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## Thomas Dolan Architecture : Building Issues

### Energy Conservation, Heat and insulation

Many states, including California, have specific requirements to address energy use in buildings, which accounts for 1/3 of all energy use in the U.S. (The other 2/3 being split roughly equally between transportation and industry.) In some cases, including California, these state regulations supercede a local jurisdiction's right to relax code for live/work or other uses. A pragmatic approach -- taken by some cities for live/work renovations -- would be as follows:

Heat in the residential portion of the unit would need to be provided unless it was truly a work/live unit with residential as very much an accessory use. In the more common cases of units whose work and living portions are in the same room, the whole space would be required to be heated to some lesser degree. Because heat rises, a residential portion that is raised above the work portion could be heated above even though open to the work space below.

Work spaces would not have to be heated, as commercial occupancies are not so required by normal codes.

When walls or ceilings are being opened for other reasons, or if a new roof is being installed, or new exterior walls or walls between heated living and unheated work portions are being installed, these must be insulated to local standards, e.g. R-13 in walls and R-19 in roofs.

Similar requirements would apply to cooling and insulation in hot climates, where it would be required otherwise in residences. In such cases, excessive skylights and West facing glazing should be especially avoided. Some cities in California require live/work to comply fully with residential or commercial state (Title 24) energy standards. Others have developed similar "prescriptive" heating and insulation requirements.

<http://www.live-work.com/revise/lwi/codes/energy.shtml>