इंटरनेट मानक

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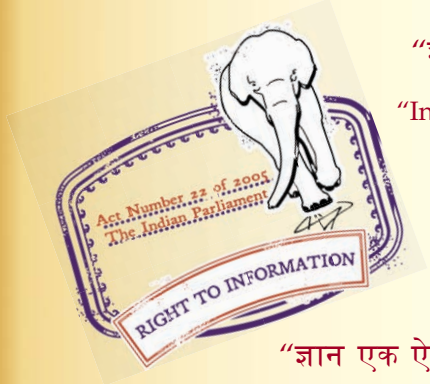
Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

"जानने का अधिकार, जीने का अधिकार"
Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

"पुराने को छोड नये के तरफ"
Jawaharlal Nehru
"Step Out From the Old to the New"

IS 1553 (1989): Design of Library Buildings - Recommendations Relating to its Primary Elements [CED 51: Planning, Housing and pre-fabricated construction]



"ज्ञान से एक नये भारत का निर्माण"
Satyanarayan Gangaram Pitroda
"Invent a New India Using Knowledge"

"ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है"
Bhartṛhari—Nītiśatakam
"Knowledge is such a treasure which cannot be stolen"

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IS 1553 : 1989
(Reaffirmed 2005)

Indian Standard

DESIGN OF LIBRARY BUILDINGS — RECOMMENDATIONS RELATING TO ITS PRIMARY ELEMENTS

(Second Revision)

(Second Reprint DECEMBER 1992)

UDC 727.82.011.2:022

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
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FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards on 7 February 1989, after the draft finalized by the Planning, Byelaws and Dimensional Co-ordination Sectional Committee had been approved by the Civil Engineering Division Council.

This standard was first published in 1960 and revised in 1976. The present revision has been undertaken with a view to updating its contents. In this revision, building design and construction aspect has been incorporated in detail covering fire safety. The site location aspect has also been modified.

Libraries of all types are expanding at an enormous rate. Increase in demand for documents, official policy and increase in literacy make this process inevitable. Since the development of new library takes several years, the stock to be accommodated on the opening day, therefore, will be larger than was estimated when the planning started. Therefore, it is absolutely essential to estimate the areas of the library building at a given future date and relate the requirements to that date. The additions and alterations later are likely to cause fire hazards.

The recommendations made in this standard may not, however, meet all the situations that may arise in individual cases and it may become necessary to deviate from the provisions of this standard or suitably adapt them to meet such situations.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

DESIGN OF LIBRARY BUILDINGS — RECOMMENDATIONS RELATING TO ITS PRIMARY ELEMENTS

(Second Revision)

1 SCOPE

1.1 This standard covers the recommendations relating to primary elements in the design of library buildings.

1.2 This standard does not provide recommendations for the types of libraries for special classes of users, such as, library for the blind, field library (military), etc, for which requirements will have to be separately worked out.

2 REFERENCES

2.1 The Indian Standards listed in Annex A are necessary adjuncts to this standard.

3 BASIC PRINCIPLES FOR DESIGN

3.1 This standard has 'open access' libraries in view as the design for 'open access' will also suit the 'closed system' whereas the converse is not true. A note on basic principles of design is given in Annex B indicating the factors to be taken into account in the design of a library building.

4 CLASSIFICATION OF LIBRARIES

4.0 For the purpose of this standard, libraries have been grouped into the following categories.

4.1 Public Library (PL)

a) National Library (NL),

b) State Library (SL),

c) City Library (CL),

d) District Library (DL), and

e) Branch Library (BL).

NOTE — Librachine or mobile or travelling library is covered separately in IS 2661 : 1978.

4.2 Academic Library (AL)

a) University Library (UL),

b) Departmental Library (DL),

c) College Library (CL), and

d) School Library (SL).

NOTE — Recommendations relating to primary elements in the design of school library buildings are separately covered in IS 8338 : 1976.

4.3 Institutional Library (IL) (Other than Academic Library)

a) Library of a Research Laboratory (RLL),

b) Industrial Research Library (IRL),

c) Government Departmental Library (GDL), and

d) Library for Professional Institutions (LPI).

4.4 Dormitory Library

NOTE — The essential function of a dormitory library is to store reading materials weeded out by any single large library and/or by different service libraries in a region or a state. It is not a service library. Whenever any reading material stored in a dormitory library is required by a reader, it will be sent on to his service library.

5 LOCATION

5.1 The proper location of a library will substantially influence the extent to which its services will be made use of by the reading public. The location of a library should be such that it is conveniently accessible to those it is designed to serve. The site selected for building should satisfy the following norms:

a) Adequate separation (about 10 m) should preferably be available between the building and the other neighbouring buildings.

b) The site shall not be in the immediate neighbourhood of any hazardous occupancy.

c) The site shall abut on a road of not less than 12 m width. One end of the road shall join another road of the same width and the road shall not have a dead end.

d) Adequate supply of watar is assured for fire fightine purposes.

e) A public fire brigade is within easy running distance from the site.

5.2 The following general considerations shall apply in regard to the location of different kinds of libraries.

5.2.1 *Public Library*

A public library shall be centrally situated along with other community buildings.

5.2.2 *Academic Library*

An academic library shall be located centrally with respect to class rooms, research rooms and laboratories. There shall be convenient access from these for the library.

5.2.3 *Institutional Library*

An institutional library shall be located centrally with respect to the work places of its members.

5.2.4 *Dormitory Library*

A dormitory library may be located in an area where land is inexpensive and available for future extension. It shall have unobstructed accoss all the year round from the service library concerned.

6 SIZE OF LIBRARIES

6.1 The size of different libraries will vary with the volume of the service to be rendered.

7 ROOMS REQUIRED IN EACH TYPE OF LIBRARY

7.1 Essential rooms required to be provided for different types of libraries are given in Table 1. The size of the rooms shall dependupon the actual requirements in each case. The general requirements for sizes are however given in Table 1.

Table 1 Rooms Required for Different Types of Libraries

(*Clauses* 7.1 *and* 7.3)

Sl No.	Room Normally Separate	Public Library					Academic Library		Institutional Library	Dormitory Library
		NL	SL	CL	DL	BL	UL	DL		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
i)	Stack room	R	R	R	R	R	R	—	R	R
ii)	Catalogue room	R	R	R	R	R	R	—	R	—
iii)	General reading room	R	R	R	R	R	R	R	R	—
iv)	Periodicals reading room	R	R	R	—	—	R	—	R	—
v)	Special reading room	R	R	R	—	—	R	—	—	—
vi)	Research cubicles	R	R	R	—	—	R	—	—	—
vii)	Group study room	R	R	R	—	—	R	—	—	—
viii)	Seminar room	R	R	R	—	—	R	—	—	—
ix)	Conference room	R	R	R	—	—	—	—	—	—
x)	Exhibition room	R	R	R	R	—	R	—	—	—
xi)	Librarian's room	R	R	R	R	R	R	—	R	—
xii)	Deputy librarian's room	R	R	R	R	—	R	—	R	—
xiii)	Technical staff room	R	R	R	R	—	R	—	R	—
xiv)	Administrative staff room	R	R	R	R	—	R	—	—	—
xv)	Committee room	R	R	R	R	—	R	—	—	—
xvi)	Display space at entrance	R	R	R	R	—	R	—	—	—
xvii)	Night watchman's room	R	R	R	R	R	R	—	—	R
xviii)	Microfilm reading room	R	R	R	—	—	R	—	R	—
xix)	Document reproduction room	R	R	R	R	—	R	—	R	—
xx)	Computer cell room	R	R	—	—	—	R	—	R	—
xxi)	Audio-visual room	R	R	R	R	—	—	—	—	—
xxii)	Store room	R	R	R	R	R	—	R	R	R

'R' indicates required.

'—' indicates not required.

7.2 Where necessary, two or more users may be accommodated in one room depending upon the size and the kind of library and the intensity to its use.

7.3 Additional rooms may be added to those given in Table 1 to meet special needs, such as, reprography, music library, map library, etc.

8 ORIENTATION OF LIBRARIES

8.1 For orientation, reference shall be made to IS 7662 (Part 1) : 1974.

9 CIRCULATION

9.1 Each floor of the library building shall be at one single level to facilitate the movement of book trolley from one part to another. Thresholds shall not be provided anywhere inside the building.

9.1.1 The movement of the book trolley from one tier to another where there are three or more tiers in the stack room, should be through electric lifts provided within the stack room with landing at every tier of the stack room and at other connected adjacent rooms. In large libraries where quick mechanical carriage of books and related materials are required, special arrangements, such as, pneumatic tubes and belt conveyors may become necessary. This may require to be considered at the initial stages of design of the library and its building.

9.1.2 The rooms shall be arranged in such a way that the staff other than those servicing the reading room shall not have to pass through the reading room disturbing the readers.

9.2 Control Region

Entrance to the library building and exit from it shall be only through the counter enclosure in the general reading room at the point of entrance from the entrance lobby.

9.2.1 The control region shall be so arranged as not to permit any contact between a person in the reading room and a person in the entrance or exit gangway.

9.3 All the other open areas resulting between the stack room and the wings of the main building shall be properly enclosed with a view to ensuring the safety of books.

10 RELATIVE POSITIONS OF ROOMS

10.1 The stack room should be so placed that it is easily accessible from and proximate to every part of the library.

10.2 The catalogue room should be like an anteroom to the stack room on the way from the general reading room to the stack room.

10.3 The general reading room should be close to the entrance.

10.4 Periodicals room may be further removed from the general reading room. But independent access to it shall be possible when the other rooms in the library are closed.

10.5 Special reading rooms may be still further removed from the general reading room.

10.6 The librarian or the deputy librarian should have his room in close proximity to the general reading room.

10.7 The rooms of the technical and administrative staff should be placed in close proximity to the rooms of the librarian and the deputy librarian.

10.8 The technical staff shall have independent access to the stack and catalogue areas.

10.9 The cubicles, the rooms for group study, the committee room, etc, may be in a separate wing or a separate floor.

10.10 The exhibition room may be combined with the entrance lobby or placed as close to it as possible.

11 SIZES OF ROOMS, GANGWAYS AND POSITION OF GANGWAYS

11.1 Gangways

Gangways are not only essential for efficient functioning of the library but also to allow easy access/passage to firemen to various parts of a room/building. The minimum clear width of gangways shall be as follows:

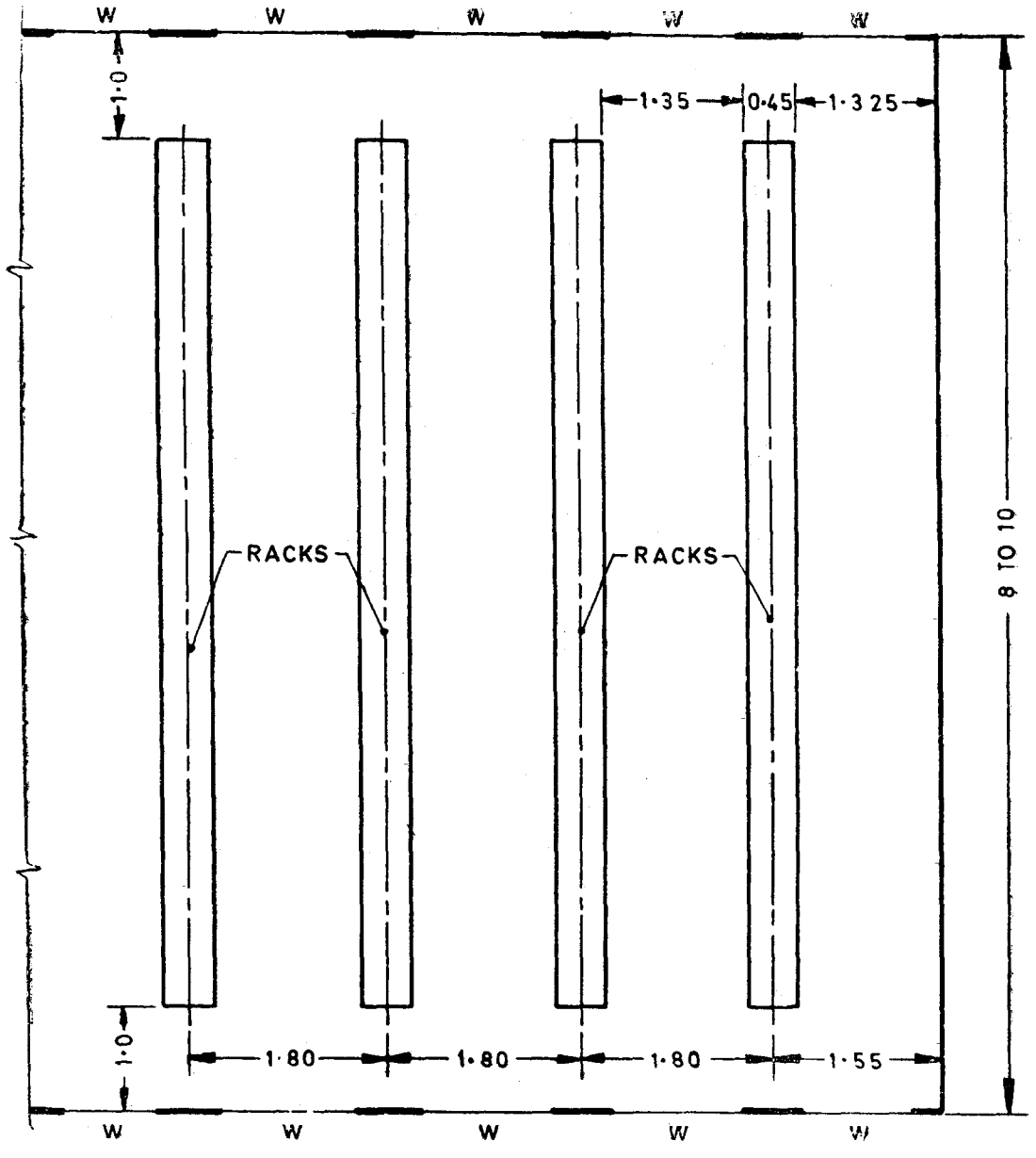
a) Longitudinal gangway not less than 1 m,

b) Cross gangway not less than 1·35 m, and

c) End gangway (between the end wall and nearest row of racks/reading table) not less than 1·325 m.

11.1.1 All gangways shall be maintained clear without any obstruction whatsoever, at all times. No books, records or furniture or any other article shall be placed in a gangway.

11.1.2 A typical arrangement of gangways is illustrated in Fig. 1.



W = Windows.

All dimensions in metres.

FIG. 1 PART LAYOUT OF STACK ROOM (ILLUSTRATIVE)

11.2 The dimensions of stack room should be as follows (*see also* Fig. 1):

a) *Clear Length in Metres,* $1{\cdot}80\,n + 3{\cdot}10$ where n is the number of rows of book racks*.

*Each unit book rack 2 m long may be assumed to house 700 to 750 volumes and 1 m² of stack room area may be assumed to house 150 volumes.

NOTES

1 The centre-to-centre distance between consecutive racks is 1·80 m (on the basis of 0·45 m of rack depth plus 1·35 m of cross gangway width).

2 The distance from an end wall of the stack room to the centre of the nearest row of racks is 1·55 m (on the basis of 1·325 m of the end cross gangway plus 0·225 m of half rack depth).

b) *Clear Width*

1) 3 m (on the basis of 1 rack, 2 m long plus one longitudinal gangway of 1 m) close to a longitudinal wall;

2) 5 m (on the basis of 2 racks, each 2 m long plus one longitudinal gangway of 1 m) close to a longitudinal wall;

3) 8 m (on the basis of 3 racks, each 2 m long plus two longitudinal gangways of 1 m each) close to each of the longitudinal walls; and

4) 10 m (on the basis of 4 racks, each 2 m long plus two longitudinal gangways of 1 m each) close to each of the longitudinal walls.

NOTE — Three metres and five metres width are generally used only in the case of stack spaces as the stack room and the reading room may be combined into a single room in such cases.

c) *Clear Height*

Floor to ceiling, 2·40 m.

NOTES

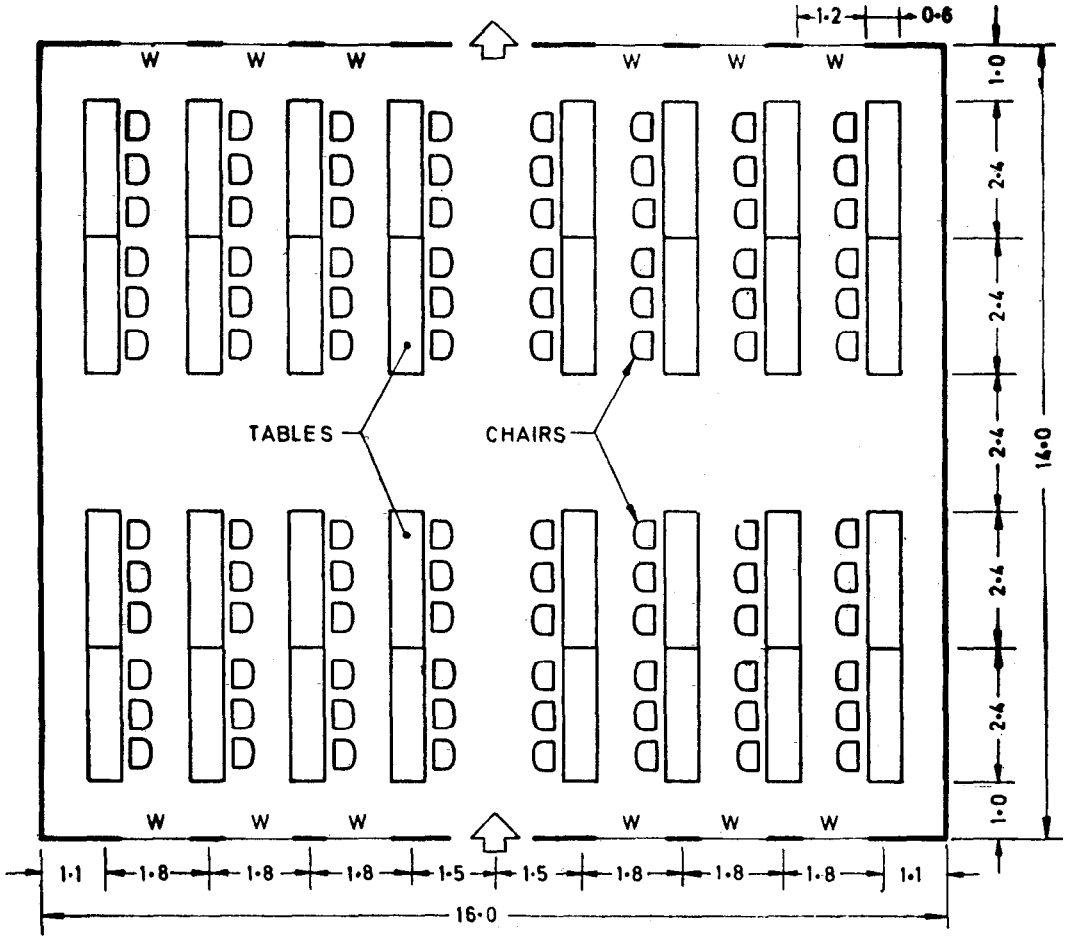
1 The height of the rack is 2·20 m and allowance for bay guides is 0·20 m.

2 The stack room should be combined with necessary devices for effective ventilation.

11.3 Reading Room

The average area per reader in the reading room should be 2·33 m^2, *Min.* An illustrative layout of the reading room is shown in Fig. 2.

NOTE — The size of the reading table as shown in Fig. 2 is 2·4 m × 0·6 m. The centre-to-centre distance between two consecutive rows of reading room tables is 1·8 m with seating arrangement on one side of the table only.



W = windows.

All dimensions in metres.

FIG. 2 ILLUSTRATIVE LAYOUT OF READING ROOM

11.4 The sizes of the other rooms shall normally be as follows:

For Use of	*Area* m^2
a) Librarian and deputy librarian	30
b) Classifier, cataloguer, accession librarian and maintenance librarian	9 per person
c) Secretary to the librarian	9
d) Visitor's room	15
e) Administrative and professional staff not at service points and other than those mentioned in (b)	5 per person
f) Group discussion room	2 per person
g) Conference room	2 per person
h) Seminar room	2 per person
j) Committee room	2 per person
k) Cubicles	7 per person

11.5 Dimensions of rooms other than those mentioned in **11.2** to **11.4** are to be determined according to local needs.

12 BUILDING DESIGN AND CONSTRUCTION

12.1 Building design and construction should take into account the following aspects specially to ensure fire safety at the design and construction stage itself. The site shall be large enough to ensure that:

a) adequate passageway (not less than 6 m wide) and clearances required for fire appliances to enter the premises is provided; the width of the main entrance shall be not less than 4·5 m; if an arch or covered gate is constructed, it shall have a clear head room of not less than 5 m;

b) separate open spaces are available to park cars and/or other vehicles in addition to (a); and

c) a clear passageway of 6 m width is maintained contiguous to and around the building.

12.2 Building Design

12.2.1 *Stack Room*

This is the most important and valuable feature of any library. It is, therefore, essential that it is suitably compartmented, both horizontally and vertically, to ensure that fire in any compartment cannot spread to other compartments.

12.2.1.1 Each stack room shall be so oriented as to avoid direct sun (through windows, etc),

12.2.1.2 Relative position of each stack room, *vis-a-vis* other rooms or buildings, shall be such that any fire outside the stack room cannot spread to it.

12.2.1.3 Where the stack room has several tiers of racks, each tier shall be separated from the succeeding one by a non-combustible floor. The intervening floors must not have any apertures in them. Any arrangement where the book racks extend through several floor levels and the stack floors are merely platforms, which provide a walkway through the stacks and result in slot-like openings between the stacks and the walkways, shall be strictly avoided to prevent rapid, uninterrupted upward spread of a possible fire.

12.2.1.4 Each stack room shall be divided into compartments so that no single compartment shall have a floor area exceeding 400 m^2. Where possible, the area of each compartment may be further reduced.

12.2.1.5 Each compartmentation wall shall be entirely of non-combustible construction with a fire resistance rating of not less than two hours. No opening shall be provided in any compartmentation wall except for a door, if unavoidable. In all such cases, the door shall be a self closing fire/smoke check door with a fire resistance rating of not less than one hour.

12.2.1.6 Windows in the side walls of the stack room shall be opposite each cross gangway. Each window shall be provided with glazed shutters and additionally protected with wire fabric. The wire fabric shall be of suitable mesh to prevent squirrels, rats, etc, from passing through. The glazed shutter, when fully open, shall not project into the gangway.

12.2.1.7 Each stack room shall be at the same level as the rest of the floor served by it. The stack room shall not be provided with any threshold.

12.2.1.8 In multi-storeyed buildings where lift(s) may be required for vertical movement of books/records, the lift(s) shall be electrically operated with landing at each level in the stack room. The lift(s) shall have solid non-combustible doors with a fire resistance rating of 2 hours and shall not be used as passenger lift(s). Where passenger lift(s) are required, these shall be installed separately and away from the stack rooms.

12.2.1.9 Stack room shall be so designed that it cannot get flooded and rain water cannot enter

it through windows, ventilators, etc. The room shall be damp-proof.

12.2.1.10 All services, such as, lighting and electrical fittings, air-conditioning, sound insulation, etc, as may be necessary, shall be considered at the initial stages of design of the library and its building.

12.2.2 *Reading Room*

As far as possible, the reading room shall be designed to admit natural light but where this is not possible, adequate illumination shall be provided to enable readers to use the facility without any strain on their eyes and also without any glare. Consideration may be given to the installation of fixed table lights. If any reading room is accessible directly from the outside, all windows and ventilators shall be provided with wire fabric of suitable mesh to prevent rats, squirrels, etc, from passing through. In addition, glazed shutters shall also be provided.

12.2.3 *Catalogue Room*

Because of its importance and proximity to the stack room, it is essential that the various design aspects given for stack room are also complied with for the catalogue room.

12.2.4 *Other Rooms*

Other rooms may be located according to convenience of use in relation to the day-to-day working. Some examples are given here.

12.2.4.1 Rooms in proximity of or directly communicating with the catalogue room and the stack room shall be fitted with self-closing fire/check doors of not less than 1 h rating.

12.2.4.2 All windows and ventilators in the rooms accessible from outside shall be provided with wire fabric to prevent books, periodicals, etc, being, passed out through them.

12.2.4.3 Canteen for the readers and the staff shall preferably be placed in an independent building well separated from other buildings. Where this is not possible, the canteen kitchen shall be isolated from the adjoining rooms by fire resisting walls of not less than 2 h rating, fitted with self-closing fire check doors of not less than 1 h rating. In any case, the canteen shall not be placed in proximity of the catalogue and the stack rooms.

12.2.5 *Compound*

A compound with adequate open space all round the buildings shall be provided to ensure adequate separation of buildings from the adjoining property and adequate space for internal roads, car park, water sources for fire fighting and an incinerator.

12.2.5.1 Entry gate to the compound shall have a clear width of not less than 4·5 m.

12.2.5.2 Paved access-ways shall be provided within the compound to enable vehicles to have access to parking areas and fire appliances to have access to water sources and the various buildings in the complex. Each of these access-ways shall be not less than 5 m in width. Turnings shall be widened and hard standing(s) provided, where necessary, to ensure easy manoeuvrability of fire appliances.

12.2.5.3 Parking area for cars and/or other vehicles shall be placed well away (not less than 6 m clear) from any building.

12.2.5.4 Location of the incinerator, shall be well away from any building or adjacent property. Where necessary, a suitable fire resisting enclosure of suitable height shall be provided for the incinerator to ensure its fire separation from buildings.

12.2.5.5 Paved surface shall be provided up to a distance of 3 m around each building so as to prevent the growth of grass or other vegetation in that area.

12.2.6 *Underground and Windowless Buildings*

Buildings or portions of buildings that are completely underground, or largely so, or are windowless, or are completely ventilated by mechanical means do offer advantages in controlling temperature, humidity and air pollution but such buildings pose special problems for fire extinguishment and life safety in the event of a fire. The problems are accentuated if there is a failure of power supply which may impair the lighting and ventilation system. Such buildings are, therefore, not recommended.

12.2.6.1 Where it is unavoidable to house library in buildings identified above, the following provisions shall be made:

a) Alternative means for safe venting of heat and products of combustion,

b) Adequate roof ventilation,

c) Means for safe emergency evacuation of persons who may be present in the building at the time of a fire,

d) Means of access for the fire brigade to the fire area. Consideration may be given for this purpose to the provision of 'knock-out' panels, located to permit direct access

to well-maintained aisles within the building.

e) Automatic fire detection and alarm system, and

f) Automatic sprinkler system (in addition to the automatic fire detection system).

12.3 Building Construction

Building/compartment of a building for housing books/valuable; vital and permanent records shall have a fire resistance equal to not less than that of Type-I construction, as specified in IS 1642 : 1988 and shall comply with the following minimum requirements:

a) Use of combustible materials shall be avoided in the construction of the building/ compartment or any portion thereof, including the floor, roof, lining, surface finish, doors and windows.

b) Each compartment/room for storage of books/records shall be effectively segregated from other compartments/rooms and from other portions of the building, both laterally and vertically. For this purpose, openings between floors in multi-storeyed buildings shall be protected so that a fire on one floor cannot spread to the floors above or below. Stairways, lifts and cable/pipe shafts shall be properly enclosed or protected so that openings do not detract from the ability of the floor assembly to resist passage of fire. The separating walls/enclosures, including enclosures for all vertical openings, such as, stair-wells, shall have a fire resistance of not less than that of Type-I construction, as specified in IS 1642 : 1988 with all openings protected by fire check doors of not less than one hour fire resistance.

c) Floors/stagings in storeyed buildings or specially built records facilities shall not be grated or perforated because such construction aids the rapid vertical spread of fire.

d) Roofs of buildings/compartments housing books/records and floors of storeyed record storage facilities shall be leakproof. In the latter case, adequate drainage must be provided at all floor levels to prevent accumulation of water during fire fighting operations.

13 OTHER SERVICES AND AMENITIES

13.1 Water closets, urinals, wash basins and other similar facilities shall be provided in accordance with the requirements laid down in IS 1172 : 1983.

13.2 Adequate provision should be made for canteen, rest rooms for the readers and the staff, parking area, first aid room, etc, where necessary.

13.3 Suitable provision for suspending bay guides from the ceiling of each tier of the stack room should be made.

For example, at a depth of about 50 mm from the ceiling of each tier of the stack room and at a distance of about 50 mm from both sides of a row of book racks, a rod may be run from wall to wall of the stack rooms, so that frames holding the bay guides may be suspended and slid along.

13.4 Requirements for the use of library for night reading, where needed, may be kept in view when designing a library.

13.5 Adequate consideration shall be given to protect the area of the library from dust, dampness, insects, rodents, etc.

13.6 For details of fire protection and safety, reference shall be made to IS 11460 : 1985.

14 LIGHTING AND OTHER ELECTRICAL POINTS

14.1 For details of principles and practices governing good lighting of libraries, reference shall be made to IS 2672 : 1966 which also recommends the levels of illumination to be achieved by general principles of lighting. For daylighting, reference shall be made to IS 7942 : 1976.

14.2 The general lighting shall be such as would easily suffice the reader at the desk and between the aisles of the stacks when looking for a volume.

14.3 While locating fan points and light points, care shall be exercised to see that the intervention of the shadow of the blades of the revolving fan does not further worsen the flickering effect of the fluorescent lighting.

14.4 Adequate provision of plug points for servicing with vacuum cleaners, sprayers, etc, should be provided at appropriate areas.

14.5 Emergency lighting shall be provided at suitable points, for example, staircases, reading room, gangways, control region and bathroom.

15 NOISE CONTROL

15.1 Internal noise consisting generally of conversation, frictional noise (chairs scrapping the floor and the impact of heels on hard floor) and

mechanical noises (from book hoists and typewriters) shall be controlled effectively, for example, by using noise absorbing materials in ceiling, walls, floors and partitioning surfaces.

15.1.1 All legs of movable furniture should be provided with rubber shoes. The book trolleys should be with rubber tyres.

15.2 The maximum acceptable noise level in a library should be 40 to 45 dB.

15.3 For details of methods for achieving noise reduction and sound insulation, reference shall be made to IS 1950 : 1962.

16 AIRCONDITIONING

16.1 Provision for airconditioning to maintain uniform temperature of 22±1°C and relative humidity at 50 ± 5 percent round the clock throughout the year for at least the storage space where rare books, manuscripts and similar irreplaceable materials are stored, shall be made.

ANNEX A

(*Clause* 2.1)

LIST OF REFERRED INDIAN STANDARDS

IS No.	*Title*	*IS No.*	*Title*
IS 1172 : 1983	Code of basic requirements for water supply, drainage and sanitation (*third revision*)	IS 7662 (Part 1) : 1974	Recommendation for orientation of buildings : Part 1 Non-industrial buildings
IS 1642 : 1988	Code of practice for fire safety of buildings (general) : Details of construction (*first revision*)	IS 7942 : 1976	Code of practice for daylighting of educational buildings
IS 1950 : 1962	Specification for sound insulation of non-industrial buildings	IS 8338 : 1976	Recommendations relating to primary elements in the design of school library buildings
IS 2661 : 1978	Specification for mobile library van (*first revision*)	IS 11460 : 1985	Code of practice for fire safety of libraries and archives
IS 2672 : 1966	Code of practice for library lighting		

ANNEX B

(*Clause* 3.1)

BASIC PRINCIPLES OF DESIGN

B-1 MONUMENTAL VERSUS FUNCTIONAL

B-1.1 Whenever a conflict arises between monumental and functional design and one of these has to give way to the other, the functional requirements should be given greater weight in the design of the library building. This would particularly indicate the undesirability of having circular, square, butterfly and similar type of design in a library building.

B-2 DESIGN FOR OPEN ACCESS

B-2.1 A library building designed for 'open access system' can also serve a 'closed system' but the converse is not true. Therefore and in view of the world trend towards 'open access system', the design for a library building should be as for 'open access'.

B-2.1.1 The following are some of the implications of this:

a) One entrance and one exit should be provided for the public at the counter so as to be under the control of the circulation staff within the counter enclosure.

b) It should be secured that there is no means for passing of books between the readers in the entrance or exit gangway and those inside the library.

c) Doors and windows should be protected with wire fabric for safety of books.

d) The circulation within the building should be designed in such a way that the readers are not distracted by the traffic and that the catalogue room and the stack room are within the closest reach possible from the counter.

NOTE — The seating of the readers in any reading room should be such that no reader is made to face the general or the main flow of traffic.

e) The height of a unit book rack should be such that the books in the topmost shelf can be easily picked out by a person of normal height standing on the floor.

f) Each window in the stack room should have the maximum possible area so as to admit maximum possible natural light in the cross gangway facing it.

g) Each window in a reading room should be so placed as to throw sufficient natural light on the reading table from the left and the back of the readers sitting in a line at right angles to it.

h) Provision should be made for research cubicles, one for each reader, to have a quiet enclosure, all for himself, in which he can keep his reading materials for several days.

B-3 DIMENSIONS

B-3.1 The basic dimensions of a library building shall be in multiples or submultiples of 100 mm module. The dimensions concern every piece of library furniture — the small primary charging tray, the final charging tray, the primary work box for the sections, the trays in the work tables, the work tables themselves, the catalogue cabinets, the book trolleys, the book racks, the window sills, the reader's tables, the circulation counter, the turnstile of the circulation counter, the height of the book rack, the height of the windows and doors, etc. The dimensions of each of these should register with one another. The cost of production, servicing and replacement will swell unnecessarily if they do not all conform to modular standard dimensions. Economy of space and comfort to reader are the deciding factors in fixing the various dimensions. Special attention should also be given to economical storage and proper protection of books.

B-3.2 Without prejudice to any further innovative design, it should be possible to conform to the principles of modular coordination, dry construction, standardization and simplification of the elements of a library building and its fittings and furniture.

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The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

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