

Case #4: Hyatt Regency Walkway Collapse



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Background Information

- Numerous issues
 - Unusual design
 - Dangerous design changes
 - Setbacks
 - Roofing collapse during construction
- Night of the Incident
 - 1500 people were attending a weekly dance contest
 - Large amounts of people on the walkways
 - Load capacity far in excess
 - $\frac{2}{3}$ of the walkways failed
 - 114 people died, more than 200 injured.

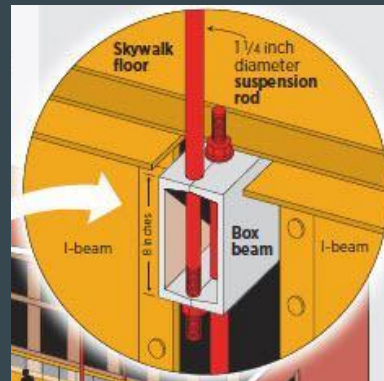
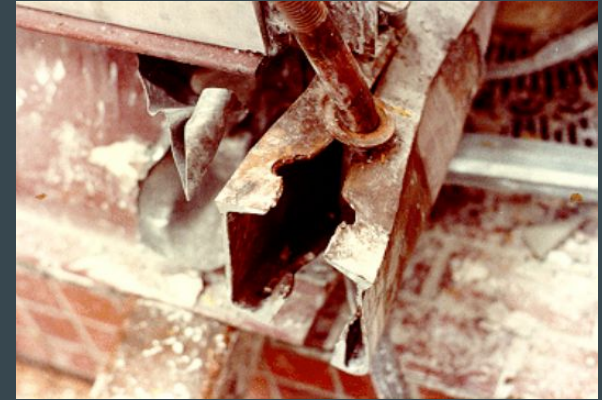


Result of the Collapse



Key Issues

- Walkways suspended from the roof
- Fourth floor walkway supports the weight of itself and the entire second floor walkway
- Threading on the rods were damaged upon installation.
- The beam used to transfer the load between the 2nd to 4th floor rod, to the 4th to ceiling rod was not intended for that purpose.



Ethical Issues

- Original design only supported 60% of the required load
- Design changed for easier assembly
- Caused walkway to support even less than 60% of the required load

Reasons for Design Change

- Saving time.
- Saving money.
- Avoiding a call for reanalysis, thereby raising the issue of a request to recheck all connector designs following the previous year's atrium roof collapse.
- Following his immediate supervisor's orders.
- Looking good professionally by simplifying the design.
- Misunderstanding the consequences of his actions.
- Any combination of the above.

Known/Unknown Relevant Facts

Relevant facts known to the general public:

- Multiple project schedule setbacks
- Construction accident (roofing collapse)

Relevant facts unknown to the general public

- Crucial design changes after it had been approved
- Inadequate load capacity (not up to code with the Kansas City building codes)

Works Cited

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