

## Iconic Buildings

## La Grande Arche de la Défense



Vojtěch Petrík, Konzultant vpetrik@deloittece.com

La Grande Arche is a modern building inspired by the Arc de Triomphe which became the most distinguished construction of the modern business district La Défense

in Paris. The monument is 111 meters high and symbolises a "window to the 21st century". It was completed in 1989 on the occasion of the 200th anniversary of the French Revolution.

An international design competition was launched in 1982 at the initiative of French president François Mitterrand to commence new construction activity in the La Défense district in Paris. A total of 424 entries from all over the world were submitted. The jury selected four projects of which the winner became the design by an unknown Danish architect, Johan Otto von Spreckelsen, due to its stability, simplicity and purity of form. The construction cost 2.7 billion francs (USD 439 million) instead of the original budget of 1.3 billion francs which was negatively perceived by the public. The foundation stone was laid down in July 1985; nevertheless, Spreckelsen resigned in 1986 because of the controversial budget and programme changes and transferred all of his architectural responsibilities to his associate, French architect Paul Andreu. Under Andreu's leadership, the monument was completed in 1989, two years after Spreckelsen's decease. The arch completed the line of monuments that forms the Axe historique running from Louvre, over the Tuileries gardens, Luxor Obelisk, Avenue des Champs-Élysées, Arc de Triomphe to Charles de Gaulle Square and the Nanterre district in the west of Paris. It is interesting that the arch is set at a six degree angle towards Axe historique. La Défense where one of the most famous Paris landmarks was built ranks among the most prominent business districts in Europe, comparable to the City of London. The La Défense district features approximately 3 million square meters of leasable areas which is almost the same as in the whole of Prague. Numerous multinational companies and international organisations are based in the locality. In 2014, an average rental in La Défense amounted to approximately EUR 44/sqm.

The monument has a shape of a vast cube made of ferroconcrete which is covered with glass and three hectares of Carrara white marble. The construction lies on 12 massive grounded pillars. All corners of the cube evenly narrow in the inward direction, jointly forming another smaller cube. As a matter of fact, the entire Notre-Dame cathedral would fit into the smaller cube. A total of 300,000 tonnes of material was used for the construction. The lower part of the monument features an irregular hanging cloud-shaped construction to remind the involvement of Paul Andreu who originally designed airport buildings. The purpose of this construction, which is made

of a stretched Teflon mesh supported by a steel cable netting and joint bars, is to lighten the entire construction and provide sun and rain protection to visitors. Panorama elevators are hung up under the arch. They were used to access the roof offering a view of a large part of Paris and the La Défense district. There is a heliport on the roof as well as four courtyards, each of which is decorated with a star chart symbolising the zodiac based on a design by the French artist Jean-Pierre Raynaud. Nevertheless, the observatory deck and elevators have been closed to the public since April 2010. The building features approximately 87,000 sqm of office areas. The southern pillar is the seat of the Ministry of Construction and Transport, the northern pillar houses several international organisations, and the International Human Rights Foundation is located at the top of the building.

A recent study from 2014 revealed that the monument is in serious disrepair due to dangerous pores in the Carrara marble tiles. The French government has already allocated EUR 200 million to reconstruction which will take at least two years.

## La Grande Arche in numbers

111 meters is the height of the building

**300,000** tonnes of material were used for the construction

35 is the number of floors of the building

**6,3** degrees is the angle at which the monument is set towards *Axe historique* which links selected prominent historical sites in Paris

439 million USD is the monument's final price

**44** EUR is the average monthly rental per square meter in the La Défense district

87,000 square meters is the rentable area

200 million EUR is the amount allocated by the French government to the monument's reconstruction

