Which Wood?

A Comparison of:
Composite
PVC Decking
Pressure Treated
Naturally Resistant Wood (Cedar, Redwood, Cumaru or Ipe)

SOUTHWEST CONSERVATION DISTRICT

Composite

-COST: ~$30-45/ft² ($2.90 to $6/linear ft)

-MAINTENANCE: Clean at least once every 3-4 years (once a year recommended) with soap + water and low power pressure washer or a soft bristle brush

-TOOLS REQUIRED: Should wear respirator when cutting or sanding. Also a good idea to tarp area or have a vacuum to clean up “sawdust” (since it’s mostly plastic should go in the trash).

-MATERIALS: Mix of recycled plastic and wood fibers

-LONGEVITY: Depending on brand 25-30 years (direct contact with ground)

PROS

-low maintenance

-doesn't need additional chemicals added for maintenance

-can be installed in high moisture conditions (don't absorb any water)

-can be bent to create curved sections (by heating it)

-lasts longer

CONS

-cost

-can host mold if not cleaned (once/3-4 yrs)

-hotter surface temperature (unless you get new specially formulated types)

-does the plastic breakdown and release microplastics over time?

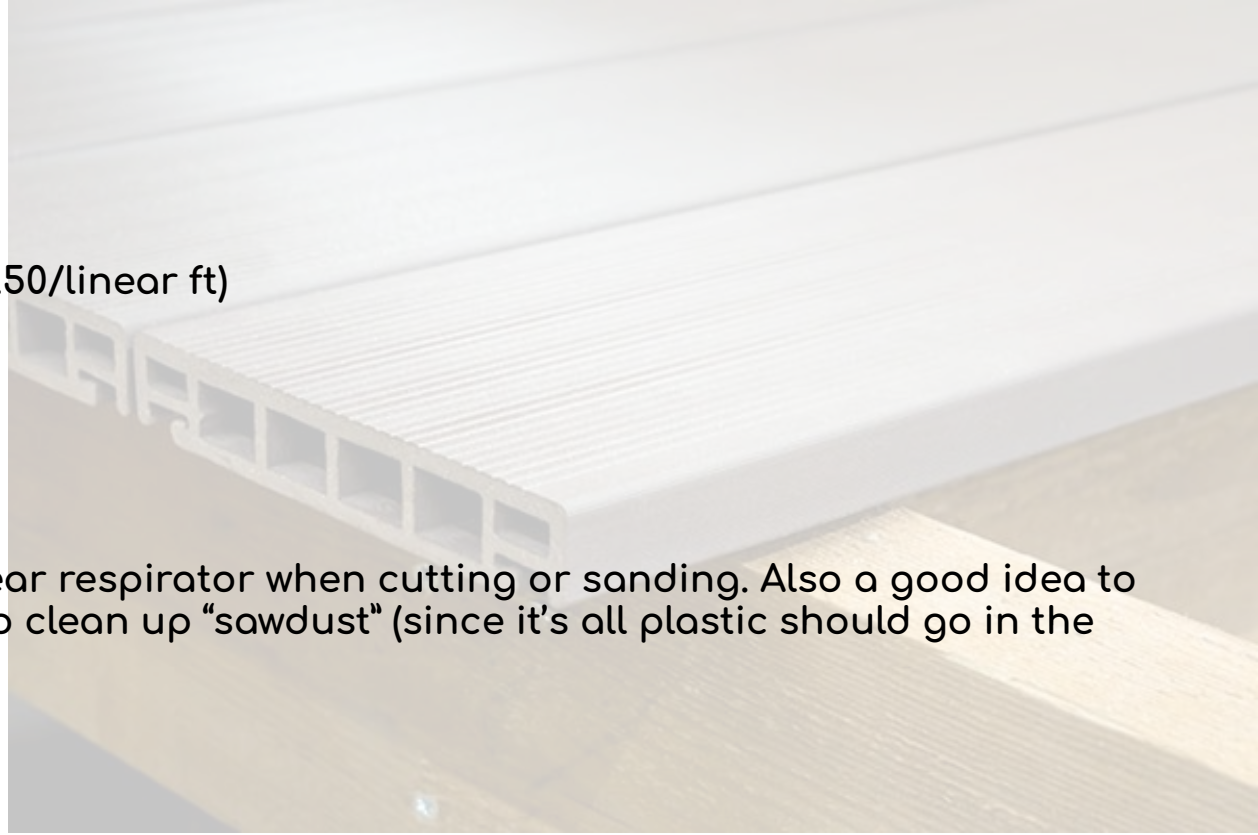
-become worn in high traffic areas

-some brands are less rigid than solid wood

-at end-of-life goes to landfill

-could contain polyvinyl chloride, a toxic plastic polymer

PVC decking



-COST: ~$30-45/ft² ($4.40 to $7.50/linear ft)

-MAINTENANCE: None

-TOOLS REQUIRED: Should wear respirator when cutting or sanding. Also a good idea to tarp area or have a vacuum to clean up “sawdust” (since it’s all plastic should go in the trash).

-MATERIALS: Recycled plastic

-LONGEVITY: Depending on brand 25-50 years (direct contact with ground)

PROS

-low maintenance

-doesn't need additional chemicals added for maintenance

-can be installed in high moisture conditions (don't absorb any water)

-can be bent to create curved sections (by heating it)

-lightweight

-lasts longer

CONS

-cost

-hotter surface temperature (unless you get new specially formulated types)

-does the plastic breakdown and release microplastics over time?

-become worn in high traffic areas

-may get stained from contact with some types of rubber (water shoes)

-at end-of-life goes to landfill

-can contain polyvinyl chloride, a toxic plastic polymer

Pressure Treated

-COST: ~$15-25/ft²

-MAINTENANCE: Refinish with a clear sealer or stain every 2-3 years

-TOOLS REQUIRED: Need to wear respirator when cutting or sanding

-MATERIALS: Fir or southern yellow pine soaked in preservatives (includes copper, chromium, and arsenic [new movement/alternatives to arsenic now on the market, but need to check]) and pressurized. CCA is common type + includes arsenic. ALSO, avoid wood treated with Borate products, it is water soluble and not recommended for in-ground application.

-LONGEVITY: Depending on maintenance, 10-15 years (direct contact with ground)

-NOTES: Avoid using "film-forming" or non-penetrating stains (latex semi transparent, latex opaque, and oil-based opaque stains)...these end up peeling + flaking off over time and no longer maintain the wood and prevent leaching. Oil-based sealers will protect + prevent arsenic from leaching into the environment.

PROS

-affordable

-aesthetics

-cooler surface temperature

-kiln dried types are less susceptible to cracking & splitting (look for “choice,” “premium” or “select”)

CONS

-susceptible to warping, splitting, rotting, insect damage & cracking

-become worn in high traffic areas

-turns grey if not maintained

-at end-of-life goes to landfill...DO NOT compost or burn (CT regulations on this, including scraps from construction...small amounts can go to municipal dumps).

Cedar, Redwood, Cumaru or Ipe

-COST: ~$25-30/ft²

-MAINTENANCE: Refinishing with a clear sealer or stain every 1-3 years can extend its longevity

-TOOLS REQUIRED: Nothing additional to normal tools

-MATERIALS: Just whatever species wood you choose

-LONGEVITY: Depending on species 10-15 years (direct contact with ground)

PROS

-best aesthetics

-Naturally rot- and insect-resistant

-cooler surface temperature

-kiln dried types are less susceptible to cracking & splitting

-at end-of-life composts/ decomposes

CONS

-susceptible to warping, splitting, rotting, insect damage & cracking if not maintained (but less so than pressure treated wood)

-become worn in high traffic areas

-Ipe & cumaru are very dense & heavy and need to be predrilled

-when in contact with the ground, will deteriorate faster than pressure treated wood

References

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