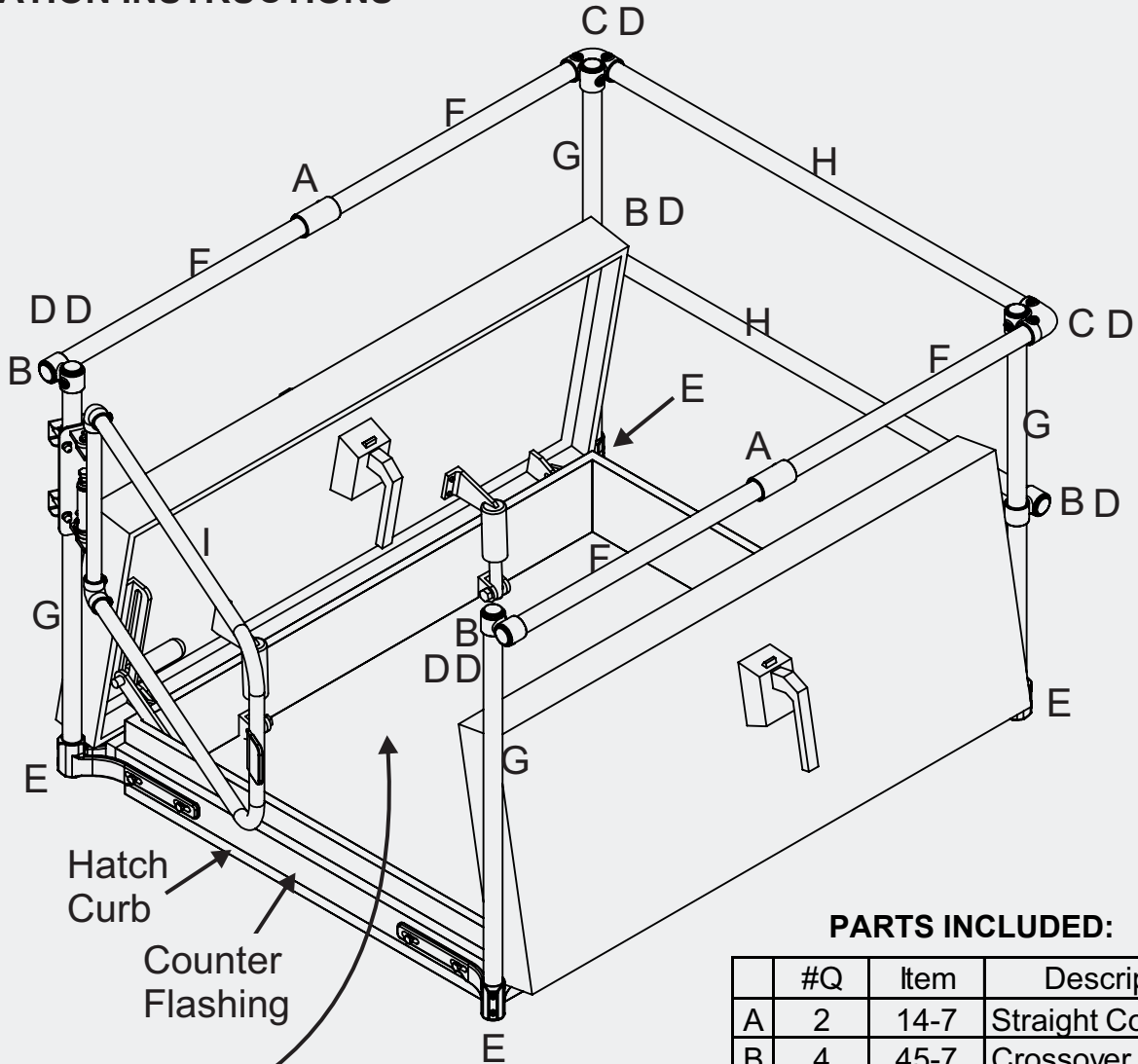




# KEE HATCH® RAILING MODEL KH-DL-4860

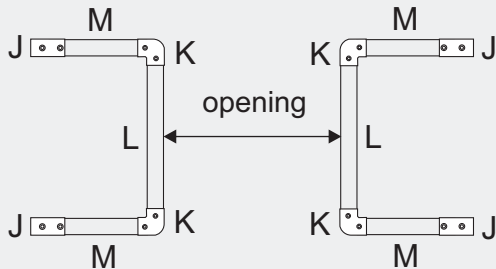
## INSTALLATION INSTRUCTIONS



### PARTS INCLUDED:

#Q	Item	Description
A	2 14-7	Straight Coupling
B	4 45-7	Crossover
C	2 121-7	Corner Crossover
D	8 133C	Plastic Plug
E	4 161-7	Corner Bracket
F	4 40 1/8"	Pipe
G	4 42 3/4"	Pipe
H	2 66"	Pipe
I	1	Self Closing Gate
J	2 or 4 10-7	Single Socket Tee
K	2 or 4 15-7	90 Degree Elbow
L	1 or 2 19 1/2"	Pipe
M	2 or 4 12"	Pipe

D Returns - Used to narrow the opening at the gate. Use one side or both sides, cut M to fit. Gap should be no more than 36". Either 1 or 2 D's are included, depending on the opening size.



**Kee Safety**  
100 Stratdman St.  
Buffalo, NY 14206  
keesafety.com



# KEE HATCH® RAILING

## MODEL KH-DL-4860

### INSTALLATION INSTRUCTIONS

There are two methods of installing our Kee Hatch Railing System:

1. Mounting on the counter flashing.
2. Mounting on the hatch curb.

We strongly recommend mounting on the counter flashing to avoid roof penetrations in the hatch curb.

Hardware Included:	
#Q	Description
16	3/8" x 2 1/2" Hex Head Bolt
16	3/8" x 1 1/4" Hex Head Bolt
16	3/8" Nut
16	3/8" Flat Washer
16	3/8" Lock Washer
16	3/8" Fender Washer
1	Hex Key Set

1. Mounting on the Roof Hatch Counter Flashing (please refer to drawing on page 1)	
STEP 1	Hold Corner Bracket (E) tight to corner of counter flashing.
STEP 2	Mark one hole closest to corner, remove bracket and drill a 7/16" hole (titanium bits work best).
STEP 3	Bolt bracket to counter flashing using 1 1/4" bolt, washer and lock washer, snugly tighten.
STEP 4	Insert post (G) into bracket, plumb side to side, drill outside hole, insert 1 1/4" bolt, washer and lock washer, tighten both bolts.
STEP 5	Plumb post in opposite direction, drill outside hole, insert 1 1/4" bolt, tighten, drill inside hole, insert 1 1/4" bolt, tighten both bolts.
STEP 7	Repeat for all Corner Brackets.
STEP 8	Install top & mid railings (H & F) as shown in diagram keeping top Railing at least 42" above roof surface and positioning mid railing halfway between the top rail and the top of the hatch curb, level rails, cut off excess top and mid railing close to fittings.
STEP 9	Install D returns as instructed in diagram.
STEP 10	Torque all fitting set screws to 29-foot pounds.
STEP 11	Install Self Closing gate (I) per instructions in gate box, adjust gate tension.
STEP 12	Check roof hatch for proper unobstructed closing.



# KEE HATCH® RAILING MODEL KH-DL-4860

## INSTALLATION INSTRUCTIONS

<b>2. Mounting on Roof Hatch Curb (please refer to drawing on page 1)</b>	
Abide by industry standards for mounting, fastening and sealing Corner and Side Brackets.	
STEP 1	Hold Corner Bracket (E) tight to corner of hatch curb.
STEP 2	Mark one hole closest to corner, remove bracket and drill a 7/16" hole (titanium bits work best).
STEP 3	Place roof sealant on inside of bracket, run bolt with fender and lock washer thru inside of curb, snugly bolt bracket to curb.
STEP 4	Insert post (G) into corner bracket, plumb side to side, drill outside hole, run bolt thru inside of curb with fender washer and lock washer, tighten both bolts.
STEP 5	Plumb post in opposite direction, drill outside hole, insert bolt, fender washer and lock washer, tighten, drill inside hole, insert bolt, fender washer and lock washer, tighten both bolts
STEP 6	Repeat for all Corner Brackets.
STEP 7	Install top & mid rails (H & F) as shown in diagram keeping top rail at least 42" above roof surface and positioning mid rail halfway between the top rail and the top of the hatch curb. Level rails, cut off excess top and mid Rails close to fittings.
STEP 8	Install D returns as instructed in diagram.
STEP 9	Torque all fitting set screws to 29-foot pounds.
STEP 10	Install Self Closing Gate (I) per instructions in gate box, adjust gate tension.
STEP 11	Cut off all bolt ends to the nuts. File or grind burrs on bolt ends. Caulk over nuts.
STEP 12	Check roof hatch for proper unobstructed closing.