



From Old House to New Office

by Gordon Tully

Converting a home into office space may sound like a straightforward remodeling job. It isn't. Once the public is invited onto a premises, a whole set of legal complexities enters into the picture. To cover the breadth of topics that must be considered, we listened in on an imaginary conference among the owner, builder, and architect.

Architect: So you bought this house and want to convert it into lawyers' offices?

Owner: Exactly, and I brought our favorite builder along to discuss the problems.

Builder: Yo!

Architect: We have several basic issues to consider. First is zoning. Is your proposed conversion allowable?

Owner: It is.

Architect: Good. Otherwise you'd need a variance, and that can be tricky. The next problem is parking. I read here in the ordinance that you need one parking space for every 200 square feet on the ground floor and every 300 square feet on other floors - that's more parking area than house area.

Builder: But check this provision. It says that if you don't add more than a certain amount of building area over what was there in 1964, you don't need additional parking.

Architect: That may get you off the hook. But we'll probably still have to work out a compromise with the planning board and the board of zoning appeals. You may have to limit the amount of finished floor space.

Another step is to check the code

regarding the floor area and number of floors you can have for a building of wood frame construction. You'll probably need sprinklers if you want to use the third floor, and you may have to take special pains about exits and smoke barriers.

Owner: Well, we can't do anything about that until we check with the authorities. What's next?

Architect: Next is the usual stuff involving the conservation commission and board of health. No problems there, because you're not within 100 feet of wetlands and you have a city sewer connection.

Owner: Next?

Architect: That about takes care of the legalities. The first functional problem is entry and egress. Let's start with accessibility.

Builder: The first floor is 3 feet above grade. Do we have to ramp up?

Architect: That depends on whether you'll need an elevator to make the upper floors barrier-free. You might need an elevator serving every floor, in which case you could have an elevator entrance at grade instead of a ramp.

Builder: An elevator would really do a number on the budget. Could we use one of those residential elevators?

Architect: No, but they might allow you to use a one-story lift to make the second floor accessible. But then you couldn't rent out the third level, losing that income. You'd also need a ramp.

Builder: The ground floor is 3 feet above grade. Let's see, at 1:12, the

ramp has to be 36 feet long. Ouch!

Architect: Plus a landing. You can't go more than 32 feet horizontally without a landing. A real design challenge. And if you do it wrong, the building will look institutional. And the ramp has to go in the main entry; you can't bring handicapped people in past the garbage cans out back anymore.

Builder: Aren't there any easier solutions?

Architect: It's technically feasible to cut down the foundations and drop the whole building down to grade, but it would wreck the proportions of the house.

Owner: Well, I'll put the access question aside until I check all this against the regulations. This is getting pretty complicated.

Architect: We've just started. How about egress? You need two means of egress from each floor. The ideal strategy from a code point of view is to put enclosed fire stairs at either end of the building, run a one-hour corridor on each level between the two stairs, and open the offices off those corridors.

However, the plans usually don't work out that way.

Builder: Isn't there a way to leave one of the stairs open on two or three levels? It would look nicer.

Architect: If you install sprinklers, you may be able to work with the code provisions for atriums and galleries. You'll have a much easier time

dealing with the fire marshals in general if you install sprinklers. They might even insist on them.

Owner: Another balancing act to look into, then: sprinklers versus egress. So, we've covered the zoning and other regulatory hurdles. What about the architecture?

Architect: Before that, don't forget the hvac. Probably in an old house you'll need to trash the old heating equipment and build furred ceilings and chases for the new ductwork.

Builder: Another thing not to forget: Wrap all the drain piping with insulation. There is nothing worse than sitting in a conference with your lawyer while listening to a gurgling waterfall from the upstairs toilet. Plastic piping is a problem.

Architect: Acoustics in general are a big issue in making good office space, especially if the rooms are close together, as they are in a remodeled house.

Builder: I envision a gut rehab: nothing left but the building frame.

Architect: The extent of the remodeling is another issue. You should have an experienced structural engineer look at the building to be sure the office floor loadings can be accommodated and that the tenants won't find the floors noisy or bouncy.

Builder: One or two layers of 3/4-inch plywood will stiffen up the floor, if you're doing a gut rehab anyway.



Converting a house to office space often requires such things as enlarged entryways and handicapped access. In most cases, you can meet these needs without harming the look of the house, as in the building at left. The house above, however, has been converted into an eyesore.

Owner: That brings us to the floor plan. Do we need to butcher the existing plan to get all this in?

Architect: Your house has some nice spaces, like the double parlor with sliding mahogany doors, that I would like to save. Problem is, they might not work very well acoustically or functionally. It's a tough tradeoff. The nicest examples of houses rehabbed into offices are mansions where the rooms are big enough to serve as grand entry halls or conference rooms. You should do whatever you can to preserve the house's flavor. For instance, you should use residential-type lighting, like downlights, lamps or wall sconces, instead of the usual fluorescent fixtures. Of course this doesn't work in doctors' or dentists' offices, where you need intense lighting. But as far as gutting it goes, you might try to leave the best things and then gut the rest.

Builder: How about the outside skin? Can you save any of that?

Architect: If you don't have to butcher the building to get the entries and stairs in, you can almost fully restore the outside. You will probably need yard lights for the parking, and you may want to replace the windows.

Owner: You know, this whole discussion is centered on keeping a residential look. Why can't we just accept the changes and make something new and better, but not residential?

Architect: Unless you totally rebuild the house, it will still look like a house, and in your case it will still have other houses next door. The worst thing you can do is add irrelevant, out-of-scale warts to a nice house. If you drift away from residentially scaled elements, you are going to get lost. For example, no aluminum and glass entry doors, please.

Owner: Have we forgotten anything crucial?

Architect: You need a new electrical service, along with plenty of telephone wiring and a fire alarm system of some kind, depending on the code

and on whether you sprinkler the building. You probably need new solid-core doors and good hardware for security and a classy look. You need an entry hall that leads to each tenant space, with a directory and some place for mail. You may want an intercom system connected to the entry hall. Also, you need to follow the sign ordinance.

Owner: How about finishes? Carpet everywhere?

Architect: Wood floors are classier, but they are high maintenance, an acoustical problem, and the tenants have to buy rugs. Probably carpet is best. Stay away from resilient tile: higher maintenance, and chintzy appearance.

Builder: Speaking of finishes - don't you need fire-retardant materials?

Architect: That's right. The codes are more stringent on finish materials in office spaces than in homes. But you probably can use natural woods in small buildings like this.

Owner: Do you get any breaks if the building is historic?

Architect: That depends. Some states allow certain deviations in an old building when it is impossible or very destructive to strictly follow code. I assume that in other states you can get similar relief through the code or by a hearing.

Owner: This is a lot to digest. I'll need to think this over. Maybe I can't make this work.

Architect: Work up your numbers and establish a budget. Then I'll do a quick sketch, which we can run by our builder for a rough price. If that works, we can check with the authorities and set up whatever hearings are necessary.

Owner: You know, maybe if I rented out the upper floors as an apartment and just used the first level for my own office... ■

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