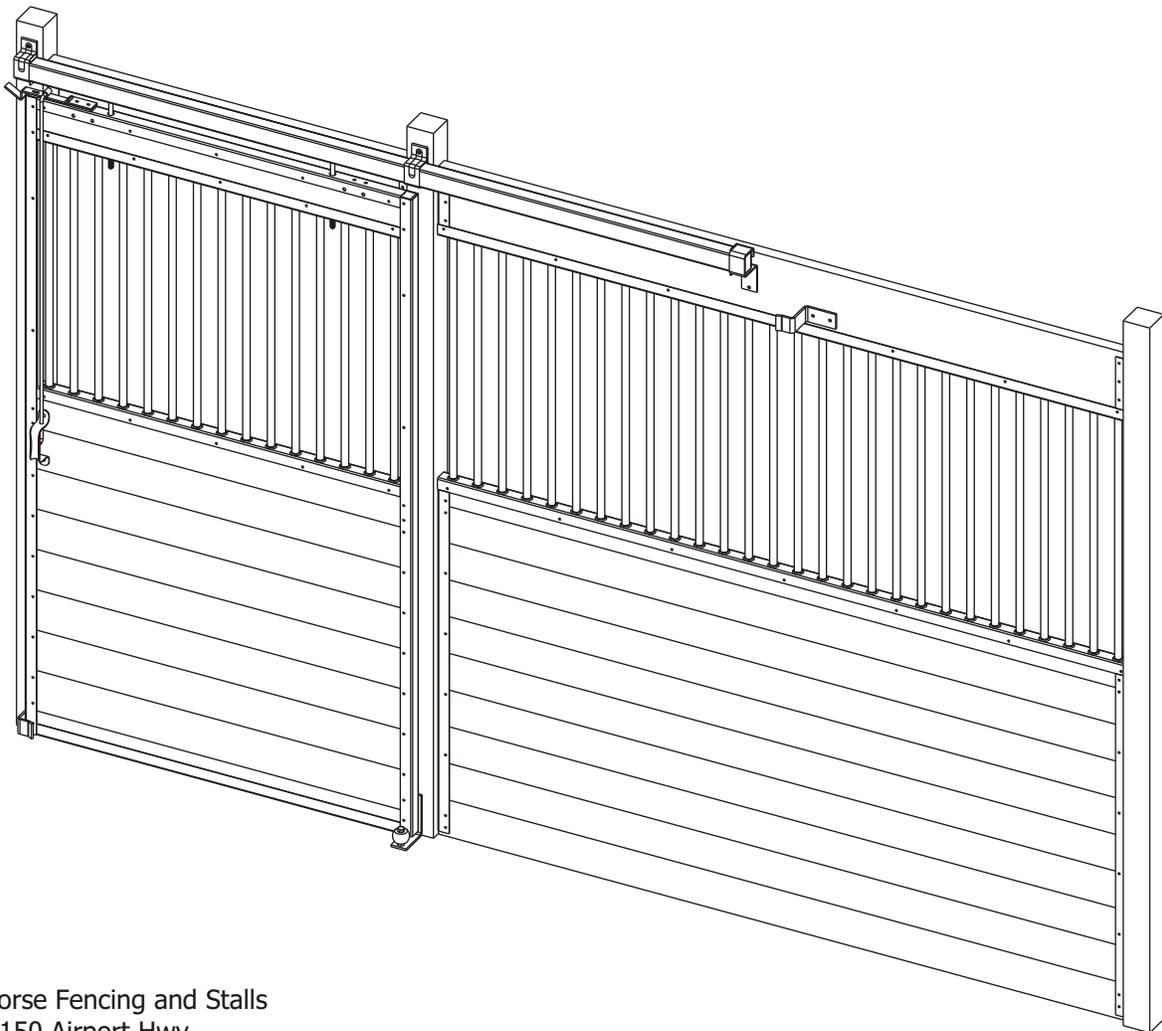




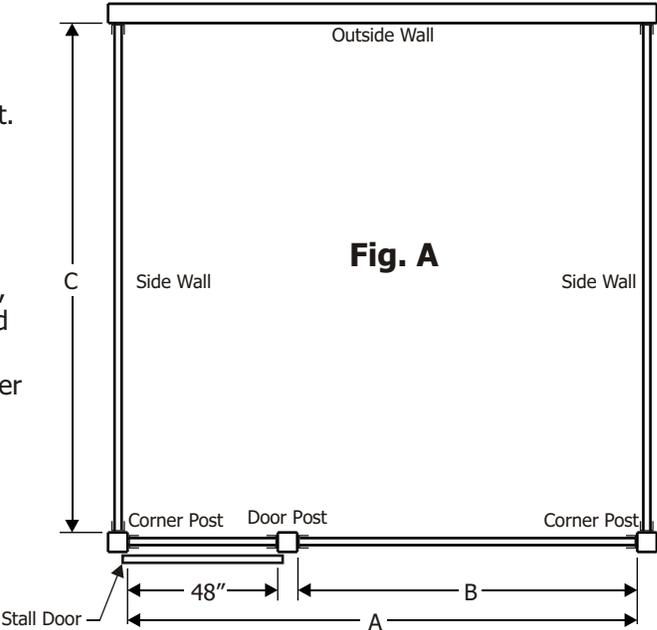
Standard Stalls

Installation Instructions



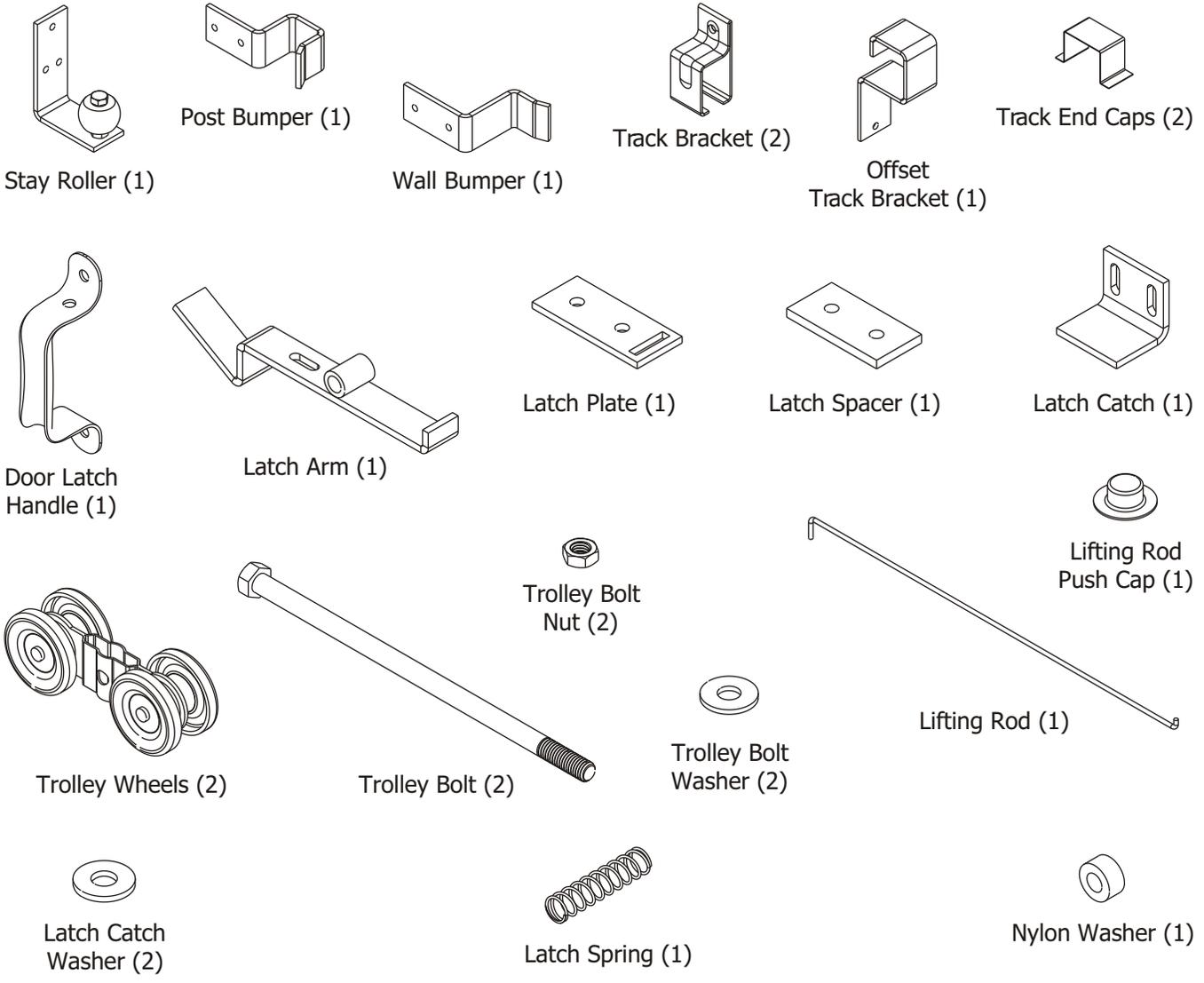
Before You Start

- Typical stall sizes are 10' x 10', 12' x 12' or 10' x 12', but virtually any size can be built using the stall system.
- Make sure to plan for additions to your stable ahead of time.
- All measurements are based on finished wood sizes. (Example: 2" x 6" = 1 1/2" x 5 1/2")
- Tongue & groove boards are recommended for filler wood. Account for loss of height due to tongue & groove.
- Pressure treated wood is recommended for posts and bottom two boards of the stall fronts and partitions.
- Corner posts can be set 10' or 12' (or any other spacing as desired) on center to fit building design or special needs. The grill length (See dimension B in Fig. A) of a standard 10' stall front is 65" and 91" for a 12' stall front. However, grill sections can be combined or cut down to create any size of stall front you desire.
- The inside distance between the door posts (See Fig. A) must be 48". Posts used for the installation may be 4x4, 4x6 or 6x6. If top of posts are not going to be anchored then a sufficient amount of post should be placed deep enough in the footing to provide adequate holding power (3' depth recommended).
- Install the corner posts first followed by the door posts. Make sure all posts are plumb, true and level.
- Wall sections that span over 12' long will require a 4x4 center support post.
- Drilling pilot holes is recommended to prevent splitting of wood.

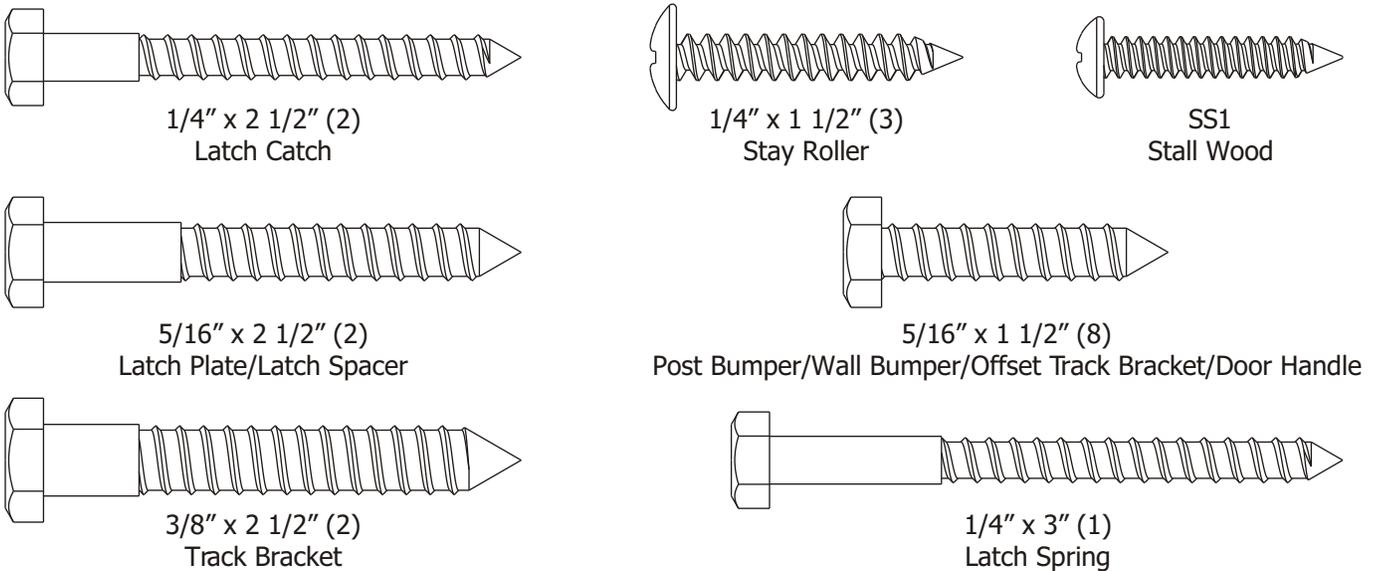


Wood Specifications for RAMM Welded Stalls			
SECTION	10 FT. STALL	12 FT. STALL	14 FT. STALL
Front Walls	(10) 2" x 6" x 10'	(10) 2" x 6" x 12'	(10) 2" x 6" x 14'
Header Board	(1) 2" x 10" x 10'	(1) 2" x 10" x 12'	(1) 2" x 10" x 14'
Grill Partitions	(10) 2" x 6" x 10'	(10) 2" x 6" x 12'	(10) 2" x 6" x 14'
Header Board	(1) 2" x 10" x 10'	(1) 2" x 10" x 12'	(1) 2" x 10" x 14'
Solid Partitions	(18) 2" x 6" x 10'	(18) 2" x 6" x 12'	(18) 2" x 6" x 14'
Posts*	(3) Needed per stall system except when stalls are added next to each other. * See Fig. A above		
	4x4		
	4x6		
	6x6		

Part Identification - Square Track Hardware Kit

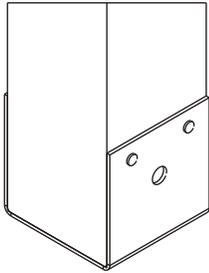


(Screws shown actual size)

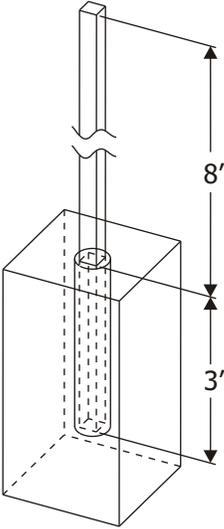


Post Installation

Posts can be installed in several ways. The most common is to auger into the ground or using post anchoring plates to a concrete base.

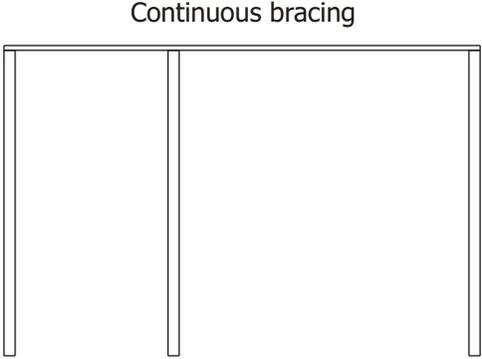


Post Anchor Plate



Augered in Ground

 When you auger posts, all posts should be installed with the top at least 8' above the ground.



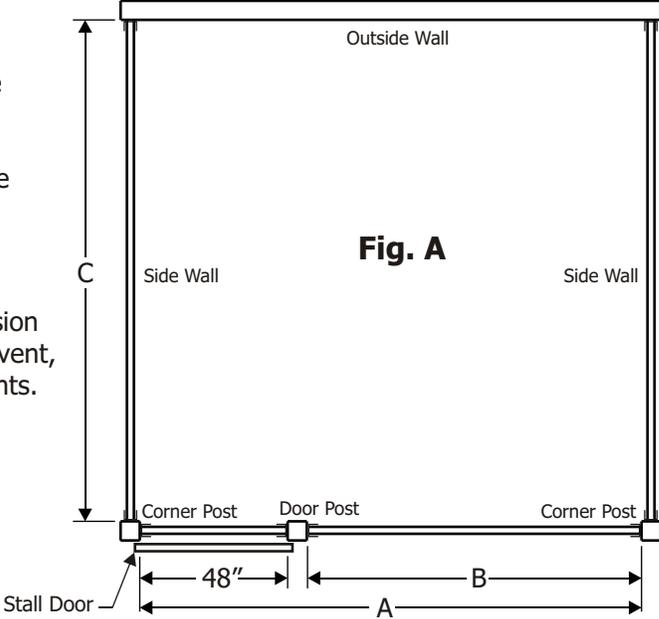
 Continuous top bracing must be used on free standing or cathedral ceilings when posts are not secured to ceilings or rafters.

1. Refer to Fig. A to determine post locations for your stall size.
2. Install corner posts first. Be careful to stay within the dimensions A and C per the chart.
3. Install door post 48" from corner post with a tolerance of +/- 1/4".

NOTE: Check all posts for level, square and plumb.

4. Dimension B should be treated as the variable dimension if a problem with post location should arise. In this event, it may be necessary to cut some of the grill components.

Stall Dimensions using 4x4 (3-1/2" x 3-1/2") Posts		
Dimension	10' Stall Front	12' Stall Front
A	116 1/2"	142 1/2"
B	65"	91"
C	120"	144"



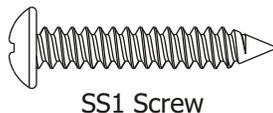
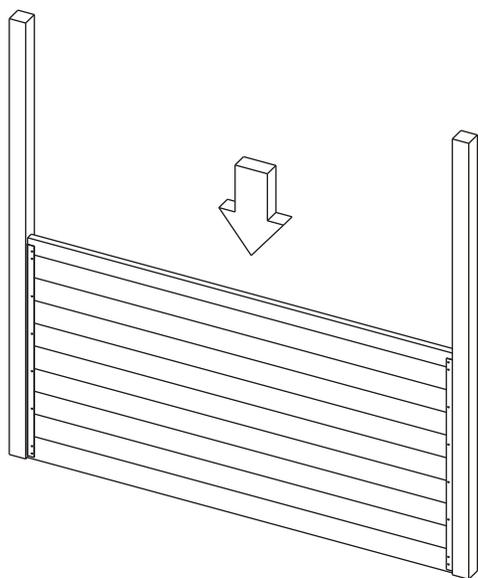
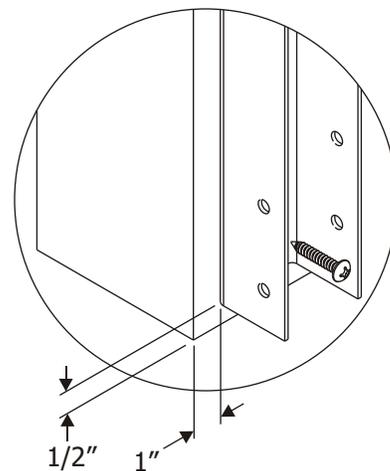
 **CHECK FOR SQUARE:** Measure from one corner diagonally to the opposite corner (top left to bottom right) and repeat for the other corner. Measurements should be the same. If they are not, tap the corner of the longest measurement until you have two equal measurements. This will ensure your work is square.

Stall Front Assembly

Place 46 1/2" U-channels 1" from front face of posts and 1/2" above floor on corner and door posts.

Check that channels are level and plumb.

Fasten with provided SS1 screws through holes in channel.



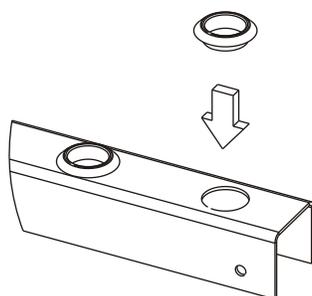
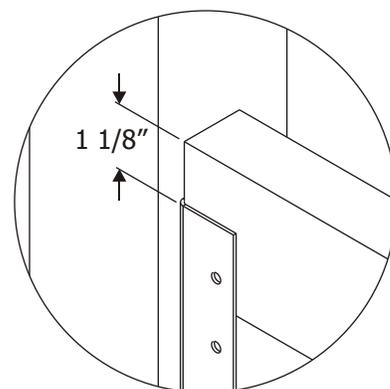
SS1 Screw

Cut lumber 1/4" to 3/8" less than the distance measured between the inside faces of the U-channel.

Slide first board down to the bottom of the U-channel ensuring that it is level. Pressure treated lumber can be used for the bottom of the stall wall. When using pressure treated lumber, proper coated screws must be used.

Secure bottom board with provided SS1 screws before installing the remaining boards.

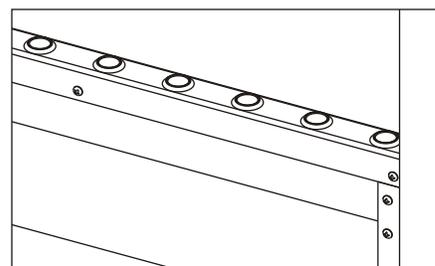
Install remaining boards ensuring the last board is 1 1/8" above the U-channels. It may be necessary to rip a board to achieve the correct height.



Firmly press in rubber grommets into holes for the top and bottom grill channels.

Place bottom grill channel over the last board so it rests on top of the U-channel.

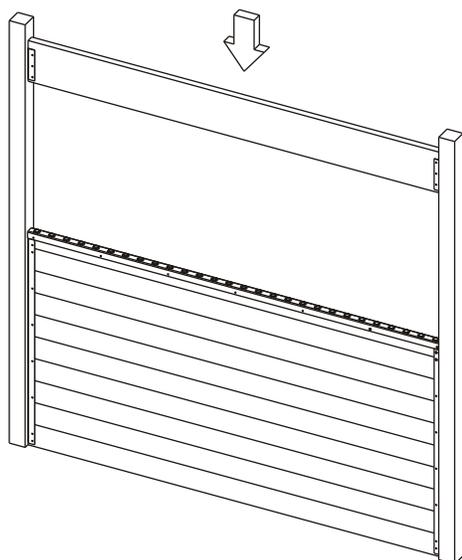
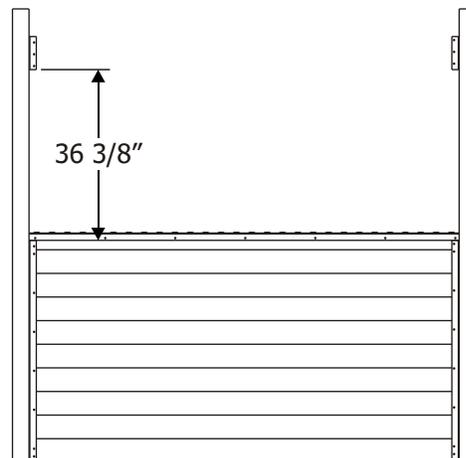
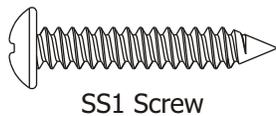
Fasten with SS1 screws provided.



Stall Front Assembly (cont.)

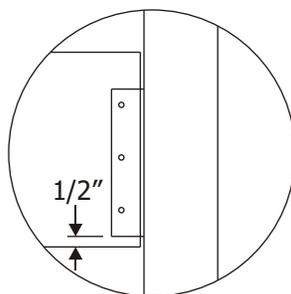
From the top of the 46 1/2" U-channel, measure up 36 3/8" and place a mark on the posts.

Place 7" U-channels against posts at the mark. Using a level or other type of straight edge, align 7" U-channel with 46 1/2" U-channel, then fasten to posts with provided SS1 screws.



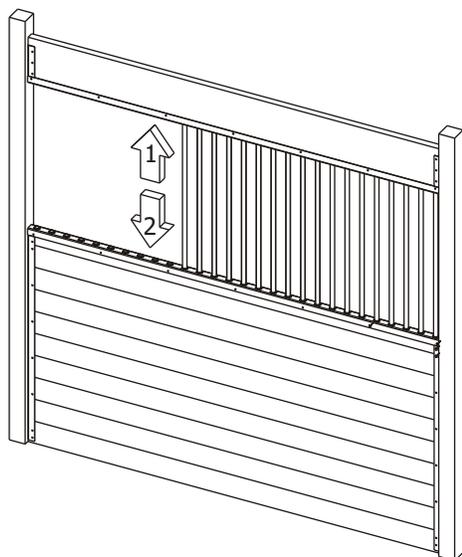
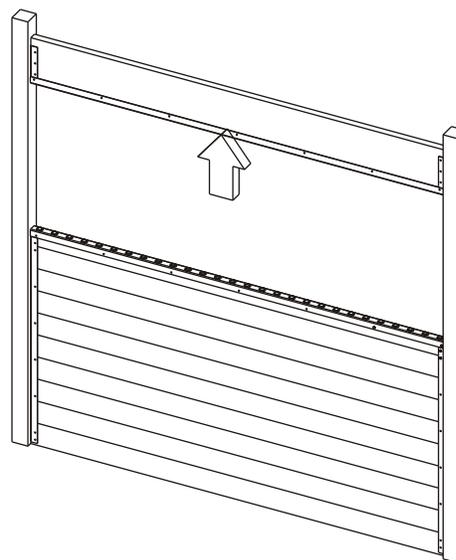
Insert a 2 x 10 board in the 7" U-channels allowing it to extend 1/2" below the 7" U-channels.

Use one SS1 screw at each end to temporarily hold the header board in place.



Place top grill channel over 2 x 10 and against bottom of 7" U-channel.

Using a couple of SS1 screws provided, temporarily fasten top grill channel to 2 x 10.



Starting at one end, first slide the grill bar up into the grommet in the top grill channel, second insert the grill bar into the grommet in the bottom grill channel.

Repeat until all the grill bars are inserted.

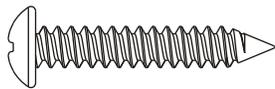
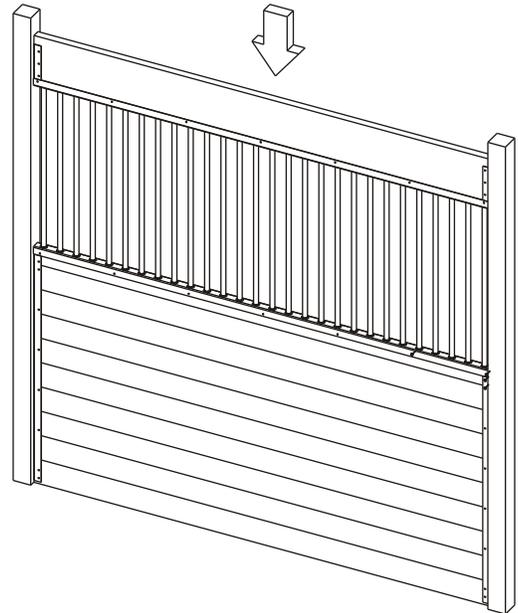
Stall Front Assembly (cont.)

After all the bars are inserted, remove the temporary screws holding the top grill channel and 2 x 10 header board.

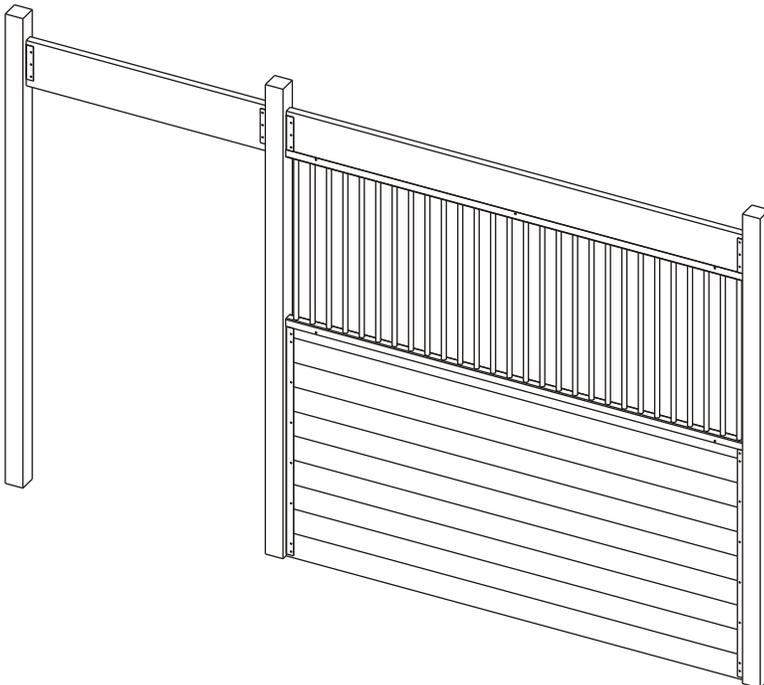
Push or pull down on the 2 x 10 header board until it sits down evenly on top of the grill bars.

Make sure the top grill channel is up against the bottom of the 7" U-channel.

Secure the 2 x 10 header board and top grill channel with provided SS1 screws.



SS1 Screw

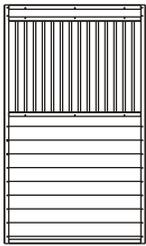


Install two 7" U-channels in the door opening aligning them with the 7" U-channels in the front.
(Measure from top of post to top of 7" U-channel.)

Fasten to posts with SS1 screws.

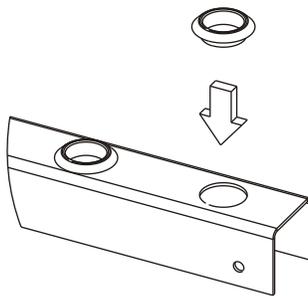
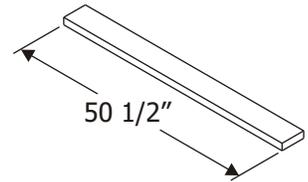
Insert 2x10 header board, align with top of 2x10 in front and fasten to the U-channels with SS1 screws.

Stall Door Assembly - Grill Top



Grill Top

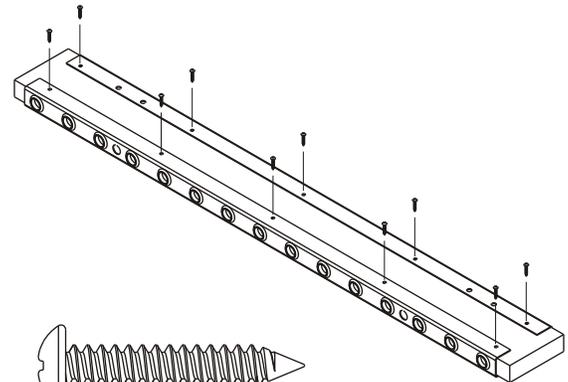
Cut 2 x 6 lumber to 50 1/2". The number of pieces may vary depending on the material used.



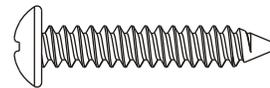
Firmly press in rubber grommets into holes on the top and bottom grill channels.

Place a 2 x 6 cut at 50 1/2" between the door top channel and door top grill channel. Space the lumber evenly from both ends of the channels making sure the 3/4" trolley holes are aligned.

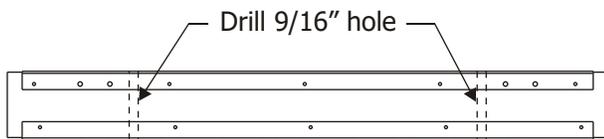
Using SS1 screws provided, attach lumber and channels together.



Only put screws on front or outside of stall door.



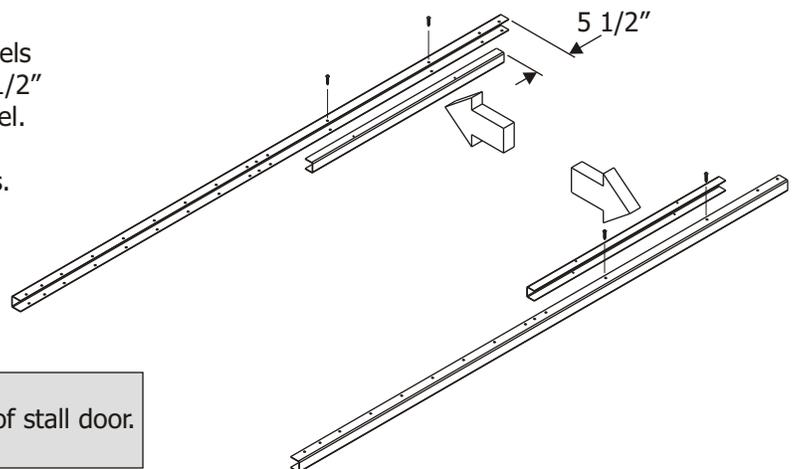
SS1 Screw



Drill 9/16" holes completely through the wood using the 3/4" punched holes as a guide. Drill in from both sides if your drill bit is not long enough.

Slide door insert channels into door side channels aligning holes. There will be approximately 5 1/2" from top of insert channel to top of side channel.

Fasten together through holes with SS1 screws.



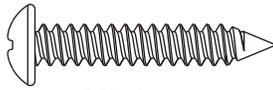
Only put screws on front or outside of stall door.

Stall Door Assembly - Grill Top (cont.)

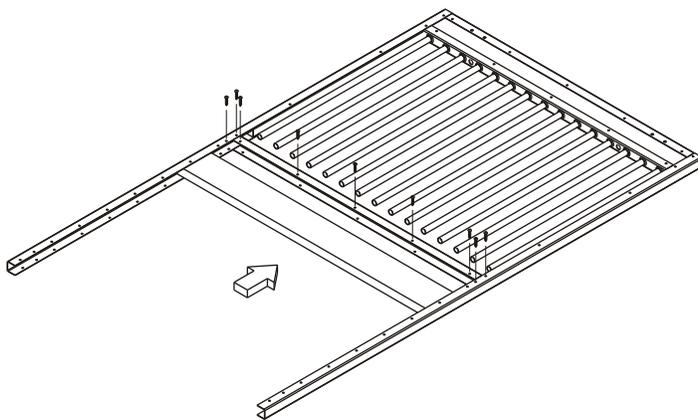
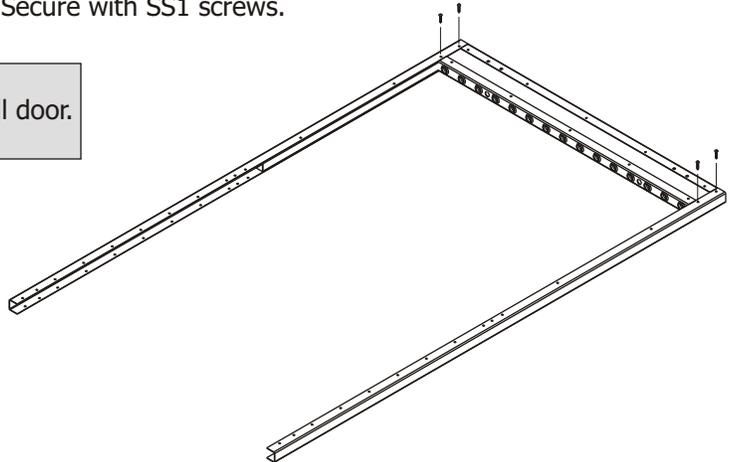
Align top of door side channels with top of channel. Secure with SS1 screws.



Only put screws on front or outside of stall door.



SS1 Screw



Center door bottom grill channel on a 2 x 6 cut at 50 1/2" and insert into door side channels.

Starting at one end, add grill bars into top and bottom grill channels.

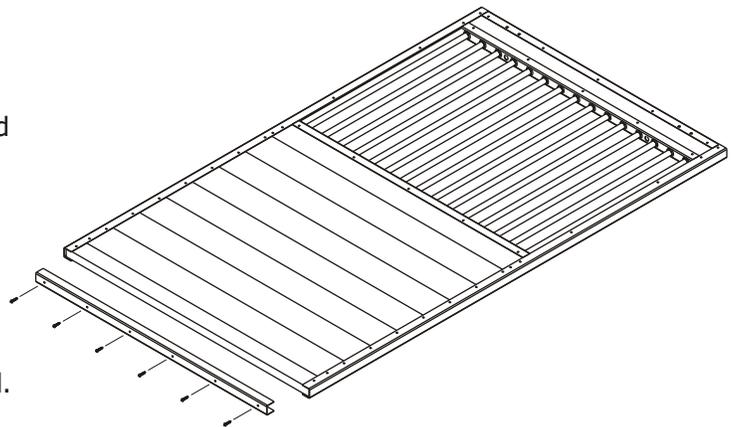
Push 2 x 6 until it is tight up against insert channels/bottom grill channel/grill bars.

Secure bottom grill channel and side channels to 2 x 6 with SS1 screws.

Insert remaining 2 x 6 x 50 1/2" lumber. The last board may need to be ripped so it does not extend past the end of the door side channels.

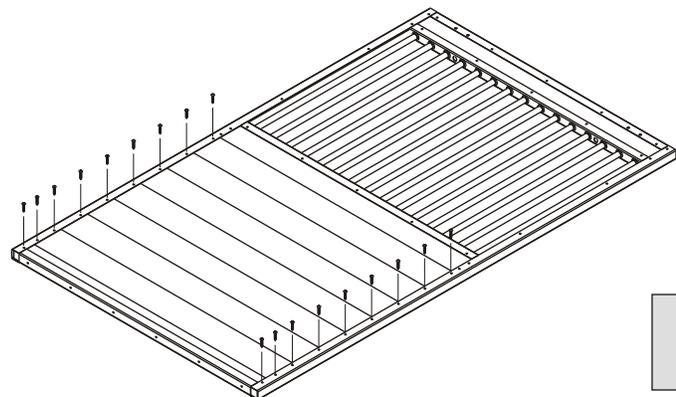
Insert door bottom channel over the last piece of lumber and flush with the bottom of the door side channels.

Fasten door bottom channel to last board with SS1 screws up through holes in bottom of channel.



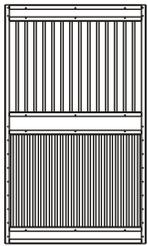
Make sure door is square and all channels and lumber are tight against each other.

Screw lumber to door side channels with SS1 screws.



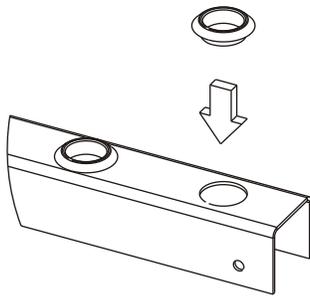
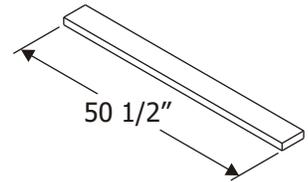
Only put screws on front or outside of stall door.

Stall Door Assembly - Full Grill



Full Grill

Cut two pieces of 2 x 6 and one piece of 2 x 8 lumber to 50 1/2".



Firmly press in rubber grommets into holes on the top and bottom grill channels.

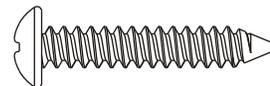
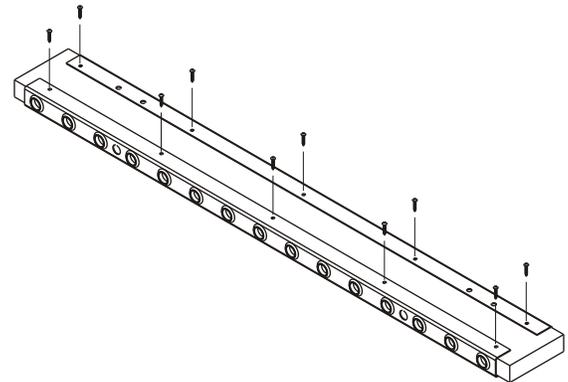
Door Header Assembly:

Place a 2 x 6 cut at 50 1/2" between the door top channel and door top grill channel. Space the lumber evenly from both ends of the channels making sure the 3/4" trolley holes are aligned.

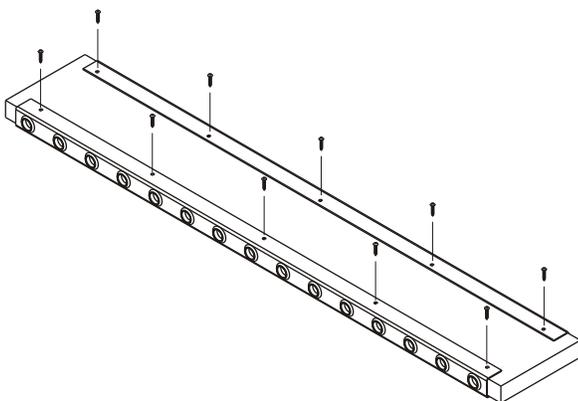
Using SS1 screws provided, attach lumber and channels together.

Bottom Grill Assembly:

Repeat for door bottom channel and door bottom grill channel with 2" bar spacing.



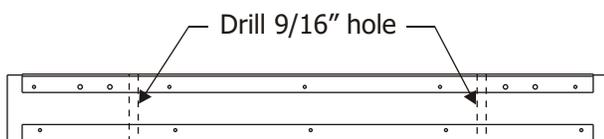
SS1 Screw



Center Grill Assembly:

Place a grill channel with 3 1/2" bar spacing and a grill channel with 2" bar spacing evenly on a 2 x 8 cut at 50 1/2".

Fasten channels to 2 x 8 with provided SS1 screws.

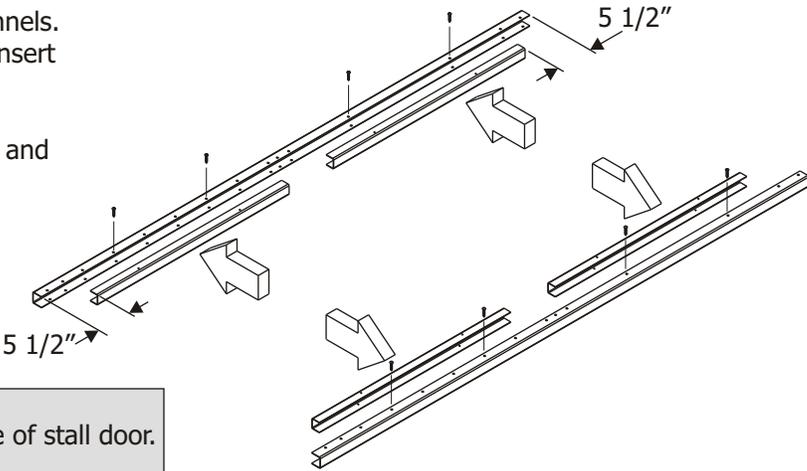
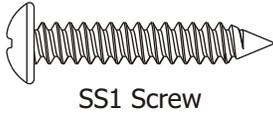


Drill 9/16" holes completely through the wood of the door header using the 3/4" punched holes as a guide. Drill in from both sides if your drill bit is not long enough.

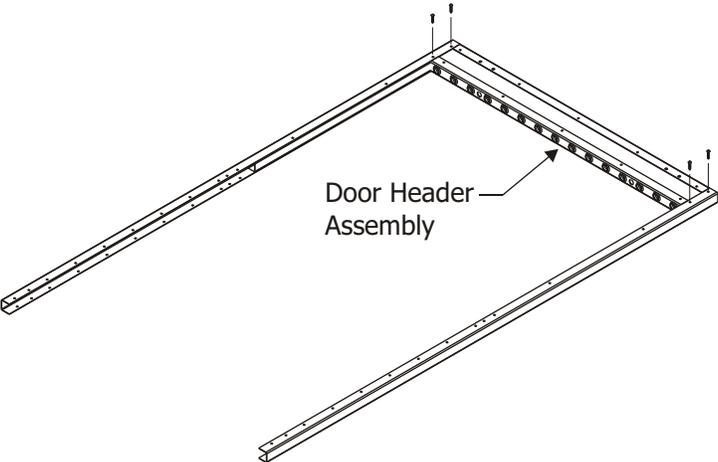
Stall Door Assembly - Full Grill (cont.)

Slide door insert channels into door side channels. Insert channels should be 5 1/2" from edge insert channel to edge of side channel.

Drill pilot holes through holes in side channel and fasten together with SS1 screws.



 Only put screws on front or outside of stall door.



Align top of door side channels with top of door header assembly.

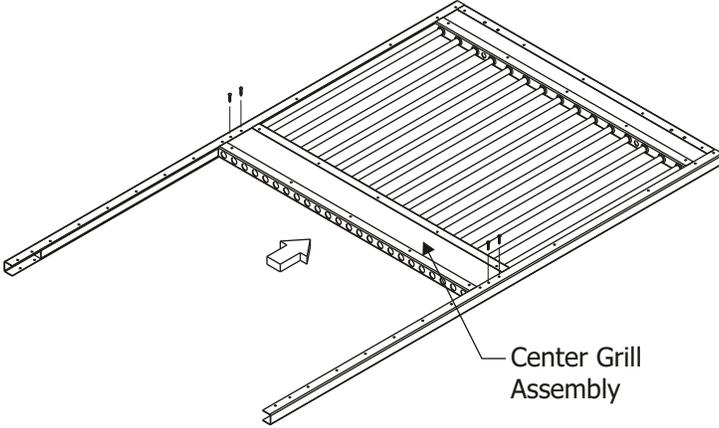
Secure with SS1 screws.

Place center grill assembly in the approximate center of the door between the door side channels.

Starting at one end, add grill bars into the top and center grill assemblies.

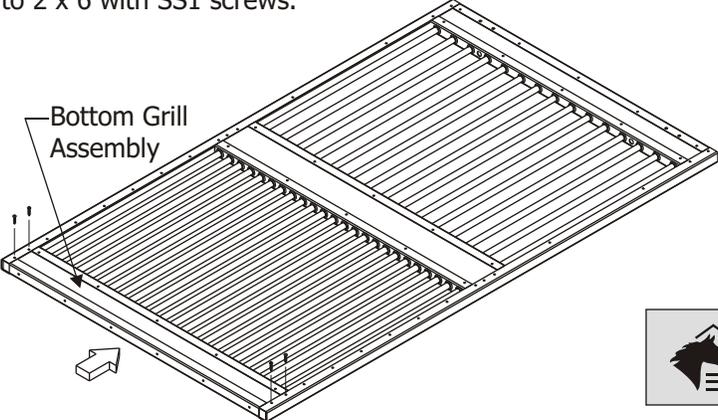
Push center grill assembly tight up against insert channels/grill bars.

Secure center grill assembly and side channels to 2 x 6 with SS1 screws.



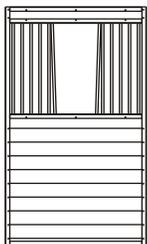
Insert grill bars into center grill assembly then slide bottom grill assembly into the side channels until bottom edge of bottom grill assembly is flush with edge of side channels.

Check that door is square and secure bottom grill assembly with provided SS1 screws.



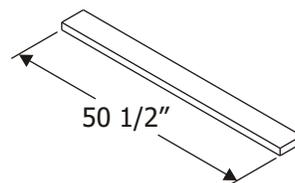
 Only put screws on front or outside of stall door.

Stall Door Assembly - V-Door



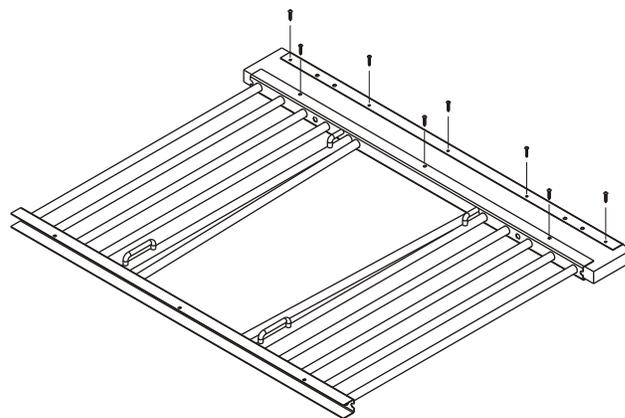
V-Door

Cut 10 pieces of 2 x 6 lumber to 50 1/2"
The number of pieces may vary depending
on the material used.

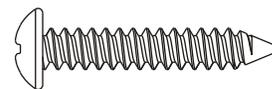


Place a 2 x 6 cut at 50 1/2" between the door top channel and V-grill. Space the lumber evenly from both ends of the channels making sure the 3/4" trolley holes are aligned.

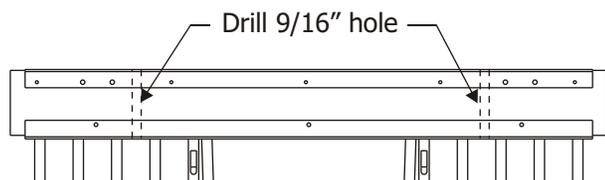
Using SS1 screws provided, attach lumber and channels together.



Only put screws on front or outside of stall door.



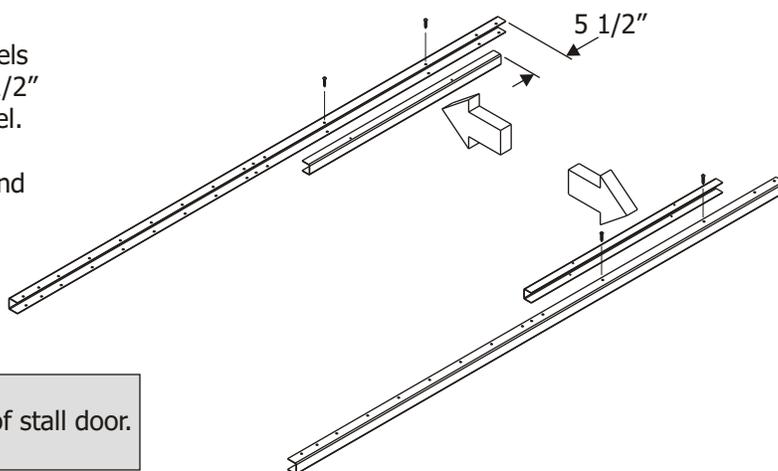
SS1 Screw



Drill 9/16" holes completely through the wood using the 3/4" punched holes as a guide.

Slide door insert channels into door side channels aligning holes. There will be approximately 5 1/2" from top of insert channel to top of side channel.

Drill pilot holes through holes in side channel and fasten together with SS1 screws.



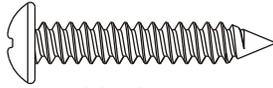
Only put screws on front or outside of stall door.

Stall Door Assembly - V-Door (cont.)

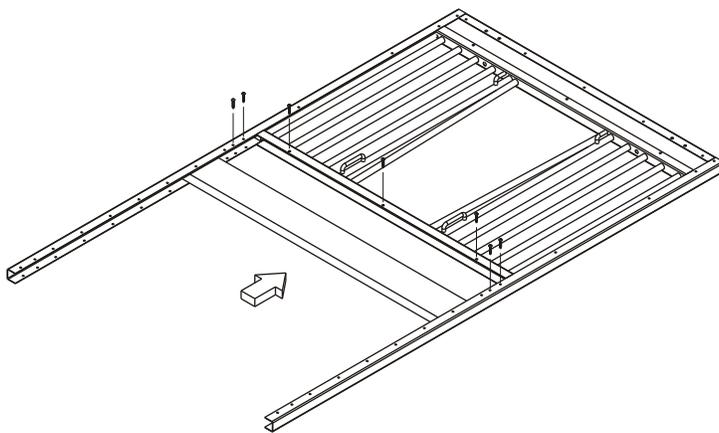
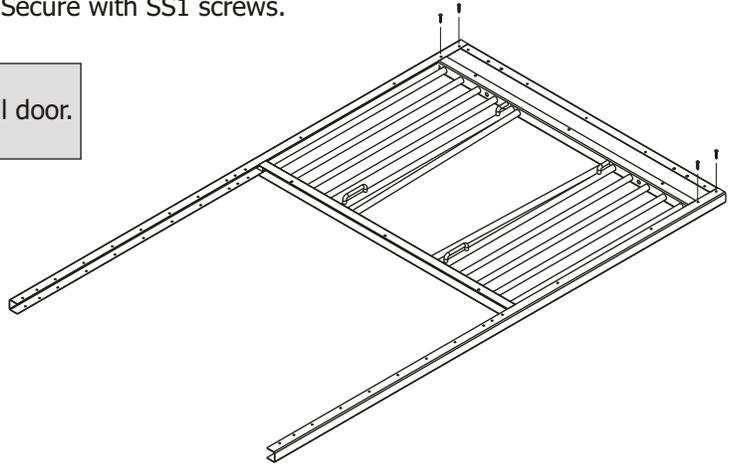
Align top of door side channels with top of channel. Secure with SS1 screws.



Only put screws on front or outside of stall door.



SS1 Screw



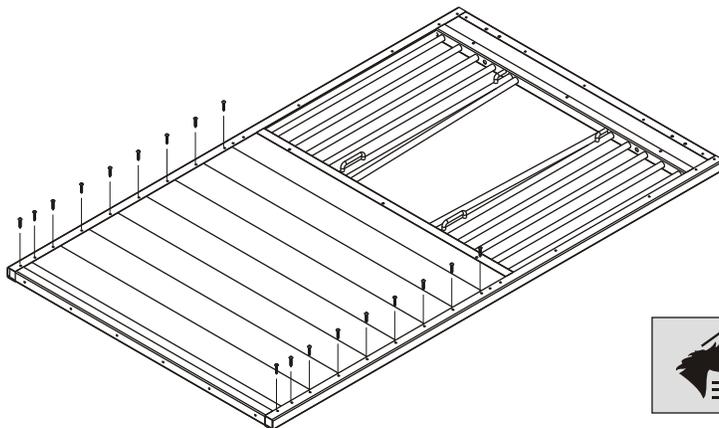
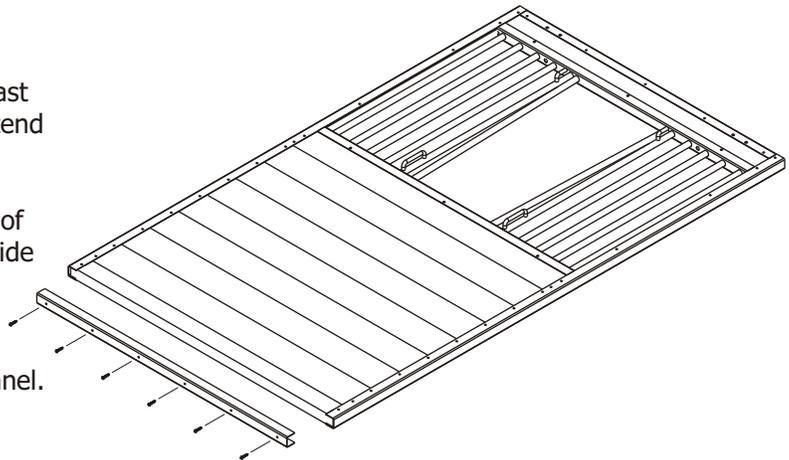
Push 2 x 6 until it is tight up against insert channels/bottom grill channel/grill bars.

Secure V-grill and side channels to 2 x 6 with SS1 screws.

Insert remaining 2 x 6 x 50 1/2" lumber. The last board may need to be ripped so it does not extend past the end of the door side channels.

Insert door bottom channel over the last piece of lumber and flush with the bottom of the door side channels.

Fasten door bottom channel to last board with SS1 screws up through holes in bottom of channel.



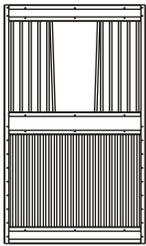
Make sure door is square and all channels and lumber are tight against each other.

Screw lumber to door side channels with SS1 screws.



Only put screws on front or outside of stall door.

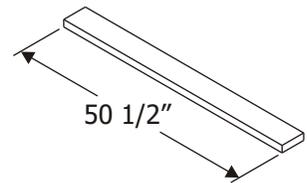
Stall Door Assembly - Full Grill V-Door



Full Grill
V-Door

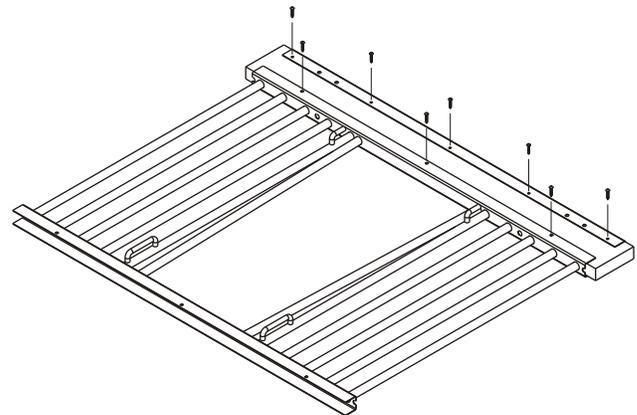
Cut one 2 x 6 and two pieces of 2 x 8 lumber to 50 1/2".

One of the 2 x 8 will need to be ripped to 6 1/8".

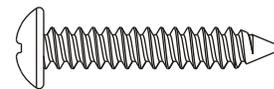


Place a 2 x 6 cut at 50 1/2" between the door top channel and V-grill. Space the lumber evenly from both ends of the channels making sure the 3/4" trolley holes are aligned.

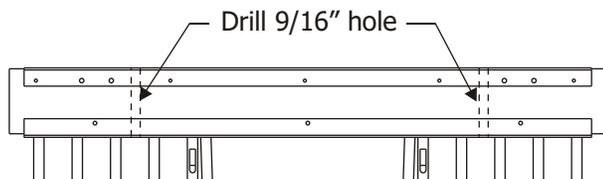
Press parts together, then using SS1 screws provided, attach lumber and channels together.



Only put screws on front or outside of stall door.



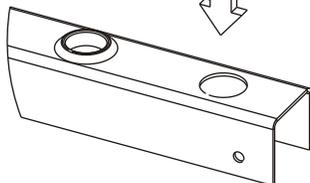
SS1 Screw



Drill 9/16" holes completely through the wood using the 3/4" punched holes as a guide.

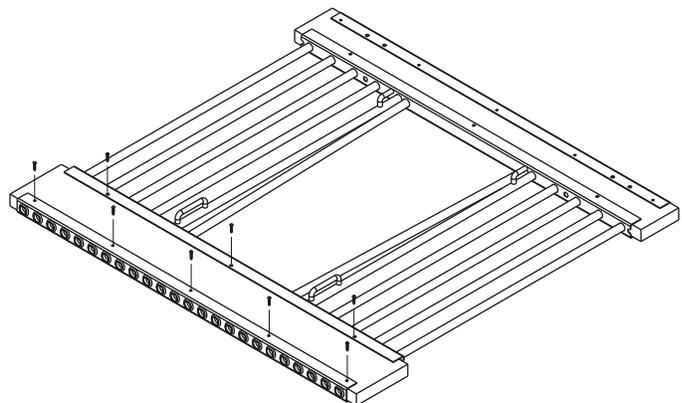


Firmly press in rubber grommets into holes in the grill channels.



Insert 2 x 8 cut at 50 1/2" into bottom channel of V-grill then place a grill channel with 2" bar spacing on the 2 x 8. Be sure 2 x 8 and channel are aligned and evenly spaced.

Press channels and 2 x 8 together then fasten with provided SS1 screws.

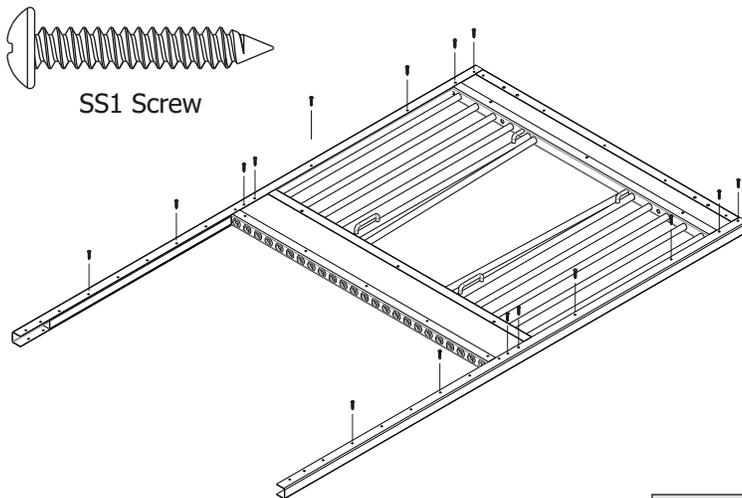
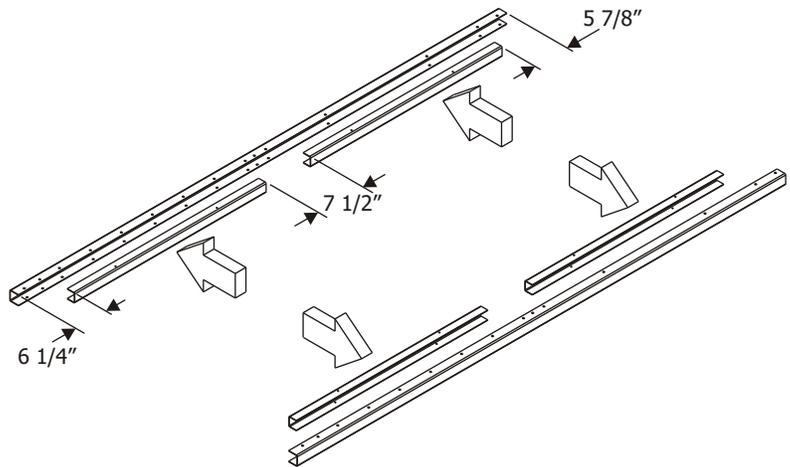


Stall Door Assembly - Full Grill V-Door (cont.)

Slide 33" door insert channels into top section of door side channels. Insert channels should be 5 7/8" from the top edge of side channel.

Insert the 34" insert channels into the bottom section of the side channel. The 34" insert channels should be 7 1/2" from the 33" insert channels and 6 1/4" from the bottom edge of the side channel.

A rubber mallet may need to be used to seat insert channels into side channels.



Place door side channels to V-grill assembly aligning top of door side channels with top of V-grill.

Make any adjustments to insert channels so they fit proper to the wood and V-grill.

Secure V-grill assembly and side channels together with SS1 screws.

Drill pilot holes through holes in side channel and fasten insert channels to side channels with SS1 screws.

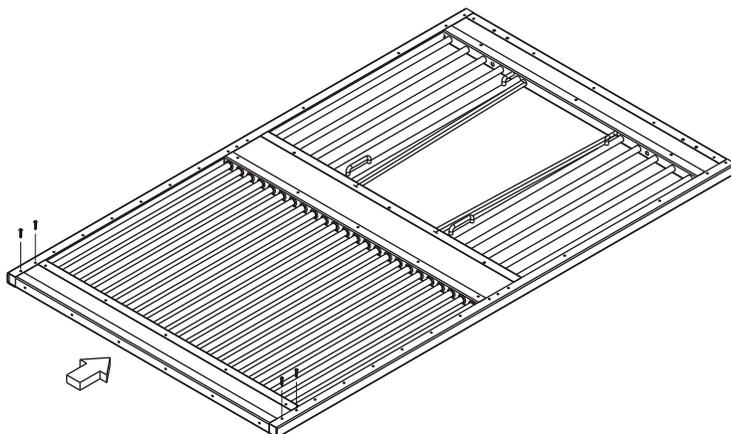
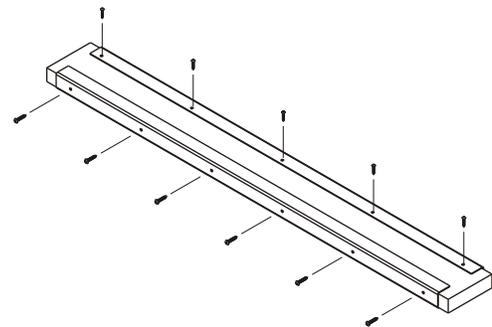


Only put screws on front or outside of stall door.

Bottom Grill Assembly:

Place a 2 x 8 ripped to 6 1/8" wide and cut at 50 1/2" long, between the door bottom channel and door grill channel. Space the lumber evenly from both ends of the channels.

Using SS1 screws provided, attach lumber and channels together.

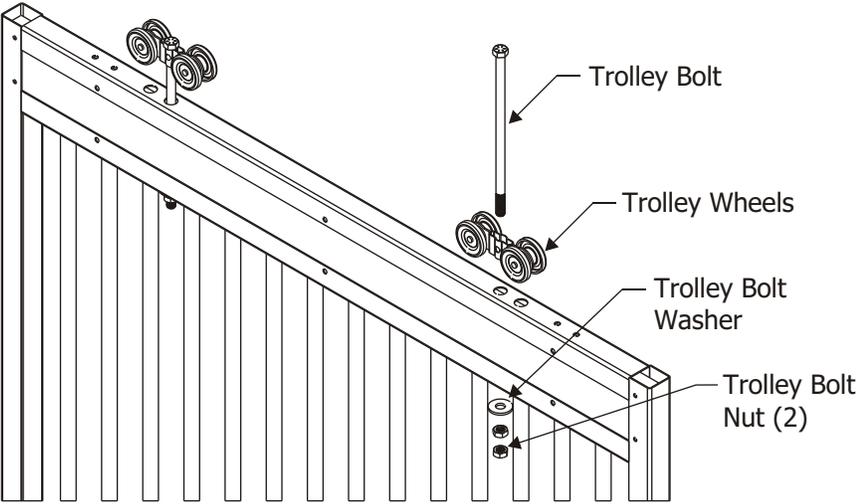


Insert grill bars into V-grill assembly then slide bottom grill assembly into the side channels until bottom edge of bottom grill assembly is flush with edge of side channels.

Check that door is square and secure bottom grill assembly with provided SS1 screws.

Door Trolley Assembly

Square Track



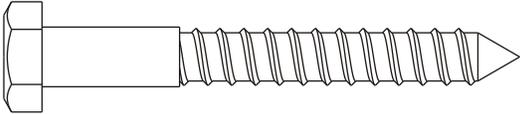
Insert Trolley Bolt through Trolley Wheel assembly then through hole in top of door.

Slip Trolley Bolt Washer over end of Trolley Bolt then add two Trolley Bolt Nuts.

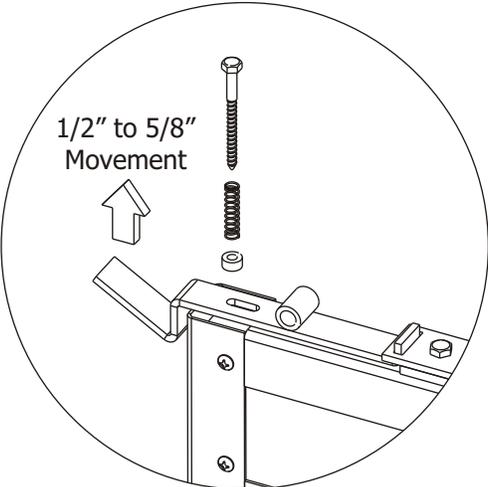
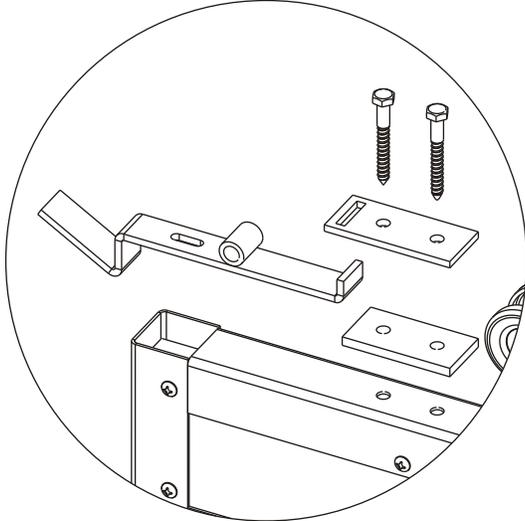
Final adjustments will be made after door is hung on track.

Door Latch/Handle Assembly

Position latch spacer, latch arm and latch plate on top of door with leg of latch arm fitting into slot of latch plate. Align with holes on top of door and fasten with provided 5/16" x 2 1/2" lags.



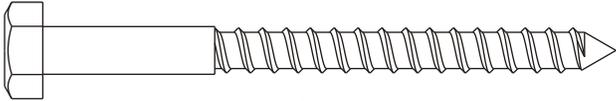
5/16" x 2 1/2"



1/2" to 5/8" Movement

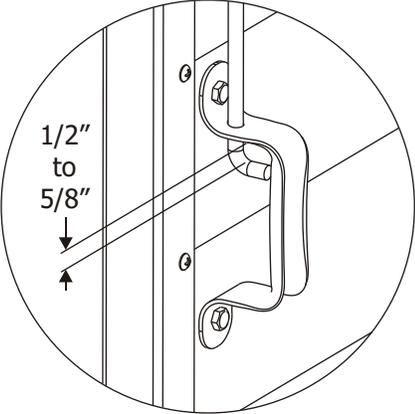
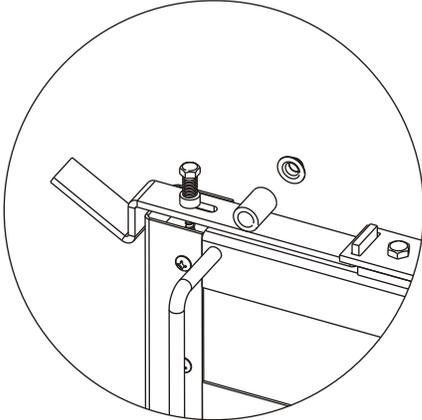
Slide latch spring over 1/4" x 3" lag then nylon washer.

Fasten screw through slot in latch arm allowing latch arm 1/2" to 5/8" vertical movement.



1/4" x 3"

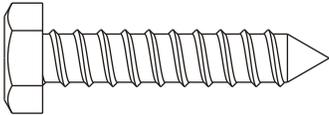
Fit long leg of lifting rod into boss of latch arm then attach lifting rod push cap onto end.



1/2" to 5/8"

Feed lifting rod through hole in door handle. Position door handle so there is approximately a 1/2" to 5/8" gap between the top of the lifting rod leg to the top of the inside of the door handle.

Check that lifting rod is plumb and level then fasten handle with 5/16" x 1 1/2" lags.



5/16" x 1 1/2"

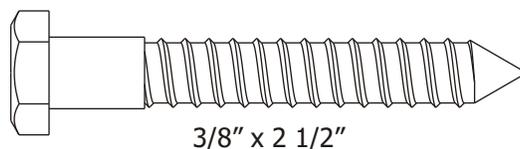
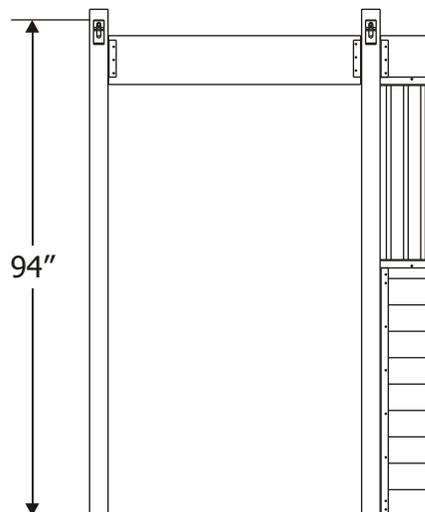
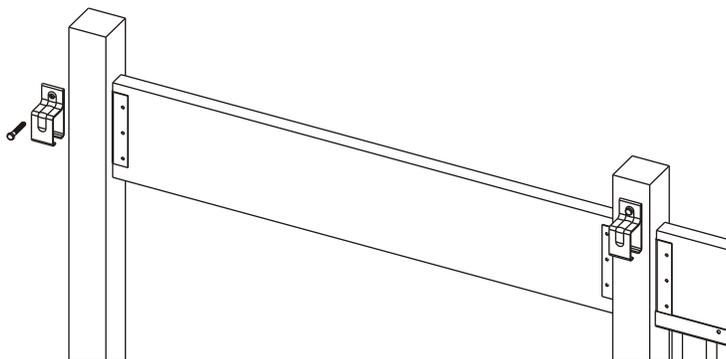
Track/Door Installation - Square Track

Measure up from the floor 94" and place a mark on the post.

Align top of track bracket with mark, center on post, then fasten with supplied 3/8" x 2 1/2" track bracket lag.

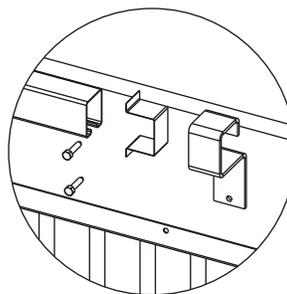
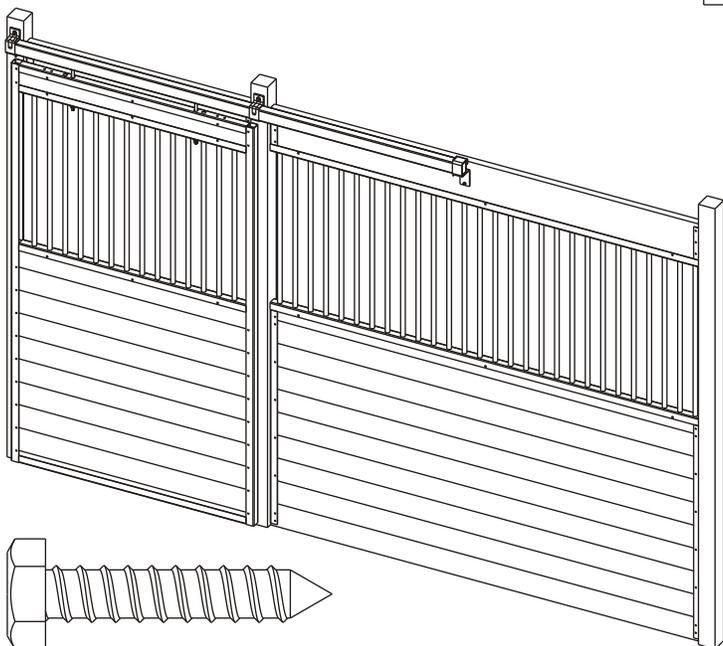
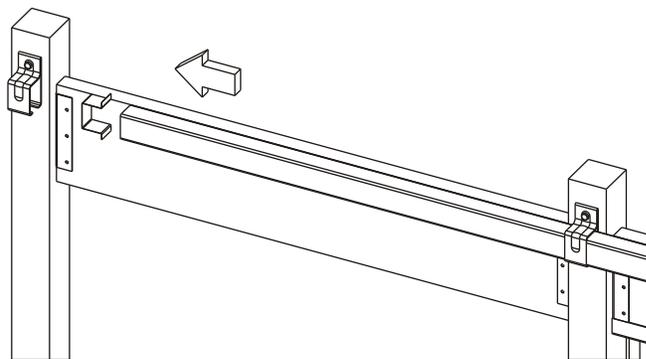
Using a level, measure over to adjoining post and mark top of track bracket.

Align, center, and attach second track bracket with other track bracket lag.



Slide square track through bracket on center post.

Slide track end cap onto end of track then finish sliding track into track bracket.



Slide rollers into the track and roll door to the closed position.

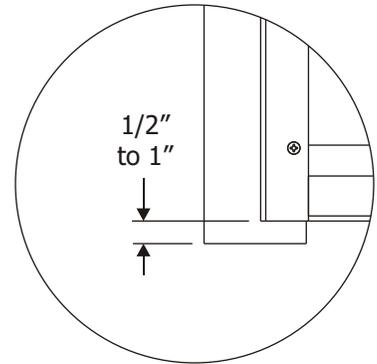
Slide track end cap onto end of track.

Slide offset track bracket onto end of track until it fits against track end cap.

Level track and fasten offset track bracket with 5/16" x 1 1/2" lags.

Door Stay/Bumper/Latch Catch Installation

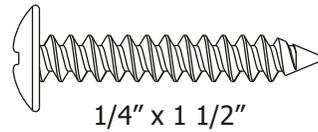
Adjust the trolleys until the door hangs approximately 1/2" to 1" from the floor.



Slide door over enough to install door stay.

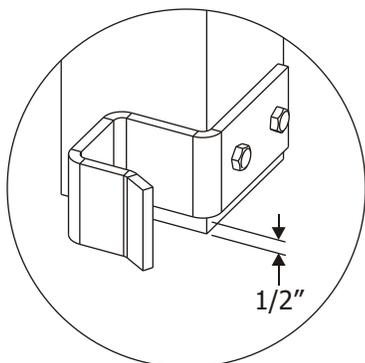
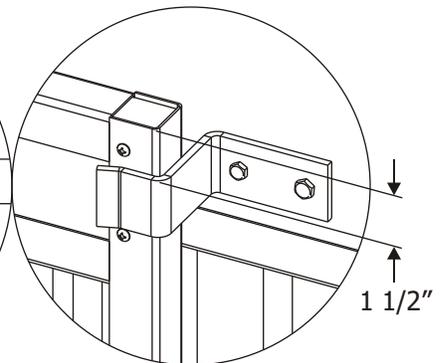
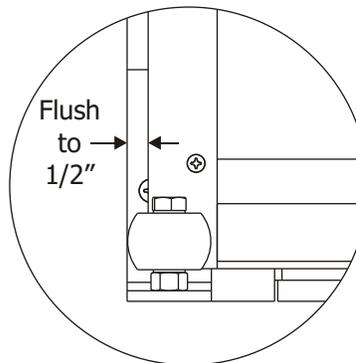
Rest door stay on floor and align with edge of center door post.

Fasten with provided 1/4" x 1 1/2" round head screws.

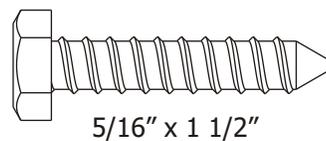


Slide door until it is flush to 1/2" from the edge of the center door post.

Place wall bumper against header board and down approximately 1 1/2" from top of door. Fasten with 5/16" x 1 1/2" lags.



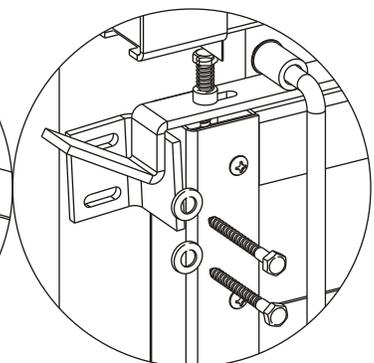
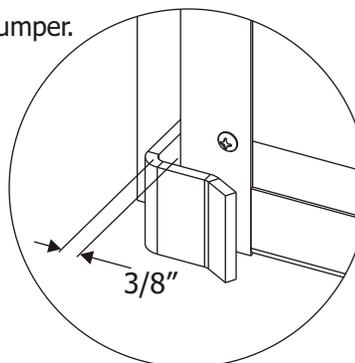
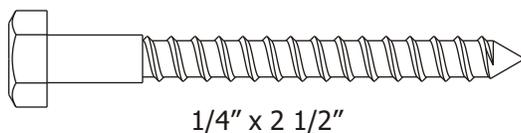
Attach post bumper to bottom of corner post approximately 1/2" above floor with provided 5/16" x 1 1/2" lags.



Close door until it is approximately 3/8" from post bumper.

Place latch catch against post and door then angle slightly.

Fasten latch catch to post with provided latch catch washers and 1/4" x 2 1/2" lags.

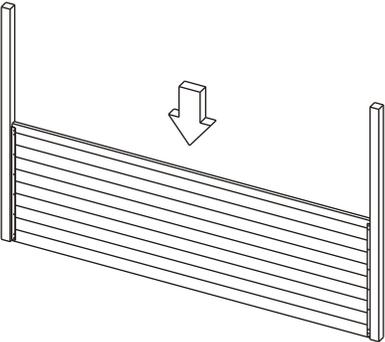
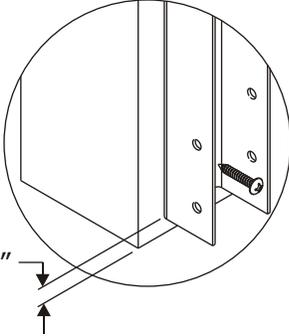


Partition Assembly - Grilled

Place 46 1/2" U-channels 1/2" above floor and centered on posts or on outside wall.

Check that channels are level and plumb.

Fasten with provided SS1 screws through holes in channel.

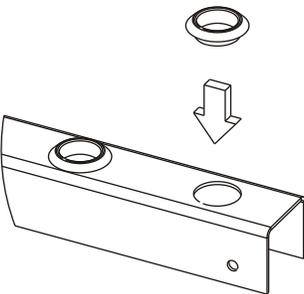
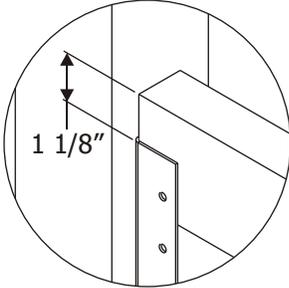


Cut lumber 1/4" to 3/8" less than the distance measured between the inside faces of the U-channel.

Slide first board down to the bottom of the U-channel ensuring that it is level. Pressure treated lumber can be used for the bottom of the stall wall. When pressure treated lumber is used, proper coated screws must be used.

Secure bottom board with provided SS1 screws before installing the remaining boards.

Install remaining boards ensuring the last board is 1 1/8" above the U-channels. It may be necessary to rip a board to achieve the correct height.



Firmly press in rubber grommets into holes on the top and bottom grill channels.



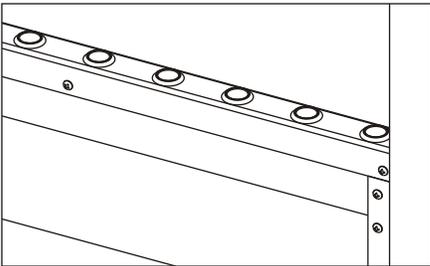
10' partition wall requires one 6' and one 4' grill channel.
 12' partition wall requires two 6' grill channels.
 14' partition wall requires one 6' and two 4' grill channels.
 * Wall sections over 12' will require a 4 x 4 center support post.

Install the 6' channel first by butting it up against the post

Place bottom grill channel over the last board so it rests on top of the U-channel.

Install the 6' channel first by butting it up against the post then install the second channel. It may be necessary to cut the second channel for the appropriate distance.

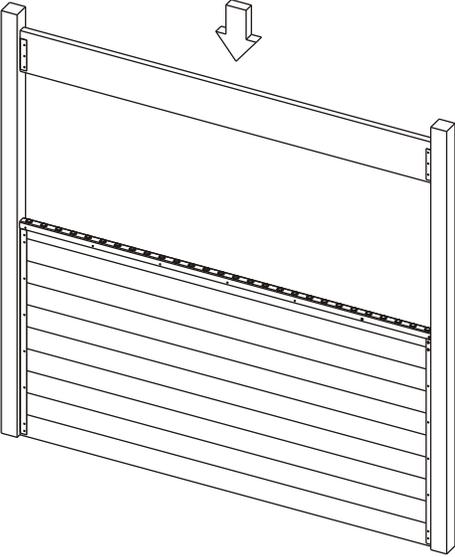
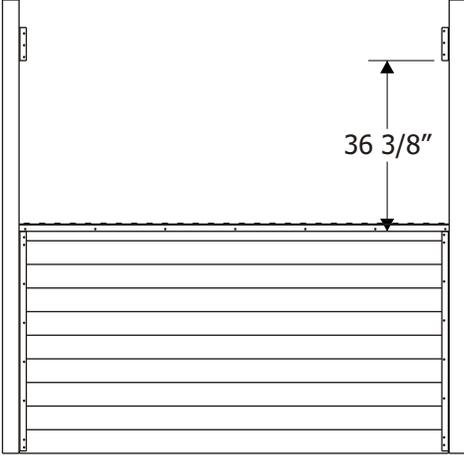
Fasten with SS1 screws provided.



Partition Assembly - Grilled (cont.)

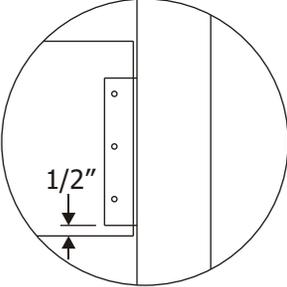
From the top of the 46 1/2" U-channel, measure up 36 3/8" and place a mark on the posts.

Place 7" U-channels against posts at the mark. Using a level or other type of straight edge, align 7" U-channel with 46 1/2" U-channel, then fasten to posts with provided SS1 screws.



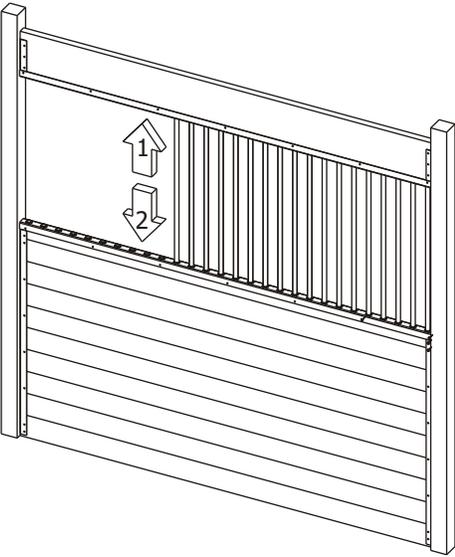
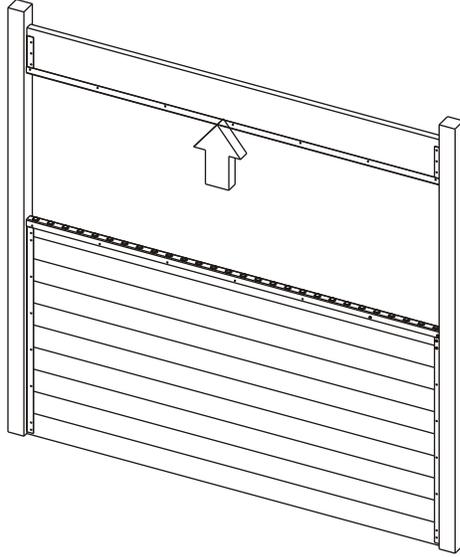
Insert a 2x10 board in the 7" U-channels allowing it to extend 1/2" below the 7" U-channels.

Use one SS1 screw at each end to temporarily hold the header board in place.



Place top grill channel over 2x10 and against bottom of 7" U-channel.

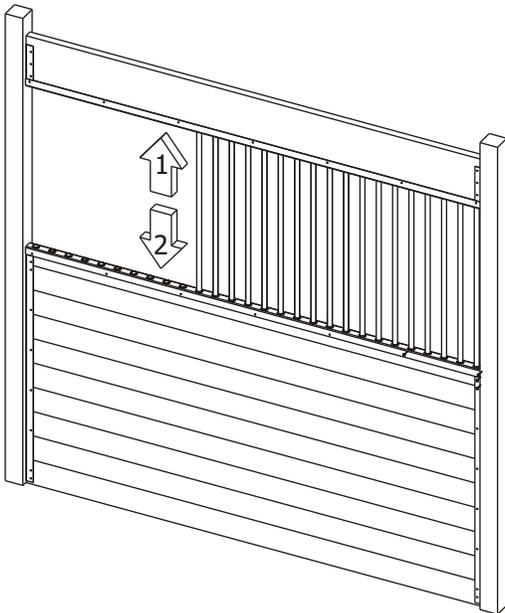
Using a couple of SS1 screws provided, temporarily fasten top grill channel to 2x10.



Starting at one end, first slide the grill bar up into the grommet in the top grill channel, second insert the grill bar into the grommet in the bottom grill channel.

Repeat until all the grill bars are inserted.

Partition Assembly - Grilled (cont.)



Starting at one end, first slide the grill bar up into the grommet in the top grill channel, second insert the grill bar into the grommet in the bottom grill channel.

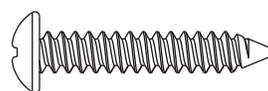
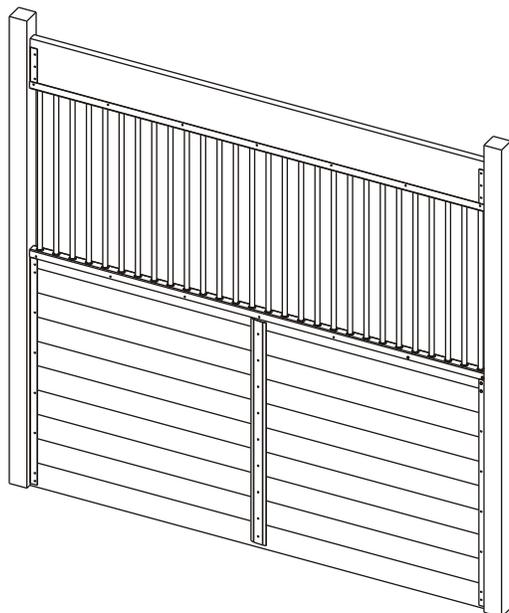
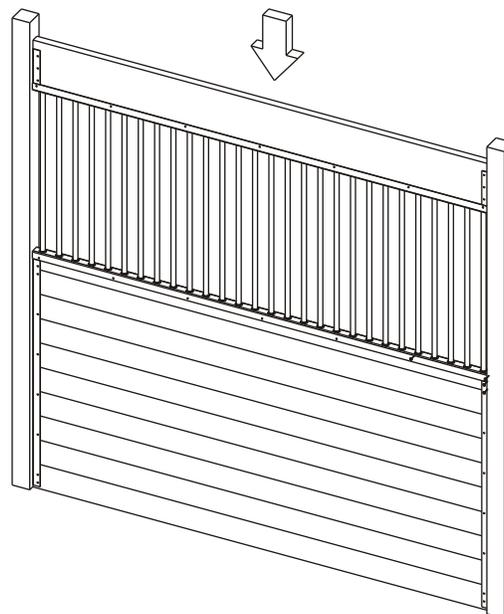
Repeat until all the grill bars are inserted.

After all the bars are inserted, remove the temporary screws holding the top grill channel and 2x10 header board.

Push or pull down on the 2x10 header board until it sits down evenly on top of the grill bars.

Make sure the top grill channel is up against the bottom of the 7" U-channel.

Secure the 2x10 header board and top grill channel with provided SS1 screws.



SS1 Screw

Center a 46 1/2" wall brace on the wall and fasten with SS1 screws.

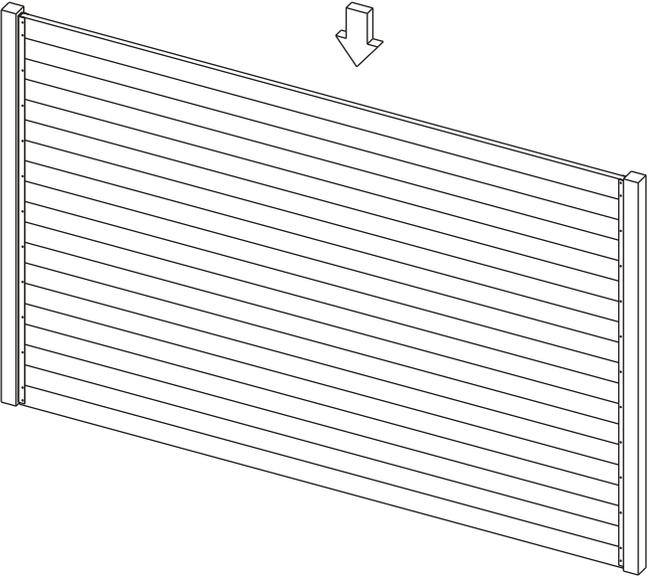
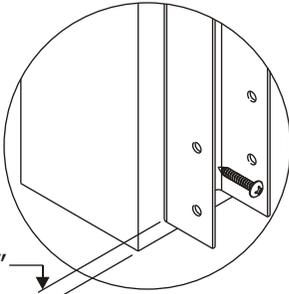
Place another wall brace on the opposite side of the wall offsetting it slightly from the previously installed wall brace so the screws will not interfere with each other when attaching.

Partition Assembly - Solid

Place 94 1/2" U-channels 1/2" above floor and centered on posts or on outside wall.

Check that channels are level and plumb.

Fasten with provided SS1 screws through holes in channel.



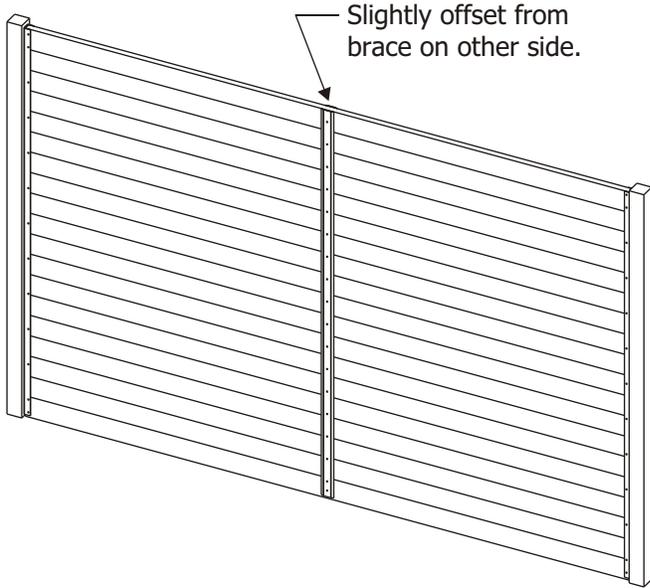
Cut lumber 1/4" to 3/8" less than the distance measured between the inside faces of the U-channel.

Slide first board down to the bottom of the U-channel ensuring that it is level. Pressure treated lumber can be used for the bottom of the stall wall. When using pressure treated lumber, proper coated screws must be used.

Secure boards with SS1 screws.

Center a 94 1/2" wall brace on the wall and fasten with SS1 screws.

Place another wall brace on the opposite side of the wall offsetting it slightly from the previously installed wall brace so the screws will not interfere with each other when attaching.



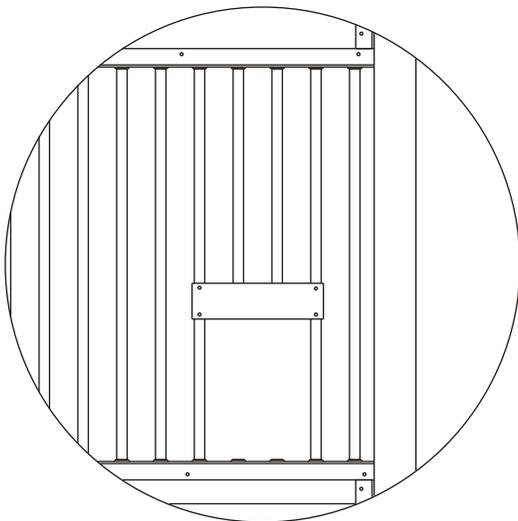
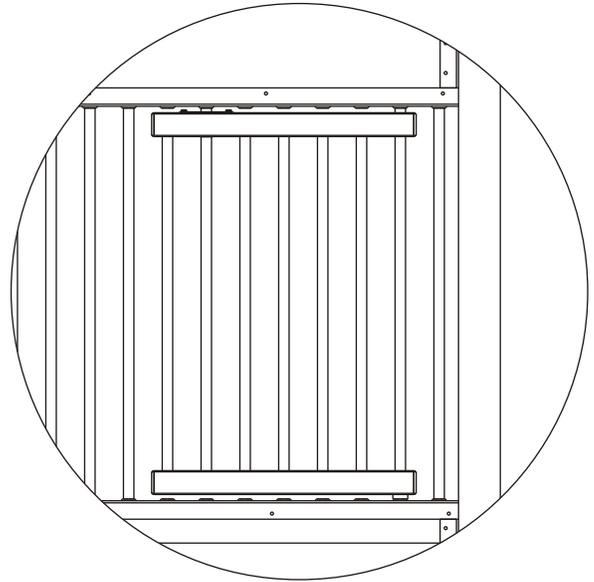
Feed Door/Feed Opening Options

Feed Door

Decide where feed door is to be located in the grill.

Omit 7 grill bars from the grill section leaving at least one bar from the end.

The feed door come completely assembled and is installed in the same way as the grill bars.



Feed Opening

Decide where feed opening is to be located.

Cut two grill bars to the desired length. Bars cut to 22" will give you approximately a 12" opening.

Slide feed opening over the two outer bars of the opening. Let the feed opening plate rest on the bottom grill channel.

Insert the two cut bars in the top grill channel and slide the feed opening up until it is tight with the two cut bars.

Use self-drilling screws to hold feed opening plate in place through holes in feed opening plate.