



How Effective is your exit & accessibility strategy

Life Safety™
Product
Brochure

based on
Verifi3D
powered by **Xinaps**

Life safety is vital

“It’s accessible, has a way out and is compliant to building codes”.

Wait, are you sure about that?

Every respected life safety professional knows inside out how to draw the quickest accessible egress path along with defining all the relevant fire exits and compartments. However, this in turn gets you thinking: “Do I necessarily have to do everything I have learnt manually each and every time or is there a simpler and more effective way?”

For when it comes to life safety we focus on fire safety and accessibility. As fire safety investigates ways by which you can protect your building and the people living or working in it. Accessibility on the other hand investigates if a building design supports access for people with disabilities. In the case of public buildings, they have a fixed layout determined by their form and function. Thus various aspects of fire safety and accessibility can be analysed and addressed throughout the various project and design stages. Throughout this complex process, your building must comply with strict regulations. These regulations are usually issued by the local governments along with harsh penalties and project delays when not following them.

In the US, an extensive guide on fire safety has been drafted by the NFPA (National Fire Protection Association). It addresses 300 codes and standards intended to eliminate death, injury, property and economic loss due to fire, electrical and related hazards. Another well-known act is the ADA (Americans with Disabilities Act) for public buildings and the ABA (Accessibility Board Guideline) for governmental buildings. In the UK, the Regulatory Reform (Fire Safety) Order, is designed to offer minimum workplace fire safety standards. Another well-known act is the Access Audit Handbook by RICS (Royal Institution of Chartered Surveyors). All of these standards and codes are used by many countries and have become an unwritten rule in the field of Architecture and Urban Planning. It might sound quite straightforward but can quickly become a complex mess when multiple aspects, buildings and functions are involved.

Next to local standards architects ought to be skilled to deliver functional designs, but how do you check if all these regulations and guidelines apply to your building? What if we had an efficient and simple way to integrate the checking while designing?

BIM-driven life safety analysis

“Short Egress Paths and Accessible Areas that are compliant to various international standards”.

When checking a building's fire-safety and accessibility, a lot of information is needed; not only about rules, regulations and guidelines but also about the building itself. The advantage of BIM is that this information is readily available and accurate; where the fire-safety and accessibility check within the life safety platform uses this information to perform checks, reports and visualizations of the results on the Verifi3D web interface. Hence it is quite easy to integrate this information along with the regulatory requirements to check if the building is compliant. And that is where some of the issues begin in preliminary phase:



Manually drawn paths and measurements along with its calculations can lead to a lot of inaccuracies.

Overlooking aspects of the projects or regulatory requirements.

Requires multiple specialists to study the building to check its compliance, hence it can be very confusing and time consuming.

No single systematic way of performing checks as it differs per building, country and regulation.

Design iterations and regulatory changes make previous work obsolete.

Unable to perform visualizations of checks and see the results within your building plans without any additional drawing.

Unable to easily see if objects are present, collide or are accessible.

Unable to simulate different conditions such as the movement of people when a fire is present, to the nearest fire-exit.

Collaboration between inter-disciplinary teams, constructors and clients can lead to miscommunication and outdated analysis.

All these issues can become a thing of the past with the patented algorithm by Verifi3D and its fire-safety and accessibility grades:



Automatically analyze your Revit or IFC BIM model and visualize the results in 2D and 3D.

Generate simulation in early design stage and check how fast the building can be evacuated.

Check your building model against your local fire-safety and accessibility

standards in Life Safety. Along with the ability to create, modify, import or export international regulations for checks.

Ability to quickly see check results and update them based upon your BIM model. Along with the ability to export the results.

Ability to perform; presence, free space, egress path, fire hose coverage, door, fire compartments, wheelchair accessibility, wheelchair turning radius, stair-case, free door space, maneuverability checks.

Easy collaboration, sharing and presentation tools that help to reduce misunderstandings.

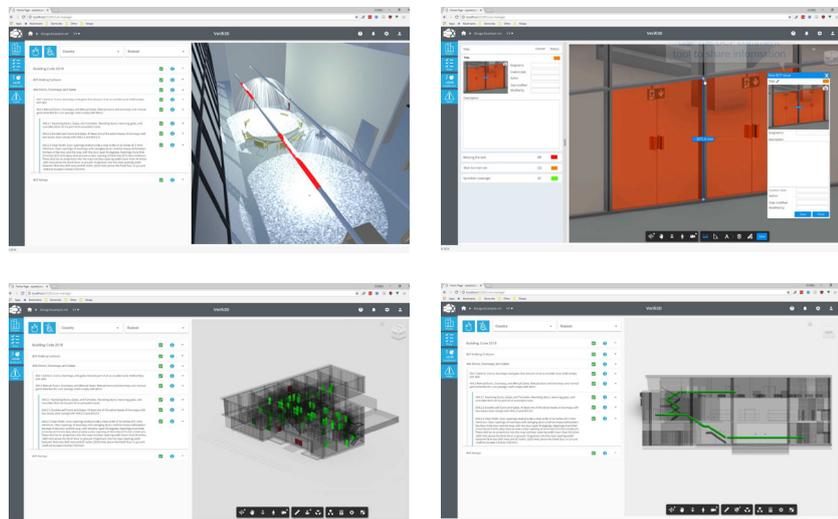
The Xinaps way

The level of detail in a building design is quite limited in the preliminary design phase. For during the preliminary phase, it is difficult to check for potential design or non-regulatory compliance issues. This in turn may lead to potential issues being carried forward to the next design iteration. The fire Safety and accessibility check are the latest series of patented algorithms by Verifi3D. That enables VDC professionals to use the web-based platform to analysis their; buildings, perform regulatory compliance checks, visualize the results and share them via our collaboration tools to other VDC professionals.

With the fire Safety and accessibility check, you do not need to change the BIM model, or add extra data. It will automatically check the accessibility of mobility, wheelchair access, turning radius, egress path, fire-hose coverage, sprinkler coverage, fire compartment aspects of your model and will automatically highlight problematic areas. The check will also perform regulatory compliance checks based upon international standards to verify that the building along with its different function are complying to local and international standards. Where specialists also have the feature to set up their own regulatory compliance checks.

You can also simulate how rooms get emptied without any obstructions along the way. At Xinaps, we believe BIM workflows need to be adopted from the preliminary design phase onwards. In that way you can focus on what's most important - making decisions and optimizing the design. Join us for the BIM design of tomorrow.

Screenshot of Verifi3D UI, its visulization, rule manager and check results.



About us

Xinaps is to set the standard for compliance with local building regulations directly within Verif3D®. Developing our checks with design professionals in mind, our suite of products enables BIM model validation in early design stage.

Founded in 2015, we are a forward-thinking team that creates web based model validation and compliance tools because we believe the building design process needs to be simplified and optimized. Our clients play an active role in tailoring the features of our solution.

Enriching design solutions for VDC professionals.



Sign up for a free online demo at info@xinaps.com

