

For some time the building industry has been in need of a comprehensive reference that describes new and innovative technologies for utilizing daylight in buildings and assesses the performance of these systems. This information is of particular benefit to building design practitioners, lighting engineers, product manufacturers, building owners, and property managers. This book is the result of a coordinated international effort to gather the most up-to-date information available about the application and evaluation of advanced daylighting systems to enhance daylighting in non-residential buildings. Although the text emphasizes the performance of daylighting systems, it also includes a survey of architectural solutions, which addresses both conventional and innovative systems as well as their integration in building design. Innovative daylighting systems are assessed according to their energy savings potential, visual characteristics, and control of solar radiation.

This book is based on work carried out by the Solar Heating and Cooling (SHC) Programme of the International Energy Agency (IEA) under IEA's Task 21, Energy Conservation in Buildings & Community Systems, Programme Annex 29, Subtask A: Performance Evaluation of Daylighting Systems. Subtask A's work programme was coordinated with research carried out by the other IEA SHC Task 21 Subtasks. These included Subtask B: Daylight Responsive Controls, Subtask C: Daylighting Design Tools, and Subtask D: Case Studies.

The IEA was established in 1974 as an autonomous agency within the framework of the Organization for Economic Cooperation and Development (OECD) to implement an international energy programme. A fundamental aim of the IEA is to foster cooperation among 25 of the OECD's 29 member countries and the Commission of the European Community in order to increase energy security and reduce greenhouse emissions. The IEA sponsors research and development in a number of areas related to energy. Within the program of Energy Conservation in Buildings and Community Systems (ECBS), the IEA is carrying out various activities to predict more accurately the energy use of buildings. These activities include comparison of existing computer programmes, monitoring of buildings, comparison of calculation methods, and studies of air quality and occupancy.

The IEA Solar Heating and Cooling Programme (IEA SHC) was initiated in 1977 as one of the first collaborative R&D agreements established by the IEA. The participating countries carry out a variety of projects intended to advance active solar, passive solar, and solar photovoltaic technologies for building applications. The main objectives of the IEA SHC Programme Task 21 and ECBS Annex 29: Daylight in Buildings are to advance daylighting technologies and to promote daylight-conscious building design.

Denmark is the Operating Agent for IEA SHC Task 21. The participating countries are:

Australia	France	Norway
Austria	Germany	Sweden
Belgium	Italy	Switzerland
Canada	The Netherlands	United Kingdom
Denmark	New Zealand	United States
Finland		