NATURAL THATCH VS. SYNTHETIC THATCH

Comparison of attributes and performance

ATTRIBUTE	NATURAL THATCH	SPARK-RESISTANT SYNTHETIC THATCH	FIRE-RETARDANT REINFORCED SYNTHETIC THATCH
Warranty	None	12 years against manufacturing defects	20 years against manufacturing defects
Estimated service life	5 years	15 years	25 years
Waterproofing	Water leaks develop after a short period	100%. Does not allow water through	100%. Does not allow water through
Weather exposure	Rots, disintegrates, turns black and becomes dirty. Quickly loses its appearance	Maintains its appearance	Maintains its appearance
Fire resistance	None. Ignites quickly from charcoal embers, fireworks debris, cigarette butts, etc.	Does not ignite from charcoal embers, fireworks debris, cigarette butts, etc.	Does not ignite from charcoal embers, fireworks debris, cigarette butts, etc., and includes fire-retardant chemicals for added safety
Wind resistance	Low. Gradually erodes over time	High. Withstands Category 2 hurricanes on the Saffir-Simpson scale	High. Withstands Category 2 hurricanes on the Saffir-Simpson scale
Pest resistance	Vulnerable. Provides nesting sites for reptiles and pests	Immune. Insects, reptiles and other pests do not nest in it	Immune. Insects, reptiles and other pests do not nest in it
Color	Becomes soiled, stained and deteriorates in the short term	Retains its color, with approximately 40% fading over 15 years	Retains its color, with approximately 40% fading over 20 years
Maintenance	Constant replacement of damaged or rotting material. Periodic application of fire retardant and pest-control treatments	Maintenance-free	Maintenance-free
Construction method	Woven and tied to the structure, following regional building methods based on artisans' practical knowledge	Screwed and fastened at strategic points on the structure, following basic engineering construction methods	Screwed and fastened at strategic points on the structure, following basic engineering construction methods
Added value	None. Depreciates due to its natural decomposition process	High. The palapa retains or even increases its value due to the quality of its construction materials	High. The palapa retains or even increases its value due to the quality of its construction materials
Property insurance	Due to the high fire risk, premiums for properties with natural-thatch palapas are high	Does not affect the property insurance cost where the palapa is installed	Does not affect the property insurance cost where the palapa is installed

COST PER YEAR OF SERVICE LIFE

Dividing the price per m^2 by the years of service life, synthetic thatch is approximately 50% less expensive than natural thatch, in addition to maintenance savings.