



# THE ARCHITECTS ASSOCIATION OF SANTA CRUZ COUNTY

Second Quarter

2012

## NON-CONFORMING RULES CHANGED

The County of Santa Cruz Planning Department has promulgated a new ordinance for residential Legal Non-Conforming Structures.

### Whole Structure Counted

First, the new concept now counts all changes to the Structure of the entire building, even if only a part is Non-Conforming.

This means if only a small portion of your building is Non-Conforming, frequently the case, now you can extensively remodel that Non-Conforming, portion and not run afoul of the new ordinance.

Why is this an improvement? Previously, this was not possible, as only the Non-Conforming portion of the structure counted as a base line against which to calculate the percentage of change.

However, the new ordinance allows use of the entire structure as a base line, spreading the same amount of change over this larger base line results in a smaller percentage of change for the same amount of work.

Yes, well the Planning Department giveth and the Department shall also taketh away. So, this new concept of counting the entire structure also means that changes to the previously exempt portion of the building (that is, the conforming portion) will now

be counted towards a rolling five year window of maximum Modifications to a Legal Non-Conforming Structure.

Since any new addition must, of course, conform to the current zoning and planning regulations, this will not be counted as a Modification, except at the point of contact where the existing structure may need to be altered for connection to the addition.

### Metrics Based Calculations

Second, the new concept uses a set of metrics, based on the percentage of changes only to the structural portions of the entire building. Roof framing is assigned a value of 15% of the total structure, exterior wall framing of 65%, floor framing of 10% and foundation of 10%.

This gives a more accurate and reliable method to calculate the amount of change attributed to any given design scheme, and to plan a set of changes over a period of time that stays within the maximum Modification limits.

The maximum percentage of Modifications allowed to a Legal Non-Conforming Structure is now 65%, except for Special Circumstances if the building extends over the property line, is within five feet of a current or future ROW, or is within a riparian corridor, in which case it is a maximum Modification of 50%.

For example, using these percentages a project that replaced the entire building founda-

tion, a Modification Factor of 1.0, ( $1.0 \times 10\% = 10\%$ ), modified the entire building roof structure ( $1.0 \times 15\% = 15\%$ ), and the entire building floor framing ( $1.0 \times 10\% = 10\%$ ) would still have leeway to modify over four tenths of the exterior wall length ( $.4 \times 65\% = 26\%$ ), for a total cumulative Modification of  $10\% + 15\% + 10\% + 26\% = 61\%$ .

However, Modifications which exceed 55%, or 40% where Special Circumstances apply, require a Modification Plan for review during the Building Permit Application process.

Calculations for most Modifications are relatively straight forward. Roof and floor framing Modifications are calculated using a tributary area approach, as viewed in plan.

For example, a new opening in the roof, with framing members at two foot on center spacing, for a four foot wide skylight would result in a Modification Area of six foot width by the horizontal length or span between supporting walls, or beams.

Dividing this Modification Area by the total projected area of the roof (the area within the outside face of the exterior walls measured in plan, not along the slope) gives the Modification Factor.

The Department has provided an online Worksheet to assist your calculations.

*Article continued on page three.*



## The Architects Association of Santa Cruz County

### Officers:

President: Jim Stroupe  
 Vice President: Hugh David Carter  
 Treasurer: William Fisher

### Newsletter:

Send letters, change of address, subscription & advertising inquiries to:  
 AASCC Newsletter, P.O. Box 7462, Santa Cruz, California 95061

The Architects Association of Santa Cruz County is a professional organization of licensed Architects, interns, and related professionals living or working in Santa Cruz County. It was formed in 1982 with the purposes of increasing public awareness and sensitivity to architecture, giving members a platform for addressing design and planning issues at the regulatory level, fostering communication among local design and building professionals, and sponsoring cooperation among private and public groups, all with the goal of improving the quality of both the built and natural environments.

Website: [www.aascc.org](http://www.aascc.org)

Recorded Information line: 831.460.2999

## NEXT IN OUR LECTURE SERIES

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Don't miss your opportunity, this **Thursday, June 21st**, to hear Roy Heine, President of Suntek Industries, present case studies of his firm's various solar power harvesting systems for electrical power and heating.

See the *"Fire" Capturing the Sun's Energy* article, this page, for a more detailed description of the presentation. See back cover for location and event details.

## HABITAT OPENS RECYCLING "ReStore"

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Habitat for Humanity Santa Cruz County has announced a construction material recycling program.

Called the *ReStore*, this program accepts donations of new and re-useable items such as building materials, appliances, hardware, and furniture, reselling them to the public at a fraction of the normal retail price. This innovative program will raise funds for Habitat's projects and divert usable resources from the waste stream.

ReStore Grand Opening is Saturday, August 18th, 9 am to 4 pm, at 719 Swift Street, #62 Santa Cruz, across from Kelly's Bakery.

ReStore is accepting donations now! Free job-site & home pick-up available, call 831-824-4704.

## OPEN ARCHITECTURE TOUR A SUCCESS

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The Architects Association's annual Open Architecture Tour, a benefit for our local chapter of Habitat for Humanity Santa Cruz County, was successfully completed this last May 21st.

This was our 17th Tour, and it was attended by more than four hundred people, visiting their choices of up to the eight different sites. Projects ranged from modest remodels to new homes, and included a complete building renovation and re-purposing for a new use.

Also this year, we added a Tour Kick Off at Verve Coffee Roasters, where your Ticket booklet was good for two of their consciousness-raising coffee drinks.

The Tour is collaborative effort of the AASCC and HfH, with Tour direction and coordination by the New Moon Design Group.

Our thanks to the Tour Sponsors, and Advertisers for their continued support over the years. A special thanks to the home and building owners who open their hearts and homes to the community in support of the Tour.

Of course, the Tour also relies on the volunteer efforts of docents and staff at Habitat and the Architects Association without whose efforts this would not be possible, thank you all.

## DON'T MISS THIS MONTH'S LECTURE

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### "FIRE" CAPTURING THE SUN'S ENERGY

Solar Energy.... It works!

By Roy Heine, President, Suntek Industries

Why would anyone not want to power their home, business, pool, and hot water needs with the sun when it works and makes practical sense? There are some cases where it is not practical or will not work, but for the great majority, solar is a practical, sensible energy solution for our community, our state, and our country.

If you are building a new home or a new building, would it not be sensible to design solar into the building, and then carry the capital expense in your new mortgage?

If you do install solar during new construction you will immediately see positive cash flow day one, and at the same time have all the extra value of owning your own power generation system that provides clean free energy.

So, how can you actually realize a positive cash flow on your solar investment? It's quite simple. The 30% Federal Tax Credit is a bottom line credit. This is money that otherwise would have gone straight to Uncle Sam instead of being invested into your home or

business. You work very hard for your money, so why give it away when you can put it to work saving you on your energy bills and at the same time adding value to your property.

With a commercial building, you get another great perk from Uncle Sam. The tax code will allow you to write the entire system off through accelerated depreciation, and the tax savings on this is often equal to the 30% tax credit. So 60% of a commercial installation will be subsidized by Uncle Sam...wow!

When you do the math for both residential and commercial solar, the increased mortgage payment is more than offset with a greater amount of energy savings. This, combined with the Federal incentives, leaves more money in your bank account than if you elected to not install solar. A solar system adds value to your home or business and it begins to make you money starting on day one!

If you have a choice between polluting, or not, which way would you go?

If you have a choice between paying the utility company or making a larger mortgage payment, and the total is less, which way would you go?

If you have a choice of being subject to utility rate increases or not, which way would you go?

If you answered that you would prefer not to pollute, invest in your own power generation plant, pay less for clean energy, and not be concerned about utility rate increases, then solar makes sense and is practical for you.

Now that we have covered why solar electricity makes practical sense, let's see why heating water makes more sense with the sun

than using natural gas.

If you own a pool or operate a commercial pool, gas heating is an enormous expense and a solar pool heating system could provide a 100% return on investment in 2-3 years. If you have a pool and you do not heat your pool, you will have a cold uncomfortable pool that simply does not get used, yet the cost of operating your pool does not go away.

Solar provides a comfortable pool that gets enjoyed and it's a simple no-brainer. There are no tax credits for solar pool heating because they are simply not needed to justify this investment.

Heating your home hot water or your commercial boiler with gas is simply a waste of a precious natural resource when the sun can get the job done, and it's clean and free. The same tax credits and depreciation apply as with solar electricity for commercial and residential projects...but, you also get the bonus of significant utility rebates to make your water taste even better.

Come to the presentation on the 21st of June, at 6:00 pm and see examples of how our different Suntek projects, show-casing the design and installation of different solar harvesting systems, could save you money and energy.

*Suntek Industries is a 20 year old solar energy company with operations in California, Nevada, Arizona, and Utah specializing in residential and commercial solar electricity, solar hot water, and solar pool heating.*

*Roy Heine can be reached at 800 292 7648, or contact him at [www.suntreksolar.com](http://www.suntreksolar.com)*

## Interior Changes Not Counted

Third, only specified structural changes count towards the maximum Modification. Such things as interior wall framing, interior and exterior finishes, wiring, plumbing, window replacement and other items are not counted as a Modification

Of course, there are many additional aspects, details, exceptions, waivers and specifics not addressed in this brief overview that are important considerations in any design process. Careful study is needed before the full implications of these rule changes emerge.

None the less, this new ordinance appears to be a major step forward in breaking up the log jam of indecision and hesitation that surrounds so many Legal but Non-Conforming buildings.

Previously, these buildings were stuck in a kind of regulatory limbo, severely restricted in their ability to proceed with normal maintenance or other improvements.

Now, by offering a reasonably clear and metrics based methodology for maintaining and improving these buildings, there is a reliable way forward for these property owners of Legal Non-Conforming Structures.

The Ordinance also changes rules for commercial Legal Non-Conforming Structures, commercial Non-Conforming Uses and commercial parking requirements.

For more information see the full text of the ordinance [13.10.260-262] and the explanatory worksheets on the Planning Department website.

## 2012 AASCC LECTURE SERIES

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This years AASCC Lecture Series, *The Four Elements: Water, Fire, Earth and Air*, looks at integrating resource conserving systems into the site and building's architecture.

### **June 21st, 2012. "Fire".**

Roy Heine of *Suntrek* presents systems for harvesting solar energy for electrical power and heating water and buildings.

See "Fire" article on page two.

### **September 20th, 2012. "Earth".**

Andrew Brownstone of Bio-Sphere Consulting shows how capture and reuse of greywater can also reduce reliance on scarce freshwater sources for irrigation.

### **November 15th, 2012. "Air".**

Examples of resource conserving systems integration within the architecture of a single project.

## LECTURE SERIES VENUE

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All Lectures and accompanying Exhibits are free and open to the public.

Our Lecture & Exhibit Series is held in *The Museum of Art & History* at the *McPherson Center*, located at **705 Front Street** in downtown Santa Cruz.

Doors open 5:30 pm, with light refreshments and Exhibits in the Atrium. Lectures start at 6:00, running until about 7:15 pm, with questions, discussion and Exhibits open until about 7:30 pm.

We hope to see you there.



*"Design is a funny word. Some people think design means how it looks. But or course, if you dig deeper, it's really how it works."*  
*Steve Jobs.*

## SPECIAL EVENTS SCHEDULE

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**July 12th, 2012. Workshop** on the new **Non-Conforming Structures** Ordinance, by the County of Santa Cruz Planning Department, at 3:00-5:00 pm in the Supervisor's Chambers, 701 Ocean Street, Santa Cruz. RSVP to Jerry Busch at 831 454-3234.

See Article on page one.

**July 19th, 2012.** Building Tour Three, of the remodeled Sentinel Building, now **Cruzio Building**.

**August 18th, 2012.** Grand Opening of Habitat's **ReStore**.

See *ReStore* article on page two.

**October 18th, 2012.** Building Tour Four of the new **Monterey Bay Sanctuary Center**.

**December 6th, 2012.** Save the Date for our AASCC Holiday Dinner Meeting, details later.

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## AASCC

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