# C-54BL Barn Door Privacy Lockset Barrier-Free (ADA Compliant)

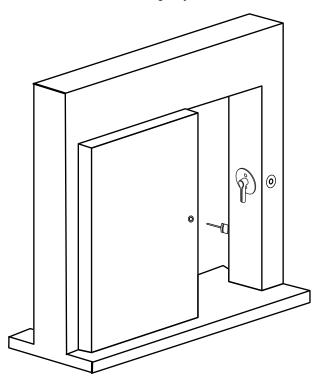


**Door Thickness:** 1 3/8 in [34.9 mm] to 1 3/4 in [44.5 mm]

Wall Thickness: 4 1/2 in [114.3 mm]

Installation is based on barn door application where doors are hung on outside of room.

- Install lock inside jamb wall behind barn door
- Install trim plate on jamb wall facing opening
- Install strike with an emergency release on barn door



#### **Wall Conditions and Tools Suggestion**

Most of drywall will have corner beads in steel or vinyl; it is strongly recommended to use a hole saw to cut holes for installing locks and trim plates. Hole saw for steel will also help cut through any screws inside drywall or wood studs to make installation quicker.

### **Included Components**





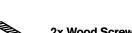


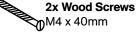
2x Slotted **Head Screws** M4 x 50mm



1x Decorative Cap













1x

**Dustproof** 

Strike

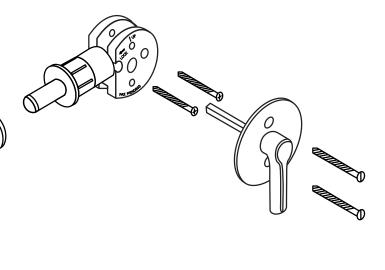
2x Washer

1x Sleeve



## **Tools required** (not supplied)

Stud Finder Level T-Square 2 1/8 in Hole Saw 1 1/4 in Hole Saw 1 in Hole Saw 1/8 in Drill Bit 1/4 in Drill Bit





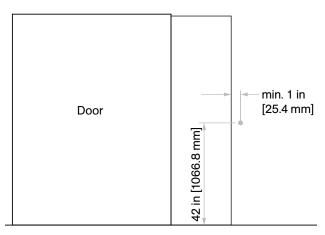
# **Installation Steps**

#### Step #1:

#### **Drywall opening**

For drywall opening with 0.5 in [12.7 mm] drywall (gypsum board), a minimum 2 in [50.8 mm] door overlap is needed. The lock bore center must be at least 1 in [25.4 mm] from wall edge; align strike with lock.

Choose center hole location based on aesthetic preference; must be at least 1 in [25.4 mm] from edge.



#### Opening with casing greater than 1 5/8 in [41.3 mm]

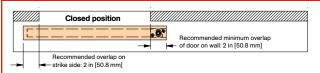
Choose center hole 0.5 in location based on your [12.7 mm] aesthetic preference, must casing be at least 1 in [25.4 mm] 0.5 in [12.7 mm] 1.5 in from edge. drvwall [38.1 mm] wood x 2 -≥1 5/8 in [41.3 mm] min. 1 in Door [25.4 mm] 42 in [1066.8 mm]

Do not install lock on casing that is less than 1 5/8 in [41.3 mm] wide. Drill lock bore at least 2.25 in [57.2 mm] from edge. For this type of installation, door overlap must be at least 3 in [76.2 mm]. Align strike with lock.

Opening with casing less than 1 5/8 in [41.3 mm]



**Note:** If lock bore center location is 2.125 in [54 mm] or more from edge of opening, use stud finder to ensure there are at least two studs stacked behind lock bore center. Extended spindle and fixing screws may be required. Contact KN Crowder to order an extension kit.

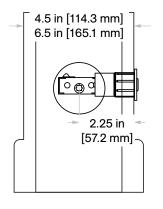


**Note:** While door is fully closed, measure overlap on side where lock is to be installed. For casing less than 1 5/8 in [41.3 mm], door overlap must be at least 3 in [76.2 mm]. Align strike with lock.

#### Step #2:

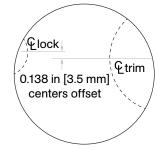
Verify wall thickness to ensure correct product and backset. There is no maximum thickness.

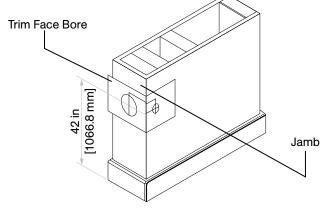
Wall thickness minimum: 4.5 in [114.3 mm] Minimum stud size: 2x4 Backset: 2.25 in [57.2 mm]



#### Step #3:

Remove barn door. Use template to mark pilot hole. **Note:** The borehole on jamb side is offset 3.5 mm (approximately 0.138 in) lower than wall-side bore.



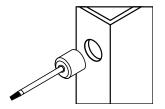


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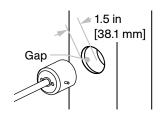
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#### Step #4:

Before drilling, cover area around borehole with masking tape to prevent drywall from chipping or cracking. With a Ø2 1/8 in hole saw, drill on jamb side in accordance with following steps.

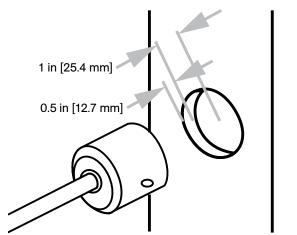


**Note:** If there is a gap between drywall and stud, measure distance and add to borehole depth. Hole depth must accommodate lock barrel preparation in step 6. Trim bore can be deepened as needed after that step.



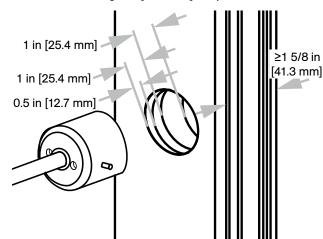
#### Without casing

- Drill through drywall approximately 0.5 in [12.7 mm] to locate first wood stud.
- B. Continue drilling 1 in [25.4 mm] into stud.



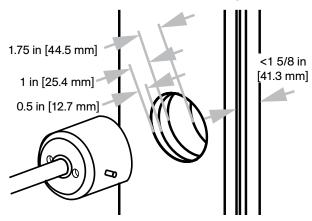
#### With casing 1 5/8 in [41.3 mm] or wider

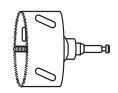
- A. Drill through casing and drywall approximately 1 in [25.4 mm] to locate first wood stud.
- B. Continue drilling 1 in [25.4 mm] deep into stud.



#### With casing less than 1 5/8 in [41.3 mm]

- A. Drill through casing and drywall approximately 1 in [25.4 mm] deep to locate first wood stud.
- B. Continue drilling 1.75 in [44.5 mm] deep into stud. This will give you a 2.25 in [57.2 mm] deep bore to accommodate lock installed next to casing.





Note: Do not exceed depth of wood stud when drilling. Minimum 0.25 in [6.4 mm] or thicker wood backing is required to support lock.

For drywall openings protected with steel corner beads, use metal hole saw for cleaner and faster installation.

#### Step #5:

Double check lock bore distance from **step #1**. Refer to template markings to ensure both lock and strike pilot holes are within door overlap requirements. Keep 0.375 in [9.5 mm] safety margin to edges.

#### Drywall or flat casing openings

Use a 1 in [25.4 mm] hole saw to cut lock borehole to depth as shown in chart.

**Note:** Hole saw for metal should be used for drywall with steel corner bead.

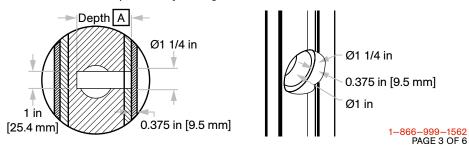
Lock Part No.	Backset	Borehole Depth
C-54BL	2.25 in [57.2 mm]	3.25 in [82.5 mm]



#### Moulded casing with uneven surface

At pilot center mark, use  $\varnothing 1$  1/4 in hole saw to drill to a depth of 0.375 in [9.5 mm]. Use  $\varnothing 1$  in hole saw at same center mark to drill hole to correct borehole depth.

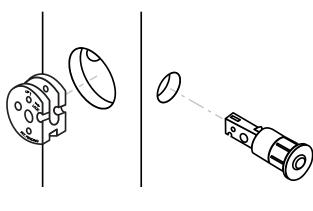
Note: Do not drill too deep, as it may damage wall on other side.



#### Step #6:

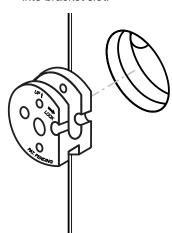
#### For drywall and casing less than 1 5/8 in [41.3 mm]

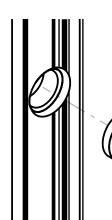
- A. Insert bracket into trim bore
- B. Insert lock bolt into lock bore and fit into bracket slot.

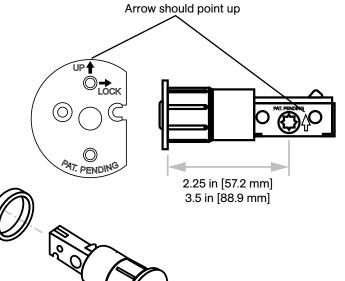


#### For moulded casing with uneven surface

- A. Insert 0.25 in [6.4 mm] spacer provided with lock into 1.25 in [31.8 mm] recess first.
- B. Insert bracket into trim bore.
- Insert lock bolt and spacer into lock bore and fit into bracket slot.



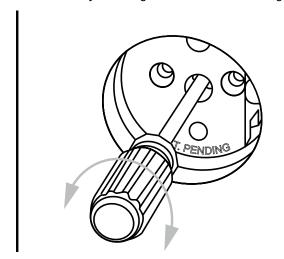


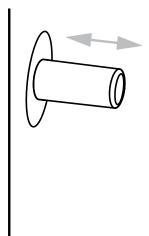


#### Step #7:

Ensure spindle hub is at center of trim bore. Use spindle or screwdriver to test bolt retraction; if not smooth, troubleshoot as follows:

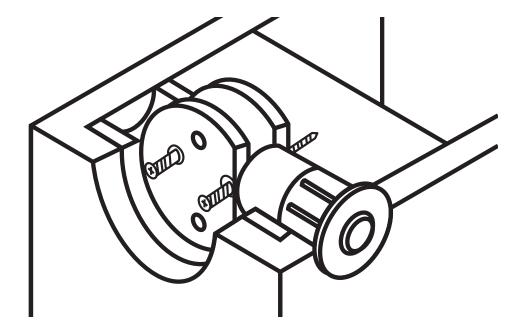
- 1. Check 2 1/8 in [54 mm] trim bore dimensions.
- 2. Ensure hole is free of debris.
- 3. Make sure 1 in [25.4 mm] lock bore is perpendicular to trim bore.
- 4. Check lock by removing it from bore and throwing bolt. Adjust wall prep as needed.





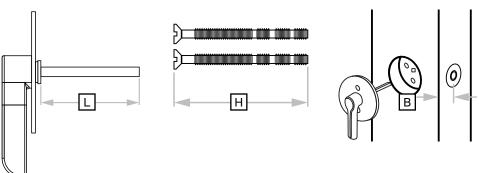
Step #8:

Fasten two wood screws inside trim borehole through lock body and into wood stud.



#### Step #9:

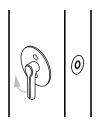
Cut spindle and screw to accommodate wall side backset.



Spindle Length L	Screw Length H
1.25 in [31.8 mm]	0.813 in [20.7 mm]
1.5 in [38.1 mm]	1.063 in [27 mm]
1.75 in [44.5 mm]	1.313 in [33.3 mm]
2 in [50.8 mm]	1.563 in [39.7 mm]
2.25 in [57.2 mm]	1.813 in [46.1 mm]
2.5 in [63.5 mm]	2.063 in [52.4 mm]
2.75 in [69.9 mm]	2.313 in [58.8 mm]
	1.25 in [31.8 mm] 1.5 in [38.1 mm] 1.75 in [44.5 mm] 2 in [50.8 mm] 2.25 in [57.2 mm] 2.5 in [63.5 mm]

#### Step #10:

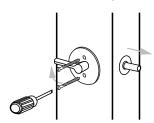
Insert trim into spindle hole. Use thumb turn to test lock bolt movement.



#### Step #11:

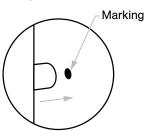
Fasten trim screws until trim is tight to jamb surface.

Note: do not over tighten.



#### Step #12:

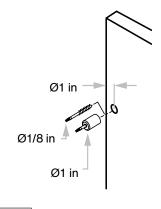
Move door to closed position and throw lock bolt to mark exact strike center position.
This location must be a minimum of 1 in [25.4 mm] to edge of door.



#### Step #13:

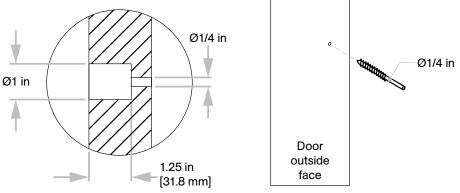
Using strike center position as a guide, drill a pilot hole through door a  $\emptyset$ 1/8 in drill bit from strike side. With pilot hole as guide, use a  $\emptyset$ 1 in hole saw to drill a 1.25 in [31.8 mm] deep hole.

Note: Do not drill through door.

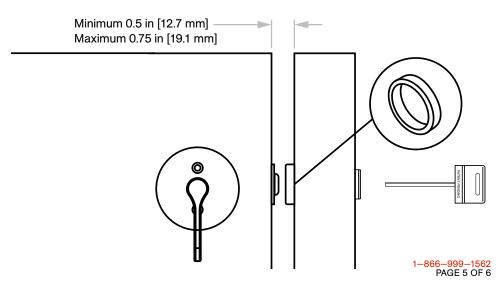


#### Step #14:

With pilot hole as a guide, use a  $\emptyset$ 1/4 in bit to drill a hole from outside to connect with strike borehole.

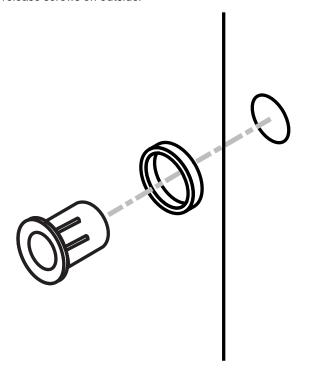


**Note:** Standard barn door to wall clearance is approximately 0.375 in [9.5 mm] to 0.5 in [12.7 mm]. Install additional spacer as needed behind strike faceplate if door to wall clearance is over 0.5 in [12.7 mm]. Additional spacers can support maximum clearance of 0.75 in [19.1 mm] between door and wall.



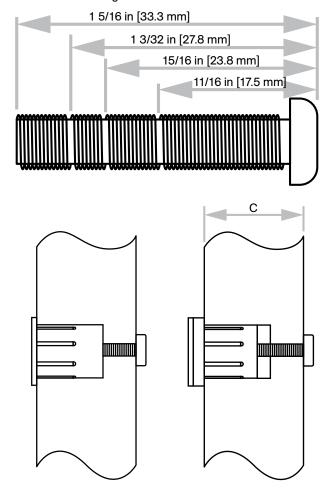
#### Step #15:

Install 1 in [25.4 mm] dustproof strike with 0.25 in [6.4 mm] release screws on outside.



#### Step #16:

Cut break-away screw to appropriate door thickness. Note: do not over tighten.

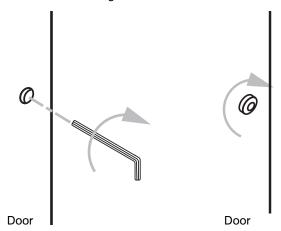


Door thickness	Length without spacer	Length with spacer
1 3/8 in	11/16 in	15/16 in
[34.9 mm]	[17.5 mm]	[23.8 mm]
1 3/4 in	1 3/32 in	1 5/16 in
[44.5 mm]	[27.8 mm]	[33.3 mm]

#### Step #17:

Install break-away screw and tighten with Allen wrench. Screw on decorative cap by hand.

Note: do not over tighten.



#### Step #18:

Use release key, provided with lockset, to push through center hole on release to push lock bolt back and unlock door.

