

Roofing Product Comparisons

Protection / Benefits	Stone Coated Steel Panels	Architectural Shingles	Concrete & Clay Tile	Fiber Cement	Wood Shake	Synthetic Composite	Standing Seam
Weight	Lightest 1.25 - 1.5 lbs./sq.ft. Avg. Roof: 3,700 to 4,500 lbs.	2.5 - 4 lbs./sqft Avg. Roof: 7,500 to 12,000 lbs.	6 - 15 lbs./sq.ft. Avg. Roof: 18,000 to 45,000 lbs.	6 lbs./sq.ft. Avg. Roof: 18,000 lbs.	1.5 - 2 lbs./sq.ft. Avg. Roof: 4,500 to 6,000 lbs.	2.5 - 3 lbs./sq.ft. Avg. Roof: 7,500 to 9,000 lbs.	.7 - 1.5 lbs./sq.ft. Avg. Roof: 3,750 to 4,500
Fire	Class A Rated Material	Class A Rated Material	Class A Rated Material	Class A Rated Material	Class B or C no rating if untreated	Class A or C underlayment requirements	Class A Rated Material
Wind Warranty	120 mph Wind Warranty	60 - 110 mph Wind Warranty ▪ Special restrictions ▪ Warranty period may vary	Wind damage not covered	75 mph Wind Warranty	Wind damage not covered	70 - 110 mph Wind Warranty ▪ Warranty period may vary	UL Tested
Hail Resistant Impact Resistant UL2218	Class 4 Impact Resistant ▪ Qualifies for insurance discounts in many states ▪ Warranted against hail penetration	Class 3 or 4 ▪ Not all meet 2218	Cracks very easily, hail can cause severe damage.	Class 4	Class 3 or 4	Class 4	Class 4
Snow / Ice	Freeze/Thaw Resistant	Freeze/Thaw Resistant	Not waterproof, when wet can absorb 15% of weight in water.	Freeze/Thaw Resistant	Limited Freeze/Thaw Cycles	Freeze/Thaw Resistant	Freeze/Thaw Resistant (snow guards recommended)
Earthquake	Lightweight + Added Shear Strength	Moderate weight with no added shear strength.	Heaviest weight with no added shear strength.	Moderate weight with no added shear strength.	Light to moderate weight with no added shear strength.	Moderate weight with no added shear strength.	N/A
Warranty	50 - Year Limited Warranty	25 - Year to Lifetime Limited Warranty	25 - 50 Year Limited Warranty	50 - Year Limited Warranty	25 - 40 Year Limited Warranty	50 - Year Limited Warranty	Coverage varies by manufacturer.
Environmental Impact	Low Impact ▪ Often no tear-off needed ▪ Recycled material ▪ End of life recyclability	High Impact ▪ High embodied energy in relation to life cycle ▪ Tear-off usually required ▪ Limited recycling use	High Impact ▪ High embodied energy ▪ Tear-off is required ▪ Limited recycling use	Moderate Impact ▪ Not virgin material ▪ Tear-off is required ▪ Limited recycling use	Moderate Impact ▪ Low embodied energy ▪ Renewable resource ▪ Tear-off required ▪ End of life recyclability	Moderate to High Impact ▪ Limited information ▪ Only on market 12 years ▪ Some made of recycled rubber & TPO ▪ Tear-off required ▪ Not all are recyclable	Low Impact ▪ Often no tear-off needed ▪ Recycled material ▪ End of life recyclability
Required Maintenance	Low	Low	Moderate to High (broken tiles)	Moderate to High (broken tiles)	High (fire resistance maintenance required)	Moderate (replacement for breakage and curling)	Moderate to High (if repainting required)
Life Cycle Costs	Low Life Cycle Costs ▪ Long Use Cycle ▪ Lifespan is 2 - 3 times longer than other roofing products	High Costs Lifespan is approx. 20 years	High Costs Lifespan is 20 - 50 years	High Costs Lifespan is 25 - 40 years	High Costs Lifespan is 20 - 30 years	High Costs Lifespan is unproven, expect 50 years	Low Life Cycle Cost ▪ Long Use Cycle ▪ Lifespan is 2 - 3 times longer than other roofing products