PROJECT INFORMATION

PROJECT NAME: CENTRAL LIBRARY, DELFT TECHNICAL UNIVERSITY  
LOCATION: DELFT, THE NETHERLANDS 
ARCHITECT: MECANOO ARCHITECTS 
PROJECT TYPE: LIBRARY 
COMPLETED: 1998 
SQUARE FOOTAGE: APPROX. 160,000 sq.ft, (15,000 sq. meters) 
COST: $30 MILLION 
STRUCTURE: STEEL COLUMNS SUPPORTING A PRECAST HOLLOW CONCRETE ROOF SLAB 
PARKING: NOT INCLUDED IN BUILDING PROGRAM

The library at Delft University is a library where books are secondary, and the newfound space, provided by the onset of computers, is celebrated. The University envisioned the new library more like a train station or airport than a traditional library.

SOURCES:
Much of the building's design is meant to allow for natural light and energy efficiency. The glass facades allow natural light to enter the building while horizontal slits between the panes of glass ventilate the building. The cone that penetrates through the roof is the major source of natural light at the center of the building. Natural light enters down through the center of the cone, as well as, down its outer walls. The program is arranged to make the most use of the natural light. The administrative offices take up to of the exposed sides while the computer room occupies the other. The reading room draws from these areas and also receives light from the cone. The books are stored below ground because natural light can damage them, and this eliminates the need for extensive climate control. The glass roof and "ground cooling", which channels water stored deep underground through tubes to a heat exchanger, keep the building at an energy efficient level.
"Instead of imposing an abstract order, Mecanoo opened up a terrain, marked its center of gravity, and gave it light." The library has allowed itself to imagine a life without books. The library does not cut the space out of the program, but leaves the open space for a new activity to begin taking place. In the section, the vastness of the expansive 15,000sq.ft. reading room can be seen as the cone punctures through the roof bringing in light from above. While the library’s three glazed facades seem to be the public sides of the building, the entrance is actually on what seems to be the back side where the grass lawn lifts away from the ground. One must climb a grand stair that cuts through the continuous sloping plane of grass to enter the building.
BUILDING PLANS AND ANALYSIS

The library's site is right next to Van den Broek & Bakema's 1955 Assembly Building, a heavy, bulky concrete mass. Mecanoo resolved this difficult position by creating a carpet of green grass that lifts up gradually off the ground away from its neighbor to a height of forty feet. The grass roof creates a public lawn that students can use for gathering as the do in the library below. Under the expansive roof is the 1,000 seat reading room. The reading room takes up most of the main floor, while most of the books and microfiche are stored below. The three exposed elevations are glass facades which on the eastern and southern sides enclose three stories of administrative offices and to the northern side enclose the reading room's computer wing. From inside the reading room a cone rises up cutting through the grass roof above acting as a beacon. Inside the cone are four rings of smaller reading rooms. Opposite the library's entrance a blue wall holds 80,000 of the most requested books by students and faculty. The rest of the libraries collection is kept below ground where it can be easily retrieved by request. Storing the books in this manner frees up space normally filled with books which allows the reading room not to have a single specific function, but many possibilities.