Why Buildings Fall Down: How Structures Fail
The authors examine buildings of all kinds, from ancient domes like Istanbul's Hagia Sophia to the state-of-the-art Hartford Civic Arena. Their subjects range from the man-caused destruction of the Parthenon to the earthquake damage of 1989 in Armenia and San Francisco. The stories that make up Why Buildings Fall Down are in the end very human ones, tales of the interaction of people and nature, of architects, engineers, builders, materials, and natural forces all coming together in sometimes dramatic (and always instructive) ways. B/W line drawings

Such is our morbid fascination that this book is inevitably more attractive than one called "Why Buildings Stay Up". That said, I think I have not only learned more about structural engineering than I would have done from a positive counterpart, but I have also learned vastly more about the other factors, human and natural, that influence the ultimate success or failure of structures. The book is based on the same material as the late 1990s TV series of the same name, and having watched that series many of the incidents and issues were familiar to me. The advantage of the book is the ability to digest information at your own speed and refer back to earlier pages, but it has to be said that the TV series communicated some of the issues better, helped by animated graphics and by the better mutual support of both pictures and narrative. Each chapter takes a topic, whether a human factor like the law, a type of construction such as the dome, or a cause of failure such as
metal fatigue, and then illustrates the issues by consideration of a number of case studies, frequently including some notable successes as well as dramatic failures. In the case of failures the book always attempts to assess both the practical cause, and also any human cause, impact and implications. The book is very well written, in an accessible style supported by some useful appendixes on structural engineering principles. However, sometimes the simple line drawings and verbal descriptions of a structure don’t manage to communicate a full understanding, and more sophisticated illustrations might have helped. Mario Salvadori died in 1997 (at the good age of 90), and the surviving author, Matthys Levy updated the book in 2002. My feelings on the update are mixed: the chapter on terrorism, culminating with the collapse of the New York Trade Centre towers on September 11th 2001 is excellent; but why did the author not acknowledge the brilliant success of efforts to stabilise the Leaning Tower of Pisa in the late 1990s? Overall I heartily recommend this book to anyone with a serious or lay interest in structural engineering, and the many complex human and natural issues which influence it.

We see all the time buildings working as they should (i.e., standing up and not collapsing), however, it is very interesting to read of some real life collapses. Salvadori does an excellent job of writing so that people without a technical background can understand why these structures failed. And he writes with such detail that engineers are not bored by lack of detail. Simply explained, fully detailed, and thoroughly researched. Excellent book for anyone who is interested in buildings, structures, or failures.

If you have read the book 'Why Buildings stand up' you should definitely read this one, since it is much more interesting to know why certain buildings collapse, since this makes the news. There are some chapters almost the same as the first book, but most chapters are case studies on bridges (the famous galloping Gertie in Washington State), explosions, structural failures etc. An extra chapter is added to explain the collapse of the World Trade Center Towers after the September 11 Attacks in 2001. Also 5 Appendixes are added dealing with stress, loads and more engineering things, which can also be found on the PBS site on buildings.

An entertaining book for readers who know about structures, and an educational book for lay readers, WHY BUILDINGS FALL DOWN is an interesting collection of case studies concerning building failures. Never condescending, but never too technical, it's a fun way to learn about architecture or structural engineering.
This was a great introduction to the fundamentals of building science - understanding why things don't work is a great help in understanding why they do. Each chapter discusses one example of something that went wrong and explains another reason why structures can fail.

I'm a young Civil Engineer from Portugal. Some months ago I went to New York and I found this fantastic book. I've also bought the book "Why buildings stand up" which is, again, amazing. The descriptions are in such a simple way that even lay people can understand easily the functioning of structures. It was a pleasure to read such interesting books.

The companion to this book (Why Buildings Stand Up) was a textbook for one of my classes when I was in architecture school in the 80s. I still have my old, dog-eared copy on my bookshelf in my office. I purchased this book, along with a new edition of Why Buildings Stand Up, to give to an 11-year-old (super intelligent) friend who would like to be an architect. I was worried that it might be too complex for him, but his mom assured me that it would not be.

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