

Practice to be assessed and included in the Guidelines

Number/code: OM/SM2

Title: DRY URINALS AND RENOVATION OF URINAL FLASHING

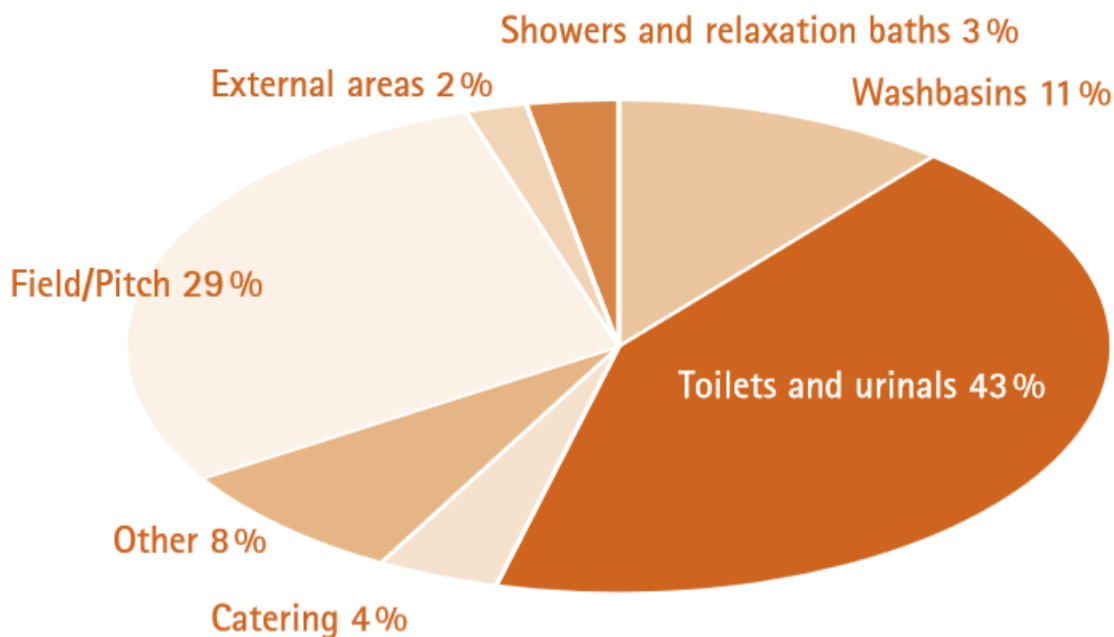
Guidelines section:

<input type="checkbox"/>	Governance	<input checked="" type="checkbox"/>	Operational management
		<input type="checkbox"/>	Context of the event
		<input type="checkbox"/>	Event
		<input checked="" type="checkbox"/>	Stadium management
		<input type="checkbox"/>	Procurement
		<input type="checkbox"/>	Mobility and logistics

Description:

Considerable quantities of potable and wastewater can be saved at comparatively low cost through the use of water-saving fittings and devices. The choice is great: dry urinals, water saving showers and toilet flushing, water-flow regulators on taps, self-closing taps on washbasins, economical dishwashers. Many of these can be easily retrofitted in existing sports facilities.

*Water consumption of selected World Cup stadiums in Bundesliga operations
(Source: Green Goal Legacy Report 2006)*



- 1) Ever since it was built, the Volkswagen arena in Wolfsburg has had over 230 water-free urinals in spectator zones. Due to the overwhelmingly positive experiences of this action, they changed over to dry urinals in other areas of the arena (including the business sector, executive boxes, administrative areas and changing rooms). Furthermore, those above-mentioned areas should have also been fitted with water-saving devices (some with sensors).
- 2) The 1994 German Gymnastics Festival in Hamburg set a milestone for the economical usage of water in the world of sport. Around 100,000 athletes traditionally stay overnight during the event in sports halls and schools. The city of Hamburg took this opportunity to modernize sanitary facilities in more than 200 schools. As a result, a great deal of potable water was saved and modernization soon paid for itself. At the same time, the water-saving gymnastics championships encouraged the education authority to re-equip sanitary facilities in other schools in the Hanseatic city.
- 3) During FIFA Men World Cup Germany 2006 the protection of resources of potable water was carried out through the building of rainwater cistern in stadiums in Berlin, Frankfurt, Nuremberg and Stuttgart. Four of the twelve World Cup stadiums installed dry urinals, and in many others water-saving sanitary fittings were installed. In Berlin, Frankfurt and Munich, additional rainwater infiltration systems were built to promote a near-natural water cycle. Further measures for the purposes of modern rainwater management were carried out, including the descaling of land, the water-permeable paving of open spaces and the greening of roofs. The result of these measures was that stadium demand for potable water decreased by 18%.
- 4) The USTA Billie Jean King national tennis center, is an American stadium complex and home of the US Open Grand Slam tennis tournament, among others, some green initiatives related to the use of waterless urinals and ultra-low-flow faucets.
- 5) The Hamburg stadium has renovated its urinals flushing system outside the stadium. The central urinal flushing was replaced by 16 separate steering units and 26 lighting groups. This enables individual toilets to be used and cleaned on their own. Previously, 25 lighting groups and 14 urinal flushing groups could only be activated simultaneously by means of a switching command, which entailed water consumption of 6 m³ per hour during usage and cleaning.

Environmental benefits:

This practice is designed to save expensive drinking water.

Hamburg stadium estimated to save at least 2,500 m³ of fresh water, 2,500 m³ of waste water and 8,120 kwh of electricity per year.

Economic benefits:

For Volkswagen Arena, in financial terms we are looking at savings of 4,200.00 € per annum after investment costs of 30,000.00 €. The investment should therefore pay for itself after seven years.

Applicability and replicability potential

The measure could be replicated in every stadium.

Source

[Women Football World Cup Germany 2011](#) (p. 31)

[USTA Centre](#)

[FIFA Men World Cup Germany 2006](#) (pp 12, 43-48)

[Guidelines of French Ministry of Sport](#) (p.14)

[FIFA World Cup Russia 2018](#)

[UEFA](#) (p. 96)