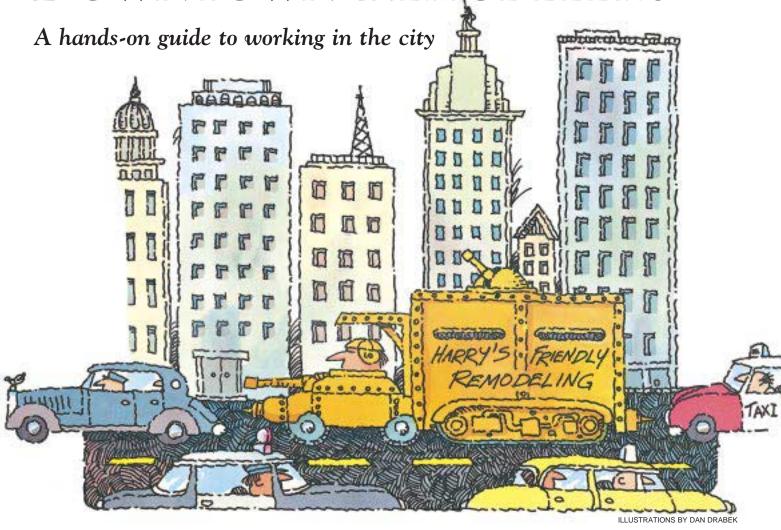
# Survival Tips for Downtown Remodelers



### by Phil Hubbard

As the owner of a small remodeling company in New York City, I work in century-old brownstones as well as pre- and post-World War II highrise apartment buildings. Brownstone work is a lot like the ordinary house construction found in rural areas and in the suburbs. But the high-rise apartment remodeling is an entirely different animal. Trade magazines and carpentry texts don't have much to say about high-rise buildings, so I've stumbled along by trial and error. I'm still standing after 18 years of trench warfare, but I've had to overcome the two major obstacles in the way of every urban remodeler: unknown site conditions and the hassles of day-to-day life in the city.

Most high-rise buildings in the city are condos or co-ops, and I am usually hired by the owner of a single unit. While the owner is the primary client, there are always two or three other people and a couple of committees involved. For example, I must submit proof of both workers comp and general liability insurance to the building's managing agent or board of directors, along with other documentation, such as subcontractor names and license numbers, construction schedules, and the number of employees expected on site for each trade. The city requires a building permit, which must be filed by a qualified architect with a set of plans that's been approved not only by the city

building department but also by the building's board of directors and managing agent. In addition, the job must be supervised — usually by the architect or by a designated site manager.

#### What's Behind Door #3?

As if it weren't hard enough to get the work done with the all of these people looking over my shoulder and dropping by unannounced (something inspectors can by law do at any time), I have to deal with the problems presented by a seemingly endless variety of materials and methods used to construct and renovate high-rise buildings over the years.

Take a simple interior door installation, for instance. In the average suburban home, you can assume that you'll be dealing with wood studs and either drywall or plaster on wood lath. You can trace all of the utilities from the basement, and any wiring, water and waste pipes, phone lines, and gas pipes you encounter can easily be rerouted through the basement or attic.

Now take the same interior door in a high-rise. If the building is relatively new, I'll be dealing with drywall on metal studs (code does not permit any wood studs). But in an older building, the wall could be plaster on gyp-block or plaster on metal lath attached to black iron. (There could also be two separate black-iron-and-plaster "walls" with some surprises between.) The wall might also be plastered terra cotta block or brick.

In buildings constructed before World War II, most of the once very large apartments have since been divided into two or three smaller units. Thus, a single wall could be constructed two different ways, or familiar materials may disguise surprises. I recently returned to a job site, for instance, to find that a section of gyp-block wall that was being demolished for a doorway was actually part of a terra cotta ventilation duct. Fortunately, the building superintendent was a very decent guy. He told the tenants on the eight floors below that the dust coming out of their bathroom vents was caused by a roof fan malfunction. For a modest fee and a three-month supply of coffee and doughnuts, he had his staff clean up the mess, and I survived unscathed.

#### **Rerouting Electrical Lines**

From experiences like this, I have learned to be careful doing demolition and to assume that there's always

something hidden behind the finish surface. Some of the more common obstacles include telephone trunk lines, cable TV lines, electrical lines enclosed in pipe conduit, and plumbing and gas lines (both active and inactive). Since I don't catch everything, I have learned the hard way to include allowances for unknowns in my estimates. Otherwise, I end up absorbing the cost of additional work.

Imagine this scenario, which has happened more than once while installing a new interior door. After merrily knocking out the gyp-block or cutting away the plaster and wire lath, I encounter a piece of electrical pipe conduit right in the center of the proposed opening. Neither the pipe, which was embedded in the floor and ceiling slabs when the building was constructed and carries an important circuit, nor the doorway can be relocated. I can't install a junction box in the floor, because the building management and co-op board forbid channeling into the slab, and the top 1/2 inch or so of the slab that isn't considered structure is not deep enough to bury a box.

One typical solution is to cut the pipe and wires above the opening about 8 inches higher than the header; then at the bottom carefully cut only the pipe just below the surface of the floor, making sure not to nick the wires inside. After pulling off the pipe, there's enough wire left to avoid any electrical connections in the floor. At the bottom, I fasten an angle connector as low as possible, slide a piece of BX sheathing over the old wires, and run it across the threshold to the wall. There I can install a junction box and run a new length of BX up the inside of the jamb and over the header, then connect it to the old conduit coming from the ceiling. A custom saddle with a groove in the bottom covers whatever I couldn't bury in the floor.

#### Locating Outlets and Fixtures

Unknowns like these are standard fare for all urban remodeling and often complicate seemingly simple jobs. Locating outlets in kitchens and baths, for instance, is a big headache. Clients, architects, and interior designers can never seem to find the *perfect* tile for the backsplash until the job is 99% done. Because the tile has some special pat-



tern or decoration, the outlets must be located *precisely*. So I have learned not to locate the outlets in a place that I and the electrician deem sensible, because somebody will object and I will have to dig them out and reinstall them. Instead, I leave kitchen outlets wired up but "floating," attached to a piece of wood blocking behind the drywall (for plaster or gyp-block, we leave a 6-inch hole and fill it in later). After the final location is determined, I cut an outlet-sized hole, fish for the outlet, and secure it in place with screws drilled through the drywall into the blocking.

Light fixtures pose a similar problem. The "normal" way to install high-hats in a kitchen, for example, would be to attach the housings after the framing is completed, then cut the trim holes during drywall installation. In urban remodeling, however, nothing is ever "normal." Because of all the unknowns — the Sub-Zero refrigerator won't fit into the service elevator and a smaller unit shifts all of the cabinet

dimensions, or the client and decorator decide on a bigger stove — final kitchen design is usually delayed far past framing and electrical rough-in, and often until after drywall is complete. Since the high-hats must align precisely with the centerline of each cabinet, I can't safely mount the housings until after the cabinets are in. So I have the electrician float the housings in the ceiling, with plenty of slack in the wiring. After the cabinets are installed, we cut the holes in the proper places, reach in and find the fixtures, and screw through the drywall into the housings from below.

#### Waste Not, Want Not

Plumbing rough-in is also an adventure in urban remodeling. Since plumbing lines serve a series of apartments, the location of a kitchen or bath is determined by the location of the waste risers. Buildings often have two sizes of waste lines: a 3-inch line for graywater and a 4-inch line for solids. Hooking

up a toilet to a 3-inch waste stack is a no-no, particularly when there is the risk it will back up into the kitchen sink of the president of the co-op board who may live in the apartment below

I found this out the hard way. A new bath I was installing had been mistakenly located near the *waste* stack, not the soil stack. Since we couldn't move the soil stack, we had to move the bathroom. This particular building was constructed before World War II and the finished floor was 6 inches above the slab. The subfloor was nailed to sleepers, which were held in place with a 6-inch layer of cinders.

When it came time to run the waste line to its new location, we discovered a structural steel beam in the floor running parallel to the sleepers and at the same elevation. (This is why the sleepers were there in the first pace — the steel structure was 6 inches higher than the slab in some places.) So we had to raise the tub and use a back-discharge toilet. To make

## No Parking Anytime

Despite the differences in materials and methods, some builders would argue that urban remodeling is still remodeling and that city builders have the same skills as their brothers in the suburbs. But there is one exception: Urban remodelers have refined the art of finding a place to park. Most of the time and energy is spent trying to avoid paying from \$100 to \$400 per month for a secure downtown parking space.

Fortunately, vehicles with commercial plates can park on the street in designated areas, and also have less chance of



getting a ticket for double-parking. Although double-parking is illegal — tickets start at \$55 — most tradespeople working in the city have no choice and often double-park all day. We try to make up for our flagrant disregard for the law with courtesy. For instance, even if I'm simply making a delivery, I leave a note on my windshield so the driver of the car I'm blocking can find me.

Most streets have a regular schedule of alternate-side parking. The ban is usually in force between 8 a.m. and 11 a.m., so for three hours there's no parking on one side of the street or the other. This creates a window of opportunity at about 10:45 a.m. Tradespeople try to offload all materials and tools before 10:30 a.m., then try to grab a parking space just before



the ban expires. I sometimes pay an employee to sit in the truck for a half hour; if I'm alone, I'll read the paper and drink coffee in the truck until a space opens up.

If I can't reach the site till after 11:00 a.m., I just double-park and hope. (I always padlock the hood of the truck to prevent theft of the battery.) Another strategy is to drive my truck to the site, unload, and drive back to my shop, where I have a parking space. Then I take the subway back to the site and home again at the end of the day. It's cumbersome, but it works.

— P.H.



the connection, the plumber had to cut away a portion of the 4-inch soil stack and insert a tee-wye fitting. All the while, of course, the stack was available for the apartments on the floors above. (I can assure you that city plumbers know how to work *fast*.)

Water supply hookups must also be carefully choreographed. Most shutoffs in the buildings I work in have long since frozen open, so I usually have to shut down water to a lot of apartments. On one job, even the main shutoff in the basement was defective and the superintendent had to have the water supply to the entire building shut off by the city. Another time in a newer building, the water lines to the refrigerator ice makers had a separate riser, but no main shutoff. The super had to shut down all of the kitchens and have his plumber install a valve.

After running into this headache on several jobs, I always allow in my estimates for the cost of new main shutoffs in the apartment so that the next guy won't have the same problem, which can take days to coordinate and fix.

#### Mother of Invention

I usually sub painting and plastering, although I've learned to do some of

both myself. I often need to duplicate existing plaster crown moldings, but it's too expensive to do this with wood: The moldings are either too complex or there just isn't enough volume to justify the expense of custom work. Instead, I've learned how to make my own plaster moldings. I make a mold out of liquid rubber, embed the mold in a plaster "master mold" to hold the shape, then fill it with plaster of Paris. The cast molding has some imperfections, but they're easy to patch. I can produce plaster crown moldings at about 1/10 the cost of a wood equivalent, while maintaining the look and feel of the original plaster. The plaster is much more forgiving and easier to patch than foam moldings. This is especially true in old buildings that are seriously out of square, because it's hard to get the inside and outside corners to meet. By using plaster moldings when the walls and ceilings are really irregular, I can simply feather out the surfaces to align with the molding. Plus, joints where plaster meets plaster are much more stable than those where plaster or joint compound meets foam or wood.

Lately, I have been using autobody products such as Bondo and fiberglass, as well as marine epoxy resins, to patch tricky conditions. Another "magic" product is Structolite, a perlited gypsum plaster that replaces the traditional brown and scratch coats of conventional plaster.

Except for small patching jobs, which I have learned to do myself, I sub most marble and tile work. Sometimes the tile work is just too small to interest a subcontractor. Plus, the difficulties of getting to and from the job site make small jobs cost ineffective for subs.

#### Hurry Up and Wait

Everything takes longer in the city, partly because of building code requirements and partly because of the nature of high-rise construction. For instance, I once worked for an owner who had bought the apartment next door and wanted me to break a doorway through a 12-inch-thick structural brick wall. The first day's work involved chopping a horizontal channel halfway through the wall and installing a structural steel lintel, cemented with structural grout. The next two days were eaten up waiting for inspections by the client's architect and a city engineer. After getting the official "okay," it was over to the other side, chop the rest of the channel, install another lintel against the first one, and wait for the inspections. Only after both inspections were done was I able to remove the bricks below and open the doorway. This four-day project would probably have taken a little over half a day in an ordinary

And it isn't just the mandatory inspections that drag jobs out. Take the load of bricks I removed for that doorway. You can't just heave them out the window into the dumpster nine stories below. Instead, you have to load a manageable number of bricks into a barrel, wheel them by hand truck through the hall to the service elevator (after laying hardboard over building paper to protect the hall carpeting). Assuming the service elevator isn't being used by a tenant to empty trash and recyclables, or by a trucking company to move somebody in or out of an apartment, or by another builder, you ride the load down to the basement, wheel the barrel out to the street, and load the bricks into your truck. With any luck, you haven't gotten a parking ticket (see "No Parking Anytime," page 43).

Actual disposal is difficult and can be either expensive or very expensive. There are four legal ways to dispose of construction debris in the city: Hire a carting service to haul it away; rent your own container back at your shop (you still have to hire a carting service to haul it from there, but it's cheaper the farther away you get from downtown); cart it in your truck to a transfer station or carting center; or get a special permit and bond from the building department to keep a container on the street. The convenience of having a container on the street is offset by the likelihood that others will fill it up while you're not looking — one of many illegal ways to dispose of debris.

#### Getting from Point A to Point B

Obviously, the size and location of service elevators, corridors, and stairways affect all aspects of the job's schedule and cost. Most older buildings have severely constricted clearances someplace between the street and the apartment I need to work in. I have had to rebuild many bookcases and breakfronts because I forgot to plan ahead. I now make it a policy to survey the entire route from the street to the job site, taking measurements of all tight spots. I make sure any cabinetry is designed and built modularly based on the minimum clearance.

Most elevators are not much higher than 7 feet 6 inches, so full sheets of plywood and drywall won't fit. I use 4x6 drywall and precut the plywood. Some elevators have a small hatch in the top for servicing, and sometimes I can beg or bribe the operator to let me stick 10-foot or longer studs or pieces of trim through them. (I have to be careful about this when I'm working on the top floor; if the molding sticks too far out the top of the elevator — crunch.)

In the worst cases, the materials won't fit in the elevator no matter what I do and I have to find another way to get them up to the site. Once when I was building a penthouse on top of a seven-story building, I had to haul 16-foot-long joists up the side of the building from an alleyway. A commercial rigger was too expensive, so I ended up hoisting them up by hand with a block and tackle; unfortunately, I hadn't included this in my estimate.

For another job, I had to travel through an alleyway, down a flight of stairs, and through more than a city block (1/20 of a mile) of subterranean corridors to get to the service elevator. Then I had to wait about 15 minutes for the grumpy elevator operator to arrive. After four or five trips, this got very old — and very costly.

#### Tooling Up

Because of the difficulties of parking, loading, and unloading, I like to set up a job-site workshop whenever possible. Larger equipment, like a radial arm saw or 10-inch contractor's table saw are difficult to haul around. I use either an 8- or 10-inch Makita table saw for

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rough sawing and a 10-inch Inca for precision work. A 10-inch Makita compound miter saw and a bench-size drill press round out the job-site shop.

Tools are a street commodity in New York City. I either store all my tools on site, or bring just what I need each day; tools left in the truck will probably get stolen. In fact, if you leave too many tools in your truck, they'll steal the entire truck.

In addition to dodging the meter cops while unloading tools and materials, you have to keep an eye on any suspicious-looking characters who are hanging around. If I'm alone, I usually use a hand truck to wheel my tools and materials into the relative safety of the service entrance, then go right back to check on the truck or to get another load. In certain parts of town, I lock my doors even when going from one side of the truck to the other. A tool left on the seat with the door unlocked or ajar is an invitation to a street predator to grab it and run. If I have to run an errand, I pay my helper to stay with the truck.

The same is true for "sidewalk delivery" of material. I happen to have a lumberyard right around the corner from my apartment in Manhattan, but there are several in the city. Most will deliver, but the farther you get from Manhattan, the cheaper the prices. For large orders, I do business with a yard outside the city; for quick pickups, I use the city yard.

#### **Buying Time**

All of this hand trucking, locking, and unlocking takes time, so it adds to the cost of a job. In fact, time itself is in short supply for remodelers in Manhattan. Most co-op boards limit working hours to between 8 or 9 a.m. and 4 p.m. — with no noise before 10 a.m. Unlike the burbs, if I hit a snag during the day, I can't simply work late. Sometimes I develop a good enough relationship with the super that I can stay late, so long as I don't make any noise. Even then, I have to take a change of clean clothes to wear when I leave, because I have to use the main elevator.

#### The Upside of Downtown

Despite all the hassles, remodeling in the city has an upside. Many older buildings offer opportunities to do beautiful and challenging work, and I get to deal with many talented and creative architects and designers. I also get a great deal of satisfaction from overcoming all the obstacles. And when I properly do my homework, I get compensated for all of the difficulties. It takes a special breed of builder to do remodeling in the city — but I wouldn't be happy anywhere else.

So the next time you've had one of those days when nothing goes right, think of me wheeling a hand truck full of tools down the alley while looking over my shoulder to see if anyone's trying to pry open the door to my truck or write me a \$55 ticket for double parking. If that doesn't work, run up and down the basement stairs 18 times just to see what it's like to work on the 9th floor when the service elevator is out of order. I guarantee it will put a smile back on your face.

Phil Hubbard lives in Manhattan and has been double-parking outside apartment remodels for 18 years.