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Planning & Building Services



10-year-old steel roof (yes, that is holes in the steel)

To: Mendocino Historical Review Board

From: Ann Zollinger, 33975 Albion River South Side Road, Albion CA

I purchased a home with a 10-year-old weathered steel roof 2 ½ years ago in July. Six months later, it became apparent the roof was failing and needed to be replaced. My home is located under the village of Albion approximately 1500 feet from the ocean. Located on the south (north facing) side of the river, even on a clear day, most surfaces are continuously damp.

It is my understanding that the Board is considering requiring the former Anderson's Alternatives building to have the failing roof be replaced with a corrugated steel roof. Although in a climate like Central California, this roof might have a lifetime of 100 years, here at the coast, it begins to fail the day it is installed.

A steel roof requires a certain environment for its natural oxidation process, also known as patina, to occur.

It needs to be in an environment with alternating wet and dry cycles to properly form the adhered protective layer that it's known for. During these rotating cycles, the rust layer becomes a little thicker, while the underlying solid steel becomes thinner as the metal goes

between being damp and drying out. The rust layer takes a couple of years to stabilize, resulting in the highly desired, maintenance-free material. However, if the rust layer is in the wrong climate that prevents it from stabilizing, the metal will become punctured and ultimately have to be replaced.

A steel roof should not be on the coastline. Properties near the ocean, especially those within **one mile from the ocean**, are surrounded by a **high amount of salt particles in the atmosphere**. When salt spray is continuously deposited onto a steel surface, it prevents the development of the inner protective oxide layer from forming.

The rust will not stabilize but may continue to corrode, inevitably resulting in holes in the material. Properties that are waterfront, or close to water, should not use a steel roof to avoid future roofing issues.

I am opposed to this requirement as this is a material that it is now known should not be used in a coastal environment. This would be similar to requiring a wood shake shingle roof which we all know is an extreme fire danger. Corrugated steel roofs are installed with raised fasteners and due to this additional cut as you can see in the photo below, the corrosion around the fasteners is accelerated and this weakness could cause the wind to rip a panel off perhaps causing a huge accident. And we all know anything metal at the coast rusts and corrodes quickly.

I believe as a homeowner of corrugated steel roof, an architect, and a resident of Mendocino County (and formerly of the town of Mendocino) that this decision does not protect the health, safety, and welfare of the public.

