



## McCormick Tribune Campus Centre Illinois Institute for Technology Chicago

### Client

IIT State Street Corporation, NFP

### Architect

OMA, New York

### Structural engineering

Holabird & Root, Chicago

### Acoustics

DHV

Personal reference: L.C.J. van Luxemburg

### Projectmanagement

IIT State Street Corporation

NFP

### Area

10.340 m<sup>2</sup>

### Realization

1998 - 2003

[www.levelacoustics.nl](http://www.levelacoustics.nl)

[www.buildingengineering.nl](http://www.buildingengineering.nl)

### Project description

O.M.A. (Office for Metropolitan Architecture) designed the McCormick Tribune Campus Centre of the Illinois Institute for Technology (IIT) in Chicago.

A steel railway bridge (The EL Green Line) runs through the campus site. The sound pressure level under the bridge is more than 110 dB(A) during train passing. The area the railway runs through divided the campus in two parts. The architect decided to design a building under the railway bridge to connect the two campus areas.

The building houses an auditorium, conference room, silence centre, library, faculty club and recreational areas.

DHV advised on the several noise problems and the room acoustics. The main problems were the high noise level close to the railway bridge and the vibrations. With 3D models several solutions to limit the noise emission of the train were simulated. The final solution was constructing a tube around the railway. The structure for this tube is separated from the structure of the bridge to isolate vibrations. To avoid excessive noise levels inside the tube, openings were made at the top of the tube. Despite these measures the noise exposure on the building roof still is 80 to 95 dB(A). Special solutions have been designed for good sound insulation of the roof and the glass facades.