## **Roofing Product Comparisons**

Protection / Benefits	DECRA Roofing Systems	Concrete & Clay Tile	Fiber Cement	Architectural Shingles	Wood Shake	Synthetic Composite	Standing Seam
Lightweight	Lightest 1.25-1.5 lbs./sq.ft. Ave. roof: 3,700-4,500lbs	6 -15 lbs/sqft Avg. Roof: 18,000 to 45,000 lbs	6 lbs./sq.ft. Average roof: 18,000 lbs.	2.5 - 4 lbs/sqft Avg. Roof: 7,500 to 12,000 lbs	1.5 - 2 lbs/sqft Avg. Roof: 4,500 to 6,000 lbs	2.5 – 3 lbs/sqft Avg. Roof: 7,500 to 9,000 lbs.	.7-1.5 lbs/sqft
Fire	Class A Rated Material	Class A Rated Material	Class A Rated Material	Class A Rated Material	Class B or C or no rating if untreated	Class A or C – underlayment requirements	Class A Rated Material
Wind Warranty	120 mph Warranty	Wind damage not covered	75 mph warranty	60 to 110 mph warranty Special restrictions Warranty period may vary	Wind damage not covered	70 to 110 mph • Not all have wind war- ranty • Not all wind war- ranties are for full warranty term	UL Tested
Hail Resistant Impact Resistant UL2218	Class 4 Impact Resistant • Qualifies for Insurance discounts in many states • Warranted against hail penetration.	Cracks very easily, hail can cause severe damage.	Class 4	Class 3 or 4 • Not all meet 2218	Class 3 or 4	Class 4	Class 4
Snow / Ice	Freeze/Thaw Resistant	Not waterproof, When wet will absorb 15% of weight in water	Freeze / Thaw Resistant	Freeze / Thaw Resistant	Limited Freeze / Thaw Cycles	Freeze/Thaw Resistant	Freeze/Thaw Resistant (snow guards recommended)
Earthquake	Lightweight + Added Shear Strength	Moderate to Heavy weight with no added shear strength	Moderate 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	25-50 Year Limited Warranty	50 Year Limited Warranty	25-Year to LifetimeLim- ited Warranty	25-40 Year Limited Warranty	50 Year Limited Warranty	Coverage varies by manufacturer. Check with manufacturer.
Environmental Impact	Very Friendly Often no tear-off needed Recycled material End of life recyclability	<ul> <li>High embodied energy</li> <li>Tear off is required in reroof</li> <li>Limited recycling use</li> </ul>	<ul> <li>Not virgin material</li> <li>Tear off is required in reroof</li> <li>Limited recycling use</li> </ul>	<ul> <li>High embodied energy in relation to life cycle</li> <li>Tear off usually required in reroof</li> <li>Very limited recycling use</li> </ul>	<ul> <li>Lowest embodied energy – renewable resource</li> <li>Tear off required in reroof</li> <li>End of life recycling - compost</li> </ul>	<ul> <li>Limited information - on market about 10 years</li> <li>Some synthetic products made of recycled rubber &amp; TPO</li> <li>Tear off required in reroof</li> <li>Not all are recyclable</li> </ul>	<ul> <li>Recycled material</li> <li>Often no tear-off needed</li> <li>End of life recyclability</li> </ul>
Life Cycle Costs	Low Life Cycle Costs • Long Use Cycle + • Lifespan is 2-3 times longer than other roofing products	High Costs Lifespan is 20-50 years	High Costs + lifespan is 25-40 years	High Costs + lifespan is approx. 20 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