

IAPMO creates “wow” factor with NEC LCD video walls

Quick Facts

Facility: International Association of Plumbing and Mechanical Officials (IAPMO)

Location: Ontario, California

Challenge: Create a striking first impression that gives visitors the feeling they are working with a technically savvy, forward-thinking organization

Solution: 46" NEC X461UN

Date: June 2010

It took just seven years for the International Association of Plumbing and Mechanical Officials (IAPMO) to outgrow a building it had anticipated serving all its needs for 20 years. Despite a lagging economy, worldwide demand for the organization’s services – which include developing the Uniform Plumbing Code®, Uniform Mechanical Code®, Uniform Solar Energy Code® and Uniform Swimming Pool, Spa and Hot Tub Code® product certification and training, and certification of both installers and inspectors – was higher than ever.

Founded in 1926, IAPMO is dedicated to protecting the public’s health and safety. Its codes are followed by municipalities in much of North America, as well as half of the rest of the world. In addition to overseeing plumbing and mechanical (HVAC) standards in residential, commercial and institutional buildings, IAPMO’s influence also extends to safety standards for solar energy and swimming pools. The organization has its own

product testing laboratory and certification division, as well as classrooms for education and meeting rooms for experts from all over the globe.

The Challenge

With a new worldwide headquarters to accommodate the organization’s growth now a necessity, IAPMO officials wanted to give as much thought to the aesthetics as it did to the functionality. Ontario is a suburb of Los Angeles, but is worlds away in appearance. It is set in the middle of what was once cattle country, and cattle farms still thrive just two miles to the south. The commercial buildings that are there consist primarily of nondescript industrial structures.

Given those surroundings, when visitors stepped through the doors of the new building, IAPMO wanted them to feel as though they’d entered a completely different world. The association also wanted to fight the perception among some of its visitors of plumbing and mechanical being industries that were largely low tech.



The NEC 3x2 LCD video wall inside the entrance to IAPMO’s new facility has helped build an image of high-tech innovation for the organization. In addition to the map showing its offices around the world, it greets visitors and displays visuals that depict the company’s initiatives and values.

The current building had a large, painted map on the wall behind the reception desk, which showed the locations of IAPMO offices around the world. Below the map were 12” diameter clocks with strings leading to the offices within that time zone. The objective was to demonstrate IAPMO’s worldwide influence. But as the number of offices grew, it became more and more difficult to fit the clocks into the display, and the strings became more of a tangled mess. In addition, the clocks themselves required regular

maintenance, whether it was changing batteries or changing the clocks themselves to accommodate daylight savings time. Finally, the look of the map with the physical clocks began to feel dated, which was not the image this progressive organization wanted to present.

IAPMO still felt the concept was good – the map showing their offices around the world. It was merely the execution that had become problematic. Building the new office presented the perfect opportunity to create a more modern, technology-driven version both in the new building and the existing one.

At first, IAPMO considered using an LCD projector to cast an image on a white wall screen behind the reception desk. But as officials looked into it further, several issues, including drop soffits in the reception area and the risk of people walking in front of the projection, led them to determine it was not a viable solution.

They then decided to look into creating a 3x2 video wall using digital displays. It was at this point they engaged Fluid Sound, a San Diego-based designer and integrator of commercial audio visual systems. Fluid Sound has extensive experience creating these types of large-scale presentations using NEC monitors, which was also the preference of IAPMO based on its own research.

“We wanted the video wall to make a statement from the moment anyone walks in the front door,” said Duane Huisken, director of marketing and communications for IAPMO. “That meant doing it right. We wanted the graphics to stand out, of course, but we also wanted a system that we could run 24x7 without problems. NEC was the first choice on both counts.”

The Solution

At first, IAPMO was looking at NEC’s P Series displays. However, after discussing what they wanted to accomplish and looking at the budget, Fluid Sound recommended using the X Series instead.

“IAPMO wanted the graphics to be as clean and impactful as possible,” said Phil Borkowski, a partner at Fluid Sound. “They considered a bezel-less plasma screen at one point, but the NEC X Series with its ultra-thin bezels would give them virtually the same effect, with greater reliability and a brighter screen, for a much more reasonable cost. Since they planned to install video walls in both the old and new buildings, it became an easy choice.”

Fluid Sound recommended using 46” NEC X461UN displays specifically. In a video wall, the X461UN has a screen-to-screen distance of just 7.3mm, creating an almost gapless visual effect. Its advanced cooling system was a key consideration as well.

“Many LCD video walls look impressive from a distance, but they exude a lot of heat,” said Huisken. “That would be bad for the

receptionist who sits right in front of it and for our image. IAPMO is very involved in helping building owners make their buildings greener by using less energy, especially for heating and cooling. It wouldn’t look very good for us to have a video wall that added to our own cooling load. These NEC displays have very low heat dissipation into the room, which allows us to ‘walk the walk.’”

IAPMO and Fluid Sound started with the old building. The old map and clocks were removed, replaced by a recessed video wall in a 3x2 configuration. The default for the display is a new, animated map built by long-time IAPMO audio visual supplier Wyatt Video that shows the office locations along with animated clocks in place of the old physical ones. Office locations are highlighted in sequence on a continuous loop.

“You remember the old saying, ‘The sun never sets on the British Empire?’ Now, it never sets on IAPMO,” Huisken said.

Since content is created using computer graphics, there are no batteries to expire and no need to make manual time adjustments. Everything is handled automatically. Even the hours for the display itself are pre-set. The display turns on at 6am, before anyone gets to the office, and remains on until just after office hours, when everyone is gone. Should the need arise, however, IAPMO can reset it to run 24x7 with confidence.

The installation in the old building was completed in May 2010; the new building’s video wall became operational in June 2010 when the facility opened.

Although the map is the primary graphic used, IAPMO can run other content as well. It has been used for welcome messages for dignitaries and international guests. The welcome message includes a short PowerPoint presentation that shows the various things the company does. It also shows IAPMO personnel testing products, conferring to discuss standards and results, and small children drinking out of a water fountain – emphasizing what IAPMO is all about.

Has the video wall achieved the desired effect? “Absolutely,” said Huisken. “It has a huge ‘wow’ factor, especially when first-time visitors walk in. They’re just not expecting to see something like this in Ontario, from an organization that works with plumbing and mechanical products. We often have architects stop by for information rather than waiting for it to be sent out, and at least once a week, one of them will ask who did the video wall and can we get their contact information.

“Perhaps the best testament to its effectiveness, though, is the reaction from our CEO. He feels it was worth the money we spent. It’s been a boost for our internal personnel. They see it when they come in, and it makes them proud to be a part of IAPMO.”