# **Highlighting Plumbing Problems Globally**

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At the plumbing industry breakfast hosted by IOPSA, executive director on plumbing, mechanical and fuel gas issues for the International Code Council (ICC) Jay Peters highlighted the similarities experienced in terms of plumbing perspectives, accomplishments and challenges the world over.

### The role of the International Code Council

The ICC is a membership association dedicated to building safety and fire prevention. The association develops the codes used to construct residential and commercial buildings, including homes and schools. Most U.S. cities, counties and states that adopt codes choose the International Codes, building safety codes developed by the ICC.

Peters stated that global construction in terms of materials and procedure does not differ vastly from one country or continent to another, and that because of this it is possible to establish a standard that is able to regulate the quality of the industry. As a result he showcased several countries working closely with the ICC to establish a sound construction standard.



Jay Peters believes that plumbing challenges are not too different around the world.

#### Sanitation in a global perspective

Sanitation the world over is currently experiencing a vast challenge in bringing safe water into buildings and removes waste effectively. Peters said that sanitation systems should be improved to improve general human health as it removes the threat of waterborne diseases such as cholera, and typhoid. He also stated that a recent World Health Organisation (WHO) study has revealed that for every dollar spent on improving sanitation, an average economic benefit of seven dollars is generated.

Improved sanitation contributes to social development and dignity as sanitation in schools enables children, especially girls, to remain in the educational system. Restricted toilet opportunities increase the chance of chronic constipation, and are making women vulnerable to violence if they are forced to go outside during nightfall and in secluded areas. Lastly, improved sanitation aids in conserving the environment because the improved disposal of human waste protects the quality of drinking water sources, while re-use of composted waste for agriculture is an environmental, as well as economic gain.

#### The cost of living healthily

Peters explained that the estimated annual cost to halve the proportion of people without basic sanitation by 2015 is around \$10 billion. This sum is less than 1% of world military spending in 2005, one-third of the estimated global spending on bottled water, or about as much as Europeans spend on ice cream or Americans on pet food each year. If a sustained programme of sanitation improvement can be implemented, the same investment could achieve basic sanitation for the entire world within one or two decades. As the state of sanitation globally stands a child dies every fifteen seconds due to preventable diseases caused by poor sanitation and hygiene.

#### Collaboration is key

The World Plumbing Council (WPC) is initiating a range of proposals aimed at alleviating sanitation problems. One of these is to establish a training programme and training scholarships to provide qualified plumbers to the industry in future. However, there is no generic solution to the problem, as world conditions differ from country to country. Aspects such as economic factors, political climate, climatic situations, social and cultural developments, and physical geography all play a role. This makes a ones-size-fits-all solution very unlikely and it is up to the individual role players in the different countries to establish a sustainable programme in order to address their specific sanitation issues.

#### **Future plumbing issues**

Peters pointed out that the sanitation industry will be facing a host of challenges in the near future. The universal environmental concern, climate change, may cause drought conditions in many regions, making sanitation very difficult. One of the solutions being investigated is desalination, with large amounts of seawater being desalinated for sanitation purposes. With droughts in mind, water efficient use will become more important, in homes and industry. As sustainable alternative rainwater harvesting and collection could become a viable answer. With energy and emissions coming under the spotlight, solar reliance, such as solar heat geysers to produce hot water could become more commonplace, adding solar installation to the plumber's range of required skills.

The management of grey water for agricultural irrigation should also be investigated more closely and especially the ways in which to separate grey water from black and potable water. The maintenance and upkeep of these systems should enjoy special attention. With a lack of public awareness comes the cost of processing sewage which could have been used in more productive ways. It is therefore critical to educate and advise the public on water efficient use.

## It is all about basic housekeeping

To ensure a viable sanitation system that will be water efficient, as well as water conserving, industries will have to focus on their own situations by ensuring that the craftsmanship of their members are of the highest quality. This can only be done if excellent training remains the focus point of a growing industry. The public will also have to be made aware of the benefits of proper sanitation. Installers and the products they install will have to be certified to ensure that standards are met, while enforcement and inspection will guarantee that no second-rate work is done or product installed. Lastly, the education of both the public and the industry must never cease, as it is only through continued education that a viable sanitation industry will be built.

#### Where it all starts... and finishes

Peters explained that the first step toward ensuring this sanitation industry lies with the craftsmen, the people who do the physical work and installation. He urged them to be proud of their work and their industry by keeping in mind that the work to be done should not only be of a high standard where it can be seen, but also below the ground and in the walls. This means that the craftsman should install each pipe and fitting correctly, making sure that the fixture being installed is fitted for the purpose it is intended for, and lastly by only installing certified products. In the end, Peters said that it takes a whole industry, from the contractor, to the manufacturer and the government to ensure a successful and vibrant sanitation industry. It is only by the combined efforts of all these industry role players that the industry can go forward globally.

## **IOPSA** receives international recognition

At the industry breakfast hosted at the Plumbdrain exhibition from 23 July to 26 July, the Institute of Plumbing of South Africa (IOPSA) was recognised by the International Code Council (ICC) as a Global Partner in Safe Sanitation. ICC executive director Jay Peters said that the recognition is a way of acknowledging IOPSA's efforts and leadership in local plumbing affairs, which are similar to the ICC's missions to protect public health and safety. IOPSA becomes only the second global partner to the ICC in this endeavour after the World Toilet Organisation.



IOPSA president Steven Brown receives the crystal award from ICC executive director Jay Peters.

# Industry breakfast proves step forward for plumbing industry

The industry breakfast held at the Plumbdrain/Saniter exhibition on 25 July 2008, went well beyond all of the organiser's expectations.

The breakfast, which was attended by more than 250 industry representatives, was presented with speakers from around the world. Most notably the Minister of Water Affairs and Forestry, Lindiwe Hendricks, delivered a presentation on govenrment's role in investing in providing water and sanitation solutions for current and future generations. Former World Plumbing Council (WPC) chairman Stuart



Henry noted the importance of a strong, effective, and co-operative working partnership between government and the plumbing industry while executive director of the International Code Council (ICC), the council tasked with writing most of the world's construction codes, Jay Peters delivered a presentation on the importance of a sound plumbing industry. Peters also presented IOPSA president Steven Brown with an award of recognition from the ICC, recognising IOPSA as a Global Partner in Safe Sanitation.