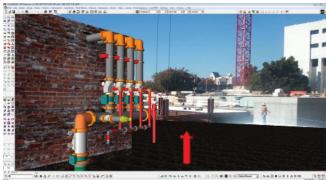
Hot Products: Reader's Choice





My Favorite Software

By Paul A. Basherian

I have used AutoSPRINK exclusively as my fire sprinkler system design tool since 1999. I say exclusively because I do not use AutoCAD, Navis, or Revit. I have 28 years of design experience (seven years by hand, nine years with SprinkCAD, and the rest with AutoSPRINK).

I mainly design large projects that require BIM compliance and utilize Integrated Lean Project Delivery. Using AutoSprink has helped my business grow and enabled me to offer 3D modeling services to fire sprinkler, HVAC, electrical, and other contractors that have not yet made the transition to BIM. I can also handle more projects because my efficiency, compared to AutoCAD-based programs, has increased dramatically.

I chose this program because the alternatives (AutoCAD and Revit) seem cobbled together to deal with the 3rd dimension. Some of my colleagues use a third-party AutoCAD program to design in 2D and use Navis for collision resolution. They must go back and forth between the two to resolve conflicts. For example, a "hit" is shown in Navis, then the designer must find this hit in 2D, then hope the revision made misses all trades and building components. I've never tried designing this way, but it sounds ridiculous and time-consuming. A major project can have hundreds of ongoing conflicts per floor! Many designers do it this way because they don't like change. As the saying goes, "when all you have is a hammer, everything starts to look like a nail."

The AutoCAD .dwg file format has been the standard platform for architecture and dictated how all trades exchange information. Third-party programs use AutoCAD as their "core." Thus, third-party programs are limited by AutoCAD, which was never intended to be a 3D program. This is why Revit is being forced upon the industry.

Revit is anything but user-friendly. I'll just say that it's a (pricey) work in progress. There are no third-party fire sprinkler design programs for Revit. Existing companies must build a program from scratch in order to function in the Revit platform. Some fire sprinkler design programs claim to have Revit compatibility. I looked into this and it turns out that the fire sprinkler system can only be viewed and manipulated in Revit,

not calculated or listed. Revit must also be purchased on top of AutoCAD. The designer must now navigate among three programs (AutoCAD, Revit, and Navisworks)! I just can't tell you why some of my colleagues insist on doing it the hard way.

Since AutoSPRINK began its life as a stand-alone, Auto-CAD-compatible, 3D program, it's only limited by Microsoft Windows. I can build a complicated fire pump setup, check for collisions with steel and other trades, verify fitting compatibility, flow water through it, list it, import and export to AutoCAD (.dwg) and Revit (.ifc) — all in one piece of software. No other one program does this.

The AutoSPRINK features I use the most are interference checking, voice recognition, design wizards, automatic armaround, and real-time hydraulic calculations. These tools have saved me countless hours of design time. I would not have been able to meet submittal and POJ dates for two of my most recent projects without this program, period. The jobs are: Sacramento International Airport Expansion and Sutter Medical Center Women & Children's Hospital, both in Sacramento, California. For the airport, the roof has an undulating wave structure that would have been a nightmare to design correctly in anything but AutoSprink. The pipes follow the roof contour using strategically placed flex couplings, which eliminated the need to bend the pipe, saving the fire sprinkler contractor a significant amount on installation cost.

To conclude, there really is no logical reason to design everything in 2D. Designers must ask themselves, "is it easier to draw in 2D with lines and symbols, using elevation and slope blocks to describe the 3rd dimension (don't get me started on the issues with doing this), and letting a piece of software interpret that information, or draw the system in 3D using intelligent objects and simply place them where they'll be in the real world?" For a designer to be his or her best, they must use the best tools available. If you're as serious about software as I am, AutoSPRINK is the only way to go.

About the Author:

Paul A. Basherian is the owner of Fire Design Specialties, 324 Cromwell Avenue, Clovis, CA 93611-7047; (559) 269-0311, E-mail: pbasherian@sbcglobal.net.