



Commercial Buildings

Reference Details:

Owner Deutsche Post AG, Deutsche Post Bauen GmbH, Bonn, Germany +++ **Designer** Architects Murphy/Jahn, Chicago, USA +++ **Consultant** Hochtief AG, Essen, Germany +++ **General Contractor** Hochtief AG, Essen, Germany +++ **Technical Structures** Ingenieurgesellschaft Brandi Consult, Cologne, Germany

DSI Services Supply installation and post-tensioning of over 24 t of DYWIDAG Unbonded Multistrand Tendons $\varnothing 5.7$ mm (150 mm²), type 6804.



Post-Tower post-tensioned with DYWIDAG Strand Tendons

Construction of the new Group head office for Deutsche Post World Net, Bonn, Germany

A new head office for Deutsche Post World Net is currently under construction in Bonn's former government district, south of the building commonly known as the "Langer Eugen". The so-called "Post-Tower" was designed by the German-U.S. architect Helmut Jahn. With its height of 162.5 m it will rise above all other office complexes in the state of North Rhine-Westphalia after completion.

The shape of the Post-Tower is similar to two halves of an ellipse executed in a slightly staggered pattern. In between a so-called sky garden will be created every nine storeys. These "open air" levels divide the high-rise building into four sections providing an excellent view of the Rhine, the surrounding hills (the so-called Siebengebirge) and the city of Bonn. The building consists of a total of 40 upper floors and five underground floors with 600 parking spaces. A pedestal building with conference rooms and catering facilities was built adjacent to the high-rise building.

The glass façade incorporates a technical refinement: it has a cavity between two layers, consists virtually of glass only and brings about a temperature equilibrium in the air, thus offices need not be equipped with an air conditioning system. By reason of the novel air conditioning system the new Post-Tower consumes approximately 30% less energy compared to a conventionally built high-rise building - an example of intelligent energy saving technology.

The construction will consume extremely large amounts of building materials: about 80,000 m³ of concrete, 16,000 t of structural steel and 90,000 m² of glass are being incorporated into the building. DSI supplied, installed and post-tensioned over 24 t of DYWIDAG Unbonded Multistrand Tendons $\varnothing 15.7$ mm (150 mm²), type 6804, for the flat slabs on the underground levels.

About 2.000 employees moved into their new offices in the middle of 2002. A total area of 107,000 m² is available on 40 upper floors and five underground levels.