

COMMON ERRORS IN RESIDENTIAL CONSTRUCTION

A short list of items I see too often.

1. Contractors

- Submit plans good enough to build from, include sizes of framing.
- A site plan is required by law, every time. On pole foundations footers must be sized correctly.
- All commercial work requires a permit. How can we check your work later?
- You must meet our energy conservation code, not Ohio's.
- Footers must be continuous (bulkheads at changes in elevation) lintels only for porches etc.
- Basement insulation is from the floor to the ceiling not just to grade.
- Emergency escape and rescue windows are not optional if the homeowner doesn't want them.
- A man door out of an integral garage is acceptable as your emergency escape from the basement.
- If you build without a building permit to save money, you may be working for free, if caught.
- If you call to ask a question and don't give me all the information, don't be surprised if I'm wrong.
- If you install a product that requires installation instructions, make sure the instructions are on site.

2. Framers, Mechanical, Plumbers, Electricians

- You can not cut or drill a truss. If it was ordered wrong you still can't cut it. You can't drill a truss.
- No holes within 2" of the top or bottom of horizontal framing. How can you fix them?
- Use the correct protector plates, non-combustible caulk, and fiberglass to seal floor to wall openings.

3. Framers

- Nail the floor system to the sill plate. Why would you bolt the plate down and not attach the floor.
- Follow the approved plans, if they're not on site, get them, I make notes to save you time.
- Be sure to include the correct support under engineered lumber, I'll need the paperwork.
- For roofs with unequal loads (pitch or length) or no ceiling joist the ridge must be designed as a beam.
- All joist, rafters, hips, valleys, ridges, headers, etc. must be supported at both ends or engineered

4. Mechanical

- Round ducts must be taped with listed (UL 181) tape. Slips and drives don't require tape.
- Bath fans require metal ducts or flex, not dryer vent you bought at Wal-Mart.
- Watch the electrical work to the units, wire size and breakers must be correct.

5. Electricians

- Waterproof in use covers on the exterior if not under a roof.
- No lights or additional outlets (other rooms or areas) on small appliance circuit.
- Smoke detectors must be on an arc-fault protected circuit with a lighting load.
- No wiring in return air spaces, it's OK to cross space, no phone or cable unless listed for plenums.
- Tamper proof receptacles in all locations.

6. Plumbers

- No tees on their back or side, no S-traps, and no horizontal 90s in 3" and larger.
- No heel outlet elbows under water closets. Vents must rise continuously through the roof.
- PVC requires purple primer, drains must slope correctly, and you can't glue different type of plastic together.
- Hose bibs require an air or vacuum break unless on a washer (built in) or a waterheater (drainage).
- One full size vent (1/2 drain size-2" for 4") continuous through the roof.

7. Drywallers

- Only garage ceilings under living space must be 5/8" X drywall.
- Glue is required on all framing members, even edges, or you must fasten for no glue.
- Garage ceilings with 5/8" X require 1 7/8" nails 6" on center or equivalent screws if not glued.
- Ceiling framing 24" on center drywall to be textured must be 5/8" or sag resistant 1/2"
- Enclosed under stair areas must have 1/2" drywall on the walls and rake, tight or taped

8. Suppliers

- Ask about Emergency escape and rescue openings. This could save you a headache.
- If you supply engineered wood products, do the structural calculations, & give us the information.
- If you supply steel beams, do the structural calculations, & give us the information.
- If you supply a product that requires installation instructions, make sure the instructions are on site.
- I am happy to approve new products, just show the testing.