

Sanitary Tapware

Definition:

This document covers procurement actions for sanitary tapware. For the purpose of these criteria, sanitary tapware is defined as covering the following groups of products:

- 1) taps,*
- 2) showerheads,*
- 3) showers.*

The definitions of these product groups are as follows:

- “tap” means a directly or indirectly, manually mechanically and/or automatically operated valve from which water is drawn.*
- “showerhead” means;
a fixed overhead or side shower outlet, body jet shower outlet or similar device which may be adjustable, and which directs water from a supply system onto the user; or
a moveable hand held shower outlet which is connected to a tap with a shower hose and can be hung directly on the tap or on the wall with the aid of an appropriate support;*
- “shower” means a combination of showerhead and interrelated control valves and/or devices packaged and sold as a kit;*

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Sanitary Tapware																										
1.1	Subject Matter (suggestion on how to draft the tender title)																									
	Purchase of water-efficient sanitary tapware for new or refurbished buildings.																									
1.2	Technical Specification (to be included in the terms of reference / technical specifications)																									
	<p>Maximum available water flow rate</p> <p>The maximum available water flow rates to the basin/sink shall, independent of the water pressure, not exceed values presented in Table 1.</p> <p>Table 1 Maximum available water flow rates for sanitary tapware</p> <table><tr><th>Product sub-group</th><th>Water flow (l/ min)</th></tr><tr><td>Kitchen taps</td><td>8.0</td></tr><tr><td>Basin taps</td><td>7.0</td></tr><tr><td>Showerheads or showers^[1]</td><td>9.0</td></tr></table> <p><i>Note [1]: Showerheads or showers with more than one spray pattern shall fulfil the requirement for the setting with the highest water flow.</i></p>		Product sub-group	Water flow (l/ min)	Kitchen taps	8.0	Basin taps	7.0	Showerheads or showers ^[1]	9.0																
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	<p>Verification:</p>	<p>Products holding a relevant Type 1 Eco-label fulfilling the listed requirements will be deemed to comply. Otherwise, results of sanitary tapware testing according to the test procedure contained in the relevant EN standard (see the list in Table 2 below) or an equivalent standard shall be submitted together with the tender to the contracting authority. The testing shall be conducted at pressure of 1.5, 3.0 and 4.5 bar (± 0.2 bar) for products declared by the manufacturer as being suitable for high pressure installations (typically 1.0 to 5.0 bar) or at pressure of 0.2, 0.3 and 0.5 bar (± 0.02 bar) for products declared by the manufacture as being suitable for low pressure installations (typically 0.1 to 0.5 bar). The mean value of the three measurements shall not exceed the maximum water flow rate value indicated in Table 1. The testing shall be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent.</p> <p>A technical dossier from the manufacturer or other appropriate means of proof demonstrating that these requirements have been met will also be accepted.</p> <p>Table 2 EN standards for sanitary tapware;</p> <table><tr><th>Number</th><th>Title</th></tr><tr><td>EN 200</td><td>Sanitary tapware. Single taps and combination of taps for water supply systems of type 1 and type 2 - General technical specification</td></tr><tr><td>EN 816</td><td>Sanitary tapware. Automatic shut-off valves (PN10)</td></tr><tr><td>EN 817</td><td>Sanitary tapware. Mechanical mixing valves (PN10) - General technical specifications</td></tr><tr><td>EN 1111</td><td>Sanitary tapware. Automatic shut-off valves (PN10)</td></tr><tr><td>EN 1112</td><td>Sanitary tapware. Shower outlets for sanitary tapware for water supply systems type 1 and type 2 - General technical specification</td></tr><tr><td>EN 1286</td><td>Sanitary tapware. Low pressure mechanical mixing valves. General technical specification</td></tr><tr><td>EN 1287</td><td>Sanitary tapware. Low pressure thermostatic mixing valves. General technical specification</td></tr><tr><td>EN 15091</td><td>Sanitary tapware. Electronic opening and closing sanitary tapware .</td></tr><tr><td>EN 248</td><td>Sanitary tapware. General specification for electrodeposited coatings of Ni-Cr</td></tr><tr><td>EN60335-1</td><td>Household and Similar Electrical Appliances</td></tr><tr><td>EN60335-2-35</td><td>Household and Similar Electrical Appliances, Safety, Particular Requirements for Instantaneous Water heaters</td></tr></table>	Number	Title	EN 200	Sanitary tapware. Single taps and combination of taps for water supply systems of type 1 and type 2 - General technical specification	EN 816	Sanitary tapware. Automatic shut-off valves (PN10)	EN 817	Sanitary tapware. Mechanical mixing valves (PN10) - General technical specifications	EN 1111	Sanitary tapware. Automatic shut-off valves (PN10)	EN 1112	Sanitary tapware. Shower outlets for sanitary tapware for water supply systems type 1 and type 2 - General technical specification	EN 1286	Sanitary tapware. Low pressure mechanical mixing valves. General technical specification	EN 1287	Sanitary tapware. Low pressure thermostatic mixing valves. General technical specification	EN 15091	Sanitary tapware. Electronic opening and closing sanitary tapware .	EN 248	Sanitary tapware. General specification for electrodeposited coatings of Ni-Cr	EN60335-1	Household and Similar Electrical Appliances	EN60335-2-35	Household and Similar Electrical Appliances, Safety, Particular Requirements for Instantaneous Water heaters
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	<p>Lowest maximum available water flow rate</p> <p>Lowest maximum available water flow rate of the sanitary tapware, independent on the water pressure, shall not be lower that the values given in Table 3:</p>																									

Table 3 Lowest maximum available water flow rates for sanitary tapware		
Product sub-group		Water flow (l/ min)
Kitchen taps		2.0
Basin taps		2.0
Showerheads or showers		4.5
Electric shower and low pressure shower ²		3.0
Note [1]: Showerheads or showers with more than one spray pattern shall fulfil the requirement for the setting with the highest water flow.		
Verification:	Products holding a relevant Type 1 Eco-label fulfilling the listed requirements will be deemed to comply. Otherwise, result of sanitary tapware testing according to the test procedure contained in the relevant EN standard (see the list in Table 2) or an equivalent standard shall be submitted together with the tender to the contracting authority for verification. The testing shall be conducted at pressure of 1.5, 3.0 and 4.5 bar (± 0.2 bar) for products declared by the manufacture as being suitable for high pressure installations (typically 1.0 to 5.0 bar) or at pressure of 0.2, 0.3 and 0.5 bar (± 0.02 bar) for products declared by the manufacture as being suitable for low pressure installations (typically 0.1 to 0.5 bar). The mean value of the three measurements shall not be lower than the water flow rate value indicated in Table 3. The testing shall be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent. A technical dossier from the manufacturer or other appropriate means of proof demonstrating that these requirements have been met will also be accepted.	
Temperature management (criterion not applicable for showerheads and for sanitary tapware that shall be fitted to a water supply that is already temperature controlled) Sanitary tapware shall be equipped with an advanced device or technical solution which allows for management of temperature. According to their preferences, public authorities can choose one of the following options: a) Sanitary tapware shall be equipped with a hot water barrier. b) Sanitary tapware shall allow for thermostatic adjustment. c) Sanitary tapware shall be designed with a cold water supply in middle position. Double lever/handle showers do not fulfil the criterion.		
Verification:	Products holding a relevant Type 1 Eco-label fulfilling the listed requirements will be deemed to comply. Other appropriate means of proof will also be accepted, e.g. manufacturer/supplier statement specifying the type of solution used and its technical parameters, as appropriate, shall be submitted. Where a water supply is already temperature controlled the tenderer shall explain the specific technical property that makes the sanitary tapware specifically designed to be fitted to this form of system.	
Time control for sanitary tapware for multiple users and high frequency use Sanitary tapware installed in non-domestic premises for multiple users and for frequent use (i.e. sanitary tapware used in public toilets or washrooms in schools, offices, in hospitals, swimming-pools and similar premises) shall allow for limiting time of a single water use (i.e. water volume consumed). This can be done by equipping the products with devices which stop water flow after certain time if they are not used (for example, sensors which stop water flow when a user leaves the sensor range) and/or after a set time period of use (for example, time limiters, which stop the water flow when the maximum flow time is reached). a) If the public authority is wishing to have a time-controlled system: For sanitary tapware equipped with time limiters the pre-set maximum flow should not exceed 15 seconds for taps and 35 seconds for showers. Nevertheless, the product shall be designed to allow the installer to adjust the flow time to the intended product's application. b) If the public authority is wishing to have a sensor-controlled system: For sanitary tapware equipped with the sensor, the shut off delay time after usage shall not exceed 2 second for taps and 3 seconds for showers. Furthermore, the sanitary tapware equipped with a sensor shall be equipped with an inbuilt 'security technical feature' with a pre-set shut-off time of maximum 2 minutes in order to prevent accidents or the continuous water flow from taps/showers when not in use.		

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	Exposed surface condition and quality of coating	
	Sanitary products which have a metallic Ni-Cr coating (regardless of the nature of the substrate material) shall comply with the standard EN 248.	
	Verification:	Products holding a relevant Type 1 Eco-label fulfilling the listed requirements will be deemed to comply. Otherwise, results of sanitary tapware testing according to the test procedure contained in the EN 248 standard or equivalent shall be submitted together with the tender to the contracting authority for verification. The testing shall be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent. A technical dossier from the manufacturer or other appropriate means of proof demonstrating that these requirements have been met will also be accepted.
	Reparability and availability of spare parts	
	The product shall be designed in such a way that its exchangeable components can be replaced easily by the end-user or a professional service engineer, as appropriate. Information about which elements can be replaced shall be clearly indicated in the information sheet attached to the product. The tenderer shall also provide clear instructions to enable the end-user or trained experts, as appropriate, to undertake basic repairs. The tenderer shall further ensure that spare parts are available for at least five years from the date of purchase.	
	Verification:	Products holding a relevant Type 1 Eco-label fulfilling the listed requirements will be deemed to comply. Other appropriate means of proof will also be accepted such as written evidence from the manufacturer that the above clause is met. The tenderer shall provide a description of how to replace components and provide a guarantee for the availability of spare parts.
	User information	
	The product shall be supplied with the following information in printed (on the packaging and/or on documentation accompanying the product) and/or electronic format: (a) installation instructions, including information on the specific operating pressures that the product is suitable for, (b) recommendations on the proper use and maintenance (including cleaning and decalcification) of the product, mentioning all relevant instructions, particularly: (i) advice on maintenance and use of products, (ii) information about which spare parts can be replaced, (iii) instructions concerning the replacement of washers if taps drip water, (iv) advice on cleaning sanitary tapware with appropriate materials in order to prevent damage to their surfaces, (v) advice on regular and proper service of aerators.	
	Verification:	Products holding a relevant Type 1 Eco-label fulfilling the listed requirements will be deemed to comply. Other appropriate means of proof will also be accepted such as written evidence from the manufacturer that the above clause is met.