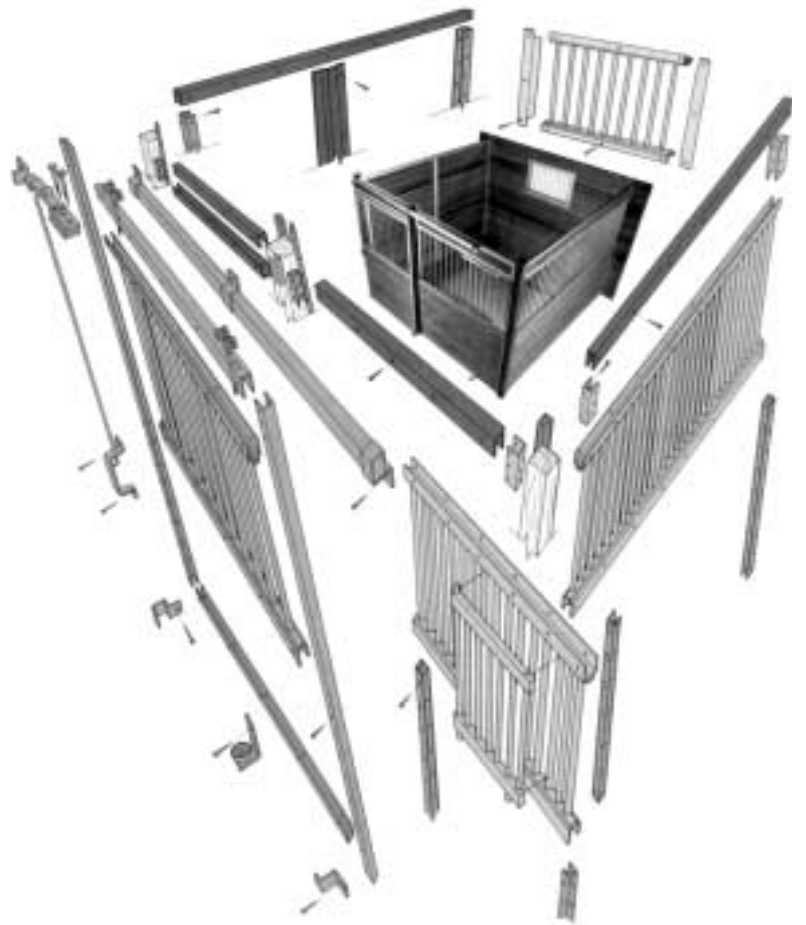


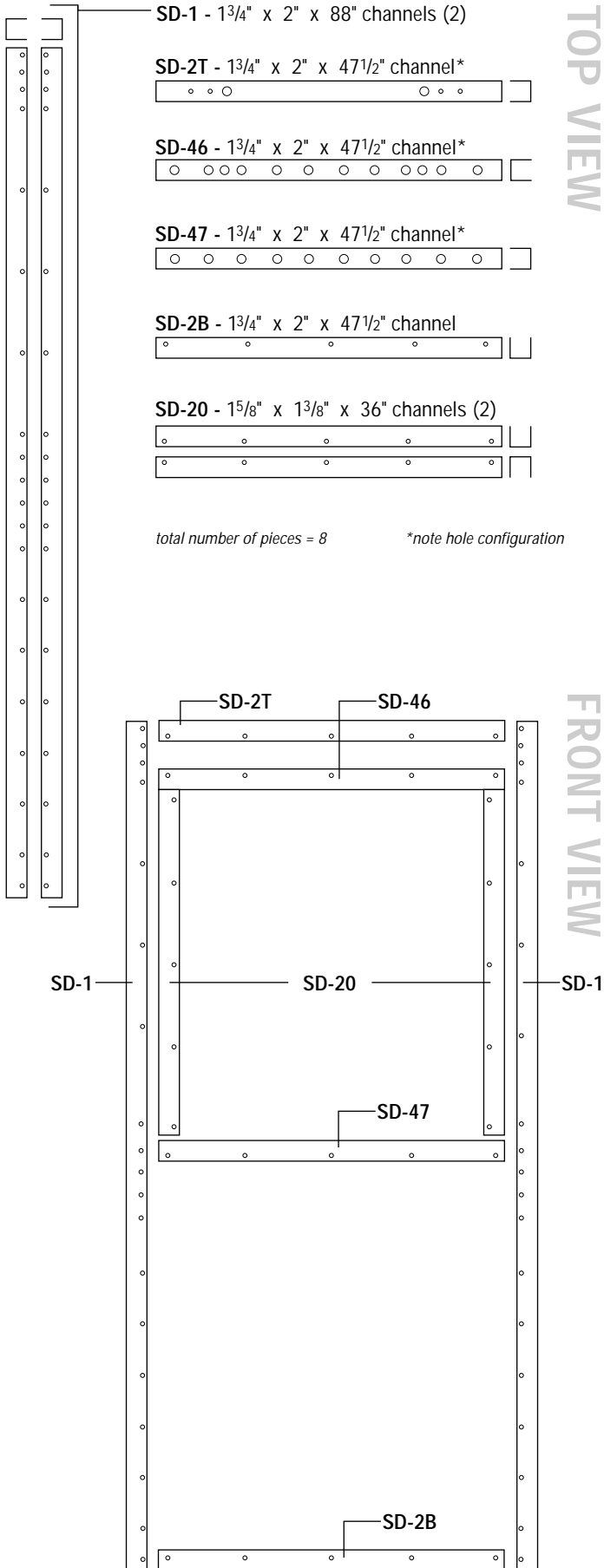
PRE-ENGINEERED HORSE STALL SYSTEMS

4884 HSD STANDARD
SLIDING DOOR



Assembly
& Installation
Instructions

4884 HSD Standard Sliding Door Components



Some Considerations When Choosing Your Stall System

1. Size of stalls – standard sizes are 10' x 10' or 12' x 12' or any combination thereof. If 24" grill extensions are used to create larger stalls, some additional parts would be required and possibly some structural changes should be considered.
2. Your choice of solid partitions or grilled partitions. When considering grilled partitions, the horse owner must keep in mind the temperament and social ability of the horses in such an environment.
3. Use a standard sliding door or a sliding door with a fold-down grill section.
4. Feed doors are great for feeding from the aisle but are not engineered to withstand a large horse leaning and using it for a window.
5. Good equine management must be the first and only consideration when choosing your stall system. In no way will the manufacturer be held responsible for injury to persons, livestock or personal property in conjunction with the installation and use of D.T. horse stall components.

Lumber Specifications For Stall System

NOTE: DO NOT USE "ACQ" PRESSURE TREATED LUMBER WHEN INSTALLING D.T. STALL COMPONENTS. ALL PRELIMINARY TESTS PROVE THAT "ACQ" (WITH ITS HIGH LEVELS OF COPPER) WILL ATTACK ALL "ZINC" COATED SURFACES, I.E. GALVANIZED, HOT DIPPED AND GALVALUME. AS WELL AS THE D.T CHANNELS, ALL FASTENERS SUPPLIED ARE ZINC COATED. IF PRESSURE TREATED LUMBER MUST BE USED IN CERTAIN INSTALLATIONS, TESTS HAVE PROVEN THAT IF A BARRIER (SUCH AS ICE AND WATER SHIELD) IS USED BETWEEN THE "ACQ" LUMBER AND THE STEEL PRODUCTS, IT IS LESS LIKELY THAT CORROSION WILL HAPPEN.

SECTION	10' STALL	12' STALL
Front wall	10 pcs - 2 x 6 x 10' 1 pc - 2 x 10 x 10'	10 pcs - 2 x 6 x 12' 1 pc - 2 x 10 x 12'
Grilled partition	10 pcs - 2 x 6 x 10' 1 pc - 2 x 10 x 10'	10 pcs - 2 x 6 x 12' 1 pc - 2 x 10 x 12'
Solid partition (93" high)	17 pcs - 2 x 6 x 10'	17 pcs - 2 x 6 x 12'

6. All stall components are pre-punched and come complete with all fasteners.
7. Corner posts must be set 10' or 12' on center (or any other spacing as desired). A 65" grill section is used to construct a 10' standard stall front and an 89" standard grill section is used to construct a 12' stall front (Figure 1).

NOTE: There are two methods of installation:

- a) Posts anchored in the floor and fastened to the ceiling.

- b) If posts are not anchored to ceiling then anchor at least 2' into the floor for adequate strength.
- 8. Distance between the corner post and door post must be 48" inside (Figure A). 6 x 6, 4 x 6 or 4 x 4 posts can be used for the installation.
- 9. Install the corner posts first and then the door posts making sure all posts are plumb, true and level.

NOTE: To prevent the horses from chewing the lumber, post edging and wall capping are supplied as part of the standard packaging. Install the post edge inside the stall on the exposed post edges. Refer to Figure 1 for wall capping installation.

Follow These Steps For Easy Installation

Stall specifics when using 4 x 4 post (3 1/2" x 3 1/2") (Figure A)

10' x 10'	12' x 12'
A = 120"	A = 144"
B = 48"	B = 48"
C = 65"	C = 89"
D = 120"	D = 144"

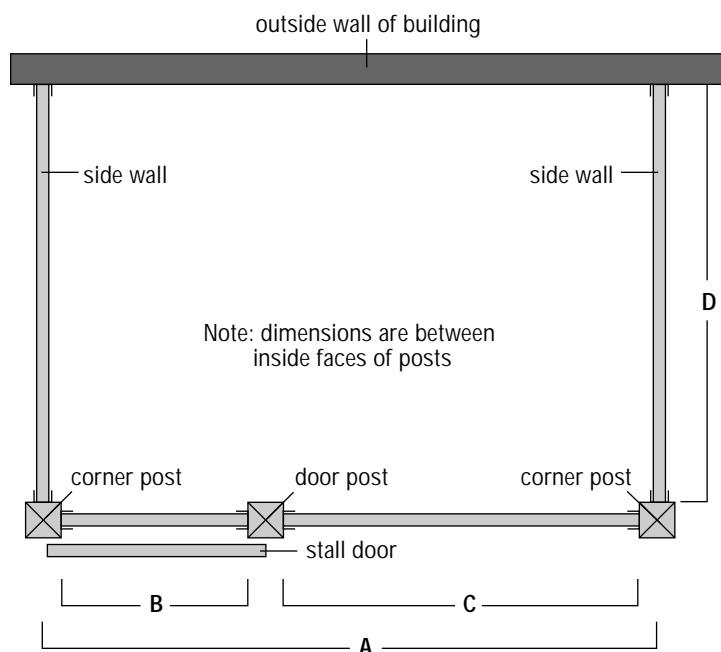
NOTE: All posts must be installed with the top at least 98" above the floor.

To accommodate the latching mechanism when two doors meet on a common post, a minimum of 9" of post is required.

Post Installation

1. Refer to Figure A to determine post locations for the size of stall selected.

Figure A



2. Install the corner post first, staying within Figure A - A and D Dimensions.
3. Install the door post to Dimension B - Figure A.
4. Dimension C - Figure A should be treated as the "variable" dimension if a problem with post location should arise (or if other than 4 x 4 posts are used).

NOTE: With all posts in place, it's time to unpack the stall components and review the assembly instructions and drawings to familiarize yourself with names and locations of parts.

Stall Front Grill Installation

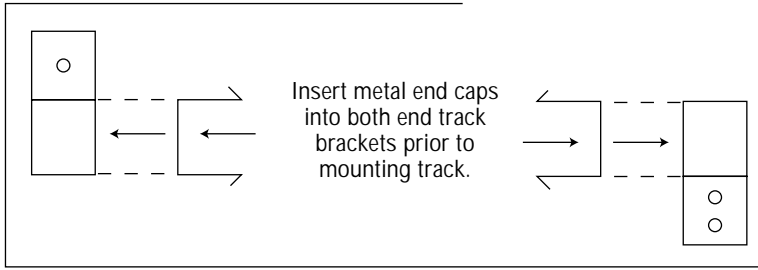
(Figure 1)

NOTE: Lumber length is determined by the opening size less 1/2".

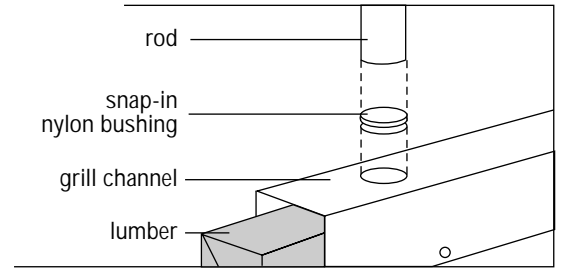
1. Chalk a line on face of the posts at a height of 46 3/4" above floor level. Fasten the U channels 1" back from the front of post with the top edge level with chalkline.
 2. Chalk a second line on the face of the posts at a height of 38 3/4" above the first chalkline. Fasten lumber clips here 1" back from the front of the posts with the bottom edge of the lumber clip at the chalkline.
 3. Stack lumber from the bottom of the U channels to a height of 1 1/2" above the top of the U channels, making sure the top piece of lumber is square. Insert all screws.
 4. Slide the 2 x 10 header board into the lumber clips leaving 1/2" of lumber below the clip. Temporarily fasten with a screw.
 5. Insert all of the nylon bushings into the rod holes in both top and bottom grill channel (Figure 1, Detail D).
 6. Place one of the grill channels over the lumber extended above the U channel and tap down until the grill channel sits on the U channel. Insert screws. Place the other grill channel over the 1/2" of lumber extending below the lumber clip and slide the grill channel up until it butts against the lumber clip.
 7. Temporarily support the channel in place by nailing a piece of lumber against the post under each end of the channel.
 8. Insert all rods into the top grill channel first, then drop them into the bottom channel.
- NOTE: If a feed door is being installed, leave seven rods out of the grill section at the desired location.
9. Remove the temporary screws in the lumber clips and tap the lumber down firmly onto the top of the rods. Insert and tighten all screws in the lumber clips. (If the installation is followed to the dimensions shown in Detail E, the rods should be inside the top and bottom grill channel 1/2" FOR A TOTAL OF 1".)
 10. Tap the top grill channel up until it butts against the lumber clips. Insert and tighten all screws.
 11. Slide the piece of wall capping firmly over the top of the 2 x 10 header board. Insert screws.
 12. Center and fasten the wall brace on the inside of stall front.

Figure 1 Stall Front and Track Installation

DETAIL E - DOOR TRACK MOUNTING BRACKET



DETAIL D - NYLON BUSHING INSTALLATION



STALL FRONT AND TRACK ASSEMBLY

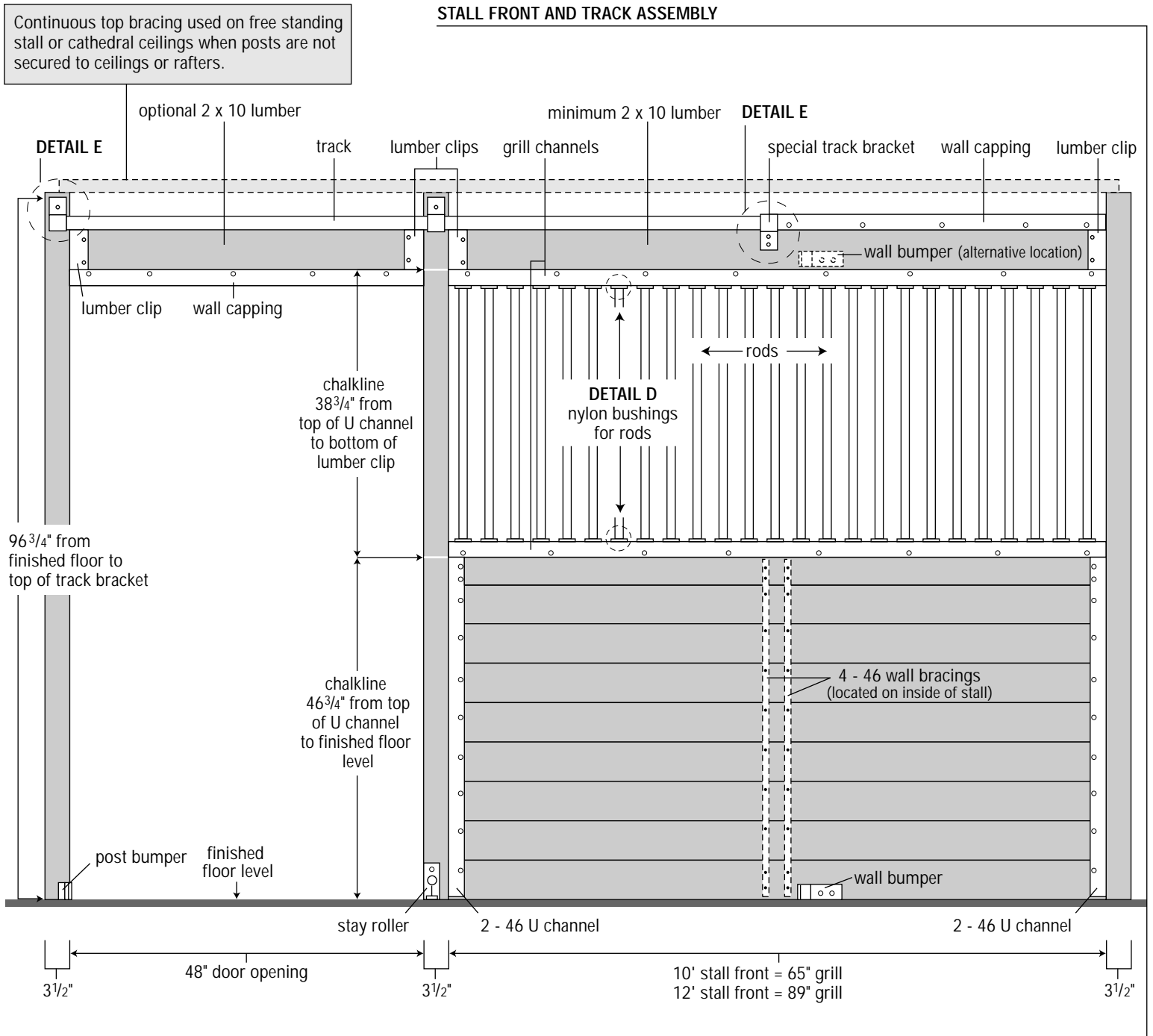
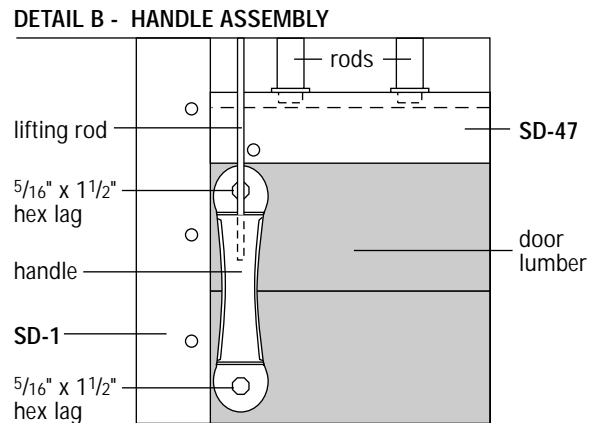
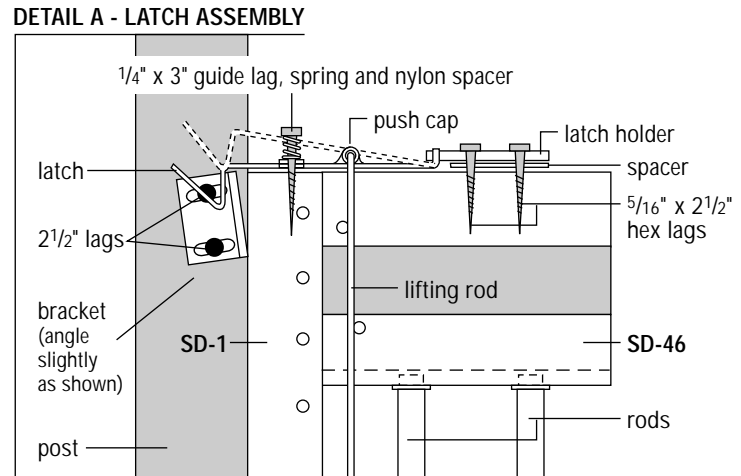
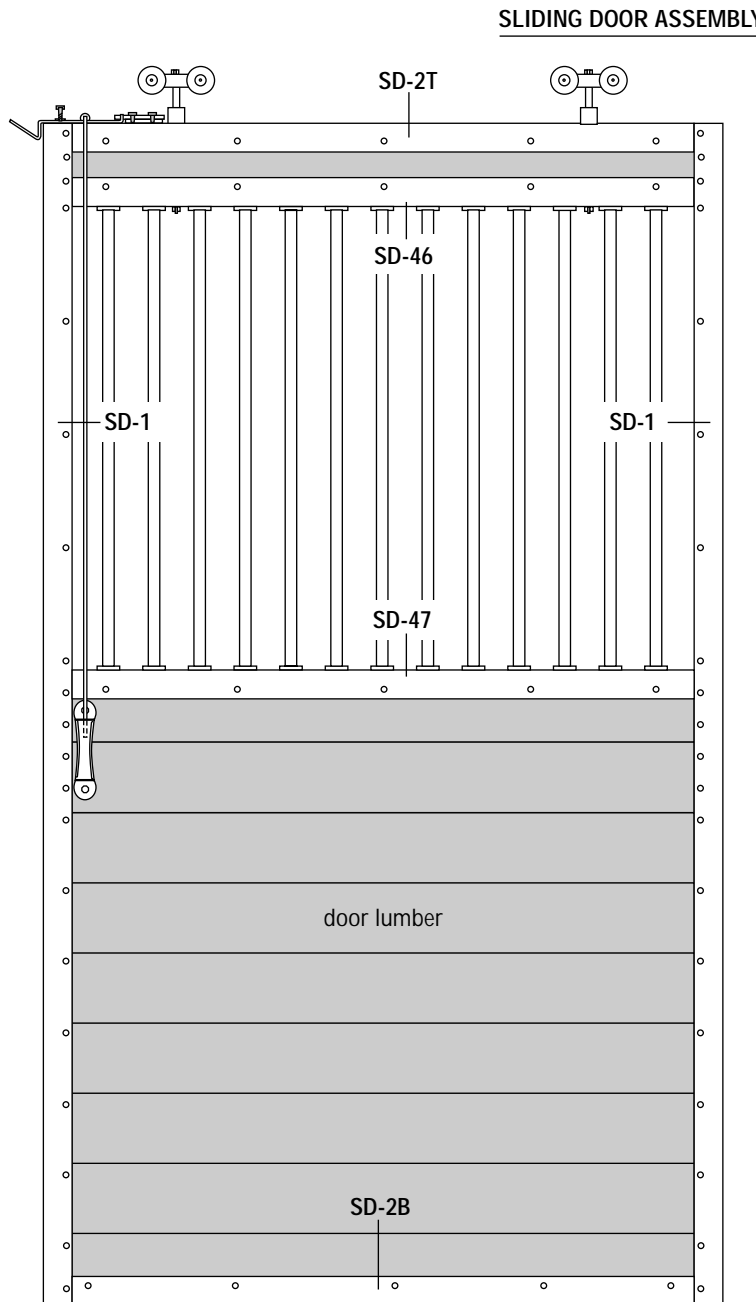
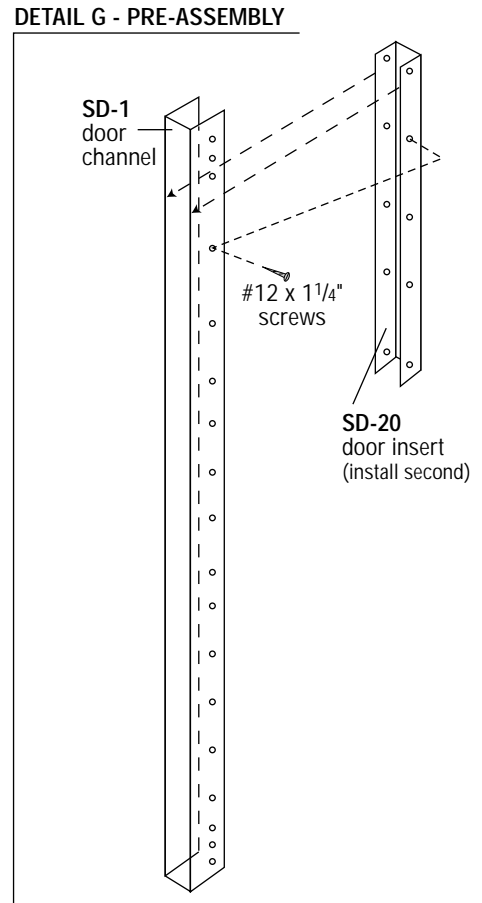
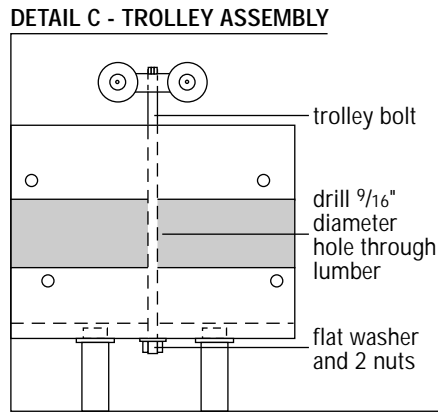
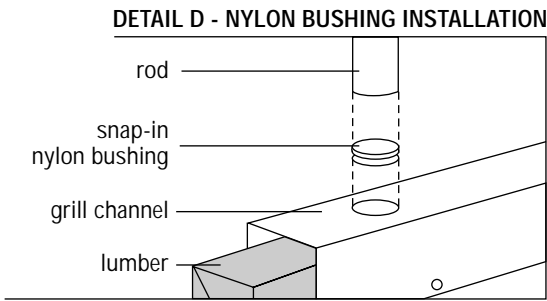


Figure 2 4884 HSD Sliding Door



Grilled Side Wall Assembly

Side wall grills are 65" and 89" long. To construct a 10' grilled partition, use a 65" complete grill and a 55" grill extension. To construct a 12' grilled partition, use an 89" complete grill and a 55" grill extension. If a longer grilled partition is required, use additional wall brace (which is sold separately) or consider using a center post for strength. It is recommended that additional wall brace be used on 12' or longer partition spans. Wall brace is sold separately for this purpose. Refer to the grill section packaging for number of braces included.

NOTE: The depth of the partition has been determined by the placement of the front post from the back wall. Use whichever grill section size is applicable to your installation. Lumber is cut 1/2" shorter than the opening required, i.e. 120" opening - 119 1/2" lumber.

1. Mark a line on the back of the front post and back wall at a height of 46³/₄" above floor level. Center and fasten one of the 46¹/₂" U channels on this post, top edge level with the line.
2. Fasten second U channel on the back wall in direct line with the first U channel.
3. Mark a second line at a height of 38³/₄" above the top edge of U channel already fastened. Center and fasten the lumber clip with the bottom edge even with the line.
4. Install the lumber clip on the back wall in direct line with the U channel below.
5. Stack the lumber to a height of 1¹/₂" above the top of the U channels, making sure the top piece of lumber is square. Insert all screws.
6. Slide the 2 x 10 header board into the lumber clips leaving 1/2" of lumber below the clips. Temporarily fasten.
7. Insert all of the nylon bushings into the rod holes in both top and bottom grill channels.
8. Place one of the grill channels over the lumber extended above the U channel and tap down until the grill channel sits on the U channel. Insert screws. Add additional grill channels as required to make a deeper partition.
9. Place the other grill channel over the 1/2" lumber extending below the lumber clip and slide up until it butts against the lumber clip.
10. Temporarily support this channel in place by nailing a piece of lumber against the post under each end of channel.
11. Insert the rods into the top grill channel first and then drop them into the bottom channels.
12. Remove the temporary screws in the lumber clips and tap the lumber down firmly onto the top of the rods. Insert and tighten all screws in the lumber clips.
13. Tap the top grill channel up until it butts against the lumber clip. Insert all screws.
14. Remove the two pieces of temporary lumber nailed for support.
15. Install the wall cap pieces firmly over the top of the 2 x 10 header board. Fasten screws.
16. Center and fasten the 46" wall brace on each side of the partition.

Solid Wall Partitions

Packaged to construct either a 10' or 12' partition – to make a 10' solid partition, simply cut down the wall capping component by 24".

1. Center a 91" U channel on the front post 1/4" up from finished floor level. Insert screws.
2. Install the other 91" channel on the back wall in direct line with the front U channel.
3. Stack the partition lumber to a height of 2" above the U channels.
4. Install the wall cap firmly over the top of the lumber.
5. Install the 91" wall brace centered on each side of the wall partition.

It is recommended that additional wall brace be used on 12' or longer partition spans. Wall brace is sold separately for this purpose. Refer to the solid 10'/12' packaging for number of braces included.

Stall Door Assembly

NOTE: Cut door lumber to a length of 51¹/₄" long.

PRE-ASSEMBLY OF SD-1 CHANNELS

Figure 2, Detail G

Install SD-20 inserts as shown allowing 5¹/₂" from top of SD-20 to top of SD-1.

SLIDING DOOR

1. Lay out the door parts SD-1, SD-2T, SD-2B, SD-46, SD-47 on a flat surface (*Figure 2*). Slide a piece of precut lumber inside the SD-1 up from the bottom of the door touching the SD-20's. The first piece of lumber should have a square edge. Do not insert any screws at this time.
2. Insert the balance of the door lumber flush with the bottom of the SD-1's. Place the SD-2B over the bottom piece of lumber. Insert all screws in this channel.
3. Insert one screw only in the bottom of each SD-1 to hold lumber in place.
4. Insert a piece of lumber (both edges flat and square) in the top of the SD-1 channels and tap firmly against the SD-20's and flush with the top of the SD-1's.
5. Insert one screw into the top hole of each SD-1 securing the lumber.
6. Install the nylon bushings into the SD-46 and SD-47 channels.
7. Mark a distance of 1¹/₂" down from the top of the first piece of lumber. Slide the SD-47 over the lumber and down to the mark. Insert screws.
8. Place all the rods into the holes of the SD-47.
9. Slide the SD-46 between the SD-1's over the rods until the rods pass through the holes.
10. Mark 1¹/₄" up from the bottom edge of the 2 x 6 lumber at the top of the door. Slide the SD-46 over the lumber and up to the mark. Insert screws.
11. Slide the SD-2T over the top piece of lumber and flush with the SD-1's. Fasten screws.
12. Making sure the door is square, insert and fasten all screws in the door channels.
13. There are two 7" lumber clips provided to install the 2 x 10 header board. Fasten these 1" back from the front of the posts with the bottom of the clips 85¹/₂" from the finished floor.
14. Slide the 2 x 10 lumber into the clips leaving 1¹/₄" of lumber extending below the clips. Fasten.
15. Install the two 48" pieces of wall capping over the top and bottom edge of the 2 x 10 header board.

DOOR TROLLEY ASSEMBLY *Figure 2, Detail C*

1. Insert trolley bolt through roller assembly.
2. Drill through each pre-punched hole in the SD-2T top door channel using a $\frac{9}{16}$ " bit.
3. Insert bolt and roller assemblies through these holes, using flat washer and two nuts to secure in place.

DOOR LATCH AND HANDLE ASSEMBLY

Figure 2, Details A and B

NOTE: Latch hardware should be installed on the door before hanging door on the track.

1. Feed the lifting rod through the top "latch" hole and secure with the "push cap" by lightly tapping with a hammer.
2. Mount the "door pull" and fasten with the $\frac{5}{16}$ " x $1\frac{1}{2}$ " lag bolts (*Detail B*).
3. Feed the lifting rod assembly (#1) through the hole in the top of the door pull.
4. Position the latch (with the lifting rod attached as above), the spacer and the latch holder in place, fasten with the $\frac{5}{8}$ " x $2\frac{1}{2}$ " hex lag bolts.
5. Screw the $\frac{1}{4}$ " x 3" guide lag bolt with the spring and nylon spacer in position leaving the latch approximately $\frac{1}{2}$ " to $\frac{5}{8}$ " of vertical movement.

MOUNTING TRACK AND INSTALLING DOOR

NOTE: Three track mounting brackets are included in the door hardware carton; two brackets are top-mounting and have single bolt holes, one bracket is an offset style and has two bolt holes.

1. Fasten the two top-mount brackets to center of each door post using $2\frac{1}{2}$ " lags and to a height of $96\frac{3}{4}$ " from the finished floor to the top of the brackets.
2. Slide the track through the bracket on the center post, then slide one end cap on the end of the track and slide into bracket secured on the corner post (*Figure 1, Detail E*).
3. Make sure door has all hardware installed then slide trollies into track until door is in closed position.
4. Insert the remaining track end cap into the offset style bracket and slide the bracket over the end of the track.
5. Secure bracket with $1\frac{1}{2}$ " lag bolts.
6. Install the post bumper onto the post at floor level using the $1\frac{1}{2}$ " lag screws.
7. Stay roller is mounted flush with the door opening side of post using three #14 x $1\frac{1}{2}$ " wood screws (*Figure 1*).
8. Slide the door open so that the edge of the door is flush with the door opening.
9. Install wall bumper at floor level or alternative location (*Figure 1*).
10. Slide door to "closed" position and with latch in "open" position, mark a line leaving about $\frac{1}{8}$ " vertical clearance between the bottom of the latch and the top of the post bracket.
11. Put latch in "closed" position and place bracket between the latch and the SD-1 door channel.

NOTE: Tilt the post bracket as show in *Figure 2, Detail A*. Fasten with $2\frac{1}{2}$ " lags and washers.

12. Once the door is hung, use the guide lag on the top of the door to adjust the travel of the latch so when fully lifted, the end of the latch has sufficient clearance.

NOTE: The door should be adjusted to sit approximately 1" above the finished floor by adjusting the trolley bolt hex nuts accordingly.