High Performance and Integrated Design Tools and Publications

Integrating Resilience into Building Infrastructure Design and Construction

Security Information & Technologies Exchange (SITE) is a website for accessing and providing information on best practices and technologies that can provide protection for federal facilities. The project is supported by the U.S. Department of Homeland Security and the National Institute of Standards and Technology (NIST). The SITE database provides information on best practices and technologies for building infrastructure, including information on building envelopes, structural systems, and security systems.

Advanced and High-Performance Materials Database is a website for accessing and providing information on advanced and high-performance materials. The database includes information on building envelopes, structural systems, and security systems, as well as information on emerging technologies and materials that can provide protection for federal facilities. The project is supported by the U.S. Department of Homeland Security and the National Institute of Standards and Technology (NIST).

This database provides information on best practices and existing and emerging products, systems, and technologies in compliance with the ISC, UFC, and VA design criteria. www.sitexchange.org

This database allows for the overall coordination of the research and development of advanced and high-performance materials. www.advmat.org

This report includes recommendations to Congress based on the proceedings prepared from Designing for a Resilient America: A Stakeholder Summit on High Performance Resilient Buildings and Related Infrastructure. www.nibs.org/frdp


07/01/11
The OPR and IRVS Tools

Owner Performance Requirements (OPR) Tool

The OPR Tool is an owner’s web-based tool that allows the analysis and compilation of a range of high-performance requirements such as earthquakes, floods, and winds; explosive blast, chemical, biological, and radiological threats; and energy conservation, fire, environmental sustainability, durability, and continuity of operations. The development of the OPR is being developed in concert with the establishment of high-performance metrics and benchmarks in accordance with EISA 2007 public law. The tool is also being developed as an ASTM Standard and will result in performance, risk, and resilience scores for owner facility requirements.

www.oprtool.org

Integrated Rapid Visual Screening (IRVS) Tool

The IRVS are a user-friendly family of tools designed to prepare risk assessments for buildings, mass transit, and tunnels. Its purpose is to provide a quick and rapid visual assessment for a combined range of hazards such as earthquakes, floods, and winds; explosive blast, chemical, biological, and radiological threats; and fire. The tools are designed to be used by law enforcement agencies, emergency managers, facility managers, engineers, and architects. The screening result is built into a database that calculates the risk score and store records. The screening process can be conducted by one or two screeners and completed in a few hours. The tools are designed to produce risk and resilience scores for constructed facilities.