

# **Full Frame Double Dutch Door**

Assembly & Installation Instructions





### **Before You Get Started**

- Read the entire instructions before you begin.
- Wear appropriate safety gear when using saws and drills. This is not limited to, safety glasses, hearing protection, and work gloves.
- Please know that \*\*STEEL MAY HAVE SHARP EDGES WHICH CAN CUT & CAUSE INJURY\*\*
- Set help moving parts and building the door, as some pieces are heavy and awkward to handle.
- These instructions are for a Double Dutch Door with Full Frame. On custom doors, some steps are not applicable, dimensions, and in some cases quantities may be different than those shown.
- The wood called out in this document is standard nominal dimensional lumber. For example 2" x 6" standard lumber has an actual size of 1.5" x 5.5". Please go over the document titled "Door Fill Options" in the Additional Resources section at the bottom of this page to view our suggested fill options.

### **Required Tools**

- Circular saw
- ◆ Blade for above to cut 2" x 6" lumber
- Impact drill
- Caulking gun

- Philips driver bit
- #25 Torx bit
- Caulking to match door
- 5/₁6" wrench & socket
- Hammer
- Level
- Tape measurer

# **Required Wood**

♠ 19 x 2 x 6 x 8' (Bottom Door)

**№** 19 x 2 x 6 x 8' (Top Door—if door is solid)

 3 x 2 x 6 x 8' (Door Casing)

Cedar shims (Wood Wedges)

### Additional Resources

- Installing Glass Into Your Dutch Door
- Door Fill Options



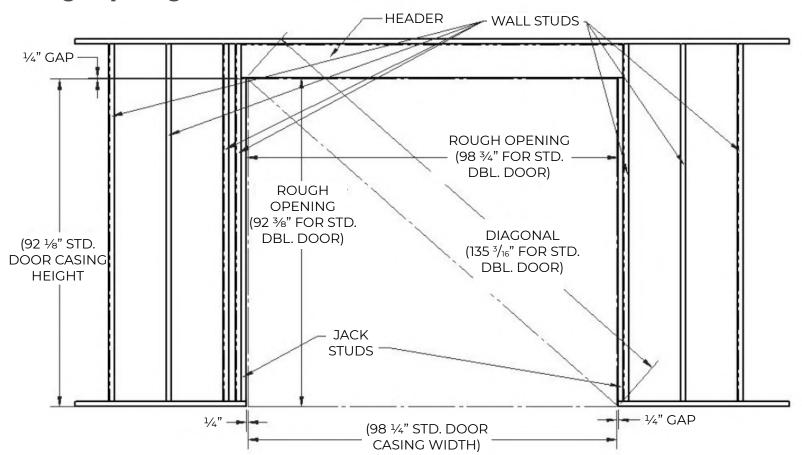
### **Parts List**

Picture	Part #	Description	Qty
	011-DDTDWP	Dutch Door Top Door	2
	011-DDBD	Dutch Door Bottom Door	2
	011-DDD-F	Dutch Door Frame	1
	011-DD-UDSA	Dutch Door Upper Door Sill Angle	1
	011-DD-LDSA	Dutch Door Lower Door Sill Angle	1
	011-DD-BDCB	Dutch Door Bottom Door Cross Buck	2
	03-2056	Dutch Door Skin Style Horizontal Sill Angle	2
	011-DDWC	Dutch Door Window Channel (if door has window)	2
	011-365-1001	Iron Grip Latch Heavy Duty with Double Cast Handle	1
O-OVOLUESED DO LESSED DO L	365-424	System Equine Top Spring Bolt Painted	1
	364-DLCB	Cane Bolt ½" x 12"	2
	02-2008	Screw #12 x 1" Black Eclipse Screw (if door is painted) If glass is already installed, quantities will be reduced	10
	02-2162	Lag Bolt 1/4" x 3" Hot Dipped Galv	19
	02-2302	Washer ¼" Hot Dipped Galv	19
	02-2128	Hex Bolt ½" x 2" Stainless Steel	4
	02-HA-020- W-AB	Eyebolt Loop Weldment for Adjustable Hinge w/ Bushing	4
	02-2245	Nut ½" Acorn Stainless Steel	4
	02-2252	Nut 5/8" Lock Stainless Steel	4
	02-2229	Washer 5/8" Stainless 1 ½" OD	8
0	02-2332	Washer 5/8" Lock Stainless Steel	4
	02-2254	Nut %" Jamb Stainless Steel	4
4.600.000.000.000.000.000.000.000.000.00	02-2016	Screw #12 x 2 ½" Robertson Flat Socket	6
	364-100	Door & Window Hold Back Cast Aluminum 4"	2
	02-DDWS	Dutch Door Weather Stripping/ft	45



Picture	Part #	Description	Qty
	02-DDPLUG1	Dutch Door Plug 1"	19
	02-2022	Screw Tek #12 x 1 1/4" Pan Head	40
0	02-2310	Washer 3/8" Hot Dipped Galv	4
	02-2220	Nut ¾" Hot Dipped Galv	4
	02-2110	Hex Bolt 3/8" x 1" Hot Dipped Galv G5	4
	02-DWGL	Dutch Window Gold Door Latch Magnetic Catch	2
	02-20594	Dutch Window Gold Latch Shim (for Swing-in doors)	2
	364-100	Door & Window Hold Back Cast Aluminum 4"	2

# **Rough Opening**



TYPICAL 98 1/4" CONSTRUCTION

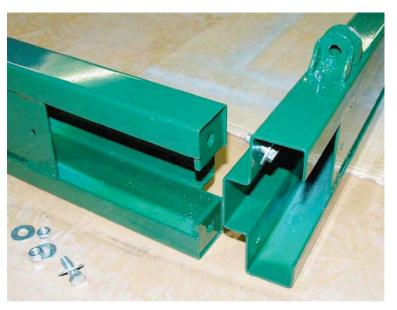
<sup>\*</sup> DOOR OPENING MUST BE SQUARE \*

<sup>\*\*</sup> CHECK THAT DIAGONALS ARE EQUAL \*\*



# **Step 1: Assembling the Frame**

The frame assembly comes in three pieces and is bolted together on site. Lay out the top, left, and right sides. Then use the 3/8" bolts and washers provided to bolt the frame together.





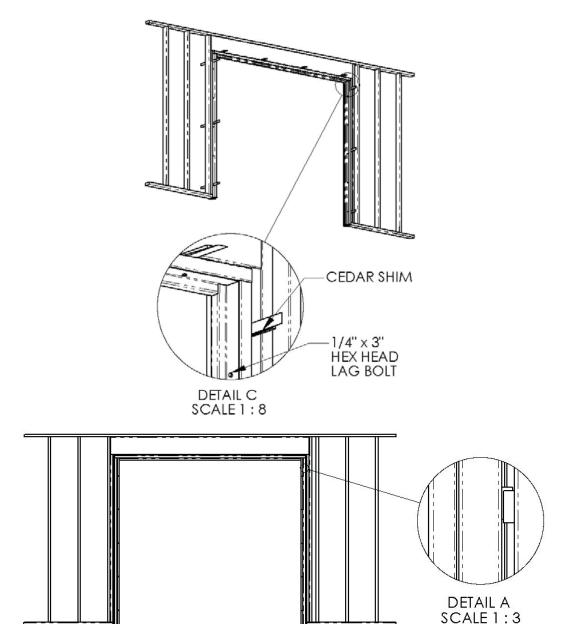
Picture		Part #	Description	Qty
	0	02-2310	Washer 3/8" Hot Dipped Galv	4
	0	02-2220	Nut ¾" Hot Dipped Galv	4
		02-2110	Hex Bolt 3/8" x 1" Hot Dipped Galv G5	4



# **Step 2: Leveling the Frame**

Tip up the frame assembly, and center in the rough opening. Level the frame using shims, and with 1/4" x 3" Hex Head Lag Bolts, replace the #12 x 1 1/4" Philips Truss Head screws as you go around. It is very important to ensure the frame is perfectly level and square.

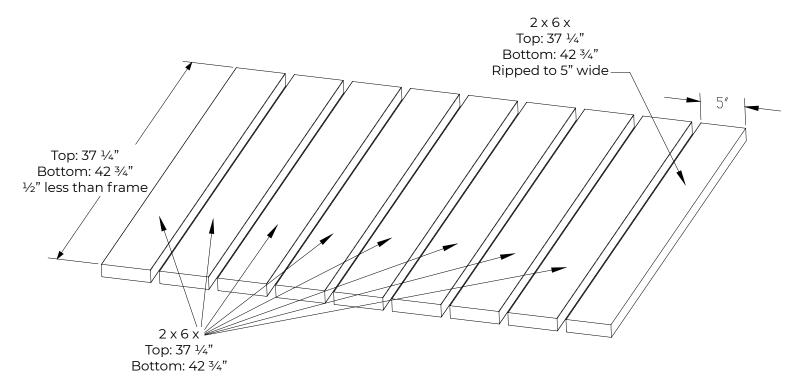
NOTE: Frame must be flush with finished wall if you want the door to open 180°.



Picture	Part #	Description	Qty
	02-2162	Lag Bolt 1/4" x 3" Hot Dipped Galv	19
	02-2302	Washer 1/4" Hot Dipped Galv	19

# Step 3: Glueing the Wood (If Filling with Tongue & Groove Wood)

Cut the boards to fit into panels 1/2" less than the opening. Glue the boards together in a full panel. Total width of panels would be ½" less than the opening. Center the boards and clamp for recommended glueing time.



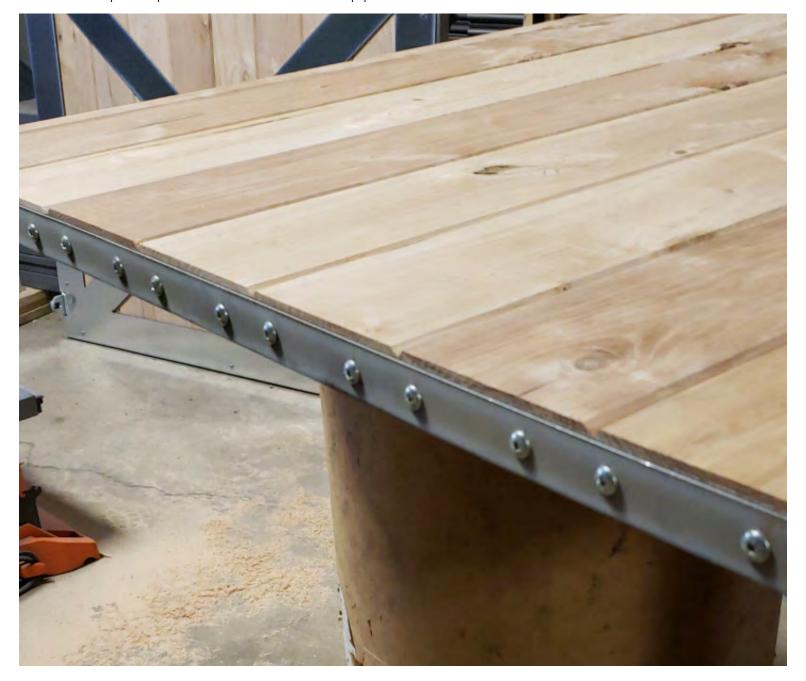






# **Step 4: Securing the Glued Wood (Optional)**

Put metal strip on top and bottom of doors to keep panel intact.



# Step 5: Inserting the Panel Into the Frame

Put insert panel into frame, then put skin onto frame ensuring to center it on all sides. This can be wood, FRP and foam, or wood and metal insert. We recommend all wood be pre-stained and glued.





# Step 6: Affixing the Skin

Once you have filled the bottom panel with your wood you can now install the outside skin panel to complete the door assembly.

Unassemble the skin from the frame by taking off the screws, insert the fill, then use the existing screws to fasten the skin back on. Center the panel to ensure the reveal is even around the entire frame. Hold the skin with vise grips (protect the paint) or a helper to ensure it doesn't move and using the supplied self drilling metal tek screws install one in all four corners through the holes already in the skin. Then install the remainder through the holes in the skin (do not tighten right away). You should back the screws back off and blow the metal filings created by the self drilling screws (these cause rust spots). If you have painted product you can remove the metal screws and replace with the painted black screws supplied.





Picture		Part #	Description	Qty
		02-2022	Screw Tek #12 x 1 $\frac{1}{4}$ " Pan Head (if door is galvanized)	20
	«somm)	02-2008	Screw #12 x 1" Black Eclipse Screw (if door is painted) If glass is already installed, quantities will be reduced	20

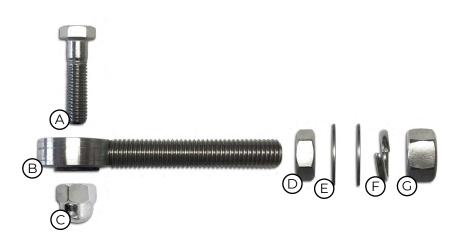


# **Step 7: Assembling the Hinges**

Assemble the eye bolt loops on all doors as shown below. Hand-tighten nuts on the eye bolts.

**NOTE:** The Delrin bushing on the hinge always faces down.

With the eye bolts installed and tightened by hand, lift the doors into place with three people. They will line up with the welded tabs on the frame. Drop the ½" stainless bolts through the top tab, eye bolt, and bottom tab and fasten the Acorn Nut.





Picture	Part #	Description	Qty
	02-2128	(A) Hex Bolt ½" x 2" Stainless Steel	8
	02-HA-020- W-AB	(B) Eyebolt Loop Weldment for Adjustable Hinge w/ Bushing	8
	02-2245	(C) Nut ½" Acorn Stainless Steel	8
	02-2252	(D) Nut %" Lock Stainless Steel	8
	02-2229	(E) Washer 5/8" Stainless 1 1/2" OD	16
0	02-2332	(F) Washer 5/8" Lock Stainless Steel	8
	02-2254	(G) Nut %" Jamb Stainless Steel	8



# **Step 8: Installing the Weatherstripping**

Install the weatherstripping around the frame of the openings before tightening the eye bolts. Weatherstripping is the "fur" with a peel and stick adhesion. Make sure it is above 10°C when you complete this step for it to adhere properly. You are now ready to adjust the doors.

#### **Parts Used**

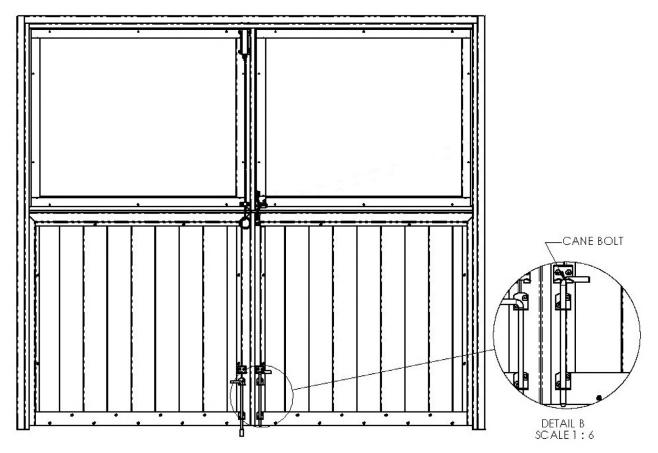
Picture	Part #	Description	Qty
	02-DDWS	Dutch Door Weather Stripping/ft	45

# **Step 9: Leveling the Door**

Level the bottom door to line up with the top door, snugging them up against the frame.

# **Step 10: Installing the Cane Bolts**

Install the cane bolts on the bottom of the doors. Cane bolts will always be installed on the inside of the doors. They can also be mounted to the boards instead of the steel frame (except when used on Thermo-Plex).



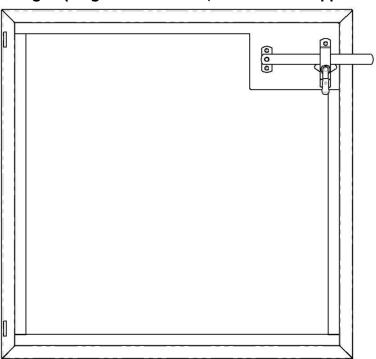
Picture	Pa	rt #	Description	Qty
	364	4-DLCB	Cane Bolt ½" x 12"	2

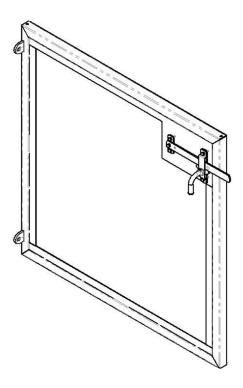
### Step 11: Installing the Iron Grip Latch

These instructions are to be used by anyone assembling an iron grip to be used on a 1 3/4" thick Dutch door. There are subtle differences between Swing-in and Swing-out and therefore you may use additional spacer plates depending on whether it is S/I or S/O.

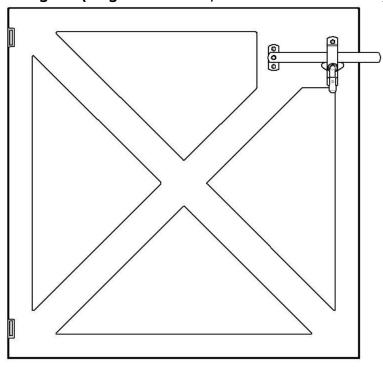
It is important to determine the opening of the door. The swing plate will ALWAYS be on the hinge side of the Door. It will be important to be aware of the "HINGE SIDE" vs. the "NON HINGE SIDE" of the door. Also, the skin is always on the outside.

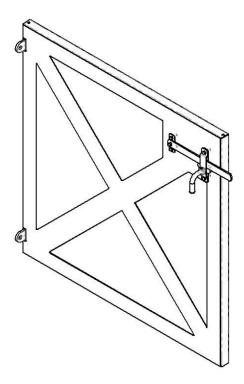
### Swing-in (hinge is on this side; skin is on the opposite side):





#### Swing-out (hinge on this side; skin on this side as well):

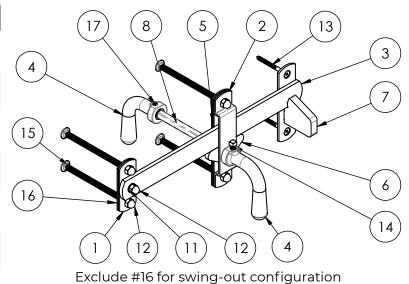


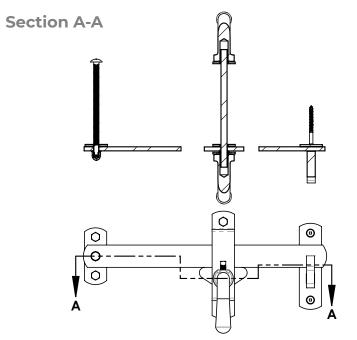




Use the diagram below to verify all parts are included.

#	Part #	Description	Qty
1	365-126	Iron Grip Pivot Weldment (blk)	1
2	365-131	Iron Grip Swing Guide Plate (blk)	1
3	365-133	Iron Grip Swing Plate (blk)	1
4	365-121	Iron Handle Grip (blk)	2
5	365-120	Iron Grip Front/back Plate (blk)	2
6	365-130	Iron Grip Triangle Cam	1
7	365-128	Iron Grip Catch Weldment (blk)	1
8	365-136	3/8" Square Rod x 7 1/4" Long (galv)	1
9	02-2450	Nylon Plastic Snap-in Panel Plugs	2
10	02-2452	Nylon Plastic Washer .50" ID .69" OD .036" THK	5
11	02-2451	Nylon Plastic Washer .38" ID .57" OD .036" THK	2
12	02-2212	<sup>5</sup> / <sub>16</sub> " - 18 Stainless Steel Acorn Nut	5
13	02-2032	#10 x 1 1/4" Waferhead Tek Screw	
14	02-PGL- SCREW	<sup>5</sup> / <sub>16</sub> - 18 x <sup>5</sup> / <sub>8</sub> " SS Square-head Cup-point Set Screw	2
15	02-2180	<sup>5</sup> / <sub>16</sub> " - 18 x 5 ½" Carriage Bolt	4
16	365-132	Iron Grip Pivot - Plate Only (blk)	1

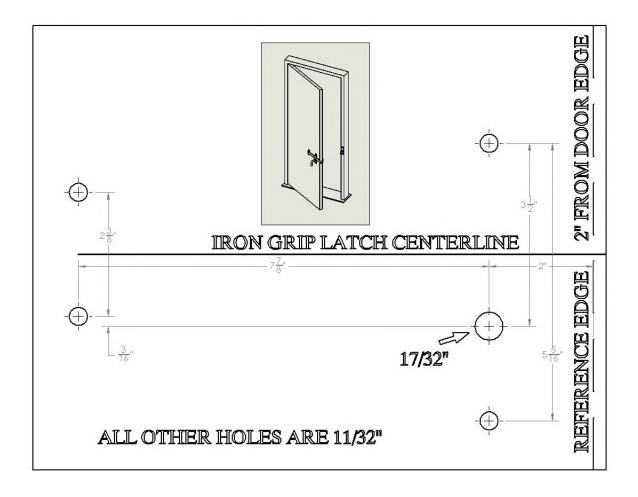




Pick the appropriate template for door opening direction. Print this page or the next page on an 8 ½" x 11" sheet.

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Check that template is accurate by verifying 7 %" width with tape measurer.

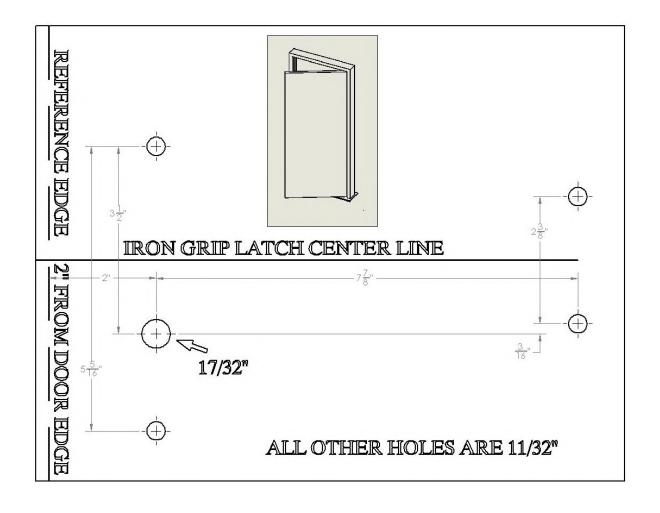




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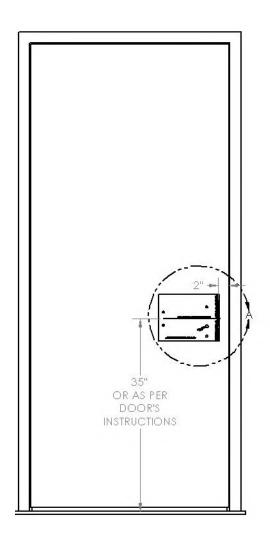
Check that template is accurate by verifying 7 %" width with tape measurer.

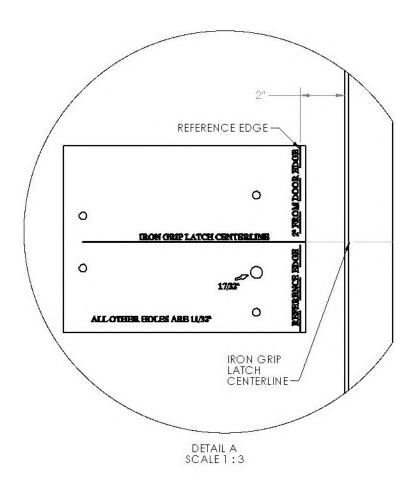


Place template on door

2" from inside of Door Jamb to Reference Edge

\* 35" from floor to Iron Grip Latch Center Line





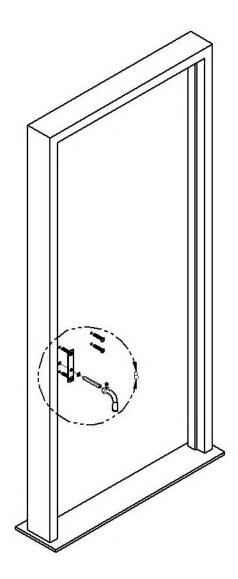
Use an Awl or Center Punch to mark the hole locations by punching through the paper template and into the door.

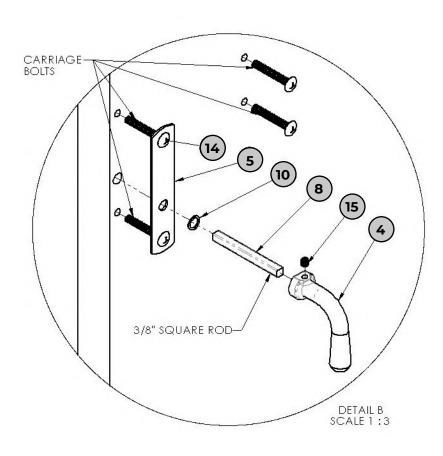
Drill through the door with -1x  $\frac{17}{32}$  hole (for **Pivot Cam Weldment**)

- 4x <sup>11</sup>/<sub>32</sub>" holes (for **Carriage Bolts**)

As shown on template.

Attach (5) Iron Grip Front/Back Plate to the back side of the door using the provided hardware. Use the (14) Carriage Bolts to hold the plate in position. Slide the last 2 Carriage Bolts into the remaining holes. Slide the (4) Iron Handle Grip on to the (8) %" Square Rod and secure with the (15) Set Screw. Then slide this assembly into the large center hole in the (5) Iron Grip Front/Back Plate, making sure to include a (10) Large Washer between the Handle and the Plate.

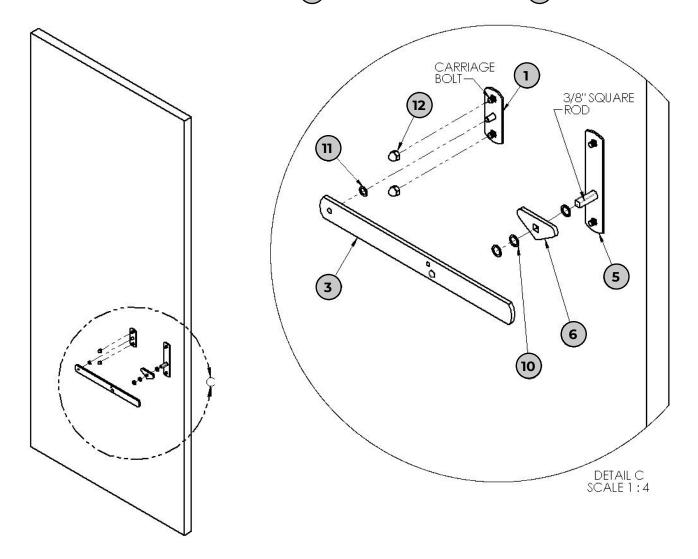




On the opposite side of the door, slide the (1) Iron Grip Pivot Weldment onto the exposed threads of the carriage bolts, and secure with an (12) Acorn Nuts at top and bottom.

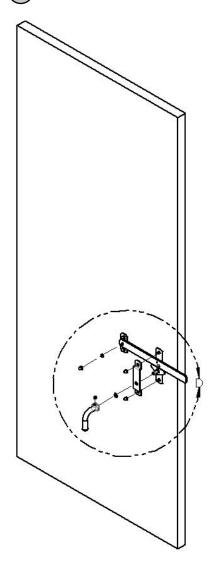
Slide a (5) Front/Back Plate over the (8) %" Square Rod and the remaining protruding carriage bolts. Then slide a Large Washer, the Triangle Cam Plate, and 2 more (10) Large Washers over the (8) %" Square Rod.

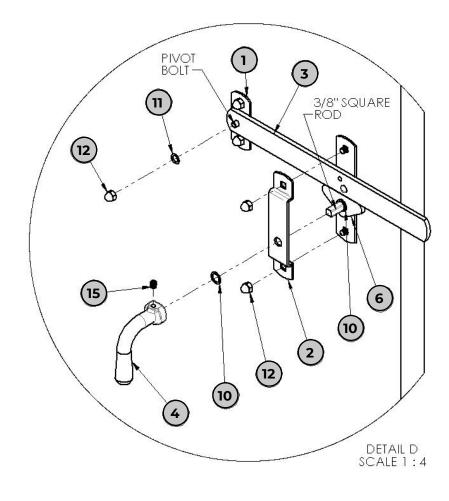
At the (1) Iron Grip Pivot Weldment slide a (11) Small Washer over the center  $\frac{5}{16}$ " thread. Then slide the (3) Swing Plate over top of this making sure that the (3) Swing Plate is resting on the (6) Triangle Cam Plate.



At the (1) Iron Grip Pivot Weldment, slide a (11) Small Washer and (12) Acorn Nut over the Pivot Bolt, securing the (3) Swing Plate in place.

Slide the 2 Swing Guide Plate over the 3 Swing Plate and secure with the 2 remaining 12 Acorn Nuts, then slide a (10) Large Washer and the remaining (4) Iron Handle Grip, and secure with the last (15) Set Screw.

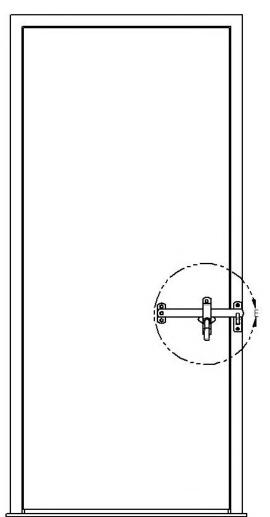


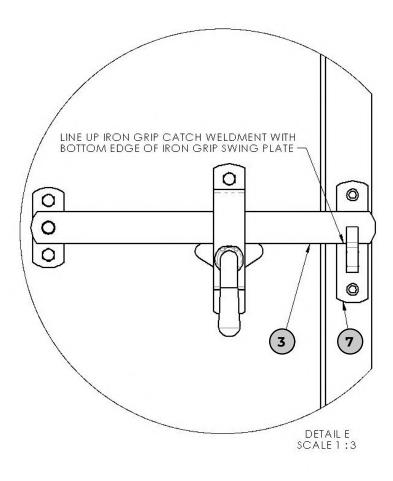




Line up (7) Iron Grip Catch Weldment with the bottom of the (3) Swing Plate and centered on the Door Jamb.

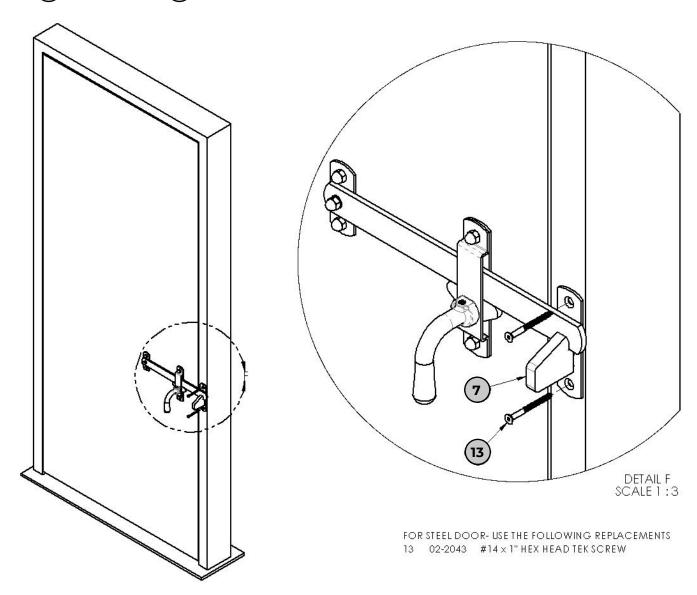
Mark the hole locations with an Awl or Center Punch.







Install the 13 Screws for the 7 Iron Grip Catch Weldment as shown below.



# **Step 12: Installing the Dutch Door Plugs**

Install the Dutch Door Plugs.

Picture	Part #	Description	Qty
	02-DDPLUG1	Dutch Door Plug 1"	15



# Step 13: Installing the Sill Angles

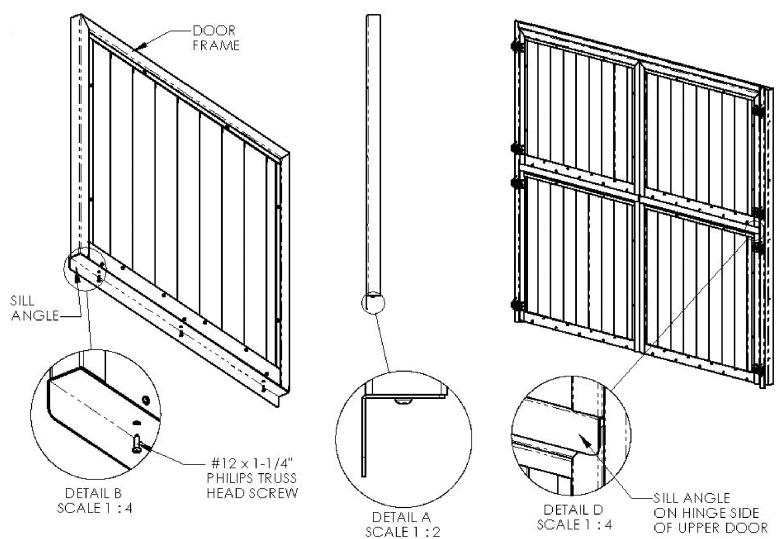
Install the sill angles.

For swing-out doors: Horizontal sill angles are installed on the top doors facing out.

Vertical sill angles are installed on the door that remains fixed facing in.

For swing-in doors: Horizontal sill angles are installed on the top doors facing in.

Vertical sill angles are installed on the door that remains fixed facing out.



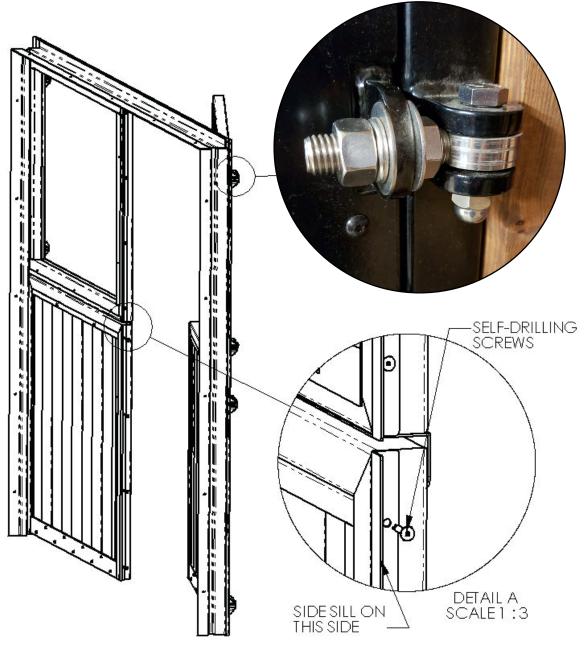
Picture	Part #	Description	Qty
	02-2022	Screw Tek #12 x 1 1/4" Pan Head	6



# Step 14: Deciding Which Door is the Primary One

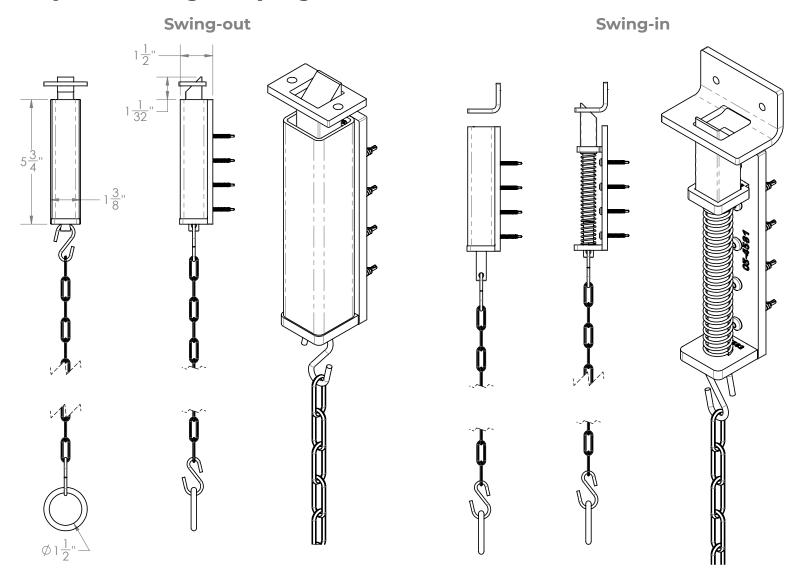
At this point you will have to decide which of the two doors will be the primary door. The primary door is the door that you open first. The secondary door can then be opened. If the doors swing out of the building, the primary door is usually in this case on the left facing the hinges (but the final decision is up to you).

Using the Tek Screws, mount the side sill angles on the secondary door on the opposite side of the hinges so that the primary door closes against it. After complete installation and adjustment, run a bead of caulking down to seal the space between the sill angles and the door.



Picture	Part #	Description	Qty
	02-2022	Screw Tek #12 x 1 1/4" Pan Head	8

# **Step 14: Installing the Spring Bolt**

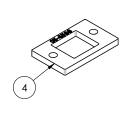


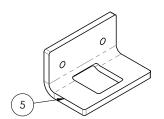
Picture	Part #	Description	Qty
0-0001110000000000000000000000000000000	365-424	System Equine Top Spring Bolt Painted	1

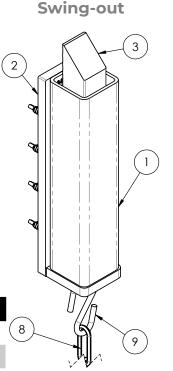
# **Step 14: Installing the Spring Bolt (Continued)**

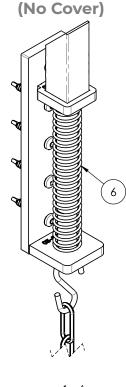
- 1. Mount weldment (2) to door using screws\*
- 2. Slide plunger (3) into weldment and through spring (6)
- 3. Slide hook (9) through hole in plunger
- 4. Attach chain (8), hook, and pull ring (7)
- 5. Mount applicable catch to door jamb (4) or (5)
- 6. Slide cover (1) down over assy and tap in place with hammer

\* Use: Steel (shown) 02-2002 #12 x 1.25" Tek Screws Wood 02-2008 #12 x 1" Wood Screws



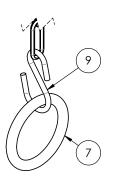






Swing-in

ITEM	PART #	DESCRIPTION	QTY
1	03-4584	Top Spring Bolt Tube Cover	1
2	03-4580	Top Spring Bolt Weldment	1
3	03-4585	Top Spring Bolt Plunger	1
4	03-4586	Top Spring Bolt Swing-out Catch	1
5	03-4587	Top Spring Bolt Swing-in Catch	1
6	2006N446	302 Stainless Steel Corrosion-resistant Compression Springs	1
7	3564T43	1.5in ID x .25in Pull Ring	1
8	359T64	#4 Twisted Zinc Plated Chain	1
9	9381T201	.125in Zinc Plated S-hook	2





Picture	Part #	Description	Qty
	365-424	System Equine Top Spring Bolt Painted	1



# **Step 16: Installing the Magnetic Latches**

Install the Magnetic Latches to the top of the bottom door and bottom of the top door as shown below. The Shim will only need to be used if installing the latch on the side of the door that the sill is on (such as in the top right photo below). All latches are installed on the inside of the door. For swing-in doors the latch is preassembled on the







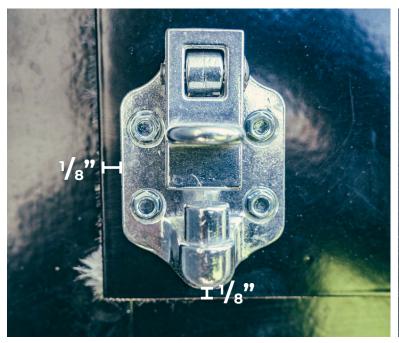


**Parts Used** 

Picture	Part #	Description	Qty
	 02-20594	(A) Dutch Window Gold Latch Shim (for Swing-in doors)	2
	02-DWGL	(B) Dutch Window Gold Door Latch Magnetic Catch	2
	02-2022	(C) Screw Tek #12 x 1 1/4" Pan Head	8

# **Step 17: Installing the Door Hold Backs**

Install the Aluminum Door Hold Backs as shown below. A Door Hold Back holds the top of the door in place against your building when in the open position.







Picture	Part #	Description	Qty
	364-100	Door & Window Hold Back Cast Alum	inum 4" 2



You have finished installing your Dutch door. Great job! We would love to show off your hard work to others.

If possible, please send finished product photos to sales@systemequine.com