Common Architectural Un-ideas

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Over the years a considerable body of architectural misinformation has built up, ranging from the old notion that it was necessary to keep a pot of water on the gas heater to “humidify” the air (one of the products of combustion of natural gas is water vapor) to newer and more sophisticated, but equally erroneous, un-ideas. Let’s see if we can lay a few of these to rest.

“A stair with six-inch steps is easier to climb than one with seven-inch steps.”

It isn’t necessarily so! What makes one stair easier to climb than another is not the height of the riser but the proportion of riser height to tread width.

Ideally, two times the riser height plus the tread should equal 25 inches. The slightest variation from this rule will produce a stair that is “hard to climb,” and dangerous as well. With a riser height that is between about five-and-one-half inches and eight inches, any stair will be an easy one. If we put an acoustic tile on the living room ceiling it will cut down all that noise from the kids’ rooms upstairs.”

Incorrect! Acoustic tile is one of the poorest materials that can be used to reduce sound transmission from one room to another. Almost any other common wall material, gypsum board, plaster, etc., will work better.

Acoustic tile is an acoustically “transparent” material and it is this quality which makes it works so well in its proper job, which is absorbing reflected sounds within a room. If the best materials to reduce transmitted sound are the most dense like masonry, concrete, etc. Solid lead would be ideal, if we could afford it. “I want solid brick walls, so the house will be easy to heat in winter.”

This is apparently a holdover from earlier days before light, inexpensive insulation materials became readily available. Brick is one of our finest building materials, but insulating value is not its strongest point.

The truth is that a solid eight-inch brick wall with a heat of .30 BTU-hour-SF degrees provides less insulating value than an ordinary wood frame wall with 3 1/2 inches of rock wool or fiberglass batting giving a heat loss of .06 BTU-hour-SF degrees.

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“Put the bathroom back-to-back to save on plumbing.”

This is one of those hoary old pieces of miscellaneous that practically everyone knows, like the date of the Battle of Hastings. All things being equal, back-to-back plumbing will save money; perhaps as much as $100 in a typical house.

But what if, in our typical house, we have to rearrange rooms so they don’t work so well, add hallways and maybe increase the size of the house 15 or 20 square feet, just to get the bathrooms back-to-back? Is it worth it? “Look at all that waste space. That hallway must be 15 feet long.”

The idea that hallways are “waste space” dies hard. In any house design there are traffic ways from one room to another. These traffic ways may be either through hallways or through rooms. There are no other choices. In either case, square footage must be allocated or the movement of people through the house is impossible. What is the answer? Hallways. With this firmly fixed in mind, we should tackle the task of keeping hallways to a minimum: but, when the minimum is reached recognize it.

“My sister built a house in Broussard for just $10 a square foot last year. Why is mine costing $16?”

The use of square foot costs is probably the most misleading of all estimating methods. Practically no two people figure square footage the same way. Some figure to the outside of walls; others to the inside. Some include storage rooms, carports and covered walks at full area; others at fractional area. Some include the cost of the lot, legal fees and loans; others just the cost of the house.

And on and on. Add the fact that the basic cost of construction in Lafayette may be as much as 25 to 30 per cent higher than in some other areas of the state and you can see that a comparison of square foot costs will not tell us very much.

The only practical way to estimate the cost of a proposed building is on the basis of a quantity survey of in-place units of construction, figured at a known cost for the area. This is the method used by most architects. It is also the most difficult method; but it should prove accurate to within 5 or 10 per cent.

Building is a very complex art. No single person knows all there is to know on the subject. However, for the solution to some of these technical problems, your best bet is to rely on the professional judgment of your architect.