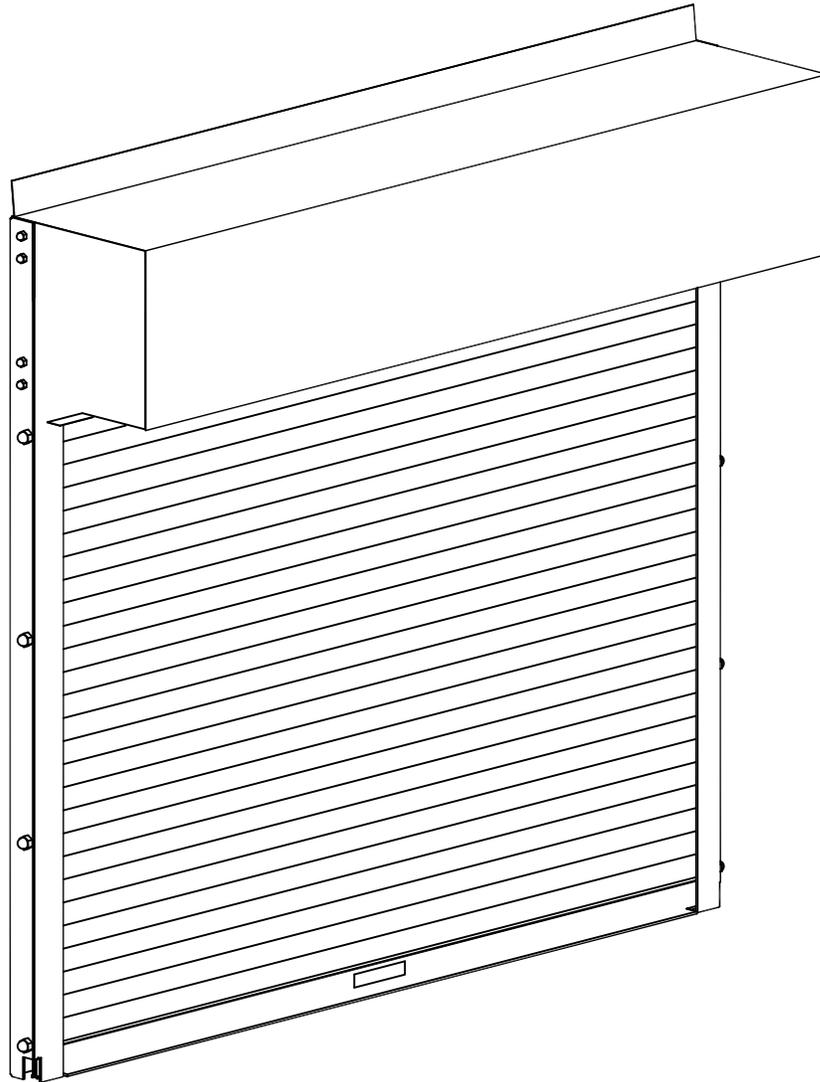


INSTALLATION INSTRUCTIONS - COUNTER SHUTTERS



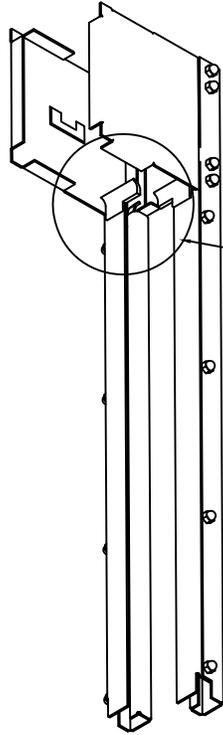
Job Name:	Docket #:	

These installation instructions have been prepared to assist you. They are not prepared to alleviate you from complying with local building codes and ordinances.

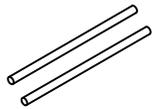
Keep for reference

PREPARATION

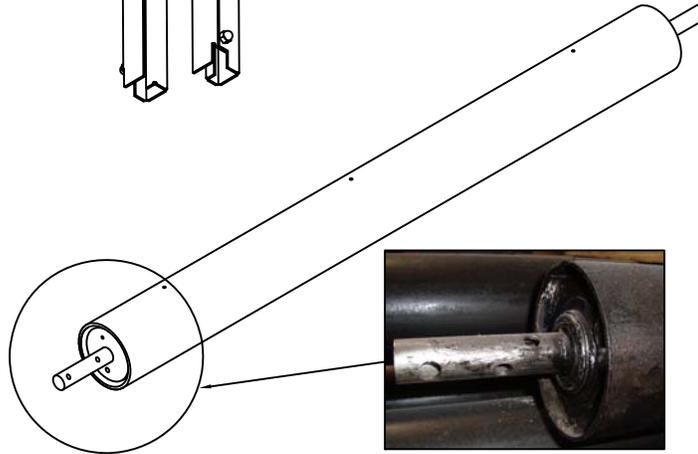
STANDARD PARTS:



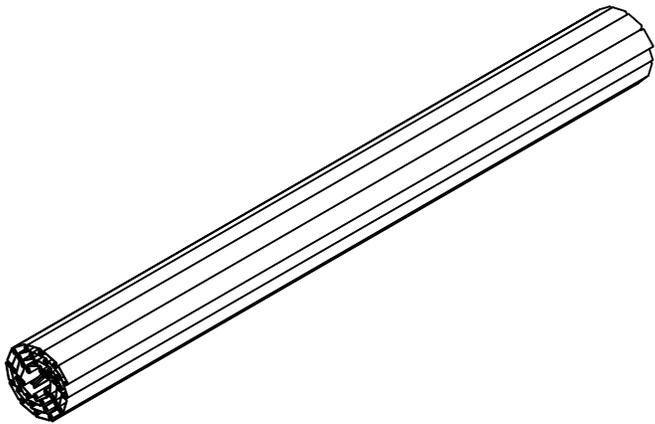
Guides (2) with bellmounts(enlarged Photo)



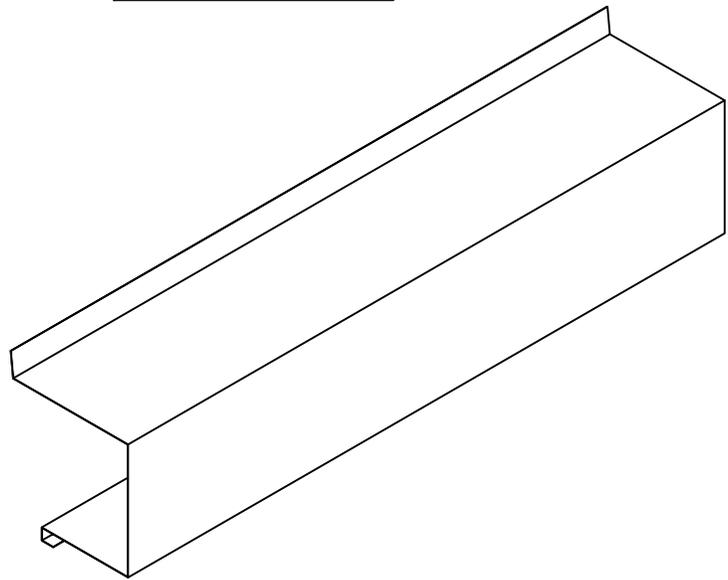
3/8" Tension Rods



Pipe Assembly

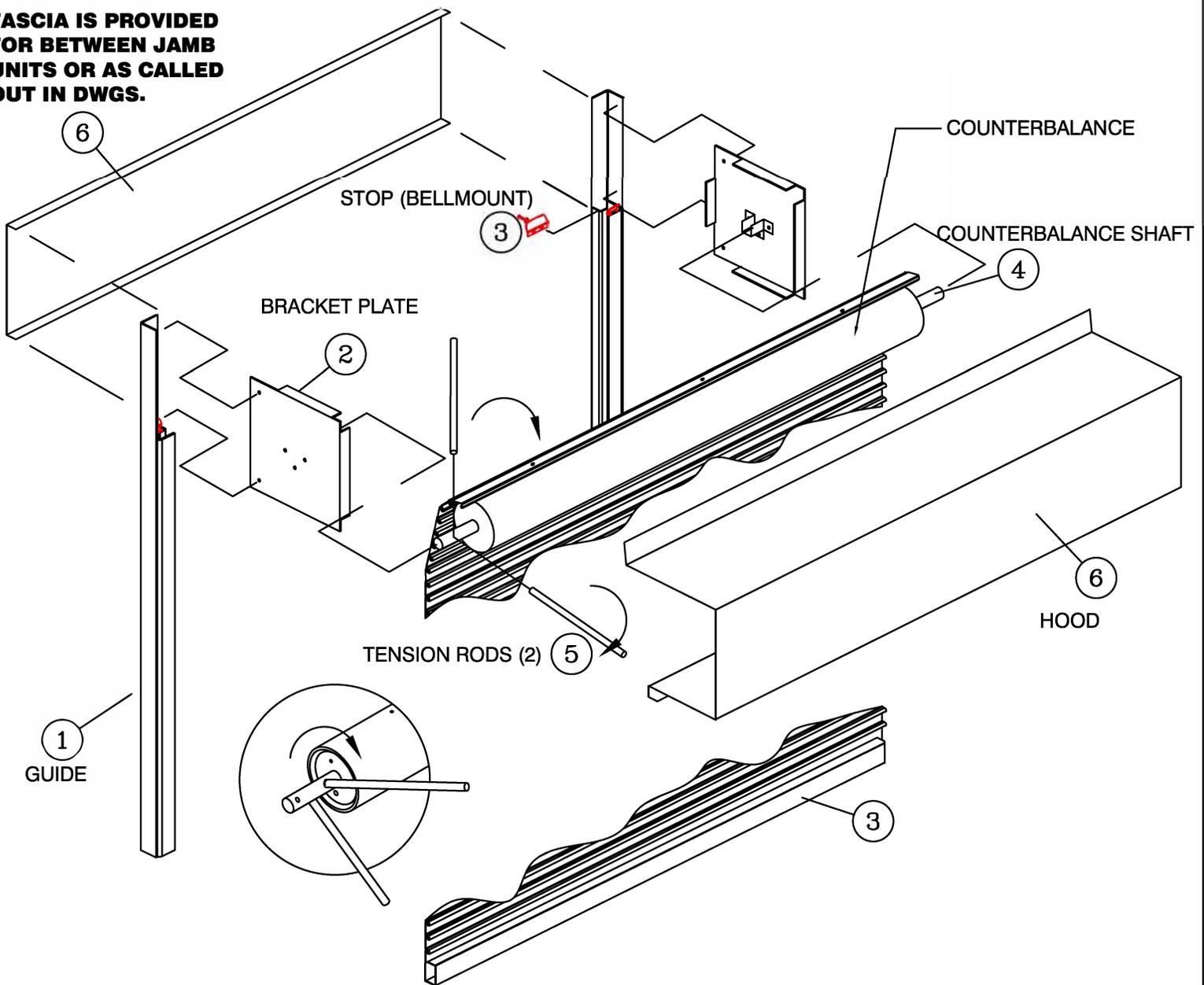


Curtain & Bottom bar (1)



Hood (1)

FASCIA IS PROVIDED FOR BETWEEN JAMB UNITS OR AS CALLED OUT IN DWGS.



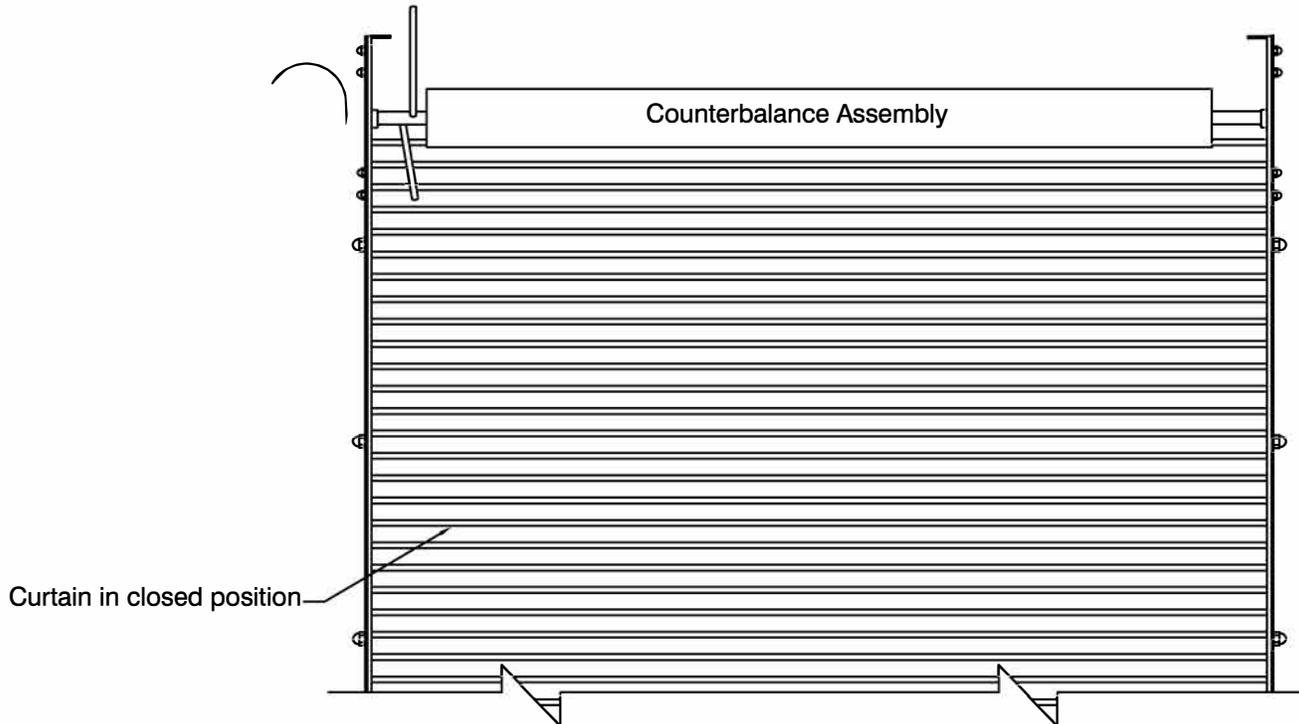
NOTE: FACE OF WALL AND BETWEEN JAMB SHUTTERS HAVE A SLIGHTLY DIFFERENT GUIDE TYPE

Measure the opening prior to the attachment of any materials to the structure. Refer to your field print for width and height.

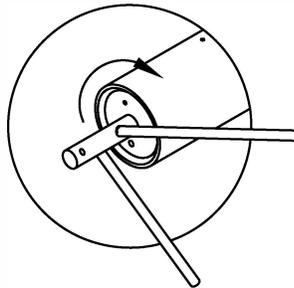
- 1. Mount guide set to the wall, spaced apart exactly as shown on field print. Holes are pre-drilled for type mounting required.**
- 2. Affix bracket plates to wall angle. NOTE: The brackets are to be even in height with the top of the wall angles and level to each other. Check overall height, adjust if required. Check between bracket plate dimension.**
- 3. Remove the stops from the guide sets and insert the curtain into the guides. The curtain must pass on the opposite coil side and the flush side must be facing out. With the curtain fully closed, reattach the stops. Bolt curtain to counterbalance assembly.**
- 4. Set pipe shaft assembly into pockets affixed on bracket plates. (refer to the markings on the pipe for proper placement) for example, the end marked RH goes into the pocket on the right hand bracket, when facing the coil side of the door.**

5. To place tension on the counterbalance assembly, two tension rods are needed in conjunction with the holes in the left end of the counterbalance.

a) With the curtain fully closed, and standing on the inside, place a clamp on the curtain to keep it in position.



b) Insert one of the tension rods into a hole in the shaft of the counterbalance and begin to pull the pin downward until you can insert a second pin into the next hole. Repeat this process to add tension.



CAUTION: DO NOT OVER TENSION, SPRING MAY COLLAPSE, RESULTING IN IMPROPER OPERATION OF THE DOOR.

WARNING: USE EXTREME CAUTION WHEN GIVING TENSION, SERIOUS INJURY OR DEATH COULD OCCUR.

c) Insert the bolts through the shaft, into the pockets and secure tightly with nut.

d) Remove the clamp from the curtain.

e) Test the operation of the curtain, repeat if required.

6) Install hood, and fascia (if equipped) using self-tapping screws.

MAINTENANCE INSTRUCTIONS



ONLY EXPERIENCED PERSONNEL SHOULD PERFORM MAINTENANCE

LUBRICATION

The most important maintenance item on doors of this type is lubrication.

The curtain, guides and teeth of the gears contained in motor or hand crank mechanism (if supplied) should be lubricated at least twice a year (more often if door works very frequently) with one of the following greases, or equivalent:

- Dixon's #2 Graphite Cup Grease (#1 for summer weather)
- Alemite MP Lithium Grease (#1 for winter weather, #2 for normal)
- Texaco #904 Graphite Grease

If door is electrically operated, check the oil level in the worm gear speed reducer every six months and replenish if necessary with S.A.E 140 gear oil, for normally heated buildings, thinner grades for outside installations exposed to low temperatures.

PAINT

All non-lubricated steel surfaces should be painted annually (more often if required in corrosive atmospheres) with a good grade of rust inhibiting metallic base paint.

SPRING ADJUSTMENT

In time, the counter balancing springs may lose some of their initial tension; this condition imposes an extra load on the operator and should be corrected as follows:

- 1a) Manually operated doors should be opened fully by hand and held open by "C" clamps or Vice grip pliers on each guide.
- 1b) Mechanically operated doors should be opened fully and the crank or hand chain should be locked to hold the door open.
- 1c) Electrically operated doors should be open fully by pushing the UP or OPEN button (motor brake will hold the door open) shut off power supply to the motor during adjustment.
- 2) With suitable tool (18" or 24" pipe wrench or larger spanner) turn the spring adjusting wheel (1/8 turn at a time) until the door is balanced properly. Make sure pawl is properly engaged in spring adjusting wheel.

NOTE: For door with adjusting wheel on left hand side, wind spring clockwise (downward), for door with adjusting wheel on right hand side, wind spring counter clockwise (downward).