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TITLE 24 - MERE TITLE 24 COMPLIANCE NO LONGER DELIVERS GREEN EFFICIENCY.

By Alan Hugenot.

Today's residential clients want green sustainability, and are willing to pay for it. Delivering the latest in green energy efficiency becomes simple when your Title 24 compliance consultant is also a design educated engineer/architect experienced with about green building design.

WHAT NO LONGER WORKS: When Title 24 first appeared in California in 1978, it was an add-on state mandated nuisance, just some more state paperwork which needed to be filed for each project. Since it was not then considered part of design it was handed off to outside "consultants" as an afterthought at the conclusion of design. The compliance consultant simply filed the forms like H & R Block shuffles tax returns.

But, with the current green revolution, global warming and sustainability, ensuring delivery of a truly energy efficient residence in a "Brighter Shade of Green", must be addressed by Project Architects during the preliminary design phase. Building orientation, fenestration, shading and overhangs must be decided through a collaborative and innovative design process which integrates the input and solutions and experience of experienced energy consultants during the initial design perceptions in order to allow proper space allocations and budgeting for anticipated energy efficiency. Delivering this kind of comprehensive project interface at all stages is a more sophisticated service that a mere Title 24 compliance filing clerk is not equipped to provide. Today's energy trade-offs require a trained design professional.

A BETTER WAY: That's what we want to provide at Mark English Architects, where we have been advising other architects on Title 24 and Green building energy efficiency design for many years. In fact that is why Mark English originally started doing his own Title 24 compliance filings years ago. He realized that the "compliance clerks" did not have the background to assist with design trade-offs. Even those few who were well schooled on the, "you can't do that", angles of California's prescriptive requirements, were unable to speculate on, "Maybe you could do this instead". They simply had no concept of what the performance computer modeling approach could offer an architect in terms of alternatives and design tradeoffs.

At Mark English Architects we build a computer model of your building, and then modify various aspects of the insulation, thermal mass, and HVAC systems to get your model into compliance with the standard model for the specific climatic zone, we also analyze alternative glazing components, including overhangs without reducing the area of the fenestration. When you ask us to do this at the conclusion of a job our goal is to make it all work for you without altering the basic design. But to take maximum advantage of today's possibilities and our outstanding expertise in green building energy efficiency, we need to start modeling your building during preliminary design. It is up to you to bring us on to your team early on.

Bringing us on board early in the project allow us to recommend space allocations that create energy savings pay backs. Something we can't do at the permit stage. Equipment rooms and ducting soffits large enough to allow efficient duct designs and good maintenance access to equipment, all generate cost savings for your clients. Halls and corridors that double as return air plenums to provide duct free design, budgeting for ductless hydronic systems which cost more for the equipment up front, but save energy costs during operation, can all provide generous returns on investment with short term pay backs. Yet, all these must be considered and decided in the initial design phases. Trying to integrate these good ideas to "green-up" a residence after the 100% permit set is already issued, is only a white wash.... a cheap and ineffective band aid when

stitches are really required. It merely prolongs the pain, is a huge cost multiplier, and the wound may not ever heal.

Design tradeoffs need to be evaluated based on life cycle costing and energy decisions should be made by owners only in full collaboration with a savvy energy consultant.

Energy use can be reduced by 10 to 40% solely by improving building operations and maintenance, while ignoring trade-offs for building envelope, shading and overhangs. Here, the savings and the "Greening" are all in the proper selection of equipment and allowing proper space allocations. For example a ductless hydronic system costs slightly more for the extra fan coil units, but uses far less energy and far less space. More floor area and less total cost over the life cycle. In larger commercial properties that additional floor space results in increased revenues in addition to the reduced energy costs.

KNOWLEDGE IS POWER: Making sure that the particular application works with the overall HVAC concept and satisfies Title 24 compliance, while keeping up on new developments is a full time job....So, isn't it time for you to begin using your own "in-house" energy experts?That is who we are at GREEN COMPLIANCE PLUS..... your own, on call (24/7), Title 24, Green Energy Compliance Consultants.

Once we computer model your project for Title 24 compliance, our project specific energy analysis based on that model can point the way to that Brighter Shade of Green your clients are seeking.

Give Alan a call at Green Compliance Plus and we'll discuss your concerns.