

# How to.... Maintain your roof Forever

*What if there was a better way, a less expensive and more effective way to keep your roof free from leaks. What if it was possible to maintain your roof forever!*

Nu Hope is a company that makes medical products. The office is cooled by 3 air conditioners but only two large swamp coolers cool the entire shop and storage area. The majority of the building gets hot during the summer months because heat from the sun transfers through the roof and into the building.

The roof was fourteen years old, nearing the end of its useful life. The skylights, vents, drains and other roof penetrations had been patched several times. These are common places for leaks to start because often when a roof is installed, penetrations are not primed or properly flashed.

Century Roofing showed them how to maintain their roof indefinitely without having to tear it off, cool the interior shop area without adding new and expensive air conditioners, and have the new sustainable roof system help pay for itself.

## Extra Tough Roof Maintenance System

Century Roofing offered a solution that was both safe and odor free; a cold process roof that combines polyester and emulsion over the existing roof, avoiding having to tear it off.

A 2-ply polyester maintenance roof system was installed directly to the existing roof. Roof top penetrations were scraped down to bare metal, primed and sealed with Acu-Caulk. Emulsion and Acu-Fabric polyester were applied. Acu-Shield, one of the best white acrylics on the market from Advanced Coating, finished the job.

### Polyester and emulsion roofs provide the following benefits

1. Can be fully written off as a maintenance procedure
2. Virtually odorless material
3. The roof structure becomes tougher than when the roof was new
4. Reflective coating will save on cooling expense
5. Large buildings can be done in phases
6. Ten year warranty
7. ACU-Shield coating will block 90% of the sun's harmful UV ray 's.



**Cleaning the roof for the new polyester and emulsion roof system.**



**All penetrations are scraped down.**



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**All penetrations are primed to create a solid long lasting bond to the new maintenance roof.**

Emulsion is a mixture of pure asphalt and bentonite clay. It is far superior to asphalt that is used in hot applied roofs. Emulsion seals off the roof and creates a thick waterproofing layer that will slow the aging process by keeping the roof pliable.

Polyester ply sheets are much tougher than conventional fiberglass. They have the ability to expand and contract without splitting on a large roof like the roof at the Nu-Hope facility.

## Cool White Roof Coating

Century Roofing used **Energy Seal Coating's *Acu-Shield***, one of the best acrylic coatings available. The coating will cut the heat on the roof by up to 80° on hot summer days. White acrylic coatings can save up to 50% on cooling bills.

The best part about using polyester and emulsion is that you can maintain your roof for about 25% of the cost of a new roof. **Every 10 years or so an additional coating of *Acu-Shield* is all you will need to maintain this roof.**

### Two main reasons for roof failure are:

- **Thermal Shock** -The roof contracts in the cool of the night and expands during the warmth of the day. A typical roof can experience a 120° change in temperature in a 24-hour period.
- **Ultra violet light** -The sun breaks down the molecular structure of the roof (even on cloudy days).

A white coating of ***Acu-Shield* blocks 90% of the ultra violet light.** The highly reflective coating dramatically lowers temperatures on the roof, greatly **reducing expansion and contraction.** These two roof killers are brought under control.

Upon completion Nu-Hope received a 10-year warranty.

Century Roofing has been using emulsion and acrylics for three generations. We have been combining them with tough polyester reinforcement for over 17 years.

May we put **three generations** of waterproofing know how to work for you?



**Century Roofing** .....lic. No. 793960  
.....*Three generations in roofing*

8218 Ensign St.  
Sun Valley, Ca. 91352



**2 layers of extra tough *Acu-Fabric* are bonded to the existing roof.**



**Fiberglass roving is chopped through a special gun at the same time the emulsion is applied. This creates a thick waterproof barrier that water cannot penetrate.**



**2 layers of *Acu-Shield* white coating are sprayed onto the roof. This will reduce temperatures and save money.**

# Drain & a/c detail



## Drain Preparation

**1<sup>st</sup> photo.** The existing drain is cut back.

**2<sup>nd</sup> photo.** Acu-Fabric and Acu-Caulk were installed in the drain. The rubbery Acu-Caulk will move with the roof. The Acu-Fabric will prevent the drain from ever splitting

**3<sup>rd</sup> photo.** The Drain is now prepared and ready for the new roof system.



Each a/c unit needed to be prepared. All units were raised, dirt and debris were cleaned from underneath.



A 2 ply modified bitumen sheet was set under each a/c unit.



The modified bitumen sheet was sealed to the roof and the wood sleepers are set on pads. The perimeter is primed and ready for the new maintenance roof.

# The Finished Roof



**The roof will reflect heat and block ultra violet light. Every decade or so an additional coating will keep the roof in tip- top shape.**



**The Acu-Shield will save a tremendous amount of money on cooling costs and greatly extend the service life of this roof.**