



CITY OF TUKWILA

Department of Community Development
 6300 Southcenter Boulevard, Tukwila, WA 98188
 Telephone: (206) 431-3670

PLUMBING &/or GAS PIPING

Type: **PLUMBING_GAS PIPING**
 Subtype: **RESIDENTIAL**
NON-RESIDENTIAL

All applications, residential or commercial, **require a detailed description** of work to be done.

All **Single-Family Residential** plumbing and/or gas piping projects are OTC, none of these require plan review.

MOST Commercial plumbing and/or gas piping projects require plan review. **EXCEPTION:** Repairs or alterations to existing systems that do not include backflow prevention devices, sewage ejector pumps, fixtures, or new service installations.

Emergency repairs may be performed immediately. However, the permit application shall be submitted within the next working business day, whether commercial or residential.

If a plan review is required, the materials listed below must be submitted at the time of your application. SEE EXAMPLES ON NEXT PAGE.

Please ensure your files conform to [City of Tukwila’s electronic submittal standards](#) prior to upload. Files that do not meet these requirements will result in the application being deemed incomplete.

Required Documents	Attachments File Name
1. Washington State Department of Labor and Industries valid contractor’s license or owner affidavit .	Contractor license or owner affidavit
2. Current City of Tukwila business license	Business license
Plans – Ensure current IBC/IRC codes are clearly stated.	Attachment File Name
1. Plans to be reviewed must be legible, drawn to scale and shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed. The person or firm responsible for the plumbing plans shall be indicated on the plans. 2. Floor plans shall be two-line drawings. Single line floor plan drawings shall not be accepted. 3. The plans must clearly show the plumbing installation or alterations in floor plan view with pipe sizes, piping run distances, and types of fixtures. 4. Plumbing riser diagram(s) indicating fixtures, drains, traps & vents required. 5. Provide manufacturers specifications with sizing for grease interceptors, grease traps, and indicate trap primers for floor drains all as applicable. 6. Where plumbing work includes roof drains and conductors , provide calculations to justify the number and size of roof drains and conductors. 7. Specify material to be used (preferably on the plans or in separate spec. document). 8. As applicable, Gas piping shall include calculations for pipe sizes, length of pipes, sized for appliances served. Provide a complete diagram of all piping.	Plans

* Each plan sheet created by an engineer or architect shall be stamped with signed and include date of signature.

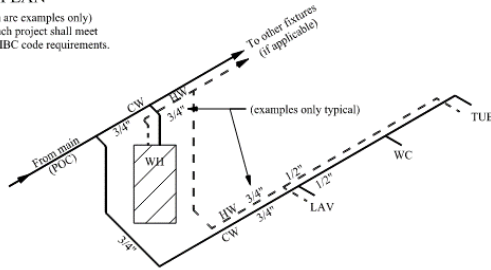
NOTE: All files must be PDF.

EXAMPLES

ISOMETRIC PLAN

(Dimensions and design shown are examples only)
Individual designs specific for each project shall meet all applicable 2021 UPC, IRC and IBC code requirements.

LEGEND
CW = Cold Water
HW = Hot Water
WH = Water Heater
POC = Point Of Connection



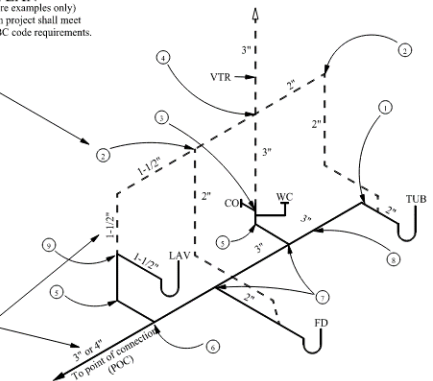
ISOMETRIC PLAN

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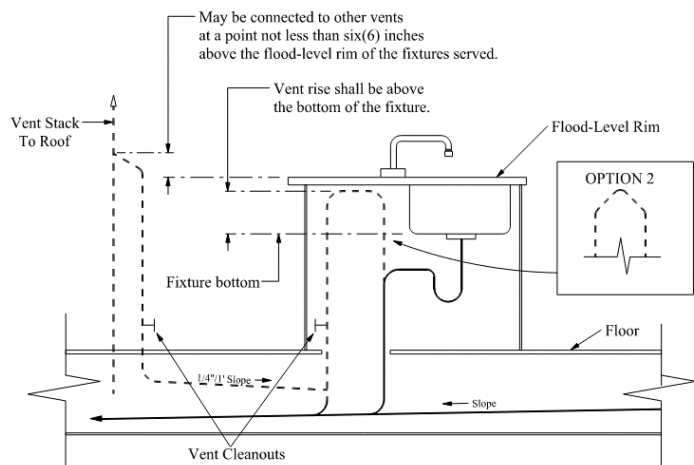
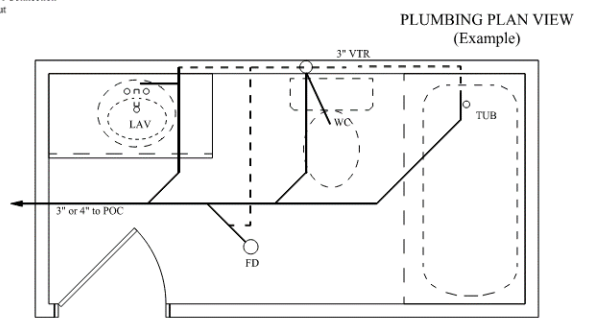
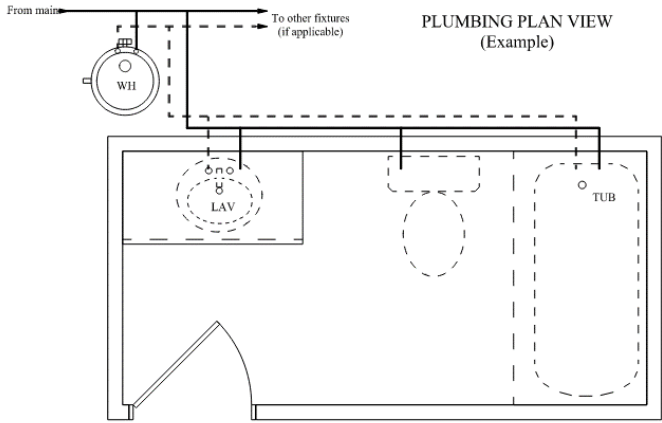
Provide a parts list with key references to each pipe joint connection.

Fitting/Parts Schedule		
Fitting type	Size	Fixture Served
1		
2		
3		
4		
5		
6		
7		
8		
9		

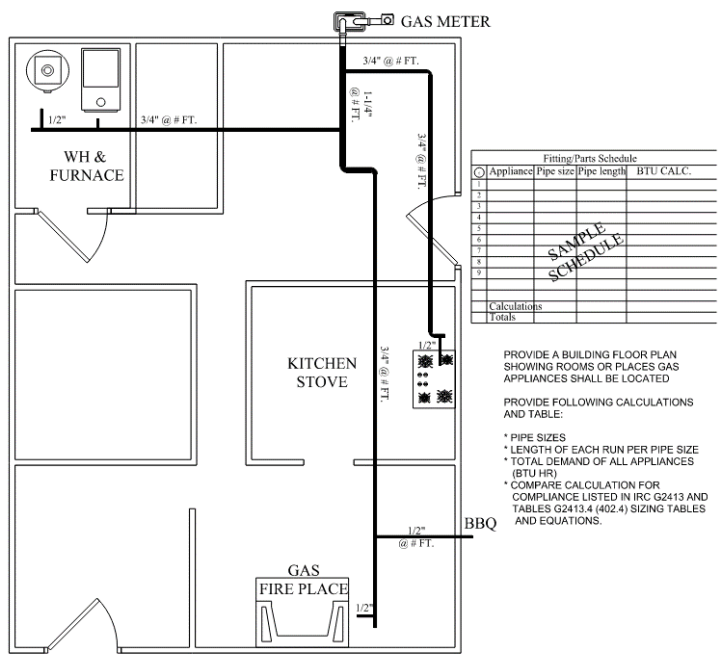
(examples only typical)



LEGEND
VTR = Vent through roof
WC = Toilet or Water Closet
FU, S or LAV = Fixture Unit, Sink or Lav sink
POC = Point Of Connection
CO = Clean Out



Traps for island sinks and similar equipments shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it into the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye branch immediately below the floor and extend to the nearest partition and then through the roof to the open air, or may be connected to other vents at a point not less than six(6) inches above the level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor flood-level, and a minimum slope of one-quarter (1/4) inch per foot back to the drain shall be maintained. The return bend used under the drainboard shall be one (1) piece fitting or an assembly of a forty-five (45) degree, a ninety (90) degree, and a forty-five (45) degree elbow in the order named. Pipe sizing shall be as elsewhere required by the code. The island sink drain, upstream of the returned vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.



Fitting/Parts Schedule		
Appliance	Pipe size	Pipe length
1		
2		
3		
4		
5		
6		
7		
8		
9		
Calculations		
Totals		

PROVIDE A BUILDING FLOOR PLAN SHOWING ROOMS OR PLACES GAS APPLIANCES SHALL BE LOCATED

PROVIDE FOLLOWING CALCULATIONS AND TABLE:

- * PIPE SIZES
- * LENGTH OF EACH RUN PER PIPE SIZE
- * TOTAL DEMAND OF ALL APPLIANCES (BTU HR)
- * COMPARE CALCULATION FOR COMPLIANCE LISTED IN IRC G2413 AND TABLES G2413.4 (402.4) SIZING TABLES AND EQUATIONS.