

CONSTRUCTING A PULLEY SYSTEM

The benefit of a pulley system is that, once it is installed, it can be used many times for different wall hangings without the use of tall ladders. Be sure to get permission to install a pulley system. Make sure the ropes virtually disappear by blending them into the wall color or having two hinged “baffles” of decorative molding made to camouflage the full length of the ropes when no banner is in place.

SUPPLIES

- Two strong screw hooks, 1½ inches long
- Two small pulleys, around 1 inch in length, with a swivel loop for hanging that will fit on the screw hooks
- Two 4-inch-long cleats and 1½-inch-long screws with shanks that will fit the holes in each cleat
- One cotton clothesline that will fit easily but snugly through the opening in the pulley. For each pulley, purchase enough rope to go from the floor up to the height at which you want the banner to hang and then back down to the floor, in one continuous length. The length of rope should be free of knots, since they will not be able to pass through the pulley. Cotton clothesline will take dye whereas nylon rope will not. Hemp rope is prickly to handle, looks rough, and its hue will distort any color when dyed.
- One tall ladder, preferably an A-frame, that will easily reach the banner height
- One drill with a bit to fit the screw hooks, and a bit to fit the screws for the cleats
- Scissors or knife to cut the rope
- Spray paint that will match the color of the wall
- The banner rod: Decide on the average width of your banners. Most banners are made from 44-inch-wide fabric, which results in a finished banner 42 inches wide. If you are thinking of using 54-inch-wide fabric, the finished banner will likely be 52 inches wide. As for the rod, it must be at least 4 inches longer than the banner width. If the banner width is 42 inches, make the banner rod at least 46 inches long. The rod can be made from 1-inch PVC pipe, or ½-inch electrical conduit pipe, or wood, or any ready-made decorative drapery rod or custom-made rod.



BEFORE INSTALLATION

1. Spray-paint the pulleys, hooks, and cleats the color of the wall. Let them dry completely.

2. If the wall is white, use a white cotton clothesline. If the wall is any other color, dye the cotton clothesline the same color as the wall. Allow several days for this procedure because you may have to test the dye and then dye the rope several times to get the color you are after. You will need a very large pot to hold all of the rope. Rit Dye packets are inexpensive and can be purchased at hardware stores and some grocery stores. Liquid dyes are fine, too. Fill the pot two-thirds full with water and bring it to a boil. Turn off the heat and add the dye carefully. Place the clothesline in the pot, but do not allow it to tangle! Add a cup of table salt to set the dye into the fibers of the clothesline. Leave the clothesline to soak, simmering for at least 15 minutes. Using tongs, pull a short bit of clothesline up out of the hot water and inspect the depth of the color. Remember, the color of the rope will become lighter when the rope is dry. If the color is not dark enough, leave the rope to simmer some more, checking it now and then. When the rope has reached the desired color, carefully remove the rope from the pot and place it in the sink. Do not pour out the dye water yet because you may want to re-dye the rope a darker shade. Remember not to tangle the rope! Run cold water over the rope until the water runs clear. Allow for thorough drying time—at least two days in the sun, with the rope laid out untangled. Do not attempt to dry the dyed rope in a clothes dryer: the dye will discolor the inside of the dryer. (Even wrapping the rope in towels and placing everything in a pillowcase will not prevent the dye from discoloring the dryer.) Once the rope is thoroughly dry, you can install it in the pulley system. Do not install even remotely damp rope because it will stain your clothes, hands, the wall, and anything else it touches, such as your car seat or the box in which you carry it. The rope must be completely dry before installing it.

INSTALLATION

In the following photos, the metal parts have not been painted the color of the ceiling or wall to make them “invisible,” thus you can see them for instruction purposes.

1. Measure the average width of your banners.

2. Place the ladder against the wall on which the banner will hang. Wrap the top ends of the ladder with towels so that the ladder will not leave marks on the wall. An A-frame ladder is preferable for stability, turned sideways to the wall.

3. Where the wall meets the ceiling (or lower if you want all your banners to hang lower), mark on the wall with a pencil the width of your banner where you want it to hang. Drill two holes, one a $\frac{1}{2}$ inch to the left of the banner width measurement and the other a $\frac{1}{2}$ inch to the right of the banner width measurement, but still within the length of the banner rod. Drill the holes into the wall at a downward angle.



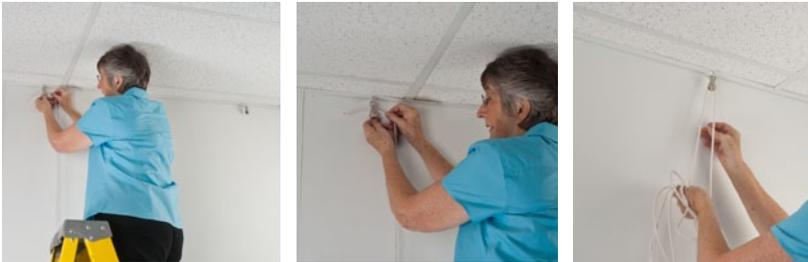
Screw the screw hooks into the holes. The screw hooks should angle slightly upward. Place each pulley swivel loop onto each hook.



4. While standing on the floor, look up at the left pulley and mentally draw a straight line down the wall to waist height. Then measure 3 inches to the right. Secure one cleat vertically at that location and at waist level. Do the same with the right pulley, placing the right cleat 3 inches to the left. If you want to hide the ropes entirely, decide what the average length of the banners will be. Position the cleats 1 foot above where the hems will hang, thus the cleats and ropes will be hidden by the banner. It's easiest to secure ropes to the cleats while standing on the floor, but this can be done from a ladder if necessary.



5. Secure one end of the rope to the cleat. Take the rope up the ladder and put it through the pulley hole. Hold onto this end of the rope as you descend the ladder.

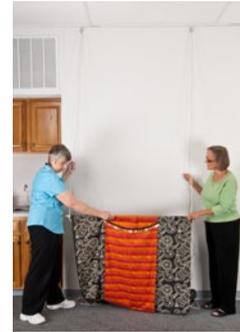


Let the rope hang to the floor and cut the rope at that length. Secure both ends of the rope together to the cleat. Never leave the ends of the rope unsecured, because one end might slip out of the pulley, and you'll have to install the rope again. Repeat steps 3 through 5 for the other pulley.



6. With the banner on the rod, tie one end of one rope to one end of the banner rod. You can use a square knot or clove hitch. Tie one end of the other rope to the other end of the banner rod. Tie each knot so that the end of the rope is short. Tuck the end of the rope neatly into the rod pocket.

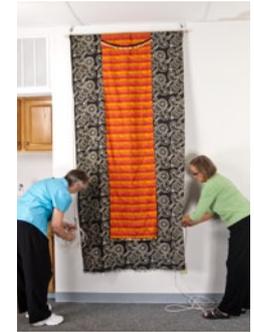
7. Have two people pull the banner rod up to where you want it, one person holding each rope. As they pull the banner up, they should pull slowly, working together to keep the rod parallel to the floor. THE END



Smooth the fabric evenly across the crossbar.



Hoist the banner keeping the rod parallel to the floor.



Tie off the ropes on the cleats behind the banner.



When the banner is at the desired height, tie off the pulling end of each rope onto its cleat. Coil the remaining rope behind the banner.