

# At Dolphin Stadium, No-Water Urinals Withstand Heavy Use and Abuse

**Require less maintenance than flushable counterparts**

Used an average of 160 times each during a single football game, the 900 flushable urinals at Dolphin Stadium in Miami Gardens, Fla., were draining the facility of more than water. Chief Engineer Frank Everton estimates that his staff spent at least 30 to 45 min servicing each urinal twice a year. This was due in part to the water in Miami, which is high in calcium and would leave a residue on flush-valve gaskets, causing them to crack and leak—a common occurrence costing about \$50 to correct.

Also contributing to the high maintenance costs of the urinals was vandalism. On more than a few occasions, Everton had been witness to water shooting across a men's room, the result of flush valves having been ripped from the wall by overexuberant fans.

To combat these problems, Dolphin Stadium installed 220 no-water urinals from Falcon Waterfree Technologies.

There are several reasons why no-water urinals are a good fit for heavy-use/abuse facilities such as sports stadiums:

- They offer substantial water savings. Like many sports stadiums, Dolphin Stadium hosts events year-round. Depending on use, a single no-water urinal can save up to 40,000 gal. of water in a year.

- Because they do not use water, there are no worries of leaks or continuous flushing that might go unnoticed when a facility is not in use.

- They are flushless and, thus, cannot be clogged by balled-up programs, crushed beer cups, and other discarded material.

- Their design and installation makes them nearly impossible to rip from a wall.



**Falcon Waterfree urinals inside Dolphin Stadium.**

At Dolphin Stadium, each no-water urinal requires only a few minutes of service per year.

The key to a no-water urinal is a biodegradable liquid sealant that floats on top of fluids, essentially trapping any odor from the depths of the unit. The sealant is contained in a replaceable cartridge installed at the bottom of the urinal in a fitting connected to a drainpipe. The cartridge, which typically lasts for about 7,000 uses, can be replaced in only a few minutes. The urinal requires no additional maintenance, other than being wiped down regularly with a recommended cleaner.

With a no-water urinal, "You don't have the bacterial growth that you do with a water urinal," Everton said. "There's no breeding ground because the unit is entirely made of porcelain."

In a study conducted by the Department of Civil and Environmental Engineering at the University of California, Los Angeles, the cell count for organisms

on the interior surface of Falcon Waterfree urinals was found to be lower than that of standard flush urinals. These findings were similar to those of a more recent study conducted by the Public Health and Human Services Department of Saint Louis County in Minnesota, which suggested a large difference in colony-forming units (CFUs), with an average of three CFUs for no-water urinals and 17 CFUs for flush urinals.

Falcon Waterfree urinals connect to any existing standard 2-in. drain system, so retrofits usually are quite simple. At Dolphin Stadium, 18 to 20 retrofits were completed in a single day. The adaptive coupling included with new Falcon Waterfree urinals is unique in the way it accommodates variances in hook-ups and simplifies installation.

*Information and photograph courtesy of Falcon Waterfree Technologies.*

Circle 148