

Safety Tutorial

Building safety is a key element of architectural surety. In this tutorial we discuss the stresses that threaten safety: normal day-to-day operating environments including the effects of building loads, weather, aging, and human error; abnormal environments including fire and floods; and malevolent environments including sabotage and violent assault. We discuss a top-down process for investing safety controls and how they relate to the various threat environments. We emphasize that safety controls can impact--and be impacted by--security and reliability controls. The layout of stairwells in a multi-story building illustrates the inevitable tradeoffs that spawn residual risk.