

Garment Architecture & Closet Hanger Selection Guide

Gravitational Shear Physics ($P=F/A$), Tailored Shoulder Integrity, and Wardrobe Hanger Sizing

PHYSICS FORMULA P = F / A (Shear Stress)	PRESSURE DROP 12 PSI down to 0.38 PSI	CORE ANATOMY Horsehair Canvas & Roll	PRESERVATION GOAL Zero Elastic Yield Horns
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THE GRAVITATIONAL SHEAR FORMULA:

A 3.5-pound tailored wool overcoat hanging from an 8-cent wire or tubular plastic hanger (0.35-inch contact width) generates over 12 PSI of localized downward pressure. This crushes internal shoulder pads, cracks floating horsehair canvas, and stretches natural wool keratin fibers past their elastic yield point, creating permanent, unfixable 'shoulder horns'.

1. Mechanical Comparison: Wire & Plastic vs. Contoured Wood

Hanger Architecture	Surface Contact Area (A)	Mechanical Shear Pressure & Garment Lifespan
Dry-Cleaner Wire Hanger	0.08 inch width (<0.25 sq inch contact).	14+ PSI knife-edge pressure. Permanently deforms knitwear in 72 hours; collapses sleeve heads.
Tubular Plastic Hanger	0.35 inch width (~0.6 sq inch contact).	10-12 PSI shear force. Causes padding delamination, fabric shine, and unsightly shoulder horns.
Velvet Slimline Hanger	0.20 inch width with flocking.	Superb for silk and linen shirts to stop slippage; dangerous for heavy wool coats (excessive shear).
Contoured Cedar Suit Hanger	2.25 inch flared shoulder profile (>9 sq inch).	0.38 PSI anatomical support (96% stress drop). Preserves delicate tailored shoulder rolls for decades.

2. Wardrobe Hanger Sizing & Category Matching Matrix

Garment Category	Mandatory Hanger Specification	Storage Rule of Thumb
Tailored Suits & Heavy Coats	Solid contoured American cedar or beechwood; 2.0 to 2.5 inch flared ends; curved neck arc.	Hanger width must equal shoulder seam-to-seam minus 0.5"; never extend into sleeve cap.
Woven Dress Shirts & Blouses	Flat solid wood or high-density lacquered hardwood; 0.5 inch thickness with collar support.	Button top button to maintain collar roll; prevents placket wrinkling and yoke distortion.
Silk, Rayon & Camisoles	Velvet-flocked slimline hangers with notched shoulder curves.	Prevents slippery fabrics from sliding off rod; ultra-slim profile saves closet rod space.
Heavy Knit Sweaters & Cashmere	DO NOT HANG ON TRADITIONAL HANGERS!	Store flat on shelves in breathable linen bins; or use tailor's diagonal fold over felted bar.

3. Wardrobe Audit & Shoulder Preservation Checklist

[]	Step 1: Measure Your Personal Hanger Width Lay your best-fitting jacket face down. Measure seam-to-seam across back yoke and subtract 0.5 inch. (Women sizes 2-6: 15-15.5"; Men sizes 38-44: 17-18").
[]	Step 2: The Great Wire & Plastic Purge Permanently discard all wire dry-cleaner hangers and thin hollow plastic tubular hangers from your primary coat and suit closets.
[]	Step 3: Upgrade to 2-Inch Flared Cedar Hangers Transfer all structured wool coats, blazers, and tuxedos onto contoured wooden hangers with flared 2-inch shoulder blocks.
[]	Step 4: Knitwear De-Hanging Intervention Remove all cashmere, merino, and heavy wool sweaters from hanging rods. Fold using the retail 3-fold method and stack no more than 4 high on open shelves.
[]	Step 5: Tailor's Diagonal Fold for Trousers Drape dress trousers over felted wooden dowel bars or clamp by cuff hems using felt-lined locking wooden bars to let gravity pull out creases naturally.
[]	Step 6: Seasonal Cedar Sanding Routine Lightly buff aromatic cedar hangers with 220-grit sandpaper once a year to reopen wood pores, releasing fresh moth-repelling cedrol terpenes.