

CHANGE TYPE: Clarification

CHANGE SUMMARY: The numbers of plumbing fixtures in all single-user toilet rooms and bathing rooms count towards the total number required for a building.

2021 CODE: 403.1.2 Single-user toilet facility and bathing room fixtures. The plumbing fixtures located in single-user toilet facilities and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the *International Building Code*, shall contribute toward the total number of required plumbing fixtures for a building or tenant space. Single-user toilet facilities and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use either by all persons regardless of their sex.

The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or separate facilities.

CHANGE SIGNIFICANCE: The required number of plumbing fixtures for a building or space can be located in single-user facilities, separate facilities or a combination thereof. Given that single-user facilities serve all persons (not sex separated), the number of plumbing fixtures in those rooms count towards the total number of fixtures required for a building.



International Code Council

Fixtures in all single-user toilet rooms count toward total required

403.1.2

Fixtures in Single-user Toilet Rooms Count Towards Total Required Quantities

Fixtures in all single-user toilet rooms count toward total required**A mixture of Single-User toilet facilities and Multiple-User toilet facilities**

Given: Business Use having an Occupant Load of 360. Design chosen to have 5 single-user toilet facilities and two multiple-user “separate sex” toilet facilities.

Per Table 403.1:

Water Closet Ratio: 1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50

Lavatory Ratio: 1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80

Calculations:

Occupant load for males = $360/2 = 180$

Occupant load for females = $360/2 = 180$

Males:

WCs: $50/25 + (180 - 50)/50 = 4.6$ Round up to 5.

LAVs: $80/40 + (180 - 80)/40 = 4.5$ Round up to 5.

Females:

WCs: $50/25 + (180 - 50)/50 = 4.6$ Round up to 5.

LAVs: $80/40 + (180 - 80)/40 = 4.5$ Round up to 5.

Total required WCs = 10

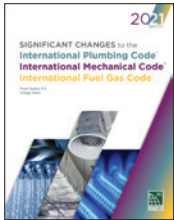
Total required LAVs = 10

Five single-user toilet facilities requires 5 WC and 5 Lavs. Five WCs and 5 Lavs remain for the multiple-user “separate sex” toilet facilities.

Distribute 2 WCs and 2 Lavs for male toilet facility and, 3 WCs and 3 LAVs for female toilet facility.

OR

Distribute 2 WCs and 2 Lavs for female toilet facility and, 3 WCs and 3 LAVs for male toilet facility.



This excerpt is taken from *Significant Changes to the International Plumbing/Mechanical/Fuel Gas Codes, 2021 Edition*.

The Significant Changes series takes you directly to the most important changes that impact projects. Key changes are identified then followed by in-depth discussion of how the change affects real-world application. Photos, tables and illustrations are included to further clarify application. Available for the IBC, IRC, IFC, IECC and IPC/IMC/IFGC, the Significant Changes publications are very useful training and review tools for transitioning to a new code edition.