



Eastern

ARCHITECTURAL SYSTEMS

**ALUMINUM AND VINYL
IMPACT WINDOWS AND DOORS**

Subject: Calculation of Masonry Opening

The following are instructions on how to calculate the masonry opening for EAS windows and doors.

1. Current 143 Vinyl Window Line and Aluminum window line:
 - a. Identify the Tip to Tip size of the windows ordered.
 - b. Subtract 1/2" from each side for the flange of the window, 1" total from both height and width to get to the buck size of the window.
 - c. Identify the substrate being used, 1X buck, 2X buck or strait to masonry. Add the buck thickness to the window buck size. Add 3/4" to each side for 1X buck. Add 1 1/2" to each side for 2X buck.
 - d. Identify the shim space to be allowed for installation. 1/4" is maximum allowed per side per EAS product approvals. Add the shim space to each side to the measurement from above.
 - e. The finished dimension is the masonry opening for the window.

Example calculation: Window Tip to Tip size = 36" x 60"

- Subtract 1/2" for flange from each side = $36'' - 1'' = 35''$, $60'' - 1'' = 59''$ Window buck size is 35" x 59".
- Substrate to be used is 1X buck. Add 3/4" to each side, 1 1/2" total to height and width: $35'' + 1\ 1/2'' = 36\ 1/2''$. $59'' + 1\ 1/2'' = 60\ 1/2''$. New dimension is 36 1/2" x 60 1/2".
- 1/4" maximum shim space per side will be used. Add 1/4" to each side. Total 1/2" to height and width. $36\ 1/2'' + 1/2'' = 37''$. $60\ 1/2'' + 1/2'' = 61''$.
- Masonry Opening for a 36" x 60" Tip to Tip Vinyl Window = 37" x 61"

2. All Vinyl and Aluminum Doors:
 - a. Identify overall frame size. If ordering a 96" x 96" unit the overall frame size/buck size is 96" x 96".
 - b. Identify the substrate being used, 1X buck, 2X buck or strait to masonry. Add the buck thickness to the door overall size/buck size at jambs and head. Add 3/4" for 1X buck. Add 1 1/2" for 2X buck. At the sill add 1/8" to allow leveling of sill.
 - c. Identify the shim space to be allowed for installation. 1/4" is maximum allowed per side per EAS product approvals. Add the shim space to the jamb and head dimension from above.
 - d. The finished dimension is the masonry opening for the door.



Example calculation: Door Overall Frame Size/Buck Size = 96" x 96"

- Substrate to be used is 1X buck. Add 3/4" to each jamb, 1 1/2" total to width: $96" + 1\ 1/2" = 97\ 1/2"$. Add 3/4" to head, $96" + 3/4" = 96\ 3/4"$. New dimension is
- New dimension is $97\ 1/2" \times 96\ 3/4"$.
- 1/4" maximum shim space per side will be used. Add 1/4" to each jamb. Total 1/2" to width. $97\ 1/2" + 1/2" = 98"$. Add 1/4" to head and 1/8" to sill for height dimension = $96\ 3/4" + 1/4" + 1/8" = 97\ 1/8"$.
- Masonry Opening for a 96" x 96" Overall Frame Size Door = $98" \times 97\ 1/8"$

If you still have questions please feel free to contact Tim Hoard, Manager of Engineering at EAS at 1-800-686-8902 or at thoard@easternmetal.com.