



Project: Presbyterian Camp/
Conference Center Lodge

Location: Big Bear, California

Challenge(s): Finding a lightweight product to roof-over two layers of existing material; durable enough to withstand the harsh mountain weather.

Solution: DECRA stone coated steel product – lightweight and durable.

Profile: DECRA Shake

Structural Solutions

Presbyterian Lodge

Opened in 1914, the Presbyterian Camp and Conference Center Lodge has served generations as a bible camp and retreat. Built on the shore of a 6200 acre lake at an elevation of 6700 feet in Big Bear Lake, California, the Main Lodge Building required a major renovation and re-roof of its existing aluminum panel roof after years of damage from the harsh mountain weather.

Construction practices dating from the early 1900's led the architect, Lem Bottoms, to conclude that any disruption of the existing layers of redwood shingle and composition shingle could result in expensive or irreparable damage to the building substrate. After careful analysis, it was determined that the best solution was to remove the aluminum roofing material, leave the redwood and composition layers, and roof over those layers.

To decrease the stress on the roof's truss system and structure, a lightweight product was needed. DECRA Shake made this a viable option. Weighing 125 pounds per square, DECRA Shake is lightweight but durable. Bottoms was confident that the DECRA Roofing System would withstand the heavy snow load and extreme freeze/thaw conditions common to the area.

Bottoms was also certain the system would perform against the high winds that come off the lake. Because of the unique interlocking design, DECRA panels have a 120 mph wind warranty, and have been tested to a velocity of 150 mph. Aesthetically, Bottoms and the church committee felt the DECRA Shake would enhance, yet maintain, the rustic appearance of the lodge building.

