
**Information and documentation —
Qualitative conditions and basic
statistics for library buildings — Space,
function and design**

*Information et documentation — Conditions qualitatives et statistiques
fondamentales pour bâtiments de bibliothèques — Espaces, fonctions
et conception*

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 11219 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 8, *Quality — Statistics and performance evaluation*.

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Introduction

This Technical Report provides guidance for the planning of library buildings by identifying requirements of space and technical equipment. It supports decision making for librarians, architects and financing institutions.

This Technical Report considers planning, both for new buildings and for the reconstruction of existing library buildings or the conversion of other buildings for library use.

In order to plan new or reconstructed buildings, libraries need reliable data that can help them to calculate their space requirements and to define the respective technical building equipment for housing the collections, as well as for offering adequate user areas and background areas for the internal library operations. Such data are not yet available in International Standards.

This Technical Report includes data and specifications for all types of libraries, but especially for academic and public libraries. Its main topics are space requirements for:

- user areas (user places, reference and information services, lending services, user training, recreation and communication areas, meeting and exhibition areas);
- collection storage areas (including non-book materials);
- library operations (media processing, bindery, computing and management).

This Technical Report also covers technical aspects like security and safety systems, floor loading, transport systems, acoustic conditions, lighting systems and wiring and the issues of barrier-free construction and sustainability.

Annex A gives an overview of issues to consider when planning to reconstruct or reorganize existing buildings for library purposes. Annex B provides a list of functional areas and rooms to be used when checking the completeness of the plans.

Several clauses of this Technical Report are partly based on References [13] and [18].

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Information and documentation — Qualitative conditions and basic statistics for library buildings — Space, function and design

1 Scope

This Technical Report specifies data for the planning of library buildings. It also provides guidance on the selection of technical building equipment for the different functional areas of libraries.

This Technical Report is applicable to all types of libraries in all countries, but especially to academic and public libraries.

It does not include details on national, regional or local regulations that can affect the planning of library buildings.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

academic library

library whose primary function is to cover the information needs of learning and research

Note 1 to entry: This includes libraries of institutions of higher education and general research libraries.

2.2

accession order

arrangement of books or other documents on shelves in the chronological and numerical order of their addition to a specific category or class, as opposed to an arrangement based entirely on a classification system

Note 1 to entry: Antonym: classified shelving.

2.3

area for events

floor space for events and exhibitions with special technical requirements as to acoustics, lighting, darkening, climate and catering

2.4

art lending library

department of a public library with collections of art books, works of art (e.g. pictures, sculptures) and reproductions, commissioned to lend those books and objects for a specified time period to users

2.5

audiovisual media

documents in which sound and/or pictures are prominent, and which require the use of special equipment to be viewed and/or heard

Note 1 to entry: This includes audio documents, pictures and films on different physical carriers.

Note 2 to entry: Adapted from ISO 2789:2006.

2.6

automated storage

ASRS

high-density storage facility with retrieving function of library materials, generally called Automated Storage and Retrieval System (ASRS)

Note 1 to entry: Advantages of this kind of storage are the efficient use of space and the speed of retrieving and returning of materials.

2.7

axis centre distance

distance between centres of repeated or similar objects

Note 1 to entry: Such objects can be constructional elements or furniture in a row. For shelves, the axis centre distance is the distance from centre post to centre post of two parallel single-sided (single-faced) or double-sided (double-faced) shelves.

2.8

barrier-free access

universal access

accessibility of the library to users with physical requirements other than those of the average user, e.g. as to the height of shelves, tables and equipment or as to working places for visually impaired persons

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2.9

bindery

book binding studio

in-house workshop in a library that performs binding and repair of physical media, especially the daily work such as repairs, binding in urgent cases, production of brochures for the institution's own publications, etc.

2.10

book drop

slot, chute, bin or box with a collection container to which materials borrowed from a library can be returned, especially during hours when the library is closed

Note 1 to entry: Book drops can be free-standing (usually outside the walls of the library) or built into the circulation desk or an exterior wall.

Note 2 to entry: Book drops are often linked to the library system and/or a transport system.

2.11

book transport system

conveyor transporting media from closed stacks to the check-out or user area and back again after check-in

2.12

carrel

work space for information users in the reader area which is shielded against its surroundings but not completely closed

Note 1 to entry: In a carrel, working papers can be kept for continuous research.

Note 2 to entry: Adapted from ISO 5127:2001.

2.13**cartographic document
map**

conventional representation, on a reduced scale, of concrete or abstract phenomena which can be localized in space and time

Note 1 to entry: This includes documents such as two- and three-dimensional maps, globes, plans, topographic models, tactile maps and aerial representations, but excludes atlases and any other cartographic documents in codex, micro, audiovisual and electronic form.

Note 2 to entry: Adapted from ISO 2789:2006.

2.14**catalogue**

ordered list or bibliographic retrieval system allowing access to data and addresses of documents in one or several collections

Note 1 to entry: Catalogues are for the most part offered in the form of online catalogues accessible via terminal or workstation. Older forms are catalogues in book form on shelves and card catalogues sorted in drawers of catalogue cabinets.

Note 2 to entry: Adapted from ISO 5127:2001.

2.15**children's library**

public library area offering special collections and services for children up to 13 years

2.16**circulation space**

space needed for access to the rooms, in-house traffic and evacuation of the building in case of need

Note to entry 1: This includes, for example, floor space of corridors, stairway space, lift shafts and traffic area for vehicles.

Note to entry 2: Movement areas in rooms that belong to the usable area are excluded.

[DIN 277-1:2005-02]

2.17**citizens' service**

service point of the local administration offering easy access for citizens to administrative services (e.g. renewing passports or driving licences, paying dog licence fees)

Note 1 to entry: The service point can be located in a library.

2.18**classified shelving**

storage of media in the order of a subject classification

Note 1 to entry: Classified shelving is usually applied in open-access stacks.

Note 2 to entry: Antonym: **accession order** (2.2).

2.19**closed stacks**

stacks that are not accessible to users

Note 1 to entry: Antonym: **open stacks** (2.58).

2.20

compact shelving

shelves or cupboards which are movable on rails with manual or electric steering and which can be moved close to each other, thus maximizing the storage capacity of a given space

2.21

conservation

intervention techniques applied to prevent, arrest or delay deterioration

[ISO 5127:2001, definition 6.1.03]

2.22

cross-aisle

corridor or passageway that intersects at a 90-degree angle the shelving ranges and stack aisles in the stack area of a library, allowing staff and users to move from one range to another without walking to the end of the range

2.23

delivery entrance

entrance for the receipt or dispatch of library materials or other goods or for the pick-up of waste materials

2.24

desk sharing

policy for minimizing the floor space required for office rooms by which two or more persons share a desk and equipment, especially useful when allocating background space for staff mainly working in contact with users

2.25

double-faced shelf

double-sided shelf

shelving unit with shelf boards on both long sides

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2.26

ductwork

system of ducts for ventilation or the conveyance of liquids, gases, electricity, etc.

2.27

electronic collection

all resources in electronic form in the library collection

Note 1 to entry: The electronic collection includes databases, electronic serials and digital documents such as eBooks, electronic patents and networked audiovisual documents.

Note 2 to entry: Adapted from ISO 2789:2006.

2.28

exhibition

time-limited display of objects, organized or co-organized by the library

Note 1 to entry: Exhibitions can take place inside or outside the library premises.

2.29

file

dossier

organized unit of documents grouped together either for current use by the creator or in the process of archival arrangement, because they relate to the same subject, activity or transaction

Note 1 to entry: Adapted from ISO 5127:2001.

2.30**frontal display****face-out**

method of displaying media face forward, especially in public libraries, which requires considerably more shelf area

Note 1 to entry: Antonym: **spine-out** (2.87).

2.31**functional space**

part of the gross floor area that houses the central operational equipment of a building

Note 1 to entry: This includes, for instance, sewage disposal, heating, conveyor technique.

2.32**gross floor area**

sum of all floor areas of all levels of a building

Note 1 to entry: This includes the usable area, circulation space, functional space and space occupied by the constructional elements of the building (pillars, walls, etc.).

2.33**group study place**

workplace for joint studying by several users

Note 1 to entry: These places are usually constructed in a way that their use does not materially affect the other users.

2.34**inside width**

distance between the inside margins of an object, without taking account of the marginal parts themselves

2.35**interactive spaces**

spaces in buildings where ICT (Information and Communication Technology) is integrated in the furniture (e.g. tables) and in the walls

2.36**interlibrary lending**

loan of a document in its physical form or delivery of a document, or part of it, in copied form, from one library to another which is not under the same administration

Note 1 to entry: Adapted from ISO 2789:2006.

2.37**IT-workplace**

workplace equipped with information technology (personal computer, terminal or multimedia equipment, etc.)

2.38**kinderbox**

special furniture for presenting large books (picture books, comics) or other media in frontal display

2.39**learning centre****information commons**

library service area specially dedicated to learning purposes

Note 1 to entry: Usually, a learning centre integrates library and computer application services, in most cases with a wireless network, equipment for multimedia use and support services for users by librarians and/or IT specialists.

Note 2 to entry: A learning centre can be a separate facility, inside or outside the library, or an integral part of the library.

2.40

lending area

library service area for supplying and returning books and other media for loan

2.41

lending library

circulating library

library that offers collections for loan outside the library

2.42

library

organization, or part of an organization, the main aim of which is to facilitate the use of such information resources, services and facilities as are required to meet the informational, research, educational, cultural or recreational needs of its users

Note 1 to entry: The supply of the required information resources can be accomplished by building and maintaining a collection and/or by organizing access to information resources.

Note 2 to entry: These are the basic requirements for a library and do not exclude any additional resources and services incidental to its main purpose.

Note 3 to entry: Adapted from ISO 2789:2006.

2.43

linear metre

measure of shelf space for the net space on a shelf, without supporting construction

2.44

live load

variable or movable load of a building unit

Note 1 to entry: This includes persons, equipment (e.g. shelving or compact shelving, inclusive of books and other media), light partition panels without load, machines and snow.

2.45

loading bay

area at the side of a building where goods are loaded on and off delivery vehicles

2.46

loading ramp

inclined plane between two levels for the passage of delivery vehicles

2.47

loan desk

circulation desk

service point at which media are checked in and out of a library, usually a long counter located near the entrance or exit with one or more working places for staff

2.48

lounge

meeting and waiting space for users, offering relaxed seating

Note 1 to entry: See also **staff lounge** (2.91).

2.49

main aisle

stack aisle that serves as access to a larger unit or shelving section, in a room

Note 1 to entry: A stack aisle does not necessarily meet the requirements for a traffic route.

2.50**media centre**

library service area providing audiovisual and multimedia documents, equipment and services, staffed to assist users in using these collections

2.51**microform**

photographic document requiring magnification when used

Note 1 to entry: Microforms are to be used with adequate reading devices. Special reader printers allow re-magnifying of minimized texts and printing on paper.

Note 2 to entry: Adapted from ISO 5127:2001.

2.52**movement area**

free area between storage areas or walls

Note 1 to entry: This includes the space which is necessary for usage or operation in front of equipment and functional areas. Additionally, it includes space for doors that open into the room. Mandatory safety clearance is not included.

2.53**multimedia document**

document combining different information media, text, graphics, photos, video, audio for interactive use, in digital format

Note 1 to entry: Multimedia documents can be available on physical carriers such as CDs (compact disks) or DVDs (digital versatile disks) or as networked publications.

Note 2 to entry: Adapted from ISO 2789:2006.

2.54**multimedia workplace**

workstation with special hardware and software for using multimedia documents

Note 1 to entry: The characteristics of such workplaces are high capacity computers and large screens, as a result of the contents, presentation and combination of electronic media (e.g. moving pictures simultaneously with text and audio). Where appropriate, these places can also be equipped with headphones.

2.55**multi-touch technology**

type of interface allowing interactive data processing by touch or motion, equipped either with a touch-sensitive surface and/or with motion sensors.

Note 1 to entry: Multi-touch interfaces can be small, as used in smartphones, or large, as used in multi-touch collaboration walls.

2.56**music library**

department of a public library with collections of materials on music and musicians, including sheet music, recorded music (CDs, audiocassettes, records, etc.), discographies and music reference material, offering lending services and user places for listening to music

2.57**non-book material**

library materials that have physical form but are not bound in codex form like a book, e.g. autographs, maps, plans, microforms, audiovisual documents, games or pictures

Note 1 to entry: Electronic media are excluded.

Note 2 to entry: Some of these media need special furniture for presentation or special equipment for using them, e.g. tables for consulting maps, a reader printer, etc.