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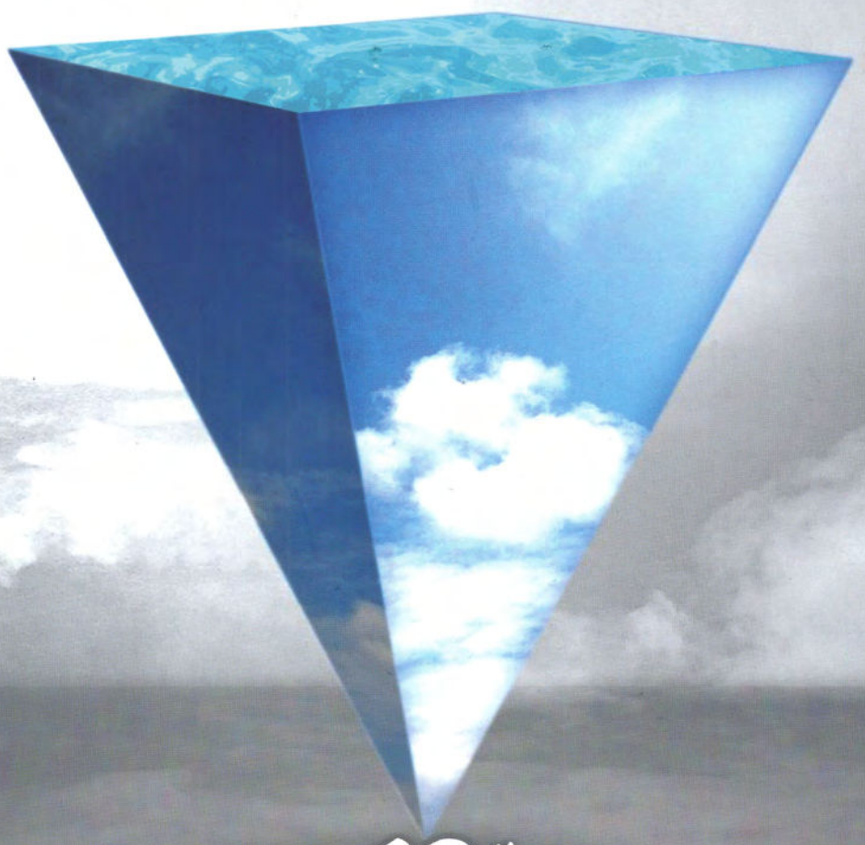

12th Anniversary

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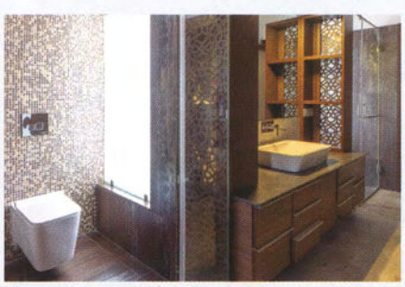

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EVENT REPORT

Plumbing and Design, Ahmedabad

The Ahmedabad edition of Plumbing & Design brought together designers, MEP consultants and structural engineers to discuss plumbing-related issues, reports Sanjitha Suresh.

The Ahmedabad edition of Plumbing & Design was the third in a series of pan-India confabulations that discusses plumbing solutions for better architecture. Plumbing & Design was conceived to be a knowledge-sharing & interactive platform for a discussion on Plumbing, HVAC, etc with MEP Consultants, structural engineers and architects. The event was held on September 10, 2022, at Courtyard by Marriott, Ahmedabad. Geberit Plumbing Technology India Private Limited was the title sponsor for the event.

The event was well attended by a good number of audiences that included architects, interior designers, MEP consultants, structural engineers and public health engineers. The display of the Geberit AquaClean Mera from their Front of Wall Range, outside the conference hall, was a key attraction and generated a lot of interest from the attendees.

Speaking on the occasion, Sheital Shetty, Editor & Publisher, Washrooms and Beyond said, "We have had the privilege to meet both the public consultants and architects for the last 12 years, from the time Washrooms and Beyond was launched. Our objective with this initiative is to get both the public consultants, architects and developers under one roof and discuss a few key issues in the area of plumbing and design."

Adil Davar, Head of Sales, West – Geberit Plumbing Technology India Pvt Ltd gave a presentation on 'Plumbing Solutions for Better Architecture'. Elaborating on the company's technical know-how, he shared, "Our first bidet system was conceptualised in 1905, the first plastic system in 1952, the first drainage system in 1956, first own concealed system manufacturing in 1964, and installation systems in 1977. Since then, we have been continuing to launch various systems, the recent one being the SuperTube systems in 2018."

He further stressed that technology fenestration from floor standing to wall-hung, saving spaces, easy to clean products, creating a modern look, from multi-stack to single-stack systems are few things that Geberit India works towards. "We provide innovative and sustainable solutions in a building for greater efficiency and higher reliability."

Suspended Plumbing Vs Sunken Slabs

The first panel discussion of the evening explored the pros and cons of suspended plumbing as well as sunken slabs. The panellists compared the two plumbing systems and gauged their suitability for projects.

Highlighting the increasing construction of high-rise buildings in cities, Anand Tatu, Principal Architect, Anand Tatu Architects, Planners and Interiors Designers opined, "Integrating services in a vertical building makes the process very complex and that is why experts like plumbing consultants, electrical consultants, or structural consultants have an important role to play here."

Talking about the aspects of structural elements in both sunken slabs and suspended plumbing, Rasik J Shah, Proprietor, Ami Engineers explained, "Any flaw in the structure or construction will definitely give rise to problems in other services as well. The process involves two levels – one is the supervision of the site and the second is the inspection to be done by the designer or owner. If these two steps are executed properly, then I do not find any flaw with any system." He called for proper coordination between the architect and the structural engineer to ensure proper execution to alleviate any future problems.

Vatsal C Joshi, Founder Director, Associated Architects India Pvt Ltd talked about the issues in both these plumbing systems, "As architects, we are always looking at solutions which are effective for the end-user. I have experienced walking into bare structures and not being able to make out those are washrooms. There is a gradual shift from sunken slabs to suspended plumbing, and maybe the future holds something else in this field, as the demands and approach change. Irrespective of the choice of plumbing systems, efficient planning and execution is a must, otherwise, the end result will have certain flaws that the end-user has to bear."

Avni Sikka, Proprietor, Artech Engineering Solutions opined,

"Nowadays, buildings are designed in a way where we do not get a lot of space for services. If we lower the beam and accommodate that area for the services, then the services can work pretty well. Eventually, when changes have to be made, it comes back to the overall process of the structural engineer, architect, and plumbing consultants."

Dipen Mehta, MD, PCS Project Management, MD, Aqua Utility Designs and Management, and Proprietor, Aqua Designs opined, "As a civil engineer, I strongly believe that the structure has to first be safeguarded because the building becomes stable only if the structure is stable. In the case of suspended plumbing, during changes, the repairing is done without considering any civil aspects. The one benefit of suspended plumbing is that there are no changes required in the flooring to repair the system."

Giving a background on what made designers and consultants adopt the sunken slabs, Tatu added, "Sunken slabs were initially introduced to avoid stack in the washroom area, therefore, slabs are sunken to accommodate all the pipelines and other plumbing pipes which provide numerous advantages like smoothening the transition line, reducing noise levels. But, certain advantages also gave rise to certain problems. The use of acid on washroom floor tiles can damage the joints between these tiles. To resolve this issue, plumbing consultants came up with the concept of suspended plumbing systems."

Highlighting the advantages of suspended plumbing, Sikka shared, "In case of suspended plumbing, it not only solves plumbing issues, but all MEP Solutions can also work well together in this case. Having leakages in a building is a problem; an even bigger problem is having leakages with electrical conduits in the same ceiling. Given an option, we would like to have suspended plumbing, but below the beam. In 95% of our projects, we generally recommend suspended plumbing systems."

Recycling of Grey Water: Whose responsibility is it?

The panellists in the second panel discussion of the evening discussed the process and various aspects related to greywater recycling and how it can be systemised. Talking about the approach, Amit Mehta, Director – MEPF Engineering, INI Infrastructure and Engineering Pvt Ltd shared, "Greywater recycling is no longer an option but is more of a compliance that we need to follow. Our approach is to start with net zero building planning. The idea is to design a system that can be water efficient. The need for water also depends on the kind of project which can differ from residential to commercial. The question here is, why would I spend on portable or bore water when I can spend on treated grey water?"

Hemal Shah, Principal Architect, Hemal Shah and Associates agreed, "We also work on a similar concept to the net zero energy buildings. Whether it is a residential building, commercial, institutional, educational, or hospitality, we always try and convince our clients to use grey water in all these buildings. We show them statistics in terms of the economy and other advantages to achieve this, which in turn saves the client's money. One of the lines I always tell my clients is, 'If you want green, go grey'. Why do we not have policies for greywater? This would be something that I would like to see in the coming days."

Highlighting the challenges of adopting greywater recycling, Nilay Patel, Partner/Director, Deep Group added, "For an architect, for a particular project, the client is usually a single person. But as a developer, our client for a particular project may be around 500 people. That makes it extremely difficult for us to convince all of them. Although we are all in for water conservation, we also have to take care of the

sentiments of the people living in the apartments. We provide sewer treatment plants, provide connections of these plants with separate overhead tanks, but we also provide a connection of the domestic water index in the same tank. This is done because people are not really convinced with the concept of reusing recycled greywater."

He further added that the amount of greywater treatment to be provided in a building can vary depending on the size of the campus. "People living in a smaller sized campus with just one building will not be able to maintain huge amounts of greywater treatment plants."

The solution, according to Apurva Shah, Principal Consultant, Avani Enterprise, lies in communicating the benefits with the stakeholders, "Greywater does not contain any microbes and has not created any epidemic in the history of mankind. If we connect water with the soil, it will automatically replenish, regenerate, and UV-sterilize, and it automatically becomes clean when it reaches the wetlands. We need to learn and understand nature-inspired science and nature-derived technology. A lot of buildings these days have vertical gardens and ground-level gardens, substantial amounts of greywater can be used for such landscapes if it is treated properly. We can definitely save 40% of the daily requirement of water."

Chirashree Thakkar, Principal Architect, Thakkar Associates added, "Architects played an important role in changing the minds of people regarding greywater. It is all about three things, the mindset, available technology, and precedence. Available technology comes into light here because the whole concept is about the purification of greywater. In private residential projects, right from day one, I have been using greywater. We need to cultivate this mindset and educate the clients in order to convince them about the concept of greywater."

On how to circumvent the user's mindset, Mehta opined, "We try to use greywater as the last option for the use of washrooms and flushing because there are factors like sentiment, culture, and mindset that come into play. We try to use greywater as a priority in landscaping and water-cooling systems."