

## Information about D-Rings and picture framing wire

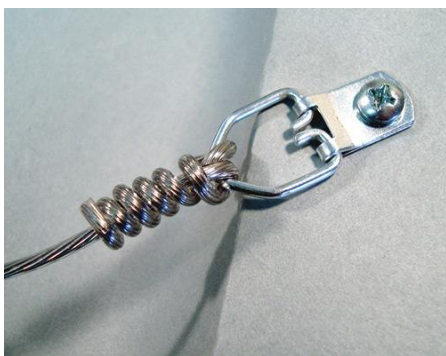


### Framing Tips: Dependability of D-Rings

<https://www.artistsnetwork.com/art-techniques/framing-tips-hardware-facts/>



Choose a D-ring hanger in a width (narrow-or wide-based) suitable to the moulding of your frame. Sometimes manufacturers designate D-rings as “light-,” “medium-,” or “heavy-weight,” indicating their suitability for lighter or heavier framed pictures.



Here you see a medium-weight, single-hole D-ring with a #4 pan-head Phillips screw and #3 coated stainless steel wire. The wire is mounted with a lark's head knot, twisted tightly and compressed where it attaches to the D-ring to prevent the wire from slipping.



Pictured are medium-weight, single-hole D-rings with #2 coated stainless steel wire. Set the straps about 4 cm down from the top edge of the frame and position the straps so the wire will slant 60 degrees when the picture is set on two wall hooks. Make the wire slack enough to reach halfway between the straps and the top of the frame but so slack that it can be seen when the picture is hung.

## Framing Tips: Wire Wisdom



(left to right) #5 twisted stainless steel, #9 coated copper, 36 plastic-coated stainless steel, #6 multistrand braided galvanized steel, #4 plastic-coated twisted stainless steel

Picture wire threads through D-rings or the eyes of steel plates so that you can suspend the picture. Like screws, picture wire comes in different sizes (also referred to as weights), as indicated by a crosshatch (#) followed by a number. In addition, there are many types of wire, some of the more common being twisted stainless steel, plastic-coated stainless steel, multistrand braided galvanized steel, and plastic-coated copper (F). Galvanized-steel wire is the most frequently used but also the least effective. Plastic-coated stainless-steel wire won't hurt your hands during installation, mar walls, rust, or discolor. Coated copper is softer and easier to work with but doesn't have the strength of stainless steel.

As multistrand braided galvanized steel wire increases in diameter, the strands remain constant in size, with additional strands being added to the braid. For example, a #2 braided wire has 12 strands while a #8 braided wire has 36 strands. In contrast, all stainless steel wire contains seven strands that have been tension-twisted, like cable, and as the wire gets larger, the strands increase in diameter. This makes twisted wires (stainless steel) comparatively stronger than braided wires (galvanized steel), but also less flexible.

Determining the correct size of wire is dependent upon the type of wire you're using. The break weight (also called break strength or break point) of braided galvanized wire should be approximately four times the weight of the frame, while the break strength of coated stainless wire should be approximately three times the weight of the frame. Hence, for a 10-lb. painting, you could use a stainless steel wire with a break weight of 30 lbs., but if you used braided galvanized wire, the break weight would have to be 40 lbs.

BRAIDED GALVANIZED STEEL			COATED STAINLESS STEEL			COATED COPPER/GOLD		
wire size	max frame weight	wire break weight	wire size	max frame weight	wire break weight	wire size	max frame weight	wire break weight
#2	12 lbs.	50 lbs.	#2	15 lbs.	40 lbs.	#2	15 lbs.	37 lbs.
#3	16 lbs.	68 lbs.	#3	20 lbs.	68 lbs.	#3	20 lbs.	50 lbs.
#4	20 lbs.	85 lbs.	#4	25 lbs.	75 lbs.	#4	25 lbs.	62 lbs.
#5	24 lbs.	98 lbs.	#5	43 lbs.	105 lbs.	#5	30 lbs.	85 lbs.
#6	28 lbs.	115 lbs.	#6	50 lbs.	150 lbs.	#6	45 lbs.	170 lbs.
#7	32 lbs.	130 lbs.						
#8	36 lbs.	145 lbs.	#8	60 lbs.	170 lbs.			
			#9	90 lbs.	250 lbs.			

**Comparative Strengths of Picture Wires:** Maximum frame weights vary not only with the style and coating of the wire, but also with the manufacturer. This chart reflects an average of the maximum frame weights given by wire manufacturers for a wire of a particular size. As a rule of thumb, the break weight for braided galvanized steel wire is four times the frame weight, and the break weight for stainless steel wire is three times the frame weight. Hence, stainless steel wire can accommodate heavier frames than braided galvanized steel wire of the same size.