



Hanging Boxes

The Ultimate Flowerbox

Installation Confidence Builder: Wall Brackets (Self-installation guidelines)

Tools you will need:

Tape measure

Stud Finder

Level: 4' long preferable, laser level even more preferable

Drill: Electric hammer drill, if mounting into mortar or thru stucco.

Drill bits: 1/4", 3/8", and 5/8" for masonry.

Ratchet wrench & sockets: 9/16 and 3/8". A power drill will make it go faster.

Hammer: claw

Caulk gun & Silicon caulk

Masonry repair sealout

General Guidelines for ALL installations

1. Be very sure your drill holes are absolutely level. The box will drain any way, but measure 3 times, drill once. If you are installing more than 2 brackets per box, be sure the middle bracket(s) are not higher than the outside brackets. Otherwise the box could rock and therefore not be securely mounted.
2. Finding the stud can be made easy. First, you will need a stud finder. They are readily available between \$18 and \$25. They are often easier to find from the inside of the house and then transfer the measurements. Slide the sensor along the inside wall under the window where the box will be hung. Locate the studs and make a small pencil mark on each side of the stud. Now accurately transfer the marks to the outside of the house. You can use a common reference point such as the bottom corner of the window.
3. Drill the bracket holes at least 3 3/4" below the window sill or other protrusion.
 - A. You will need a minimum clearance of at least 1 1/2 inches between the bottom of the sill and the top of the hanging bracket is at least 1 1/2".
 - B. This will allow the lip of the box to go above the bracket and then down onto the bracket.
 - C. There will be a gap between the top of the box and the bottom of the sill, but this will be hidden by your bountiful plantings.
4. Do not drill a hole for the bracket less than 3" from the end of the box. The end of each box along the side is solid. There is no groove for the bracket to slip into.
5. Hold the drill steady and perpendicular to the wall. Do not "wallow" out the hole or the bolt will not grab well and may be pulled out easily.

6. Do not drill too deep. If the hole is too deep the shield will be recessed and will not spread properly for the maximum holding strength. Some drills have a depth gauge on the tee handle for precise boring depth. If there is a gauge on the drill, set the same length as the lag shield. The lag shields should touch the end of the gauge and as long as the tip of the bit. If you do not have a gauge, use a magic marker to mark the drill bit.
7. All boxes need at least 2 brackets. After three feet of box, the ratio is one bracket per foot, i.e. a 4' box needs 3 brackets, a 7' box needs 6 and a 12 box needs 11.
8. Bolt sizes: 1 1/2" for deck post, and 3/8" for brick or wood.
9. Fill ALL holes with silicon to avoid water entering the building.
10. Insert the bolt through the bracket so the hole in the bracket will be flat up against the house. The top part of the bracket should then "dog leg" away from the house. This will allow room for the lip of the box to slip down over the bracket, between the bracket and the house. Tighten the bolt as tight as possible. But do not strip out wood or vinyl by over tightening. If the bracket twists out of square a little, just tap it back level with a hammer.
11. Hang the box before you fill it with soil-less mix. A 4 box will weigh 96 lbs once filled.
12. Do not forget to wiggle. After you slip the box over the brackets, be sure to "work it" and "wiggle it" down all the way onto the brackets to insure it is properly mounted.

Installation Guide for Mortar (Brick/Stone)

Why drill into mortar vs. the brick/stone for the bracket hole? If a hole is drilled into the brick, the brick may split when the bolt is tightened into the lag shield. Besides, if you ever wanted to remove the bolt, it is a lot easier to fill a mortar hole than a hole into brick or stone.

Which mortar joint? Usually it is the second horizontal 2nd mortar joint below the sill. If that is still not enough clearance, but you do not wish to have more than 1 1/2" between the bottom of the sill and the top of the box, use a vertical mortar joint. This is more difficult to make sure all holes are level, but will keep your box closer to the sill.

What kind of drill do I need? An electric hammer drill will make the job easier. They rent inexpensively.

What size drill will I need? A 5/8" concrete drill bit.

Caulk the hole before inserting anything. After drilling the holes, **fill them half way** with **masonry repair caulking** using a standard caulking gun.

Proper lag shield orientation. Insert the lag shield so the halves line up with the bricks. This will allow the halves of the shield to spread up against the bricks or stones. That is far better than "pushing" against the softer, more crumbly mortar. Sometimes it may take a hammer to tap the lag shield into the hole.

Installation guide for siding: wood, vinyl, or aluminum

Your box needs to go 3" beyond the window on each side. To have the most secure mounting of the flower box, it is recommended the box extend at least 3" beyond the edge of the trim on each side of the window. This allows

for the bolt to tie-into the framing studs around the window. Since most siding is thin, 7/16" to 5/8" step-out, it is imperative that the anchor bolt goes into a support stud. The boxes become heavy when filled with mix, about 2 pounds per inch. That is 72 pounds for a 3' box.

Where to drill. Drill your hole at least 3 3/4" below the windowsill. You will need at least 1 1/2" clearance between the top of the box and the bottom of the windowsill. This is critical since the lip of the box will need clearance to drop down onto the bracket.

What size drill bit?

For **wood** use 1/4" drill bit

For **vinyl you will need two sizes.** First, use a 3/8" bit to drill through the siding only. Then use a 1/4" bit to finish drilling into the wood. Make sure the drill is held perpendicular to the house, **not** to the siding. The reason for changing drill bits is the bolt does not have threads all the way to the head. When the bolt is tightened, the threadless part does **not** fit well into the 1/4" hole so it pulls the siding in and causes the dimpling effect.

Avoid the "dimple"

Since you can not tighten the bolt all the way, you will need to shim it to keep the bracket upright. Tighten the bolt until you see the siding starting to pull in.

3/22/05