



The GoPro™ Universal Stair Bracket



Run/Rise measurement gauge on each bracket insures accurate installation.

A Better Way to Build Stairs.

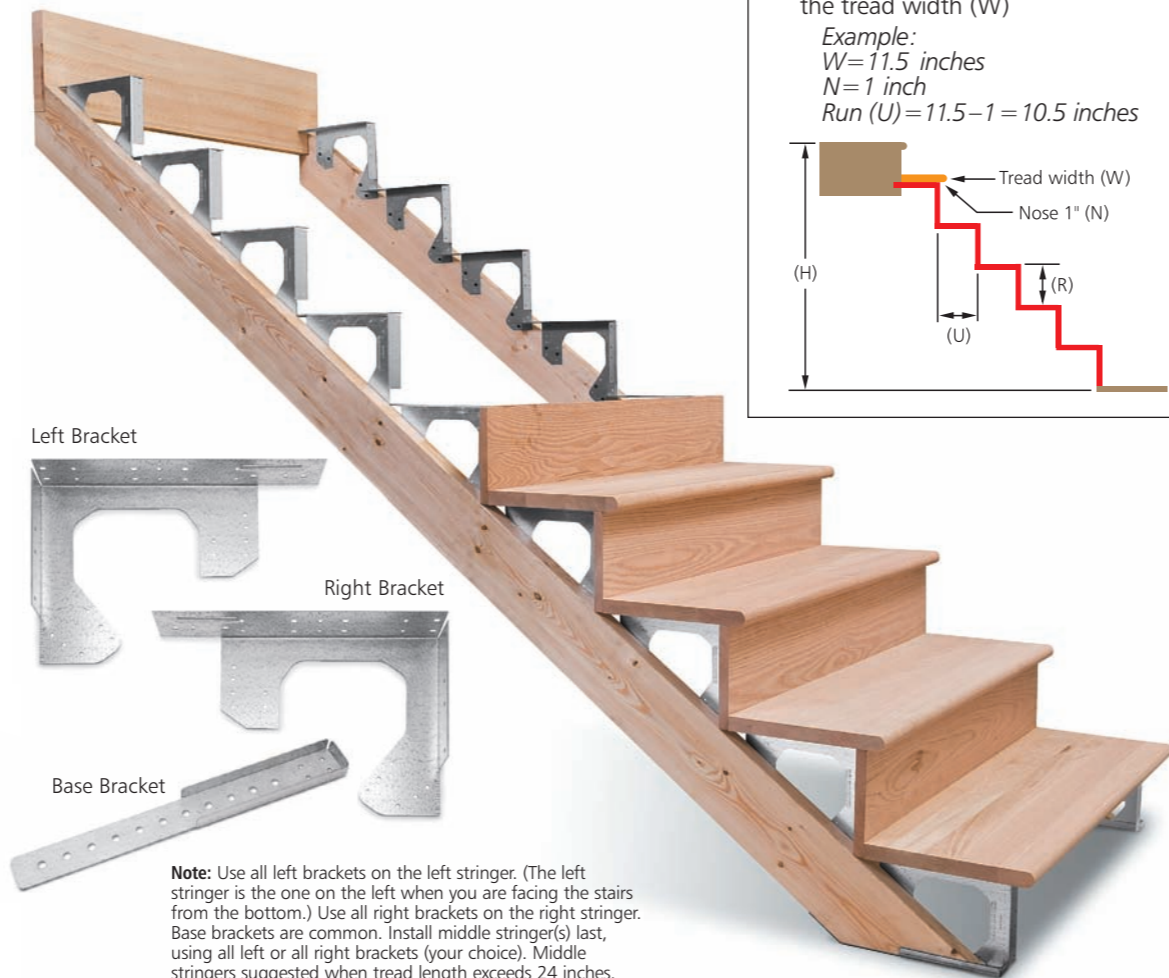
- No more notching of stringers
 - No splitting or warping
 - Less noise
- Easy to use inside or outside

IMPORTANT:

- Always wear gloves and eye protection when installing GoPro products
- Meets or exceeds IRC and IBC requirements per IAPMO-ER-122
- Accommodates all slopes with rises from 6" to 8" and runs from 9" to 11.5"
- Always check with your local building inspector to make certain that any staircase you build meets code requirements
- See the easy-to-use run/rise calculator on goproconstruction.com
- Use construction adhesive on each bracket to minimize squeaks

Materials Needed:

- 2 brackets (one left and one right) per step
- 1 base bracket per stringer
- For each additional stringer – 1 additional bracket per step (can be left or right bracket – your choice) plus 1 additional base bracket
- #8 countersunk or oval head wood screws. Maximum 1 1/2"; minimum 1 1/4". (Use 8 per left or right stair bracket plus 4 per base bracket)
- Screwdriver, hammer (any type), and pencil
- Construction adhesive and caulking gun
- Saw with metal-cutting blade



Note: Use all left brackets on the left stringer. (The left stringer is the one on the left when you are facing the stairs from the bottom.) Use all right brackets on the right stringer. Base brackets are common. Install middle stringer(s) last, using all left or all right brackets (your choice). Middle stringers suggested when tread length exceeds 24 inches.

GoPro™ Universal Stair Bracket Installation Instructions

Calculate stair rise and run.

Measuring rise (R) and run (U)

Rise (R):

1. Divide the height between the two floors (H in the diagram below) by 7.5. Round up that value.

Example: $H = 44$ inches
 $44 \div 7.5 = 5.8$ round up to 6 risers

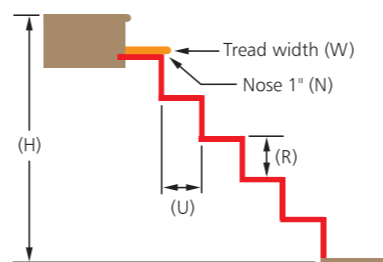
2. Divide the height (H) by the number of risers

Example: $H = 44$ inches
 $Rise(R) = 44 \div 6 = 7.33$ inches

Run (U):

3. Subtract the nose (N) 1 inch from the tread width (W)

Example:
 $W = 11.5$ inches
 $N = 1$ inch
 $Run(U) = 11.5 - 1 = 10.5$ inches



Build a staircase without notching wood stringers. Using the pre-drilled holes and the markings etched on each bracket, the treads and risers can be easily fastened to a stringer – from 2x6 to 2x12.

Install all brackets on one outside stringer (left or right); then install all brackets on the other outside stringer.

1. Secure the first stair bracket at the top of the left or right stringer, using the pre-marked measurements corresponding to the calculated rise and run. Use two #8, 1 1/4" to 1 1/2" flat countersunk or oval head wood screws in each leg of the bracket (4 total per bracket) as in (Figure A).

2. Attach a second universal stair bracket (same type) overlapping the previously installed bracket based on the calculated rise and run. (Figure B).

3. Repeat these steps for the remaining brackets on this stringer before starting on the other stringer.

4. Mark a line on the last bracket and on the wood stringer parallel to the tread, subtracting the thickness of one stair tread and 1/8 inch (base stringer bracket thickness) from the calculated rise. (Figure C).

5. Using a saw with a metal-cutting blade, cut both the bracket and the stringer along that line.

6. Using two screws, secure the stringer base bracket to the stringer as shown in Figure D. The heads of the screws will face the floor and must be flush to the metal.

7. With a hammer, bend the remaining part of the stringer base bracket against the bottom of the stringer. Secure the bracket against the bottom of the stringer with two screws (Figure E)

8. Using a saw with a metal-cutting blade, cut the top bracket and the wood stringer perpendicular to the tread at the calculated run. (Figure F).



9. Repeat steps (1) through (8) for the other stringer. If you used all left brackets on the first stringer, use all right brackets on the second (or vice versa).



10. Using the pre-drilled holes, secure the bottom two sets of steps and risers to both stringers (Figure G). You may want to attach one set of steps at the top also. (Note: Use construction adhesive between each wood-to-wood contact point and wood-to-steel contact point in order to minimize squeaking).



11. Lift the staircase into position. (Two people are needed for this.) Fasten the staircase to the floor using 2 screws in the holes provided in the stringer base bracket. The entire horizontal length of the stringer base bracket must be in full contact with the floor. (Figure H). Tip: Use the holes closest to the bent section for better protection against tread warp.

12. Secure the stringers at the top of the staircase. (You may use additional base brackets to aid this process if you choose).

13. Install the remaining treads and risers.



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