

## Proposed ADU (Accessory Dwelling Unit)

The Water Meter Sizing Worksheet helps determine the water meter size needed for projects requiring new meters or upsized water services.

### Who needs to complete this form?

Complete this form if you have new construction, building conversion or addition for a proposed ADU that will connect to the public water system.

This worksheet must be completed if the applicant is planning to:

- Construct a new building
- Add or remove plumbing fixtures

Potential ADU building permit applicants may also complete this worksheet in pre-planning or planning stages.

If you are interested in Systems Development Charges related to such a project, please feel free to complete the work-sheet and contact City of Vancouver CDD Engineering Techs at [citycddeng@cityofvancouver.us](mailto:citycddeng@cityofvancouver.us). Our staff can discuss fees, permit and any other requirements related to water / sewer for proposed ADU's.

### What kind of information does this worksheet request?

The Meter Sizing Worksheet is an inventory of the plumbing fixtures in your project. Each fixture is given a value based on typical water use. Follow the instructions to determine the water meter size that will provide optimum water flow through-out your site. You will calculate Total Fixture Unit Values and be able to match this value to the meter size.

### Where do send the worksheet?

Applicants for proposed ADU's will be required to submit this worksheet with your building permit application and then upload to ePlans.

### Permit Center, Community Development Department

Please contact us if you need any help figuring this out. 360-487-7804 | [citycddeng@cityofvancouver.us](mailto:citycddeng@cityofvancouver.us)

**Mailing Address:** City of Vancouver, Permit Center, P.O. Box 1995, Vancouver, WA 98668-1995

**Walk-in Assistance:** City Hall, Permit Center, 415 W 6th Street, 98660, Monday, Wednesday, Friday 9 a.m. to 4 p.m.  
(closed during lunch hour 12:30 to 1:30 p.m.)

PROJECT ADDRESS:

PERMIT NO:

| (1)<br>Type of Fixture               | (2)<br>Total Fixtures in New/Remodeled<br>Structure<br><i>(list all existing fixtures if utilizing / sharing existing meter)</i> | (3)<br>Fixture<br>Values | (4)<br>Total Fixture Unit<br>Value<br><i>(will calculate for you)</i> |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------|
| Bar sink                             | X                                                                                                                                | 2.0                      | =                                                                     |
| Bathtub or Tub/Shower                | X                                                                                                                                | 4.0                      | =                                                                     |
| Clinic Sink                          | X                                                                                                                                | 3.0                      | =                                                                     |
| Clothes Washer                       | X                                                                                                                                | 4.0                      | =                                                                     |
| Dishwasher                           | X                                                                                                                                | 1.5                      | =                                                                     |
| Drinking Fountain                    | X                                                                                                                                | 0.5                      | =                                                                     |
| Hose Bibb, 1st one                   | X                                                                                                                                | 2.5                      | =                                                                     |
| Hose Bibb each additional            | X                                                                                                                                | 1.0                      | =                                                                     |
| Kitchen Sink                         | X                                                                                                                                | 1.5                      | =                                                                     |
| Laundry Sink                         | X                                                                                                                                | 1.5                      | =                                                                     |
| Lavatory Sink                        | X                                                                                                                                | 1.0                      | =                                                                     |
| Mop or Service Sink                  | X                                                                                                                                | 3.0                      | =                                                                     |
| Shower                               | X                                                                                                                                | 2.0                      | =                                                                     |
| Urinal, 1.0 GPF                      | X                                                                                                                                | 4.0                      | =                                                                     |
| Urinal, >1.0 GPF                     | X                                                                                                                                | 5.0                      | =                                                                     |
| Water Closet, 1.6 GPF Gravity Tank   | X                                                                                                                                | 2.5                      | =                                                                     |
| Water Closet, 1.6 Flushometer Value  | X                                                                                                                                | 5.0                      | =                                                                     |
| Water Closet, >1.6 Flushometer Value | X                                                                                                                                | 8.0                      | =                                                                     |
|                                      |                                                                                                                                  | Total<br>Fixture Unit    | =                                                                     |

Note: Fixture units for flushmeters are approximate values. Values will be reviewed and may be adjusted by a City of Vancouver Water Engineering Staff on a case-by case basis.

### Instructions

**Column 2** - Enter the total number of each fixture type for the completed new structure. If the project has an existing structure that will be using the same water meter, include the fixtures from the existing structure.

**Column 3** - Shows the per unit value of each fixture type.

**Column 4** - Automatically multiplies the number of fixtures from column 2 by the per unit value in column 3.

| 2012 UPC TABLE 610.4                                          |                              |                                 |     |     |     |     |     |     |     |     |
|---------------------------------------------------------------|------------------------------|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| FIXTURE UNIT TABLE FOR DETERMINING WATER PIPE AND METER SIZES |                              |                                 |     |     |     |     |     |     |     |     |
| METER AND STREET SERVICE (IN)                                 | BUILDING SUPPLY AND BRANCHES | MAXIMUM ALLOWABLE LENGTH (feet) |     |     |     |     |     |     |     |     |
|                                                               |                              | 40                              | 60  | 80  | 100 | 150 | 200 | 250 | 300 | 400 |
| PRESSURE RANGE- Over 60 psi <sup>1</sup>                      |                              |                                 |     |     |     |     |     |     |     |     |
| ¾                                                             | ½ <sup>2</sup>               | 7                               | 7   | 7   | 6   | 5   | 4   | 3   | 3   | 2   |
| ¾                                                             | ¾                            | 20                              | 20  | 20  | 20  | 17  | 13  | 11  | 10  | 8   |
| ¾                                                             | 1                            | 39                              | 39  | 39  | 39  | 35  | 30  | 27  | 24  | 21  |
| 1                                                             | 1                            | 39                              | 39  | 39  | 39  | 38  | 32  | 29  | 26  | 22  |
| ¾                                                             | 1¼                           | 39                              | 39  | 39  | 39  | 39  | 39  | 39  | 39  | 34  |
| 1                                                             | 1¼                           | 78                              | 78  | 78  | 78  | 74  | 62  | 53  | 47  | 39  |
| 1½                                                            | 1¼                           | 78                              | 78  | 78  | 78  | 78  | 74  | 65  | 54  | 43  |
| 1                                                             | 1½                           | 85                              | 85  | 85  | 85  | 85  | 85  | 85  | 85  | 81  |
| 1½                                                            | 1½                           | 151                             | 151 | 151 | 151 | 151 | 151 | 130 | 113 | 88  |
| 2                                                             | 1½                           | 151                             | 151 | 151 | 151 | 151 | 151 | 142 | 122 | 98  |
| 1                                                             | 2                            | 85                              | 85  | 85  | 85  | 85  | 85  | 85  | 85  | 85  |
| 1½                                                            | 2                            | 370                             | 370 | 370 | 370 | 360 | 335 | 305 | 282 | 244 |
| 2                                                             | 2                            | 370                             | 370 | 370 | 370 | 370 | 370 | 370 | 340 | 288 |
| 2                                                             | 2½                           | 654                             | 654 | 654 | 654 | 654 | 650 | 610 | 570 | 510 |

| Fixture Unit Count<br>(column 4 total) | Required<br>Meter Size |
|----------------------------------------|------------------------|
| 0-37                                   | 5/8"x3/4"              |
| 37.5-89                                | 1"                     |
| 89.5-286                               | 1.5"                   |
| 286.5-532                              | 2"                     |
| 532.5-1,300                            | 3"                     |
| 1,300.5-3,600                          | 4"                     |
| 3,600.5-8,200                          | 6"                     |