



## **General Requirements for Residential Kitchens** (Updated for the 2016 Codes)

### **BUILDING**

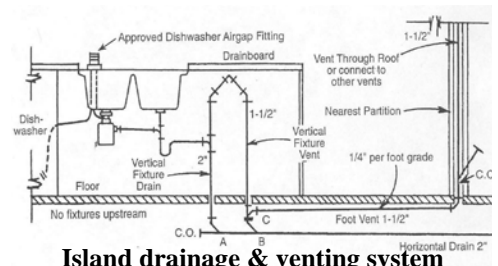
1. Minimum ceiling height in a kitchen is 7' clear, from the finished floor to the finished ceiling.
2. Insulation is required to be installed in all walls, floors and ceilings open for construction between conditioned space and unconditioned space, such as exteriors, garages, crawl spaces and attics. Type or insulation required: Walls: 2x4 R-13 or 2x6 R-19 Ceiling R-30 – Floor R-19)
3. Doors opening to garages must be a minimum of 1 3/8" solid core, self closing and latching. The door must seal on all four edges. Doors must not open up over steps or landing lower than 1" from the threshold of the door.
4. A modified 1-hr wall is required between the garage and the kitchen. The garage side sheetrock shall be ½" type X minimum.

### **ELECTRICAL**

5. Provide electrical calculations per Article 220 (fill out attached: RESIDENTIAL ELECTRICAL LOAD CALCULATIONS form)
6. Provide a completed WS-5R RESIDENTIAL KITCHEN LIGHTING WORKSHEET form. (attached)
7. There shall be a minimum of 2- 20 amp kitchen counters circuits required. All the kitchen counter receptacles shall be GFCI and AFCI protected. This can be achieved by using a combination AFCI/GFCI circuit breaker. The counter top circuits may only be shared with the dining room or a pantry. Dishwashers, garbage disposals, insta-hots, compactors, built in microwave ovens, and the kitchen lighting **shall not** be on the same electrical circuits.
8. Receptacles are to be located so no appliances are further than 2' from any plug. (4' max. apart located on all counters) Counter tops wider than 12" require receptacles. Receptacle shall be no higher than 20 inches above the counter.
9. Island or peninsulas require at least 1 receptacle. The receptacles may not be more than 12" below the counter surface or be below a counter that extends more than 6" beyond a cabinets end.
10. All kitchen lighting shall be high efficacy, and AFCI protected.
11. The maximum length for a garbage disposal cord is 36" and a dishwasher is 48".
12. Multiwire duplex receptacles for garbage disposals and dishwashers require tie-bars on the breaker in the service panels

### **PLUMBING**

13. All new gas piping shall be sized to supply sufficient gas to the appliances. The gas piping shall be tested with 3 lbs of pressure for a minimum of 10 minute. Testing gauge must read in tenth.
14. Hot water piping shall be insulated, and the insulation shall have a minimum wall thickness of not less than the diameter of the pipe.
15. All oven and stove gas valves shall be accessible and be within 6' of the appliance, and in the same room. Connectors may not be concealed or pass through any floor, wall partition, ceiling or appliance housing.
16. A 2" assessable plumbing cleanout under the sink shall be required if the sink is the highest fixture on the system.
17. An air-gap above the sink rim shall be installed between the dishwasher drainpipe and the garbage disposal inlet.
18. A mechanical water hammer is required on the water line serving the dishwasher



**Island drainage & venting system**

### **MECHANICAL**

19. A vertical minimum clearance of 30" is required above a range to combustibles materials, and a minimum vertical clearance of 24" above the range to the built-in microwave ovens is required. A reduced or increased clearance shall be per the manufactures installation instructions
20. Back draft damper are required on ventilation systems exhausting to the exterior.
21. Mechanical ventilation is required for kitchen ranges, at 100 CFM minimum. A back draft damper is required on all ventilation systems exhausting to the exterior

### **GENERAL**

22. Final inspection will require operational smoke detectors in all the bedrooms, basement and adjoining hallway outside all sleeping rooms and a minimum of one per floor level. A carbon monoxide detector is required on each level of the house, within 30 feet of sleeping rooms.

## Typical Kitchen Floor Plan Showing General Requirements:

**Provide the following:** Three sets of plans with the following information: Owner's name & address, page numbers, 1/4" or 1/2" scale  
**Identify:** Existing walls to be removed and/or added, switches, lights, florescent lights, plugs, GFI plugs, 220 outlets, plumbing, gas lines & location of valves, doors, windows, skylights, appliances, exhaust fans or ventilation  
**Show:** Dimensions and sizes of the rooms, walls, pipes, doors, windows/skylights and note height of ceilings

