SHOP-WALL CHART · NO. 01

Outdoor Lumber Chart

Which wood, which tag, which screw. Tape it to the wall.

ROGUEENGINEER

VERIFIED 2026-09

01 Which wood, where

WOOD	ROT / INSECT RESISTANCE	GROUND CONTACT?	COST	WEIGHT / WORKING NOTES	BEST USE
PT pine (SYP)	Copper preservative; rated for soil at UC4A	Yes, UC4A or UC4B tag	$	Heavy, wet, shrinks as it dries	Posts, frames, hidden structure, budget tops
Western red cedar	Heartwood resistant; sapwood rots	No, above ground only	$$ to $$$	Light, soft; pre-drill near ends	Tops, seats, slats, anything you touch
Redwood	Heartwood resistant; Common grade has sapwood	Con Heart only	$$ West, $$$ East	Very stable; splinters less than PT	Same jobs as cedar, if it is local
Douglas fir, untreated	Heartwood moderate; bugs eat it	No	$ to $$	Strong and stiff	Covered porch furniture; paint or seal
SPF, untreated	Slight to none	No	$	Light, cheap, twists as it dries	Under a roof, painted, or temporary

Sapwood of every species rots; heartwood does the work. Cedar-tone PT is dyed pine, not cedar.

02 Ground contact vs. above ground: read the end tag

TAG SAYS	MEANS	BUY IT FOR
UC3B	Above ground, exposed to weather	Deck boards, rails, tabletops, bench slats
UC4A	Ground contact, general use (about 2x the retention)	Posts, planter bases, sleepers, anything near grade
UC4B	Ground contact, heavy duty	Wet sites, hard-to-replace posts
Under 6 in. from grade, trapped debris, or no airflow	Counts as ground contact	UC4A
No UC on the tag	Assume above ground	Not for posts

Rule: anything in or near dirt gets UC4A. Tabletops and seats are fine at UC3B.

03 Fasteners for treated lumber

- The copper in MCA, CA-C, and ACQ treatment eats plain steel, electroplated zinc, and aluminum.
- Screws and nails: hot-dip galvanized (ASTM A153) or stainless 304/316. Stainless near salt or below grade.
- Hangers and brackets: G185 hot-dip (ZMAX class) or stainless. Skip G60, G90, and anything bright and shiny.
- Coated deck screws only if the box says approved for ACQ / CA treated wood.
- Match metals: stainless screws with stainless hardware, galvanized with galvanized. Mixing them corrodes.
- Cedar and redwood too: electroplated fasteners react with the wood's oils and streak black.

04 Buying and drying

- Sight down each edge. Skip crown, bow, and twist. Pull from the middle of the stack.
- Reject wane (bark edge), loose knots, and end checks longer than your hand.
- PT ships wet, often 45% moisture or more. Screw it down promptly; it shrinks as it dries.
- Stain when sprinkled water soaks in instead of beading, typically 1 to 3 months. KDAT can be stained now.
- Moisture meter: 15% or under before finish, 19% at most.
- Cedar and redwood arrive dry. Finish them the week you build.

05 Nominal vs. actual

NOMINAL	ACTUAL (IN)	METRIC (MM)
1x4	3/4 x 3-1/2	19 x 89
1x6	3/4 x 5-1/2	19 x 140
2x4	1-1/2 x 3-1/2	38 x 89
2x6	1-1/2 x 5-1/2	38 x 140
2x8	1-1/2 x 7-1/4	38 x 184
4x4	3-1/2 x 3-1/2	89 x 89
6x6	5-1/2 x 5-1/2	140 x 140

Plans list nominal sizes; cut lists use actual. Measure the board before you cut.

06 Rough price per linear foot (8 ft,

BOARD	TYPICAL $/FT	STATUS
PT 2x4	$0.65 to $1.10	estimate
PT 2x6	$1.00 to $1.75	estimate
PT 2x8	$1.50 to $3.00	estimate
PT 4x4	$1.25 to $3.00	estimate
Cedar 2x4	$1.00 to $2.00	estimate
Cedar 2x6	$3.00 to $7.00	estimate
Redwood 2x6 (Con Heart)	$3.00 to $8.00 (low end West Coast)	estimate

Checked 2026-09 from price roundups; big-box prices vary by store. Untreated SPF runs 10 to 30% under PT.

The rest of the shop-wall charts are free at rogueengineer.com/guides. Built for the same projects as the **Outdoor Table + 4x4 Bench plans**.

Be safe and happy building.

JAMISON · ROGUE ENGINEER