

Arched Footbridge in Copenhagen – Copenhagen, Denmark



**Type:** Footbridge

**Location:** Copenhagen, Denmark

**Completion Date:** March 2008

**Owner:** Municipality of Copenhagen

**Architecture:** Dissing and Weitling

**Engineering:** Niras

**General Contractor:** Barslund A/S

**Steel Fabricator:** Bladt Industries A/S

- Bridge deck width: 6.5 m
- Bridge girder span: approximately 65 m  
doubly curved, thinwalled steel box
- Cross-section resembles that of an aircraft wing
- Over the best part of its span the girder is unilaterally stayed to a slender arch by means of 11 tie-rods
- The arch is inclined 45 degrees and the girder is stayed along its concave side only. Vertically, the girder is also supported by the arch itself in the intersection points between these two components of the structure.
- The arch, being a plane circular segment with a radius of  $R=52.5$  m, is simply supported at both ends
- The arch profile is a slim  $\text{Ø}610$  circular hollow section

