Evacuation Modeling. SimWalk Simulations for a Safe Exit.

SimWalk software provides special features for evacuation modeling and simulation. Dynamic hazard triggering during runtime and object handling allow to realistically evaluate emergency strategies as well as escape times for occupants in case of an incident.

Evacuation simulation is one of the earliest applications of pedestrian simulation with its own dynamics and behaviors. In case of a sudden explosion or fire, people react immediately or with a delay that has to be accounted for, and they exhibit a special search behavior for safe places or emergency exits.

SimWalk integrates special evacuation features that allow to accurately simulate emergencies. These include time stamped triggering of hazards, immediate reaction of the occupants on incidents like explosions or fires, route choice switching to emergency exits as well as predefined object actions like closing or opening doors. For every occupant, egress time as well as other important evacuation metrics (densities and bottlenecks e.g.) can be measured.

To enhance simulation understanding and analysis, SimWalk offers animated visual effects like fires or other incidents. In addition, simulation results can be visualized in 2D and 3D through movie captures or screenshots.

Summary

SimWalk provides specialized evacuation features like dynamic hazard and action handling for realistic modeling and simulation of evacuation scenarios. SimWalk evacuation capabilities have been deployed for stadiums, rail and metro stations as well as for airport simulations.

Contact

Savannah Simulations AG
Alte Dorfstrasse 24
CH-8704 Herrliberg
Switzerland
Phone: +41 (0)44 790 17 14
sales@simwalk.com
www.simwalk.com