

WAC 246-272B-06150 Design flows. (1) The design engineer shall use the following minimum design flows, which include the appropriate peaking factors, for developments or portions of developments serving residential facilities such as single-family residences, multi-family dwellings, and mobile home parks with total LOSS design flows of 14,500 gpd or less:

(a) Modifications of existing developments:

(i) 120 gpd per bedroom; or

(ii) 240 gpd per existing dwelling unit, residence or mobile home lot or space, whichever is greater.

(b) New residential developments and new mobile home parks:

(i) 120 gpd per bedroom; or

(ii) 360 gpd per lot or space, whichever is greater.

(2) The design engineer shall use 270 gpd minimum design flow per dwelling unit, residence or mobile home lot or space for residential developments or portions of developments serving residential facilities, with total LOSS design flow greater than 14,500 gpd.

(3) For commercial and nonresidential developments or portions of developments that serve commercial and nonresidential facilities, the department may accept the following:

(a) Design flows listed in Table 4 in this section; or

(b) Design flows from other generally recognized sources, on a case-by-case basis.

Table 4: Typical Design Flows for Nonresidential Facilities

Type of Facility	Design Unit ¹	Design Flow (gpd)
Schools with showers and cafeteria ²	per student	16
Schools without showers and with cafeteria ²	per person	12.6
Schools without showers and without cafeteria	per person	10
Boarding schools ²	per person	75
Temporary farm worker housing ²	per person	50
Hotels, motels, and B&Bs	per room	130
Restaurants ²	per seat	50
Truck stops and Interstate restaurants ²	per seat	180
Offices, with showers	per person, per 8-hr shift	25
Offices, without showers	per person, per 8-hr shift	15
Nursing homes ²	per bed	200
Elder care facilities, retirement homes ²	per bed	100
Laundromats ²	per machine	500
Churches, without kitchen	per seat	3

Type of Facility	Design Unit ¹	Design Flow (gpd)
Churches, with kitchen ²	per seat	5
Day care centers	per person	20
Picnic areas	per person	5
Campgrounds, RV parks with flush toilets only, no laundry or wet sewer hookup	per camp site	50
Campgrounds, RV parks with flush toilets, showers, laundry, no wet sewer hookup	per camp site	75
Campgrounds, RV parks with flush toilets, showers, and wet sewer hookup, with or without laundry ²	per RV space	120
Trailer dump stations ²	per dump	40
Resort cabin	per person	40
Bar, cocktail lounge ²	per seat	20

1. Does not include employees and staff, unless indicated.
2. Indicates potential for waste strength to exceed that of residential strength sewage, requiring Treatment Level E or higher.

(4) For the department to evaluate alternate design flows, a written request and the following information must be submitted:

(a) The preceding year's actual metered flow data read at intervals acceptable to the department to capture seasonal and peak usage; or

(b) Comparable flow data from similar existing facilities, including:

(i) From a minimum of three similar developments; and

(ii) Using a peaking factor if average flows are recorded.

[Statutory Authority: RCW 70.118B.020. WSR 11-12-035, § 246-272B-06150, filed 5/25/11, effective 7/1/11.]