

## **INSTALLATION INSTRUCTIONS - STAIR NOSE**

### **USING: Windlass 5 IN 1 MOULDING and ALUMINIUM SUB PROFILE BASE**

#### **Installation as a Flush Mount Stair Nose**

In order to create esthetics and structural integrity for the flush mount stair nose, this installation requires care, preparation, time and a certain amount of patience.

This is a two-part system consisting of an aluminum sub-profile base and a Windlass in 1 moulding. (Note: If your moulding is a ML82 Solo 5 in 1 moulding, the installation of the stair tread requires a 1/8" wood shim that is installed along the aluminum base and another 1/8" wood shim on the stair tread against the stair riser. The shim is included in package.)

The installation cannot proceed until all stair treads are checked and found to be structurally sound, flat, dry and clean. All leveling for wear in the treads should be addressed prior to attempting to cover them with flooring.

Check building code requirements prior to altering the stair treads, risers or stringers.

#### **WARNING**

***Read and follow the safety instructions for the use of power tools and safety equipment. This installation is only to be used in residential applications.***

Prior to starting the installation, check to see that you have the correct aluminum sub-profile for the flooring you are installing and that all sub profiles are the same. Also check to see that sub profiles are in good repair

#### **Tools and Supplies Required**

**Chop saw with a non-ferrous blade** - Required to install aluminum sub-profile (**Hack saw** will also work)

**Drill** - Required to pre-drill aluminum sub-profile and countersink holes so screw heads do not interfere with installation of stair treads

**Screw driver and screws** - To fasten aluminum sub-profile to tread (Use #6 or #8 counter-sunk wood screws, 1-1/2")

**Caulking gun, construction grade adhesive, and cloths**, for clean-up

**Putty knife** to spread adhesive on aluminum sub-profile

**Adjustable square and measuring tape**

**Hammer** to help with installation of stair nosing

**Shims** to hold stair tread in place

**Utility knife** to cut shims to size

**Flat 2mm non-tapered shims (ex. popsicle stick)** to put on stair tread to keep flooring level with aluminum sub profile

**Roll of tape**

#### **INSTALLATION FOR STAIR TREADS AND RISERS**

When installing stairs, there is no need to have an expansion joint. The floor will not float, it will be glued down. The installation of Windlass flooring on stairs is a fully adhered system. Under no circumstances should underlayment be placed on stair steps or risers.

The new Windlass 5 in 1 moulding will be attached to an aluminum sub-profile, attached to the stairs in a fully adhered system.

#### **NOTE: Use the correct adhesive**

The adhesive for gluing down floating flooring is a construction-type adhesive. These adhesives come in "caulking tubes". Do not track this adhesive onto the surface of the flooring, as it is very difficult to remove.

#### **A. Preparation of the existing stairs**

1. Treads and risers should be structurally sound, flat, dry, clean, smooth, and free from paint, varnish, wax, oils, solvents, and other foreign debris.

2 a) Install over existing tread and exposed nosing

2 b) Riser can be built out to make it flush with stair nosing

2 c) Cut off any existing nosing flush with the riser

2 d) Cover riser with flooring

2 e) Leave natural

2 f) Install profile as a flush mount moulding

2 g) Install profile as an overlap stair nose molding

NOTE: Check local building codes for any stair requirements before modifying the dimensions of the tread.

#### **B. Installation starts at bottom of stairs**

**If you are covering RISERS begin your installation here**

1. Measure bottom riser to get required length and height. In order to cover with flooring, this may require clicking two or more planks together to achieve full riser height. Cut the assembled riser to the correct length first. (If the stairs are enclosed the short sides should fit flush to stringers. If stairs are open on the sides, riser ends will have to be finished with a trim, which can be a piece of Windlass 5 in 1. The bottom edge of the assembled riser will require the removal of the tongue of the flooring. Cut the top of the assembled riser to fit from the main floor to

flush with the top of the existing floor tread. If your installation is with an exposed nosing fit to the bottom of the nosing.

2. Glue assembled riser in place by applying construction adhesive to the back of the assembly in an "S" pattern and pressing it firmly into place.
3. The next step is to install the bottom stair tread, followed alternately by riser installation and tread installation.

#### **C. Installation of treads**

1. Measure the length of stair tread and cut aluminum sub profile to 1/4" shorter than this length. If stairs are open ended a 45° angle cut will have to be made. This will require a return piece of aluminum sub profile, cut on a 45° angle, so outside corner can be made.

2. Place the aluminum sub profile on the edge of the first tread (without adhesive) Check that aluminum sub profile sits flat on stair tread. It is required that both glue and screws be used to fasten the aluminum sub profile. Remove aluminum sub profile and drill holes every 12".

3. Now counter sink the holes, check to see that screw heads will be flush with the top of aluminum sub profile when installed.

4. Apply construction grade adhesive to bottom of aluminum sub profiles and press firmly in place on the stair tread. Next fasten in place with #6 or #8 1 and 1/2 inch countersunk wood screws. Do not over tighten, as the profile may bend or screw heads may pass through the profile. (Repeat steps 1-4 on the return pieces of aluminum sub profile if stairs are open on sides.)

5. **Cutting the Width:** The aluminum sub profile has a ridge on the long side that allows a plank of flooring to lock into place by the groove on the bottom side of the plank sitting on top of the ridge. To measure the width of your stair tread, lock a short piece of flooring into place on the ridge, then measure the width of your soon to be installed tread by measuring the distance from the riser to the outside of the tongue of the locked in piece of flooring. When cutting the tread to size, the tongue side of the locked in piece must be kept intact. If the riser is not going to be covered with flooring, the cut edge against the riser will have to be a tight fit and show no edge damage after it is cut. To get correct width of tread a couple of planks may have to be clicked together.

6. **Cutting the Length** of your stair tread is the next step.

a) **Enclosed Stairs:** If being fitted between two stringers on a set of closed-in stairs, use a square to measure any "out of square measurements" against the stringers. Mark the tread and cut to length.

b) **Open End Stairs:** If the stairs have an open end or two open ends and stair nose returns are going to have to be installed, then a **fitting** (notch or groove to be cut into the back of the tread) to the sub profile on the returns will now be required. If the side requiring a return is the side of the tread that has the groove end of the plank on it (or is a cut end), you will have to cut a notch or groove on the back of this end and it will also have to be fitted over the ridge on the aluminum sub profile.

- **One End:** In order to measure the length of your stair tread you should lock a short piece of flooring into place on the ridge of the aluminum sub profile on the return end and measure the length of your soon to be installed tread by measuring the distance from the stringer to the outside of the tongue of the locked in piece of flooring.

- **Both Ends:** After following the instructions above, if the stairs are open at both ends, after following the instructions above, you will then install a small piece of 5 in 1 to the far side return aluminum sub profile so you have a point to measure to. (This edge of the tread will not lock into the 5 in 1 but will be a butt fit to the 5 in 1 stair nose.) With the tread cut to size you will now have to cut a notch or groove in the back of the stair tread on the cut side, so it can fit over the ridge in the aluminum sub profile and be locked into place

7. Now you will fit the assembled tread into place and check that all adjustments have been made. You will now remove the newly assembled tread from its placement so you can prepare the tread for permanent installation. For best adhesion to the 5 in 1, remove any wax from the tongues of the assembled stair tread by using your utility knife to scratch along the edge of the tongue.

8. Apply construction adhesive to both the sub profile and the tread it is attached to. Smooth out the adhesive on the sub profile with a putty knife so no lifting of the assembled tread will occur when it is placed on top. Now place some flat wood shims on the tread so the tread will be same level (height) as aluminum sub profile. These shims will allow you to work on the installed tread once it is in place.

9. With everything prepared, place the assembled tread in position. Minor shimming of the tread against the riser will hold tread firmly in place. If a small cut piece of 5 in 1 is available install and slide along aluminum track of sub profile to check for over or under wood of the installed assembled tread

#### D. Installation of the Windlass 5 in 1

Once the tread is in place it is time to install the 5 in 1 stair nose.

- a) **Enclosed Stairs:** Measure the distance for a clean fit between the stringers. After cutting to length, turn over the 5 in 1 and apply a strip of adhesive along both sides of the leg and fine bead along the groove that will cover up the tongue of the assembled stair tread already installed. Starting at one end, press firmly on 5 in 1 pressing the leg of 5 in 1 into track of aluminum sub profile. Minor tapping with hammer will ensure tight flush fit to assembled stair tread and lower riser.
- b) **Open End Stairs:** Mitres will have to be cut on 5 in 1 to make outside corners. When measuring the length install small pieces of 5 in 1 on the returns to allow for tight measurements to be taken. When cutting your return pieces, cut 45° angles on both ends of returns. This will allow for outside mitered corners on both ends of your returns. The other end of return can be finished with another small return piece. Once pieces are cut apply adhesive as instructed above, and as well as to the inside of the mitres prior to tapping into tracks of the aluminum sub profile. Use tape to hold 5-in-1 and assembled tread to hold in position and help prevent minor gapping or over-wood if required. Remove all tape immediately after the glue's recommended drying time, as per manufacturer, has expired.

**NOTE: Make sure you have cleaned up all adhesive prior to moving on to next task.**

**Repeat Stair Installation (B,C,D) until top tread prior to landing is installed.**

#### E. Installation at Landing (Top Stair Nose)

If top landing is going to have flooring installed on it the distance to the first expansion gap will have to be noted. Continue with correct installation as described below.

**Flush Mount Installation:** If the top landing is **less than 8 feet across**, then continue installation following the same steps as above. If short ends of planks run into the flush mount and a staggered installation pattern is required, notching of the back of the planks may be required. You will have to cut a new notch or groove on the back of the tongue side so the plank can be fitted over the ridge on the aluminum sub profile and tight to the 5-in-1 moulding. Set Fence on table saw for straight cut, depth and width to be same as existing groove.

If stair nose is going to be installed prior to carpeting being installed on the stairs, you will have to remove the bottom or reducer side of the 5-in-1 moulding prior to gluing it into place. This will allow the carpeting when installed to be tucked under the 5-in-1 moulding.

**Overlap Installation:** If the top landing is **greater than 8 feet across**, the installation will require an overlap moulding which will allow the top landing to have expansion at the stairs.

1. Prior to installing the last riser, install aluminum sub profile so that the track-side is on the landing and the wide side of base is installed on existing riser where it will be both adhered and screwed into place.
2. Cutting the assembled riser will require fitting the riser so the tongue side of assembled riser is installed over the ridge of sub profile and pointing up to landing. Once the assembled riser is fitted, apply glue to back of it and install. Next cut the 5 in 1 to length. Cut the reducer side of the 5 in 1 off to make a square nose transition moulding. Next apply adhesive to the 5 in 1 so no adhesive fills the expansion and contraction area when installed. This will allow the 5 in 1 stair nose to be pressed firmly into the aluminum sub profile track and allow the landing floor to have room for expansion and contraction. This will result in an overlap finish of the landing flooring.

#### **Overlap Installation - where Stairs have Carpet (or Ceramic or Vinyl flooring):**

If top landing is **greater than 8 feet across**, the installation will require an overlap moulding which will allow the top landing to have expansion at the stairs.

1. Prior to installing the aluminum sub profile:
  - a) Cut it to length,
  - b) Score a cut line that is 3cm from the bottom or 1-3/16" from the bottom of the aluminum base. This line is already present at the bottom of the groove.
  - c) Now bend and break off this 1-3/16" piece of aluminum from the sub profile base.

2. a) If carpet is already on the stairs: Install aluminum sub profile so that the track side is on the landing (apply glue to back) and the wide side of base is installed over the carpet where it will be screwed into place.

- b) If carpet is not on the stairs: Wide side of the base will be glued to the existing stair nosing.

3. Using the cutter remove the reducer side of the 5-in-1 moulding. Then glue and install the 5-in-1 nosing into the installed aluminum track.

4. Cut a piece of flooring to finish the stair nose face. Measure from the bottom of the 5-in-1 to the bottom of the aluminum sub profile to get the width. Cut the flooring to this width, note this piece must include the male side of the joint. Now cut this piece to the correct length of the stair nose.

If required, the bottom cut edge can be made to have a finished edge.

By feeding through your table saw the removed reducer side of the 5-in-1, keep the triangular piece with the décor layer on it, you will create a finished edge for your stair nose. Glue this piece to the bottom of the unfinished edge of your assembly.

NOTE: Touch-Up Pen or Wax Stick will fill in any minor gapping that may occur.



June 24, 2025