



Encuentro Internacional de Innovación e Infraestructuras Resiliente

Forensic Investigation Methods for Resilient Infrastructures

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Examples of Structural “Collapse”



Hartford Civic Center City (1978), Connecticut, USA



Hyatt Regency (1982), Kansas City, USA



Genoa Bridge (2021), Italy



Millenium Bridge (2000), London, UK



RC Bridge (2023), DRC



Image from Getty Images

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Investigation Methodology

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Structure's Stage Approach (SS)

A type of forensic Engineering Study in which the engineer in charged of the investigation starts from the documentation available of the infrastructure project, from the **Planning stage, Design, Construction and Operation/Inspection & Maintenance stages**, and with the help of the ToolKit and Failure Analysis Report can investigate and narrow down the causes of a failure or pathology;



Pathology Based Approach (PB)

A type of forensic Engineering Study in which the engineer in charged of the investigation starts from the **visible field data extracted from an inspection** and would trace-back the mechanism of failure identifying Shallow and Deep Causes; in other words, narrow down the causes that generated the observed pathology;