

## Washington State Building Code Council

Improving the built environment by promoting health, safety and welfare

1500 Jefferson Street SE • P.O. Box 41449 • Olympia, Washington 98504 (360) 407-9280 • fax (360) 586-5366 • e-mail sbcc@ga.wa.gov • www.ga.wa.gov/sbcc

## STATE BUILDING CODE INTERPRETATION NO. 15-02

- **CODE:** 2012 International Building Code
- **SECTION:** IBC 508.4.2 Separated occupancies / Allowable area IBC 503 General Building Height and Area Limitations
- QUESTION 1: In calculating allowable area requirements for a mixed occupancy building in accordance with 2012 IBC Section 508.4.2, it states that the building area is "the sum of the ratios of the actual building area of each separated occupancy divided by the allowable building area of each separated occupancy shall not exceed 1."

The particular building under consideration is an industrial building with a mix of occupancy types consisting of F-1/S-1/B, which by IBC Table 508.4 does not require any separation of the use types. In addition, the building is fully fire sprinklered; however, it does incorporate a mix of construction types relative to each occupancy (Type IIIB for the F-1 and Type VB for the S-1 + B occupancies). Currently there are two-hour rated walls separating the different construction types within the building (i.e. the perimeter walls of the IIIB construction for the F-1 use).

In calculating the allowable area of the building per IBC Section 508.4 (with special reference to 508.4.4), can you use allowable areas from IBC Table 503 for F-1 of IIIB construction, and the S-1/B at V-B construction providing the separation walls between construction meets the Fire Barrier requirements of IBC Section 707?

- ANSWER 1: No. To determine type of construction, separate buildings must meet section 503.1 General Building Height and Area Limitations, which states: "Each portion of a building separated by one or more fire walls complying with section 706 shall be considered to be a separate building." Section 508.4 addresses allowable area based on occupancy.
- QUESTION 2: Do you have to use the lowest construction type (V-B) for calculating the allowable area for the entire building since there are differing construction types regardless of incorporating Fire Barrier separation walls (which means it is required to be calculated as per IBC Section 508.3 for Non-separated uses and IBC Section 508.4 is not applicable)?
- ANSWER 2: Yes. Where a building is not considered separate per 503.1, the area of the entire building is limited in accordance with the least type of construction.

## SUPERSEDES: None

**REQUESTED BY:** City of Tacoma