



Commercial Brass Operations

May 25, 2007



To: Our Customer Partners

Reference: Zurn "Pint" (1/8th Gallon per Flush) Urinal Valves

Dear Sir/Madam,

Thank you for considering Zurn products. This letter serves to offer a reasonable Water Supply Fixture Unit (WSFU) value for the Zurn *EcoVantage* "Pint" (1/8th Gallon per Flush) Urinal System.

As you know, it is known practice by the Uniform Plumbing Code to assign what is known as Water Supply Fixture Units (WSFU) to various plumbing fixtures. These WSFU values are used by the engineering community to ensure the supply piping and water flow throughout given buildings are adequate for proper washing and proper evacuation of waste.

Please reference section 610.0 of the Uniform Plumbing Code. This section is where we find the WSFU numbers assigned to traditional plumbing fixtures such as water closets, urinals, lavatory faucets and the like. Although ultra low consumption urinals are not yet listed in Table 6-4 of the Uniform Plumbing Code, we can utilize this table and its corresponding foot notes to calculate a WSFU value for such devices. The given WSFU numbers are based on the demand such fixtures place on a given water system. For example; typical water closets with flushometer valves demand in the range of 25 gallons per minute to evacuate waste effectively. The WSFU number assigned to water closets with flushometer valves is 40. Typical urinals with flushometer valves, demand ~15 gallons per minute during each activation. The WSFU number assigned to urinals with flushometer valves is 20.

Typical lavatory faucets demand in the area of 2 gallons per minute and are assigned a WSFU number of 1.0. Tables 6-4 and 6-7 provide the WSFU numbers for various plumbing fixtures based on expected performance and traffic patterns of usage.

Note 2 from table 6-4 states "*Appliances, Appurtenances or Fixtures not included in this Table may be sized by reference to fixtures having a similar flow rate and frequency of use*". By this footnote, the Uniform Plumbing Code is providing guidance to evaluate new and innovative plumbing fixtures such as the Zurn *EcoVantage* "Pint" Urinal System, not yet listed within the tables. The Zurn *EcoVantage* "Pint" Urinal System is

designed with an internal flow regulator to ensure precise water delivery during each activation. This internal flow regulator is factory set at 1.75 gallons per minute and functions accurately regardless of a varying building water pressures. With this internal flow regulator, the Zurn *EcoVantage* "Pint" Urinal System falls within the same category as a lavatory faucet (typically 1.5 to 2.0 gpm demand) as shown in table 6-4.

Conclusion: It is reasonable to conclude that the Zurn *EcoVantage* "Pint" Urinal System creates the same, if not less, demand on a plumbing system as a typical lavatory faucet. From Table 6-4, typical lavatory faucets are assigned a WSFU number of 1.0. In our opinion, the Zurn *EcoVantage* "Pint" Urinal System carries the same WSFU value of 1.0. Please feel confident in using a WSFU value of 1.0 when calculating your water demand requirements for your projects.

If you would like to discuss further or have questions on this matter, please feel free to contact me at your convenience 1-800-997-3876 extension 507.

Thank you again for considering Zurn products for your projects.

Sincerely,

Michael A Funari

Michael A. Funari
Director of Engineering / R&D
Zurn Commercial Brass Operations