

# **SURVEY OF ARCHITECTURAL DAYLIGHT SOLUTIONS**

## **Introduction**

The following material was generated as part of Subtask A, “Performance Evaluation of Daylighting Systems”, Subgroup A1, “Survey of Systems” of the IEA SHC Task 21 and the ECBCS Program Annex 29 “Daylight in Buildings”. Its purpose is to show the application of daylighting devices within various daylighting- and window design strategies in buildings. Surveyed are daylighting strategies of 25 buildings, located in different parts of the world. Apart from various climate settings the recorded commercial and institutional buildings range from small scale single story buildings to large scale developments.

Several of the buildings use daylight redirecting systems as examined in Task 21. Others use conventional shading systems. Many represent an architectural approach to daylight by using atria, bilateral daylighting strategies or combine sidelighting and toplighting. Some buildings reveal weaknesses in the design due to an inadequate choice of daylighting systems. As each building is unique, none of these strategies can be transferred to another project without reconsideration of all design issues.

The survey shows only selected examples of daylighting design strategies and is not intended to cover all building types, strategies, or types of systems. While the overall building and its urban context is generally characterised in rough terms a representative space was chosen to describe the daylight strategy in more detail. The recording format includes no monitoring. The appraisal of strategies is a personal opinion of the researcher who visited and analysed the building.

A standard page layout for each building helps the reader to easily locate information and permits the comparison of design parameters.

The individual projects can be accessed through two different tables:

**OVERVIEW BUILDINGS** shows the projects in order of location and incorporates information about characteristic design parameters.

**OVERVIEW SYSTEMS** lists the buildings according to their daylight system.

**LEGAL NOTE:** This survey was prepared as an account of work sponsored by the Government of the Federal Republic of Germany. Neither the Federal Republic of Germany, nor the International Energy Agency nor any of their employees nor any of their contractors, subcontractors, or their employees makes any warranty, express or implied, or assumes legal liability of responsibility for the accuracy, completeness or usefulness of any information, apparatus, product or product disclosed, or represents that its use would not infringe privately owned rights.