

WINDOW FRAME MATERIALS - DARE TO COMPARE!

Cellular Vinyl MATERIAL CHARACTERISTICS	Rigid Vinyl MATERIAL CHARACTERISTICS	VS. WOOD	VS. ALUMINUM
Maintenance-Free	Maintenance-Free	Paint can fade, streak, flake, peel - must be repainted periodically	Color sprayed on - will scratch, flake & peel. Color can fade/streak - can require scrubbing and/or painting or touch-up
Requires no painting inside or out—finishes available	Requires no painting inside or out—finishes available	Must be painted/stained--initially & repainted	Requires no painting/finishing inside or out--initially
High resistance to heat loss or gain	High resistance to heat loss or gain	High resistance to heat loss or gain	Readily conducts heat and cold
Resists condensation	Resists condensation	Resists condensation	Supports condensation, frosting in cold weather
Waterproof	Waterproof	Water resistant but vulnerable to water damage	Waterproof--unaffected by water, except salt water
Resistant to moist, salt-laden air, pollution, airborne chemicals	Resistant to moist, salt-laden air, pollution, airborne chemicals	Swells, rots, deteriorates in moist, salt-laden air, from pollution and airborne chemicals	Corrodes in moist, salt-laden air, from pollution and airborne chemicals
Impervious to insects	Impervious to insects	Resistant to insects, subject to insect damage	Impervious to insects
Smooth surface that helps prevent moving parts from "sticking". Has look/feel of wood	Smooth surface that helps prevent moving parts from "sticking"	Subject to swelling from moisture, paint build-up that can cause binding and sticking	Subject to abrasion, corrosion that reduces ease of operation--can cause binding and sticking
Easily holds screws without the need for fillers	Single walls may lose grip on screws over time	Easily holds screws without the need for fillers	Single walls may lose grip on screws over time
Solid frame and sash members. No need for foam insulation	Hollow frame and sash members, ability to add foam insulation	Solid frame and sash members	Hollow frame and sash members
Structurally rigid and stable. Many designs with excellent wind load ratings, no need for additional reinforcement	Structurally rigid and stable. Many designs with excellent wind load ratings, requires additional reinforcement	Structurally rigid and stable. Subject to shrinking, swelling, bowing, warping and cracking	Structurally rigid and stable
Strong, durable frames, withstands mechanical stress and strains	Strong, durable frames, withstands mechanical stress and strains	Subject to impact damage - denting, splintering	Subject to impact damage, denting & scratching
Insulates against noise due to solidity of product	Multi-chambered design insulates against most noise	Insulates against noise due to solidity of product	Transmits noise
Will not support combustion. Will burn only while enveloped in flame	Will not support combustion. Will burn only while enveloped in flame	Will support combustion - burns readily	Will not support combustion
Material is competitive in cost with other window materials. PVC supply is abundant, price is stable	Material is competitive in cost with other window materials. PVC supply is abundant, price is stable	Prices rising dramatically - supply fluctuates	Material cost fluctuates dramatically - supply is good
Material is energy efficient to produce, recyclable	Material is energy efficient to produce, recyclable	Material is energy intensive to produce - not recyclable	Material is energy intensive to produce, (8-10%), recyclable
Limited scrap in production – recyclable materials	Limited scrap in production – recyclable materials	Milling of trees produces tremendous waste. Scrap not readily recyclable. Cutting of trees depletes forests, etc.	Scrap in production is recyclable
Material requires no finishing	Material requires no finishing	Requires finishing and preservative treating which can contribute to "greenhouse" effect, depletes ozone	Requires finishing which can contribute to "greenhouse" effect, depletes ozone