



Common Solutions for Installing a Door on a Non-Standard Areaway

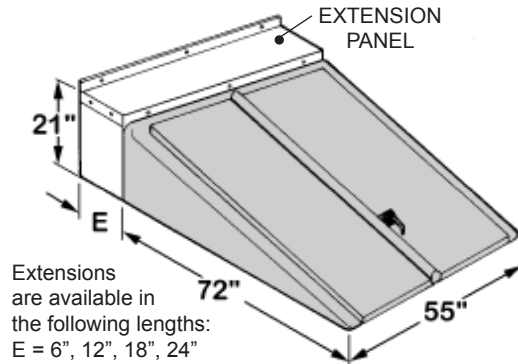
Most existing areaways will accept one of the four standard steel sided Bilco door sizes, or can be modified for a satisfactory installation. This instruction sheet provides some common modifications that can be made to either the basement door or areaway for proper installation on non-standard size or unique areaways:

The areaway foundation is too long for a standard door:

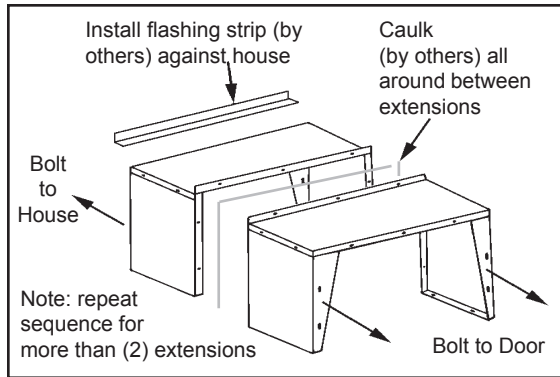
The Size C Door, the longest standard door, can be fitted with a Bilco door Extension to increase its length by 6, 12, 18 or 24 inches.

Complete installation instructions are supplied with the extension panels.

For very long areaways, it is possible to install two standard extensions, of any length, back to back. Note that the front of the second extension is then against the house and the rear flange extends downward rather than up. Extreme care is required to apply caulking between the joint with the house in order to avoid leakage. Flashing over the Extension is a good precaution. With two 24 inch extensions and the Size C Door, areaways up to almost ten feet long can be accommodated.



Extensions are available in the following lengths:
E = 6", 12", 18", 24"



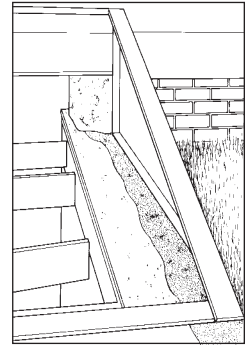
The areaway foundation is too short for a standard door:
Build a ledge on the outside front of the areaway utilizing one of the following methods:

- Build a form and pour concrete to increase the length.
- Cap the sidewall with a Bilco foundation plate. Position the foundation plate so that it overhangs outside the areaway enough to increase the opening length as required. Anchor the foundation plate to the areaway before installing the door.

The areaway foundation is too wide for a standard door:

Build a ledge on the inside of the areaway utilizing one of the following methods:

- Build a form and pour concrete as shown in the detail on the right.
- Lag bolt a steel angle to the areaway sidewall underneath it for support.
- Cap the sidewall with a Bilco foundation plate. Position the foundation plate so that it overhangs into the areaway enough to reduce the opening width as required. Anchor the foundation plate to the areaway before installing the door.



The areaway foundation is too narrow for a standard door:

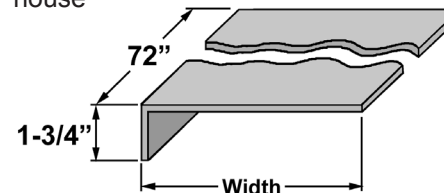
Build a ledge on the outside of the areaway on either side utilizing one of the following methods:

- Build a form and pour concrete to increase the length.
- Cap the sidewall with a Bilco foundation plate. Position the foundation plate so that it overhangs outside the areaway enough to increase the opening width as required. Anchor the foundation plate to the areaway before installing the door.

OPTIONAL FOUNDATION PLATES

Bilco foundation plates are available from your Bilco Dealer. Foundation Plates are installed on top of the areaway foundation sidewalls to:

- Improve the areaway appearance
- Cover rough masonry and small holes, and span voids in brick and concrete block
- Reduce the inside width of the areaway foundation
- For corner installations with one side supported by the house



Model	Length	Width	Height
FP5	72"	5"	1-3/4"
FP8	72"	8"	1-3/4"
FP11	72"	11"	1-3/4"
FP14	72"	14"	1-3/4"

The areaway foundation is in a corner

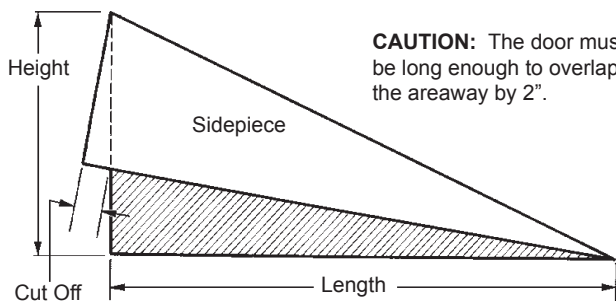
Leave enough clearance between the door sidepiece and the wall to allow easy removal of leaves and debris. Pitch concrete for good drainage. If sidepiece must be anchored to the wall of the home, the following details show methods for securing a waterproof joint:

For brick or masonry walls: Support sidepiece by lagging a steel angle to the areaway wall as shown in detail on right. Utilizing a steel bar, create a spacer to go between the sidepiece and wall. Lag bolt through the door sidepiece and spacer to secure to the wall. Caulk over spacer bar thoroughly to complete the installation.

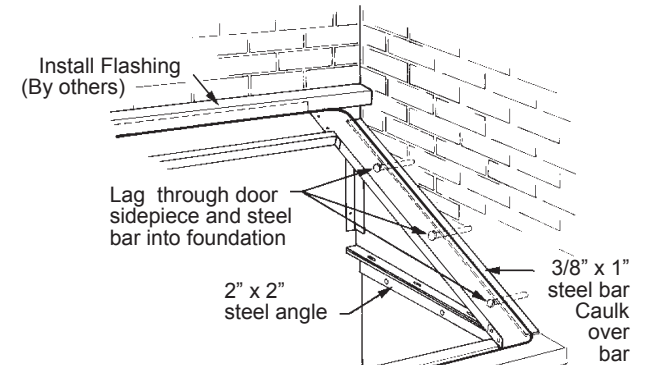
For clapboard or shingle sided walls: Use 2" to 3" pipe spacers between the door sidepiece and the house foundation as shown in detail on right. Lag bolt through the sidepiece and pipe spacers into the foundation or siding. Build a wood form and pour concrete between the foundation and the sidepiece. Caulk thoroughly to complete the installation.

Modifying the height and length of a Bilco door

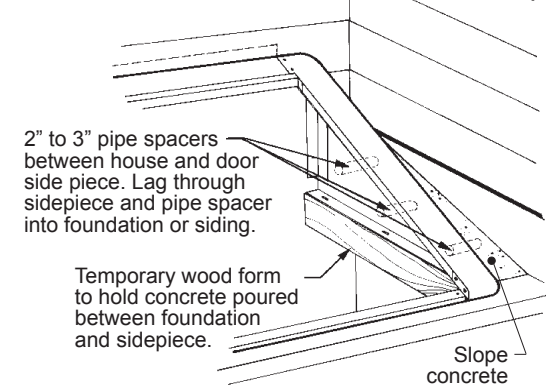
The Bilco door can be raised to increase its height by cutting an angle from the sidepieces of the door or extension as shown in detail below. This will also reduce the door length. To modify your door, first determine the desired door height from the areaway foundation. Find this dimension in the first column of the chart labeled "Height". To determine the new door length and amount to be cut off, find the column for your door size. Before cutting door, verify that the new door length will work for the length of areaway. Cut the door sidepanels with a metal cutting blade. Assemble door frame and position it on the areaway. Build a form around the frame and pour concrete in stages to fill the triangular opening under the sidepieces. To assure a good fit, prop the door in place before finishing the foundation. To fit the sill on the foundation, remove the upper sill bolts and pivot until level.



Brick or Masonry Facing



Clapboard or Shingle Facing



Height	Size O		Size B		Size C		Size C 6" Ext.		Size C 12" Ext.		Size C 18" Ext.		Size C 24" Ext.	
	Length	Cut	Length	Cut	Length	Cut	Length	Cut	Length	Cut	Length	Cut	Length	Cut
24			63-1/4	0-3/4	70-5/8	1-1/4	77-1/8	0-7/8	83-1/4	0-3/4	89-1/4	0-3/4	95-1/4	0-5/8
28			61-5/8	2-1/8	69-1/8	2-3/8	75-3/4	1-7/8	81-7/8	1-3/4	88-1/8	1-5/8	94-1/4	1-1/2
32	56-7/8	1	59-5/8	3-5/8	67-3/8	3-1/2	74-1/8	3	80-1/2	2-7/8	86-3/4	2-5/8	92-7/8	2-1/2
36	54-1/2	3-1/4	57-1/4	5-1/8	65-3/8	4-3/4	72-1/4	4-1/4	78-3/4	3-7/8	85-1/8	3-5/8	91-1/2	3-3/8
40	51-5/8	5-1/2	54-5/8	6-7/8	63	6	70-1/8	5-1/2	76-3/4	5	83-1/4	4-5/8	89-3/4	4-3/8
44	48-1/4	8	51-3/8	8-3/4	60-1/4	7-1/2	67-3/4	6-3/4	74-5/8	6-1/4	81-1/4	5-3/4	87-7/8	5-3/8
48	44-1/4	10-7/8	47-3/4	10-7/8	57-1/8	9	65	8-1/4	72	7-1/2	79	6-7/8	85-3/4	6-3/8
52	39-1/2	14-1/4	43-1/4	13-3/8	53-1/2	10-7/8	61-7/8	9-3/4	69-1/4	8-7/8	76-3/8	8-1/8	83-3/8	7-1/2
56	33-5/8	18-1/2	38	16-1/2	49-1/4	12-7/8	58-1/4	11-1/2	66	10-3/8	73-1/2	9-3/8	80-3/4	8-5/8
60			31-1/4	20-7/8	44-3/8	15-1/2	54-1/8	13-5/8	62-3/8	12	70-1/4	10-7/8	77-7/8	9-7/8
64					38-3/8	18-3/4	49-1/4	16	58-3/8	14	66-5/8	12-1/2	74-5/8	11-1/4
68							43-5/8	19-1/8	53-5/8	16-1/4	62-5/8	14-1/4	71	12-7/8
72							36-5/8	23-1/4	48-1/8	19	57-7/8	16-3/8	66-7/8	14-5/8

Note: Below broken line (— — —), cuts include Extension and sidepiece.