

Eco Mark Product Category No.158

“Water-saving apparatus Version1.0”

Certification Criteria

- Applicable Scope-

- A. Water-saving disc
- B. Constant flow regulating valve
- C. Aerator cap
- D. Flow control valve
- E. Showerhead with the mechanism of stopping water at hand
- F. Showerhead with the small volume discharging mechanism

Established: January 1, 2016
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Japan Environment Association
Eco Mark Office

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

Eco Mark Product Category No.158

“Water-saving apparatus Version1.0” Certification Criteria

Japan Environment Association
Eco Mark Office

1. Purpose of Establishing Criteria

Omitted.

2. Applicable Scope

Applicable scope of this product category is listed in the Table 1.

Table 1 Applicable Scope

	Product type
A	Water-saving disc
B	Constant flow regulating valve
C	Aerator cap
D	Flow control valve
E	Showerhead with the mechanism of stopping water at hand
F	Showerhead with the small volume discharging mechanism

- Note)
- 1 The water-saving discs are those which are used in single faucet for cold water of nominal diameter of 13 millimeters, and those included in the scope shall be the discs which enable water saving only by replacing them with relevant materials, through such measures as making the nuts stabilizing the valve seat packing, etc. in special shapes. Applicable to a disc which is easily replaced with an existing installed water-saving disc.
 - 2 The constant flow regulating valves are those used for washing hands, faces or dishes, and those included in the scope shall be the valves which enable water saving only by equipping the products to limit the amount of discharge to a certain point
 - 3 The flow control valves which are included in the scope shall be the valves which enable water saving by equipping them at the outlet side of the stop cock.

3. Terminology

Water saving disc	A disc designed to save water in a water faucet. Water discharge from a water faucet equipped with a water-saving disc is significantly smaller than that from a water faucet equipped with an ordinary disc, at the same lever opening degree. Fixed type discs are included.
Constant flow regulating valve	Among the control valves that maintain the flow at a fixed amount regardless of changes in the pressure at the inlet or the outlet of the valve, the faucet which has a control valve with the amount of flow set at a fixed point. Constant flow regulating valves utilize the kinetic pressure of water, a spring, etc. Attention should be paid to the accuracy of constant flow and allowable pressure.
Aerator cap	Faucet which can save water by mixing air into water flow.
Flow control valve	Among the control valves that maintain the flow at a fixed amount regardless of changes in the pressure at the inlet or the outlet of the valve, the faucet which has a control valve with variable flow amount settings
Showerhead with the mechanism of stopping discharge at hand	The showerheads which are used in the bathrooms with the mechanism of discharging or stopping water at hand with such switches as buttons or sensors which are installed within the area of users' operation, which are independent from the discharge switching mechanism or flow and temperature adjustment mechanism (hoses shall be included).
Showerhead with the mechanism of small flow of discharge	The showerheads which, when being installed to the bathroom shower faucets, satisfy the conditions for "Requirements for Taps with the Mechanism of Discharging of Small Flow" prescribed in "Technological Information Concerning the Criteria for Energy-saving of Houses and other Buildings and the Recognition of Low-carbon Architecture (method of measuring the designed amounts of primary energy consumption of residents)" by the Building Research Institute (hoses shall be included).

Water supply equipment	The “water supply equipment” shall mean the water pipe bifurcated from the drainpipe installed by a water utility company to supply consumers with water as well as the water supply fittings directly connected to them (such fittings should be the faucets, etc. structurally connected to the water pipe which are not easily to be removed and enable to supply water with the water pressure being maintained; devices which are connected but can be easily removed, such as hoses, shall not be included).
Prescribed constituent	A material component added for the intended purpose of giving certain characteristics to a product. Impurities of 0.1wt% or less that are technically unavoidable in the manufacturing process are not included.

4. Certification Criteria and Certification Procedure

4-1. Environmental Criteria and Certification Procedure

4-1-1 Resource Saving and Resource Recycling

- (1) Regarding water-saving performance when the applying water saving apparatus is equipped in the faucet, criteria items set by each product type in table2 shall be met

Table 2 criteria items for water-saving performance

A:Water saving disc	<p>All the following requirements a)-d) shall be met.</p> <p>a) When the handle is opened 120 degrees, the discharge rate shall be more than 20% but not be more than 70% of that when the water faucet equipped with an ordinary disc</p> <p>b) When the handle is fully opened, the discharge rate shall be not less than 70% of that of being equipped with an ordinary disc.</p> <p>c) If it is the type to be attached to the outlet of water-saving apparatuses, it shall be a single type apparatus having the capability of being applied to various types of outlets.。</p> <p>d) No electric energy shall be used.</p>
B: Constant flow regulating valve	<p>All the following requirements a)-e) shall be met.</p> <p>a) When the handle is fully opened, the proper flow shall be in the range of 5-8 liters/min at a water pressure of 0.1 MPa and more and at 0.7MPa and lower.</p> <p>b) An instruction manual shall describe the installation condition by its purpose to allow usage that meets the enough flow volume</p> <p>c) One constant flow regulating valve shall correspond to one faucet.</p> <p>d) If it is the type to be attached to the outlet of water-saving apparatuses, it shall be a single type apparatus having the capability of being applied to various types of outlets.</p> <p>e) No electric energy shall be used.</p>

C: Aerator cap	<p>All the following requirements a)-d) shall be met.</p> <p>a) At a water pressure of 0.1 MPa or more and at a water pressure of 0.7 MPa or less, the proper flow shall not be more than 80% of that of the faucet without the aerator cap.</p> <p>b) The discharge shall not be less than 5 liters/min at a water supply pressure of 0.1 MPa with a fully opened lever.</p> <p>c) If it is the type to be attached to the outlet of water-saving apparatuses, it shall be a single type apparatus having the capability of being applied to various types of outlets.</p> <p>d) No electric energy shall be used.</p>								
D: Flow control valve	<p>All the following requirements a)-e) shall be met.</p> <p>a) At a water pressure of 0.1 MPa or more and at a water pressure of 0.7 MPa or less, the proper flow shall not be more than 80% of that of the faucet without the aerator cap</p> <p>b) The discharge rate at the installed place with the handle (lever) fully opened and at a water pressure of 0.1 MPa shall not be less than the following values.</p> <table border="1" data-bbox="568 1189 1252 1384"> <thead> <tr> <th>Installation locations</th> <th>discharge rate</th> </tr> </thead> <tbody> <tr> <td>Washroom</td> <td>5L/minutes</td> </tr> <tr> <td>Kitchen</td> <td>5L/minutes</td> </tr> <tr> <td>Shower room</td> <td>8L/minutes</td> </tr> </tbody> </table> <p>f) An instruction manual shall describe the installation condition by its purpose to allow usage that meets the enough flow volume</p> <p>c) If it is the type to be attached to the outlet of water-saving apparatuses, it shall be a single type apparatus having the capability of being applied to various types of outlets.</p> <p>d) No electric energy shall be used.</p>	Installation locations	discharge rate	Washroom	5L/minutes	Kitchen	5L/minutes	Shower room	8L/minutes
Installation locations	discharge rate								
Washroom	5L/minutes								
Kitchen	5L/minutes								
Shower room	8L/minutes								

E:Showerhead with the mechanism of stopping discharge at hand	<p>All the following requirements a)-c) shall be met.</p> <p>a) The showerheads with the mechanism of discharging or stopping water at hand with such switches as buttons or sensors which are installed within the area of users' operation, which are independent from the discharge switching mechanism or flow and temperature adjustment mechanism.</p> <p>b) If it is the type to be attached to the outlet of water-saving apparatuses, it shall be a single type apparatus having the capability of being applied to various types of outlets.</p> <p>c) No electric energy shall be used</p>
F:Showerhead with the mechanism of small flow of discharge	<p>All the following requirements a)-c) shall be met.</p> <p>a) With the showerheads installed to the bathroom shower faucets, The discharging power shall be measured by the testing method prescribed in the "Technological Information Concerning the Criteria for Energy-saving of Houses and other Buildings and the Recognition of Low-carbon Architecture (method of measuring the designed amounts of primary energy consumption of residents)" by the Building Research Institute, and the value obtained shall satisfy either of (i) or (ii) below.</p> <p>(i) Without the mechanism of aeration into the flow: 0.6N or more</p> <p>(ii) With the mechanism of aeration into the flow: 0.55N or more</p> <p>b) If it is the type to be attached to the outlet of water-saving apparatuses, it shall be a single type apparatus having the capability of being applied to various types of outlets.</p> <p>c) No electric energy shall be used</p>

Note) Testing method of the discharging volume shall conform to the discharging volume test prescribed by JIS B 2061:2013.

[Certification Procedure]

The statement that the device is in compliance with the water saving standards shown in Table 2 shall be included in the attached certificate. In addition, a certificate showing the results of measurement by a third-party organization or by the applicant shall be submitted.

- (2) Maintenance and repair subcontract systems shall be available, and repairs shall be carried out as requested by the users. Supply of the spare parts shall be ensured for 6 years after production of the product stops

[Certification Procedure]

Compliance with this item shall be indicated in the attached certificate. In addition, the applicant shall submit copies of product documentation indicating the matters related to this item.

4-1-2. Restriction and Control of Hazardous Substances

- (3) The product packaging and packing shall be made as simple as possible and sufficient attention shall be paid to the easiness of recycling and the reduction of environmental burdens at the time of disposal. In addition, plastic materials used in product packaging and packing shall not be added a polymer including halogen and an organic halogen compound as prescribed constituents.

[Certification Procedure]

Product packaging material and a packaging method shall be specifically indicated in the attached certificate. In addition, It shall also be indicated in the attached certificate that plastic materials to be used in product and product packaging do not contain polymer including halogen and organic halogen compound as prescribed constituents.

- (4) In case an antimicrobial finishing is made in the product, the product shall be registered with such as the SIAA Mark of Society of Industrial technology for Antimicrobial Articles or Registration system for the use of antimicrobial performance criteria of Japan Construction Material & Housing Equipment Industries Federation, etc.

[Certification Procedure]

Compliance with this item shall be indicated in the Attached Certificate. In the case of using antimicrobial agents, a copy of a certificate that certifies the registration with the SIAA Mark of Society of Industrial technology for Antimicrobial Articles or Registration system for the use of antimicrobial performance criteria of Japan Construction Material & Housing Equipment Industries Federation, etc. shall be submitted.

- (5) In manufacturing the applied product, related environmental laws and regulations and pollution control agreement (hereinafter referred to as the

“Environmental Laws, etc.”) must be followed with respect to air pollution, water contamination, noise, offensive odor, and emission of hazardous substances in the area where the plant performing the final manufacturing process is located.

In addition, the state of compliance with the Environmental Laws, etc. for the past five years from the date of application (whether there is any violation) must be reported. If there is any violation, proper remedies and preventive measures shall have been already taken, and the related Environmental Laws, etc. must thereafter be followed appropriately.

[Certification Procedure]

With respect to the compliance with the Environmental Laws, etc. in the area where the plant performing the final manufacturing process is located, a certificate issued by the representative of the business of manufacturing the applied product or the relevant plant manager (entry or attachment of a list of names of the Environmental Laws, etc.) must be submitted.

In addition, the applicants shall report whether there is any violation in the past five years, including a violation subject to administrative punishment or administrative guidance, and if there is, the following documents in a and b must be submitted:

- a. With respect to the fact of violation, guidance documents from administrative agencies (including order of correction and warning) and copies of written answers (including those reporting causes and results of correction) to such documents (clearly indicating a series of communication);
- b. Following materials (copies of recording documents, etc.) concerning the management system for compliance with the Environmental Laws, etc. in 1)-5):
 - 1) List of the Environmental Laws, etc. related to the area where the plant is located;
 - 2) Implementation system (organizational chart with roles, etc.);
 - 3) Bylaws stipulating retention of recording documents;
 - 4) Recurrence prevention measures (future preventive measures);
 - 5) State of implementation based on recurrence prevention measures (result of checking of the state of compliance, including the result of onsite inspection).

4-1-3. Information Provision to users

- (6) Information a) and b) mentioned below shall be indicated in users manuals, catalogs, website, etc. in an easy-to-read manner.
- a) Types of faucets which can be installed and the methods of their installation.
 - b) If the water-saving effects arise on certain conditions, information on installation conditions, etc. (this includes the matters to be noted that a constant flow regulating valve or a faucet with built-in constant flow regulating valve should be installed in the part of the pipe after branching off; branching of the pipe shall not be conducted after the part of installation).

[Certification Procedure]

Copies of a corresponding part in the instruction manual, catalog and web site, etc. that indicate information to users shall be submitted.

4-2. Quality Criteria and Certification Procedure

- (7) The quality of the Product shall conform to corresponding Japanese Industrial Standards (JIS) or other related quality standards. Regarding a water supply equipment, the product quality shall meet Article 5, ordinance of Water Work Law “Standard for structure of domestic water supply equipment”.

[Certification Procedure]

A certificate certifying the conformity with the corresponding JIS, Article 5, ordinance of Water Work Law “Standard for structure of domestic water supply equipment”, etc. or a certificate such as quality test results conducted by a third party institute or applicant’s own shall be submitted.

5. Product Classification, Indication and Others

- (1) Products shall be classified (applying unit) by kind of product and trade name shown in the applicable scope (Table 1). When the criteria items A-F on water saving performance listed in Table 2 are multiply met at a time, it is considered as in the same classification.
- (2) Regarding products which correspond to designated procurement items under the "Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities Authorities (Green Purchasing Law)", conformity status for evaluation criteria will be announced by a certification number on the website of the Eco-Mark Office.

- (3) In principle, Eco-Mark shall be indicated on the product. B type display shall be conducted in accordance with the "Guidelines for Eco-Mark Use". In addition, the display position and contents shall be submitted when applying for Eco Mark certification and its use. Regarding parties to Eco Mark Usage Contract who already own Eco Mark products, type A display is also acceptable.

Type B display shall have certification information including the following 1) to 3) adjacent to the Mark. If a certain condition is satisfied in accordance with the "Guidelines for Eco Mark use", only the Mark display is acceptable.

- 1) The wording of "Eco Mark" or nominal designation of Eco Mark products stipulated in Section 7 in the "Guidelines for Eco Mark use"
- 2) The wording indication of environmental information (See below)
- 3) The Eco Mark certification number and the name of the Eco Mark Usage Contractor (The selection and display of either one is acceptable)

The indication of environmental information shall be made as "Water-saving apparatus." The showerheads falling under E or F of the applicable scope may be indicated as "Water-saving type showerhead."

Only in the case of certification products under No.116 "Water-saving Equipment Version 2" (established on August 1, 2005), it shall be accepted to indicate the environmental information and certification number as before, even in the indication of this product category.

Examples are shown below.

[an example of Water-saving apparatus.]



エコマーク商品
節水器具
12345678
〇〇〇株式会社

[an example of Water-saving type showerhead]



エコマーク商品
節水型シャワーヘッド
12345678
〇〇〇株式会社

January 1, 2016

December 31, 2022

Established (Version1.0)

Expiration date

The Certification Criteria for the Product Category will be revised when necessary.