

Advantages and need of Water Efficient Products India(WEP-I)

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Abstract – There is a pressing need to find new ways to save water. In order to ensure these policies, as well as maximize water and minimize costs, it is important to analyse existing water use and set personal benchmarks.

India's water quality classification system is known as WEPI. Water Efficient Products — India is a three-star rating system that demonstrates a product's water efficiency. Water Efficient Products-India (WEP-I) is a collection of guidelines for anyone in India who is interested in the design, engineering, manufacturing, testing, and certification of water-efficient plumbing fixtures, fittings, and materials.

Key Words: Plumbing, water-efficient, codes, standards.

1. INTRODUCTION

Building water use accounts for a significant portion of overall water demand, necessitating immediate and drastic conservation measures. Increasing population, rapid urbanisation, and resulting lifestyle changes all lead to increasing water demand. There is a need to look for ways to preserve water, which is one of the world's most valuable resources.

Water efficiency can be described as the intelligent use of our water resources, ranging from sophisticated water-saving technology to simple steps that we can all take to make a significant difference in water conservation. Water savings can be accomplished by a combination of behavioural changes, equipment modification and/or replacement with tested and approved water saving equipment, total water usage reduction, and internal reuse. It is critical to analyse current water usage and set personal benchmarks in order to ensure these policies, as well as to maximise water and reduce costs.

Water is a scarce resource, and potential water sources are uncertain in many regions. There are no suitable alternatives for water, and its depletion would have significant economic and social consequences. Water management projects should be considered by citizens and utilities alike. Many countries around the world, including India, are facing expected and imminent water shortages, which can be mitigated by carefully selecting and storing water.

installing water-efficient taps (including faucets and showerheads), as well as water-efficient plumbing fixtures like clothes washers, dishwashers, urinals, and water closets

(toilets) so that, as part of a global effort, several countries have contributed to helping resolve this issue by following in-country water efficiency guidelines.

2. Sustainable Product Certification

IAPMO and the Indian Plumbing Association (IPA) created the Uniform Illustrated Plumbing Code-India (UIPC-1) to help standardize the industry for efficiency, conservation, and best practices. The code is revised and released every three years, and it serves as a reference for product installation, training, and certification. Product listing certifications from a third-party listing service, ideally one that is an approved certification body, must be issued to the official for review in order for the official to make the proper decisions about subsequent product installation permits and approvals. A performance rating system, similar to the energy star for electrical goods.

WEPI is India's water quality rating system. Water Efficient Products — India is a three-star rating system that shows how efficient a product is with water. Green buildings are the way of the future for India, and the Indian Green Building Council (IGBC) is leading the way with ambitious goals for the world's greenest footprint in the future. As a result, there is a need for products that can demonstrate their water quality, giving both customers and builders options when building new products.

Water Efficient Products-India (WEP-I) is a set of guidelines for all those involved in the design, engineering, manufacturing, testing, and certification of water-efficient plumbing fixtures, fittings, and materials in India. This document's conditions are not obligatory.

WeP-I would make an effort to:

- Convey accurate knowledge about water-saving goods and activities.
- Raise awareness of the value of water conservation and suggest water-saving goods.
- Assist customers in making educated decisions about water-saving goods.

Certification's Advantages

Today's challenges that global societies face in global marketplaces will only serve to emphasize the importance of continuing and more reliable third-party certification of

plumbing products. When buying water-saving items, make sure they have the following features:

- Complete functionality,
- a well-designed product,
- a high-water efficiency rating

The nature of water-saving products is also critical, as it must be on par with or better than that of traditional non-water-efficient products, both internally and externally. The internal design of water-efficient products should be such that they work as well or better than their non-water-efficient counterparts, but with less water consumption that does not compromise the product's quality. Water-efficient products must have an external design that is comparable to or better than that of traditional non-water-efficient products, especially in terms of the product's aesthetic geometric appearance and finish. It should be remembered that the majority of manufacturers approve their products, because they are aware that the requirements in the product's national performance standard explicitly affect and control the design of their products.

The third critical selection parameter that determines the true green value of such products is the rating of water efficient products. This rating aids in determining the degree of a product's water efficiency as determined by the total number of stars or the total number of points. In any case, the more stars or points a water-saving product receives in its certification, the more water-saving it is. When choosing UPC-I/WEP-I green certified products with one to three-star scores.

Table -1: Star rating by water consumption

Fixture Type	1 Star	2 Star	3 Star
Faucet (Sink, hand spray)	8 lpm	5.7 lpm	4.5 lpm
Shower Head	9.5 lpm	7.5 lpm	5.7 lpm
European Water Closet	4.8 lpm	< 4.8 lpm	<4 lpm
Urinals	<3.8 lpm	<2 lpm	< 1lpm

3. CONCLUSIONS

WEPI is India's water quality rating system. Water Efficient Products — India is a three-star rating system that shows how efficient a product is with water. Water Efficient Products-India (WEP-I) is a set of guidelines for all those involved in the design, engineering, manufacturing, testing, and certification of water-efficient plumbing fixtures, fittings, and materials in India. Since each product must provide the same or better efficiency as traditional non-water efficient

products, the functionality of all water efficient products is critical. Certification to a water efficiency rating standard, such as IAPMO India's Water Efficient Products-India (WEP-I).

REFERENCES

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- [2] <https://www.indianplumbing.org/>