

Pressure-Treated Wood: Where It's Safe

Today's copper-treated lumber is fine for most outdoor builds. Here is where it is, where it isn't, and the one step for the in-between.

01 What's in it now

TREATMENT	ACTIVE INGREDIENT	RESIDENTIAL NOW?	FASTENER CORROSION	NOTES
CCA (pre-2004)	Copper, chromium, arsenic	No. Residential ended Dec 31, 2003 (EPA)	Medium	Legal for poles, pilings, foundations only. Greenish tint.
ACQ	Copper oxide + quat	Yes (EPA: most widely used)	High: hot-dip galv or stainless	Most corrosive of the group
CA-B / CA-C (copper azole)	Copper + tebuconazole	Yes; ground-contact rated	Med-high: HDG or stainless	Viance Preserve, Koppers NatureWood; the OSU garden study wood
MCA / MCQ (micronized)	Same coppers, ground fine	Yes; most common at big-box	Medium: HDG or stainless still	Less green, less corrosive than ACQ (MicroPro, ProWood)
Borate (SBX / DOT)	Disodium octaborate	Yes, interior only	Low: standard galv OK	Leaches in rain. Never ground contact or exposed.

Ranking: USDA FPL GTR-220 + Simpson Strong-Tie. All copper types need hot-dip galvanized (ASTM A153) or 304/316 stainless outdoors. No aluminum contact.

02 Use-by-use verdict (current copper PT)

BUILD	VERDICT	THE STEP	WHY
Dining or picnic tabletop	OK with a step	Seal it; tablecloth. No food on bare wood.	Labels: no direct food contact
Bench or chair seat	OK with a step	Seal it, or top with cedar slats	Copper transfers to skin in tiny amounts; sealer cuts it
Kids' picnic table / play furniture	OK with a step	Current copper PT, sealed, hands washed. Never old CCA.	Playground use is an approved application
Raised veg bed / edible planter	OK	UC4A rated. Liner and 3 in spacing optional.	OSU: copper stays within 1 in; none in crops
Herb box / cutting surface	Use something else	Cutting boards, countertops: no. Herb box: same as planter.	Direct food-contact surfaces are prohibited on every label
Dog house / chicken coop	OK with a step	PT for skids and floor frame; cedar or pine for roosts, nest boxes	Not where it becomes feed; birds peck
Indoor furniture	Use something else	If you must: KDAT or borate, cut outside, seal	Allowed but no benefit; wet, heavy, off-gasses while drying
Sauna / hot tub deck	Split	PT framing under; cedar or composite where wet skin sits	Nobody rates PT for sauna interiors
Firewood / fire pit / smoker	Never	Trash it	Smoke and ash carry the preservative (EPA)

03 The rules that matter

- No food-contact surfaces, period: cutting boards, countertops, beehives, feeders, drinking-water contact.
- Daily skin contact (seats, tabletops, arm rests): seal with penetrating stain or top with cedar.
- Cutting: dust mask, eye protection, gloves, cut outdoors, wash hands before eating or smoking.
- Never burn scraps, indoors or out, fire pit or smoker.
- Disposal: household trash or landfill. Never compost, chip, or mulch it.

04 Garden beds specifically

- OSU (EM 9879, 6-year study, CA-C): copper rose only within 1 in of the wall; none at 3 to 4 in.
- Same study: no copper increase in 12 crops (lettuce, carrot, tomato, basil, beet, radish, more).
- Want zero contact? Line the sides with heavy plastic or landscape fabric. Leave the bottom open.
- Keep roots a few inches off the wall. Cheap insurance; beds are wider than that anyway.
- Borate-treated is interior lumber. It leaches in rain. Never for beds, posts, or soil.

05 If it is older than 2004

- Tell-tales: built before 2004, greenish tint, tag or stamp reading CCA. No tag? Assume CCA.
- Seal every 1 to 2 years with penetrating oil or water-based stain. Not paint, which chips and needs scraping.
- Do not sand, scrape, or power-wash it. That frees the arsenic you are trying to keep in.
- Kids: wash hands after playing on it, no eating on it, tablecloth on CCA tables.
- EPA does not require removal. My call: replace kid-contact pieces and old veg beds.

06 PT vs. cedar vs. redwood for each job

JOB	OUR PICK	WHY	RUNNER-UP
Tabletop	Cedar	Bare food-safe surface, light, looks right	PT sealed + tablecloth (cheaper)
Seat / arm rest	Cedar	No sealer needed for skin; splinters less	PT sealed; redwood out West
Legs / frame (above ground)	PT above-ground (UC3B)	Cheapest, strongest, hidden	Cedar if the whole piece is cedar
Posts in ground	PT ground contact (UC4A)	Cedar rots in soil in years; PT lasts decades	Redwood heart; metal post base
Garden bed	PT ground contact (UC4A)	OSU: safe, half the cost, outlasts untreated 3x	Cedar (same safety, 2 to 3x price)

"Cedar-tone" PT is pine with pigment. Still pressure-treated: read the end tag, not the color.

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**.

Reference values compiled from manufacturer and industry sources and checked 2026-09; your lumber, hardware, and local code govern. Free for personal use; please share the link, not the file. © Rogue Engineer LLC.

Be safe and happy building.
JAMISON · ROGUE ENGINEER
CHART 07 · PAGE 1 OF 1