Symposium Beleven van Hoogbouw: When a skyscraper meets reality

Mecanoo: HQ in Delft, satellite offices in UK, US and Taiwan

A symphony orchestra

© Friso van der Steen
“Architecture that appeals to all the senses…”
- Francine Houben, Founding Partner/Creative Director

Public buildings all over the world

- National Kaohsiung Center for the Arts, Taiwan
- La Llotja Theater and Conference Center, Lleida, Spain
- Municipal Offices and Train Station, Delft, NL
- Bruce C. Bolling Municipal Building, Boston (MA), US
- Delft University of Technology Library, NL

Selected projects in the Netherlands

- Montevideo residential tower, Rotterdam
- Keukenhof, Lisse
- Municipal Offices and Train Station, Delft
- Hilton Amsterdam Airport Schiphol
- Netherlands Open Air Museum, Arnhem
- Delft University of Technology library

Montevideo Rotterdam 152 meter hoog, 2005 opgeleverd
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Delft, 25-09-2018

functionality vs flexibility

first skyscraper 1884
the home insurance building in chicago

first skyscraper 1884
monofunctional

Mid Manhattan Library, 100 jaar oud warenhuis
marina city Chicago 1967
tallest earliest mixed-used skyscraper

typical early skyscrapers
monofunctional plan

contemporary skyscrapers
multifunctional program

contemporary skyscrapers
multifunctional program
we want flexible buildings, but the core systems are not flexible:

- building systems
- program
- structure
- regulations
- ownership

different construction for different function
(the example of The Rotterdam by OMA)
Taipei, Taiwan 1e, 2e, 3e, 4e generatie

De Kijker Leiden, opgeleverd 2001

afterlife

Innovation
17-Story Addition, 441 Ninth Avenue, Hudson Yards

transformation of 530 dwellings, Bordeaux
Architectural icon remains mostly abandoned, due to structural constraints (too low ceilings that do not meet modern standards)

sloop flats 110 meter hoog 32 verdiepingen China

no tall building higher than 187m has ever been demolished

Singer building, New York City
1908 - 1968    187m
THE TALLEST BUILDING EVER DEMOLISHED

The tallest building ever conventionally demolished was the Singer Building in New York City, which was once the tallest building in the world—approaching 613 feet. The 41-story tower was

12-story base of the Singer Building. The 41-story tower above was a relatively narrow 65 feet x 65 feet, making for easy dismantling.
Grand Prince Hotel Akasaka, Tokyo, opgeleverd 1982, 140m
sloop: twee verdiepingen, of 6.4 meter per 10 dagen (herfst 2012 - zomer 2013)

deutsche bank building 157.6m
steel structure
sloop duurde 5 jaar 2007-2011

10 hoogste gesloopte gebouwen
4 torens gesloopt die na 2000 waren opgeleverd!

<table>
<thead>
<tr>
<th>Year</th>
<th>Building Name</th>
<th>Height (m)</th>
<th>Days</th>
<th>Reason</th>
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<td>[Building 1]</td>
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<td>[Days 3]</td>
<td>[Reason 3]</td>
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<td>2003</td>
<td>[Building 4]</td>
<td>[Height 4]</td>
<td>[Days 4]</td>
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</tr>
</tbody>
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The reason of most of the high-rises being demolished is "to make way" for a new building.

The average lifespan of the tallest demolished buildings is only 41 years.

"We should perhaps thus be thinking of tall buildings as perpetual entities with lifecycles potentially exceeding 100 or 200 years, while designing them in such a way that they can be creatively adapted for possible future uses."

(Council on Tall Buildings and Urban Habitat (CTBUH) Executive Director Antony Wood)

15 cities in the world with the most high-rises

[Map showing 15 cities with the most high-rises]