



Screen Specification and Dimension Suggestions

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1) General

- a) For screens to function properly, they must be made with the specifications (materials and design) and dimensions to match the opening on which they will be installed.
- b) Georgia Screen Products will do our best as a resource for each customer by providing suggestions, general guidelines, and explanations of materials. However, we are not window or installation experts. Final decisions about screen specifications and dimensions are the sole responsibility of our customers, and customers not comfortable making such decisions themselves should consider working with one of our preferred screen installation contractors.

2) Duplicating an Existing Sample Screen

- a) Duplicating an existing sample screen is easier than starting from scratch.
- b) Materials and design should be matched exactly if possible. If exact match is not possible, substitutions can be considered on a case-by-case basis.
 - i) Screen frame size (width) is usually critical to the function of the screen so it is not advisable to make substitutions. If a size change is necessary, it is usually preferable to go to a smaller size and not a larger size. It is best to measure the screen frame width directly against sample pieces of screen frame size as measuring such small differences with a tape measure can lead to errors. Screen frame size (face) is usually not critical to function.
 - ii) Hardware location is sometimes critical if the opening has specific holes or slots that the hardware must fit into.
 - iii) Crossbar location is usually not critical to function, but it is sometimes important because of the location of a meeting rail on a window, hand rail on a porch, or crossbar on a door.
- c) Dimensions should account for tolerances, both in the production of the original screen as well as in the production of the duplicate.
 - i) Our production tolerance is at the industry standard of $\pm 1/16$ ". This means that a screen that is $1/16$ " over or $1/16$ " under the nominally specified "build to" dimensions would be considered correct and acceptable. It also means that the nominal (exactly correct) dimension of a screen for a particular window might be $\pm 1/16$ " (or more) different from the measurement of an actual sample, depending on how closely the sample was produced to the "build to" dimensions.
 - ii) In most cases of a recess mounted screen, it is advisable to round down to the nearest $1/16$ " on measured dimension of the sample screen since a slightly smaller screen will almost always work whereas a slightly larger screen might not fit into the recess. The opposite applies for a surface mounted screen, and it is advisable to round up to the nearest $1/16$ ".
 - iii) Window and door screens usually have a consistent width (top and bottom are same measurement) and height (left and right are same measurement). Small differences ($1/4$ " or less between top and bottom or left and right) should usually be ignored and the smaller of the measurements used as the width or height. Also, multiple samples of the same "size" screen should usually be made to the same finished dimension even if the samples vary in size slightly ($1/4$ " or less).
 - iv) Porch Panel screen can often have different top and bottom as well as left and right measurements, and if necessary, all four dimensions should be used in producing the new screen.

3) Making a Screen Based on Opening Only

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- a) Making a screen based on opening only is more difficult than duplicating an existing sample screen. It is especially difficult to make a screen from scratch for a vinyl or aluminum single hung window.
- b) Porch Panel (easy)
 - i) For a recess mounted screen, it is usually best to take the opening dimensions on all 4 sides and subtract 1/4" from each measurement.
 - ii) For a surface mounted screen, it is usually best to take the opening dimensions on all 4 sides and add 1-1/2" or more to each measurement.
 - iii) Adding or subtracting from the dimensions for Angle or Arch screens is more difficult than just adding or subtracting from each measurement because of the geometry involved in an Angle or Arch screen. In limited cases, we can assist with making deductions from opening measurements, but it is usually best for a customer to take measurements directly from the opening that already allow for an acceptable gap (or overlap) for the finished screen.
 - iv) For more detailed information, refer to the Suggestions for Porch Panels document.
- c) Screen for standard Wood Double Hung windows (easy)
 - i) Wood Double Hung windows open from the top and the bottom, they are made of wood (they sometimes have vinyl parts as well, but the main frame is wood), and are usually made to standard sizes.
 - ii) Subtract 1/4" from opening measurement to determine proper screen dimensions (should be consistent width and height). Also, take measurement from bottom of opening to bottom of meeting rail and add 1/4" to determine Crossbar location Bottom-to-Bottom (CB B-B).
 - iii) Standard Double Hung (SDH) screen specifications are a standard common type of screen attached with loop latches and friction hangers. SDH screens in standard sizes will usually fit an opening that is between 1/16" and 3/8" larger than the screen. Other opening sizes will require a special screen size made to SDH specifications.
 - iv) Some windows have a groove or slot running along the sides and possibly the top of the window to accept screens with plunger pins, but this is not a recommended screen design since it does not always sufficiently secure the screen to the window. If a plunger pin specification for a Wood Double Hung window is preferred, make sure to take very accurate measurements and consider subtracting only 1/8" from opening dimensions instead of 1/4" for a better fit.
- d) Screen for Aluminum and Vinyl windows (difficult)
 - i) Aluminum and Vinyl windows are made by many different manufacturers, and each has its own screen design specification and dimensions. There is no standard screen for these types of windows.
 - ii) Because of the many different options for this type of a screen, the only options for making a screen based on opening only are as follows (in order of preference):
 - (1) If the manufacturer and model of the window is known, we might have the required specifications or can attempt to locate the screen details from the manufacturer.
 - (2) Work with a contractor who is expert in working with screens to design a screen that will work with the windows.
 - (3) Review available materials and design options and measure window opening to attempt to design a screen that will work with the window. This might require trial and error.
 - iii) Most screens for a particular type of window are consistent in the fractional portion of the measurements.
 - (1) For example, if the height on the half screen for a 5/2 height window is known to measure 30-3/8", then the height on the half screen for a 6/0 height window will likely be 35-3/8" (i.e., the difference between 5'2" and 6'0" is 10", which is divided in half for the height on a half screen to result in a 5" difference between screen heights).

- e) Swinging Screen Door (easy)
 - i) Swinging Screen Doors should be ordered based on the opening dimensions.
 - ii) Simply take the width and height measurement of the opening into which the door needs to be installed. Doors cannot be made with different top and bottom or left and right side dimensions so any differences must be adjusted to a consistent width and height.
 - iii) Different manufacturers have different ranges of opening sizes onto which a particular size door will fit. Refer to the manufacturer's specifications to determine the opening sizes that a standard size door will fit.
- f) Sliding Patio Screen Door (medium)
 - i) There are many different types of Sliding Patio Screen Doors (PSD) (main categories include standard fixed frame with wheels at top and bottom, expandable with wheels at top and bottom, and top hung). Specifications vary widely, but the standard design and materials will work in most applications.
 - ii) Getting the width and height measurements correct is both the most challenging and most important part (especially the height).
 - (1) As a rule of thumb (but not always for all types), the width dimension of a PSD can be determined as the clear opening width plus 2".
 - (2) As a rule of thumb (but not always for all types), the height dimension of a PSD can be determined as the clear opening height plus 3/8".
 - iii) The wheels on most fixed frame doors can be adjusted +/-1/2", but this is not recommended as a method to size the door because it could leave open gaps above and/or below the screen itself.
 - iv) Sizes much larger than 49 x 82 will benefit from being made with heavy duty frame material.
- g) Specialty Screen (difficult)
 - i) Making a screen based on opening only for any other type of product, whether it is any other type of window or non-standard application, must be approached on a case by case basis.