

Concrete core cooling with air CONCRETCOOL

Sparkasse Ulm

Destroyed in the Second World War, the Neue Strasse in Ulm forms a break in the architecture of the old city. On one side is Ulm Cathedral and the Stadthaus by Richard Meier, and on the other Rathaus dating from the middle ages and the new glass Central Library by Gottfried Böhm.

The new building for the Sparkasse Ulm formulates new urban space in this central location and closes a gap in the old city. The building is formed in two blocks which penetrate each other at an acute angle, leaving an opening on the Rathausplatz side, a glazed seam. The light seam takes up the enclosure of the public areas and offices, and so creates an exciting relationship between the building interior and the external surroundings.



New building for the Sparkasse Ulm. Clear forms create a new urban space between Ulm Cathedral and the historic Rathaus.

Function CONCRETCOOL

In contrast to conventional systems, in which supply air is fed directly into the working areas, the air first flows through aluminium cooling tubes cast into the ceilings. Thereby the supply air cools the ceiling. At the same time the gain of heat is used to warm up the supply air.

System advantages

- Optimum thermal comfort
- Additional ceiling cooling with water is not required
- Free cooling provides energy savings of up to 50%
- Full flexibility due to modular positioning of cooling tubes
- Cooling with outdoor air no air circulation required
- Construction costs reduced due to low floor height

Building: Sparkasse Ulm

Architects: Stephan Braunfels, Berlin / Munich

Proprietor: Sparkasse Ulm

General contractor: Matthäus Schmid - Bauunternehmen

GmbH & Co. KG, Baltringen

Consultant, building: **Conplaning GmbH** Ingenieurbüro für services

Gebäudetechnik, Ulm

Project management: Johannes Hanf, Braunfels, Architects

Gross floor area: 4000 m²

System: Concrete core cooling with supply air

CONCRETCOOL

Per fitout module, one linear diffuser. Air flow path invisibly integrated into the

ceilings.

8 m³/hm² Air flow rate:

18th October 2006 Inauguration:





