STONE COATED STEELROOFING



"Stone Coated Steel protects where all other roofing materials fail."

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Stone Coated Steel Roofing was developed over 50 years ago in New Zealand. The local residents needed a roofing product that could withstand their extreme weather conditions: Torrential rains, Hurricane force winds and Dry summer fires.

They came up with a process that combines strong, lightweight steel - coated with corrosion resistant zinc primers, with natural earthstone granules and clear, weatherproof acrylic sealers.

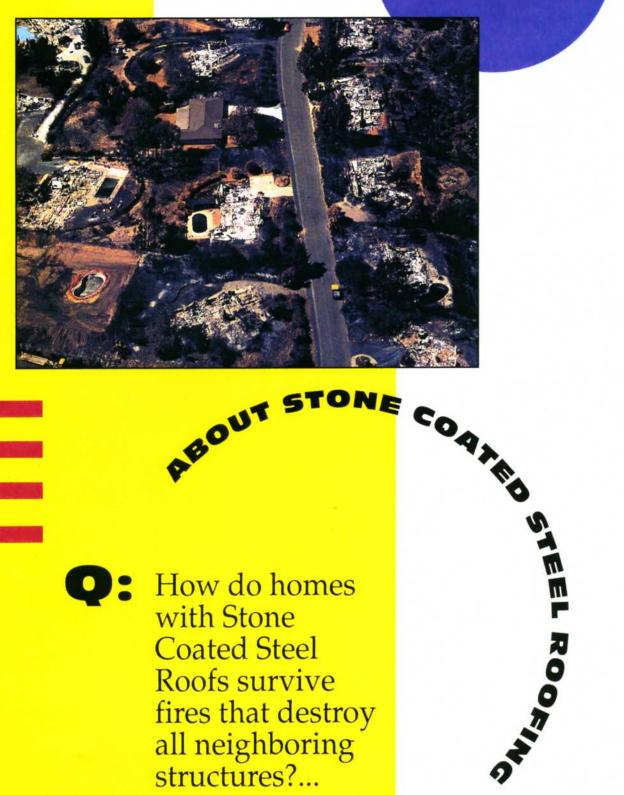
The result: A world class roofing product that is Fire resistant, Leakproof, Windproof and Earthquake tolerant.

Today, Stone Coated Steel roofs are on homes throughout California and across the country.

Stone Coated Steel provides natural, fade resistant beauty and a lifetime of protection making it the roof of choice for thousands of homeowners, including many architects, building officials and firemen.

QUESTIONS AND **ANSW**ERS

QUESTIONS & ANSWERS



How do homes with Stone Coated Steel Roofs survive fires that destroy all neighboring structures?...

QUESTIONS AND ANSWERS ABOUT STONE COATED STEEL ROOFING:

Q: Is Stone Coated Steel Roofing fire safe?

A: Definitely YES! Stone Coated Steel will not burn and will provide a greater degree of fire protection than any other roofing product.

During an exterior fire, flying embers landing on rooftops will not ignite a Stone Coated Steel roof. Heavy limbs or falling trees will not break a Stone Coated Steel roof.

Other roofing products, like concrete and clay tiles, will break under stress and may allow fire to enter the home.

In dozens of fires throughout California, homes covered with a Stone Coated Steel roof were unharmed while nearby homes having other roofing products burned to the ground.

Stone Coated Steel

roofing also provides outstanding protection during an interior fire. While no roofing product can prevent an interior fire, Stone Coated Steel will contain a fire better than any other roofing material. Additionally, because Stone Coated Steel roofing will never break, firefighters are able to walk on the roof and attack an interior fire from overhead...an important advantage not available with a heavy concrete or clay tile roof.

• What is the life expectancy of Stone Coated Steel Roofing?

years. It could easily outlast your home. Most Stone Coated Steel roofs come with a 50 year, manufacturer backed warranty.

Q: Why is wind protection so important?

Throughout California, winds can often reach speeds of 80 mph and higher. If a roofing product lifts off in high winds, it no longer protects the home. This is an especially important consideration when evaluating the fire safety of a roofing product. Fire storms create high velocity winds and propel burning materials great distances. Roofing products that fail in high speed winds will allow the fire to enter the home. Literally hundreds of homes have been lost to fire due to this flaw in many roofing products design. New building codes require roofing products to pass the 80 mph wind test. Almost all roofing products fail the test, yet they are

allow the fire to enter the home. Literally hundreds of homes have been lost to fire due to this flaw in many roofing products design. New building codes require roofing products to pass 80 MPH wind tests. Almost all roofing products fail the test, yet they are allowed to be installed under the "grandfather" clause.

Stone Coated Steel has been tested in winds exceeding 100 MPH and they are guaranteed to never lift off in any speed winds!

This crucial difference in roofing products make Stone Coated Steel the only true safe roof! Q: Is Stone Coated Steel earthquake tolerant?

A: YES! Stone Coated Steel is ultra light-weight - only 1.5 pounds per square foot. A heavy roofing product like clay of concrete tile can weigh up to 10 pounds per square foot and present a greater danger of collapsing a home during an earthquake.

Additionally, Stone Coated Steel actually strenghtens your roof and provides greater resistance to an earthquake seismic and shear forces.

Q: Will Stone Coated Steel Roofs weather hail?

Roofs have withstood hail storms without breaking or cracking and continue to provide unparalleled protection. Many insurance companies have recognized Stone Coated Steel Roofs as eligible for their premium discount plan.

Where can you get a Stone Coated Steel Roof?

A: Chances are, the contractor who gave you this booklet will install a Stone Coated Steel roof. However, if you have any further questions, feel free to call the national toll free number listed below.

WORLD CLASS FIRE PROTECTION



Many fire departments, including the American River Fire District have re-roofed their fire stations with Stone Coated Steel Roofing.

TESTIMONIALS

ASK A FIREMAN ABOUT FIRE PROTECTION



In the devastating Oakland fire, homes covered with Stone Coated Steel roofing survived where all other roofing materials failed.

Stone Coated Steel roofs are the safest roofs both for firefighters and for homeowners."

- James McMullen California State Fire Marshal, 1985-1992

"As a professional firefighter, I compared all the Class A and B fire rated roofing products on the market today. My wife and I chose Sierra Tile Roofing, not only for it's fire safety characteristics but also for the rich look of tile it brought to our home. I highly recommend Sierra Tile Roofing to any homeowner who wishes to install a roof of protection, beauty, overall economy and a lifetime of peace of mind."

- Edward L. Boddington Firefighter

"As a San Jose Firefighter, naturally I was concerned with fire safety. My shake roof was 20 years old, badly worn, damaged, ugly and dangerous. Sierra Tile's performance in many of California's worst fires convinced me to have it installed over my existing roof. I'll gladly recommend Sierra to all my friends.

Gary Parks
 Firefighter

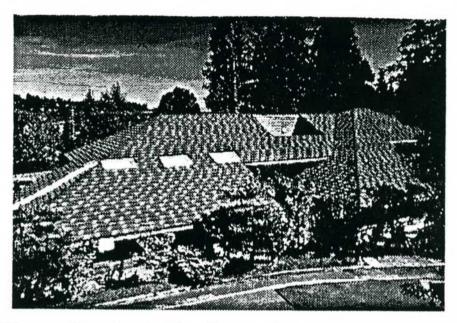
""I was aware of many sagging roofs not far distant caused by cementious roof tiles. My experience led me to conclude that lightweight Sierra Tile provided the degree of safety I felt appropriate for the area in which my home is located."

Don McClanahan
 Retired Fire Marshal

For more information on Stone Coated Steel Roofing, Contact:

1-800-977-6636

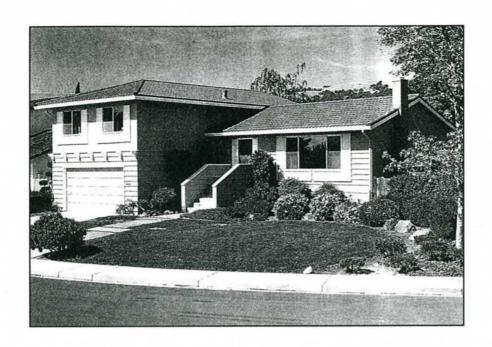
"HERE ARE JUST A FEW OF THE PROMINENT PEOPLE WHO HAVE CHOSEN TO RE-ROOF WITH STONE COATED STEEL"



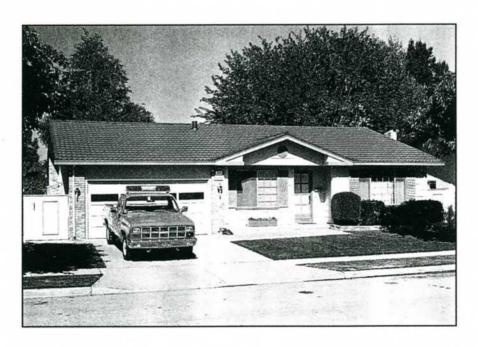
Stone Coated Steel on The International Conference of Building Officials (I.C.B.O.) Corporate headquarters in Washington.



Stone Coated Steel Tile on the home of Glen Kossin; Vice-President (retired), Sears Home Improvement Division. La Habra, CA.



Stone Coated Steel Tile on the home of John Hill; Fire Battalion Chief, City of Hayward, CA



Stone Coated Steel Tile on the home of Ed Boddington; Fire Training Chief, City of Pleasanton, CA.

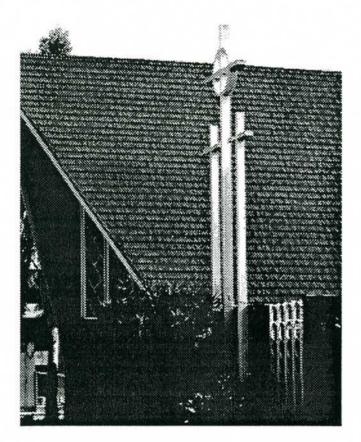


Stone Coated Steel Tile on the home of Mike Devlin; Assistant Fire Chief, City of Alameda, CA



Stone Coated Steel Tile on the home of Victor Mangini; Past Mayor, City of Burlingame, CA.

Stone Coated Steel Roofing have been choosen to re-roof many significant structures, including churches, schools and historical homes.



Stone & Steel Shake on the Yucaipa church

Stone Coated
Steel on the
Apple
Computer
Corporate
headquarters



NEWS FLASH...

Stone and Steel Roofing proven superior in containing interior fires.

Cypress, California; June, 1989

During the middle of the night a fire of unknown origin begins in the kitchen of Robert and Linda Silber. Well placed smoke alarms alert the family who quickly contact the fire department and evacuate the house. The Stone Coated Steel roof the Silbers had recently installed effectively prevented self ventilation and contained the fire to one portion of the home. The fire department was able to quickly extinguish the flames, within 20 minutes of their arrival.

Other roofing products which are flammable, or heavy roofing materials which can cause premature roof collapse do not provide the fire containment and safety features which are unique to Stone Coated Steel roofing.

Phoenix, Arizona; Phoenix Fire Department

As firefighters battle an interior fire on a home re-roofed with heavy concrete tiles, their worst nightmares come true. While walking on the roof the structure gives way, plunging one firefighter into the core of the blaze. As firefighters attempted rescue the roof continued to collapse, prompting one firefighter to later comment "I felt like I was walking on sponges." The fallen fireman was eventually rescued having learned all too well that concrete tile roofs offer no substantial support and can infact become an additional hazard in a fire.

STONE COATED STEEL MEETS HIGH STANDARD OF US MILITARY



El Toro Marine Corp Air Base

United States Military authorities turned to Stone Coated Steel as the ideal replacement roof for the giant El Toro Marine Corps Air Base.

Granting the initial contract followed a three year intensive search by military officials for a material which could meet their demands for wind resistance and permanent life span.

Installation of thousands of square feet roofing area was completed in less than half the time that military authorities had allocated for the task.

For more information on Stone Coated Steel Roofing, Contact: 1-800-977-6636

Stone Coated Steel . . . The miracle is in the design!

TEST RESULTS

No roofing product has been as thoroughly tested as Stone Coated Steel.

Strength, durability, resistance to fire, wind, rain and earthquake all have been documented and certified by independent laboratories throughout the world.

Weathering Resistance

- Accelerated Weathering Test to American Society for Testing and Materials standard (ASTM) G26-70.
- Resistance to Impact of Hailstones Test - by Commonwealth Scientific and Industrial Research Organization (CSIRO) Australia

Weather Security

- High Speed Dynamic Rain Penetration and High Wind Loading Tests - by Construction Research Laboratory Inc. Florida, USA
- Low Speed Dynamic Rain Penetration Test - by the Experimental Building Station, Australia

Hurricane/Cyclone Wind Resistance

- Hurricane tested by Construction Research Laboratory Inc. Miami, Florida, USA
- Cyclone Loading Test to the Wind Loading Code, Australian Standard 1170, Part 2 1975 - by Cyclone Testing Station, Australia

Corrosion Resistance

- Salt/Fog Test to ASTM B117
- 100% Relative Humidity Test to ASTM D2247

Thermal Resistance

• Thermal properties with and without underlays (sarking). Tests by the AHI Technical Centre, New Zealand

Concentrated Loading

 Concentrated Force on Roofing Tiles to Australian Standard 1562. Rule 5.2, 1973, by Cyclone Testing Station, Australia

Coating Strength

- Coating Flexibility Test to ASTM D1737
- Reverse Impact Test to ASTM D2794
- Coating Water Resistance and Chip Adhesion Test

Drinking Water Quality

• Rain water run-off is the lower limits of the World Health Organization's standards. Tests by Water Science Laboratories, Australia

Fire Resistance

• Class A & B under UL790 (ASTM E-108) when applied in accordance with instructions

- Underwriters'
 Laboratories of
 Canada (ULC) Class
 A, B and C Fire
 Ratings
- Class A and B Fire Retardant Roof Rating, Reroofing over existing Wood Shake, Wood Shingle, or Asphalt Shingle Roofs, in accordance with ICBO requirements
- Early Fire Hazard Test to Australian Standard 1530, Part 3by Building Research Association of New Zealand

Shear Value

Racking Test, ASTM
 E-72. Stone Coated Steel

Tile over wood shake on 1x6 spaced sheathing; 360 lbs/ft. United States Testing Company