UNIVERSITY OF MARYLAND
ARCHITECTURE PROGRAM
ARCH 401 – FALL 2019

INSTRUCTORS: Michael Abrams, Georgeanne Matthews, Danielle Alexander,
Douglas Crawford and Joseph McKenley

PROJECT 3: Design a Library Building

LOCATION 1643-45 Connecticut Ave NW (DuPont Circle)
Washington, DC

"The Library as a 'third place' between home and work" – Ken Worpole

This final project is a culmination of the Level 1 experience, incorporating and developing the issues addressed throughout the year. Principles of procession and space making, functional organization, climate design, and room and façade design, are explored in an urban context. Thus it should be kept in mind that each of the projects over the course of the year has introduced new issues, which are relevant to the successful completion of this project. Based on the lessons learned in the precedent analysis each student will apply the principles of their case study into their own design, which in turn will inform the final design product. To start, students must develop a series of iterations (study models); this will help them to develop a strong *parti* or concept.

GOALS/INTENTIONS:

1. To understand basic compositional strategies for the infill type of building;
2. To understand the relationship of building, landscape, and context;
3. To understand the relationship between compositional strategy and tectonic type;
4. To be able to manipulate architectural elements and compositions as they relate to iconographic/symbolic intentions, as well as notions of public and private;
5. To understand and be able to manipulate the idea of program as it relates to building organization and image, as well as the role of the façade in the city, on the street, garden, etc.
6. To understand and apply basic building code and ADA (barrier-free) requirements

RESOURCES:

Modern Architecture 1851- 1919 and 1920-1945, Frampton
The Ecole Des Beaux Arts, Drexler
Louis I Khan, 1983 Architecture and Urbanism Monograph
The Architecure of McKim, Mead & White, Intro by Richard Guy Wilson
H.H. Richardson, Complete Architectural Works, Jeffrey Oschsner
Michael Graves – Buildings and Projects, 1966 – 1981, published by Rizzoli
"An Intimate Sequence of Spaces" (Michael Graves' San Juan Capistrano Library)
In Architecture Magazine, December 1989
The Architecture of Frank Furness, O'Gorman
Book Shops: long-established and most fashionable, Markus S. Braun, 2012
Contemporary Library Architecture: a planning and design guide, Ken Worpole, 2013
**Building Construction Illustrated*, by F. Ching and C. Adams, latest edition
**Building Codes Illustrated*, by F. Ching, latest edition
**Architect's Studio Companion* by E. Allen and J. Lano, latest edition

PROJECT 3B: Library Program and Rules

PROGRAM NARRATIVE

The library must relate comfortably to the other buildings in DuPont Circle, yet have its own character and identity. The city is not nostalgic for historic styles, and there are no Fine Arts Commission constraints on this block. You should develop a **narrative** or **story line** for the building as part of the process of establishing its character.

As part of the narrative the DuPont Circle neighborhood has allowed you, the designer, to select the specialization of the library. For instance, you could propose the building to be a corporate library, government library, architecture library, music library, science library, children's library, art library, film library, performance arts library, history library, law library, medical library, museum library, news library, rare books library, nonprofit library or a specialized library that you see fit for DuPont Circle. Select the type of collection, or specialized collection, in the library.

BUILDING PARAMETERS

Maximum height of the library is 50' (approximate heights: ground level will be 15' ht. / upper levels 11' ht. each); setbacks and projections are allowed within appropriate reason. On the Upper levels you may project bays or balconies, of no more than 3 feet. If desired, you may carve a loggia and have a rooftop terrace. Flagpoles may excess the projection limit or height limit. The landscape of a proposed small garden, courtyard or deck area, the relationship of the library to Connecticut Ave., and street frontage will be important to this project. Existing alleyway will remain intact. Trash and mechanical room must be kept hidden from the public. Trash collection will be directly from the alleyway.

WHAT DO PEOPLE USE LIBRARIES FOR?

According to the most recently collected statistics on library use (England, 2010), the following percentages are given for the most common activities by library users:

- Borrow books (81%)
- Research (30%)
- Children's activities (20%) –such as storytelling, craft-making, parties, and other events
- Borrow music, films or computer games (19%)
- Computer use (16%)
- Neighborhood meetings and public lectures (12%)

ESTABLISHING THE GROUND RULES

A library first and foremost must be 'customer-focused', or simply put, designing for effective use. If the building and its location themselves present obstacles to public access, then trouble is sure to follow.

According to Christine Fyfe (University Librarian at Leicester University, UK), the key elements of a successful library as far as library staff and users were concerned included the following:

- Maximize natural light
  -*Southern light* is bright and can produce glare.
  -*Northern light* is diffuse; produces no glare. Excellent for reading, writing and drawing.
- Provide a welcoming and warm ambience with the dignity of the library
- Create vistas and visual interest – and intimacy (with nooks and crannies)
- Design a place that is a pleasure to be in for long periods of time
- Deliver the most sustainable building possible within the budget
- Use zoning to accommodate a range of behaviors – from silent to social spaces (keep quiet zones separate from loud zones)
- Design areas for socializing (sound-proofed) away from quiet areas.
- Design settings to encourage education and positive behavior
- Use comfortable and flexible chairs for group work

A PLACE FOR BOOK STACKS

Book stacks not only signal the presence of knowledge, culture and memory, but their configuration and mass are also vital in many other ways.

The layout of book stacks:

- Helps define routes though the library
- Acts as acoustic barriers (very important in children's sections)
- Can be configured to create distinct reading areas at perimeter of floor space
- Helps provide thermal mass
- Book stacks act as space defining elements
- AVOID dead-ends! Promote a fluid circulation.
- Protect book stacks from direct sunlight (diffused light is preferred)

BACK OF HOUSE FUNCTIONS

A lot of work is done behind the scenes to keep a library functioning effectively. Books are being delivered from other branches or from library suppliers on a constant basis, which requires good access for van deliverables at the rear or to the side, and adequate space in which to receive, store and process these books for public use.

Library staff also needs their own rest-rooms and places for coffee and lunch breaks, with a small kitchenette and comfortable chairs.

PROGRAM REQUIREMENTS

An architectural program is overall an enumeration and description of areas that will be necessary to perform the functions contained in a building. However, a program of areas is not a description of the spaces that a building will need since a single space can contain several areas and more than one function.

Served Zones:

Lobby	300-500 sf
Book Check out	200-300 sf
Library (a multi-story space is encouraged). The main library room will contain book stacks, tables and seating in comfortable chairs	5,000-6,500 sf
Garden, courtyard or deck area	as needed

Service Zones:

Private Reading Rooms	300 sf	= 3 @ 100 sf each
Classrooms	600 sf	= 2 @ 300 sf each
Special Collections Room	1,000 sf	
Book receiving	200-300 sf	
Chief Librarian's office	100-150 sf	
Staff open office area	300-400 sf	
Storage	200-300 sf	
Trash room	100 -130 sf	
Mechanical room	150-200 sf	
Restrooms	600 sf	= 3 gender neutral @ 200 sf each

(Add toilet stalls and sinks / no urinals / 1 stall to be ADA compliant
think about stacking bathrooms in each floor and/or placing them back to back)

Circulation:

1 grand staircase -- open to the library
1 fire exit stair – with protected access leading to the exterior, must be 2-hour fire rated
1 elevator -- for ADA compliance, an elevator must be provided to access all public areas in a gracious manner (search Elevator Cab dimensions)

Students should approach the accommodation of the program in a critical way. This means several things:

1. Do not get fixated on the square footages! The numbers are a guide. Getting the numbers exactly right is not the solution of the project. The solution has to do with creating a design with a strong *parti* (concept), the creation of memorable and inspiring spaces, a strong spatial sequence and beautiful tectonics (the art of material placement and their assembly).

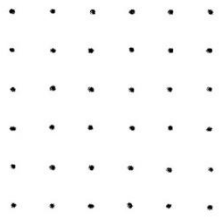
2. The *parti* might suggest the addition of other rooms not listed in the program. For example, a children's library may require a motherhood or lactation room.

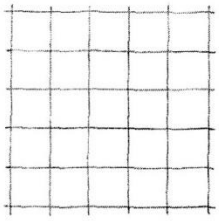
PROGRAM ON THE SITE

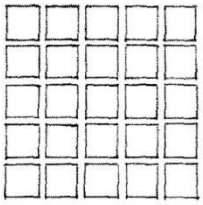
The site measures approx. 50' x 100' = 5,000 square feet
The program is twice that size. That means you will need at least 2 floors. But you should strongly consider 3 to 4 floors, two of which could be partial thus producing multi-story spaces. The floors might also be mezzanine levels. If desired, the rooftop can be used as a terrace for special events, or used as a rooftop garden or outdoor café, or it can simply be a roof.

GRID PATTERN ORGANIZATIONS

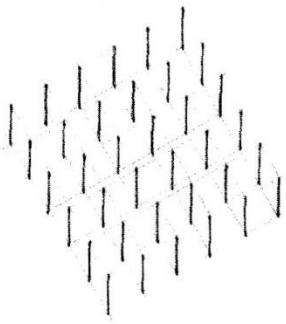
The organizing power of a grid results from the regularity and continuity of its pattern that embraces the elements it organizes. A three-dimensional grid pattern creates a set of repetitive, modular units of space. A grid is established in architecture most often by a skeletal structural system of columns and beams. A grid can be interrupted to define a major space or accommodate a natural feature of its site. Across its field, a grid can transform its image from a pattern of points to lines, to planes, and finally, to volumes. A portion of the grid can be dislocated and rotated about a point in the basic pattern.

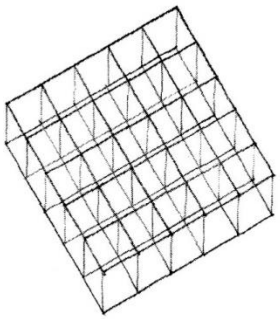


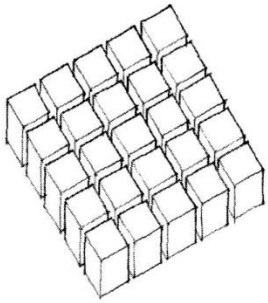




A grid is created by two, usually perpendicular, sets of parallel lines that establish a regular pattern of points at their intersections. Projected into the third dimension, the grid pattern is transformed into a set of repetitive, modular units of space.





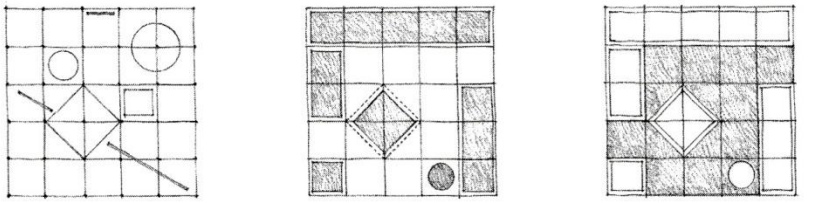


The organizing power of a grid results from the regularity and continuity of its pattern that pervades the elements it organizes. Its pattern establishes a stable set or field of reference points and lines in space with which the spaces of a grid organization, although dissimilar in size, form, or function, can share a common relationship.

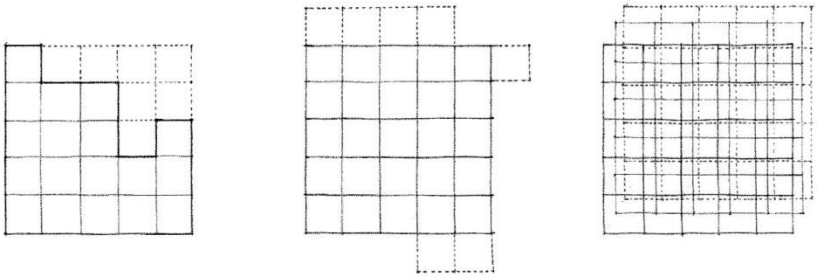
Suggestion: A good way to start organizing the program within your building (space planning) would be to place a 20' x 20' grid system over the site. You may adjust the grid system to fit your needs. The grid system can easily be manipulated to organize the service spaces versus the served spaces.

GRID ORGANIZATIONS

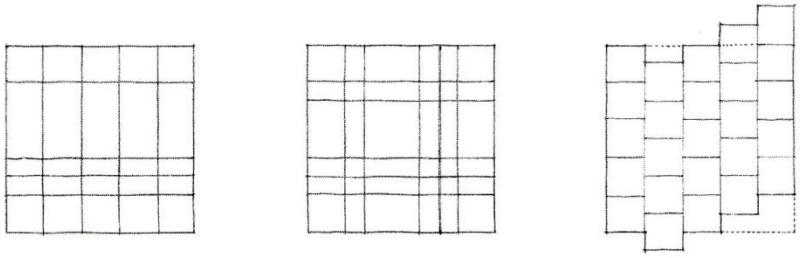
A grid is established in architecture most often by a skeletal structural system of columns and beams. Within the field of this grid, spaces can occur as isolated events or as repetitions of the grid module. Regardless of their disposition within the field, these spaces, if seen as positive forms, will create a second set of negative spaces.



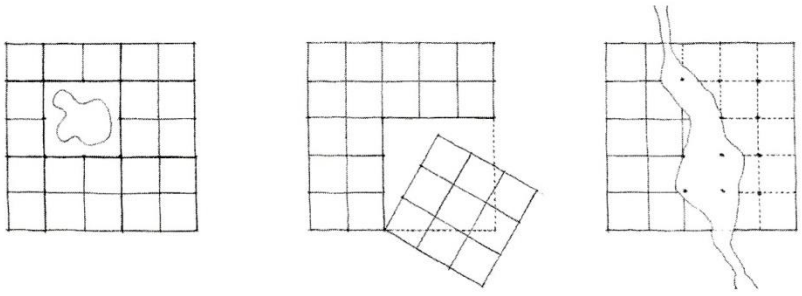
Since a three-dimensional grid consists of repetitive, modular units of space, it can be subtracted from, added to, or layered, and still maintain its identity as a grid with the ability to organize spaces. These formal manipulations can be used to adapt a grid form to its site, to define an entrance or outdoor space, or to allow for its growth and expansion.



To accommodate the specific dimensional requirements of its spaces or to articulate zones of space for circulation or service, a grid can be made irregular in one or two directions. This dimensional transformation would create a hierarchical set of modules differentiated by size, proportion, and location.



A grid can also undergo other transformations. Portions of the grid can slide to alter the visual and spatial continuity across its field. A grid pattern can be interrupted to define a major space or accommodate a natural feature of its site. A portion of the grid can be dislocated and rotated about a point in the basic pattern. Across its field, a grid can transform its image from a pattern of points to lines, to planes, and finally, to volumes.

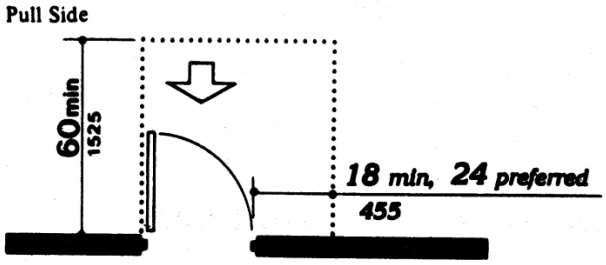


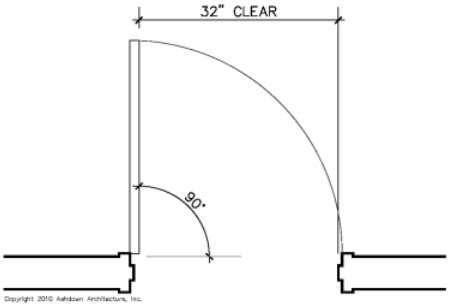
(Images taken from Architecture: Form, Space & Order *by F. Ching)*

UNIVERSITY OF MARYLAND
ARCHITECTURE PROGRAM
ARCH 401 – FALL 2019

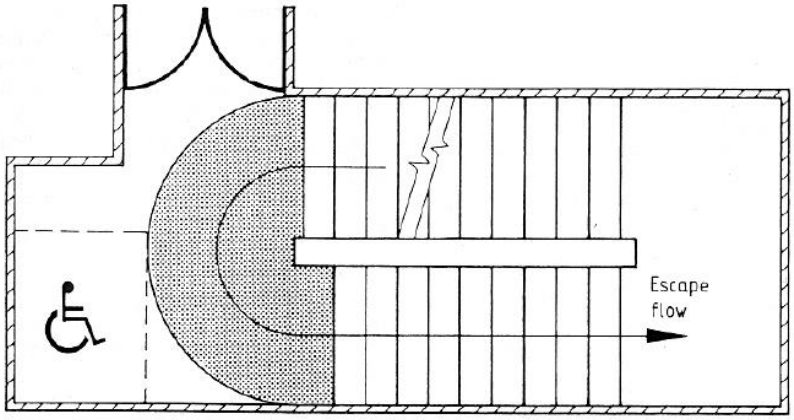
MINIMUM CODE AND ACCESSIBILITY REQUIREMENTS

- 3'-0" façade projections allowable on Connecticut Ave. side only (west façade)
- Maximum buildable height of 50'-0"
- No openings in either party wall permitted; openings permitted in northern façade above existing structure only.
- Maintain a reasonable continuity of the façade/streetscape
- Structural system may **not** bear on existing neighboring party walls
- Proper clearances must be provided at all door swings. All doors must have a minimum clear opening width of 32 inches (use 36-inch doors min to comply). Doors in rooms with occupancy of 50 people or higher must swing out.





- (1) Exit stairway for two or more levels (refer to *Program Requirements* for details). Must include an "*area of refuge*" (30"x48") for a person in a wheelchair (see image below). Exis stairway door must swing in the direction of travel.



- Stairways must have a maximum rise of 7 inches and a minimum tread of 11 inches. Handrails must extend at top and bottom of total run (see image below). Fire exit star must run through all levels.

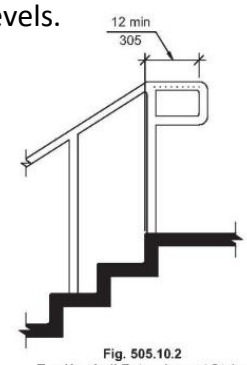


Fig. 505.10.2
Top Handrail Extensions at Stairs

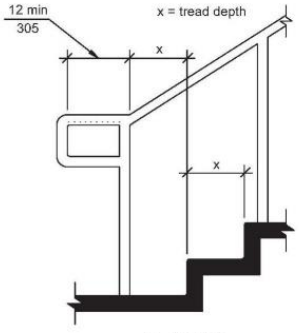
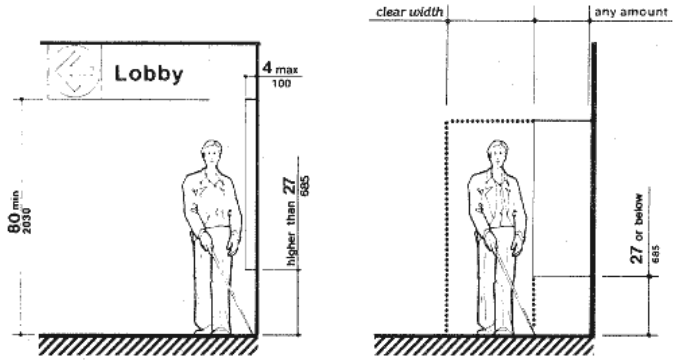


Fig. 505.10.3
Bottom Handrail Extensions at Stairs

- Minimum corridor width: **44-inches**
- Protruding Objects higher than 27 inches (2'-3") shall extend from the wall 4-in. max. (below 27 inches, objects may extend any amount).
- Provide 80 inches min. clear height within the space (80" = 6'-8").



- Bathroom: for maneuverability, provide a 60-inch (min.) diameter circle for a wheelchair to make a 180-degree turn. Provide grab bars at both the back and side of the water closet. Water closet (WC) to be located 18-in from wall to centerline of WC.

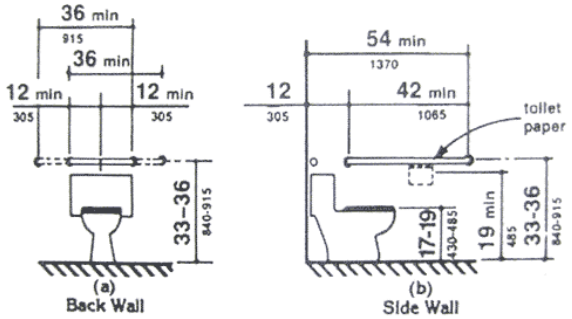
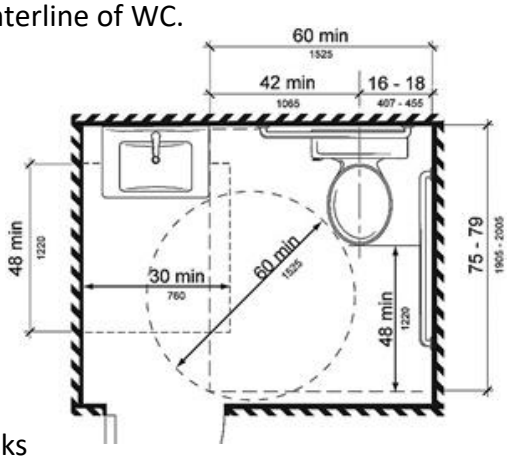
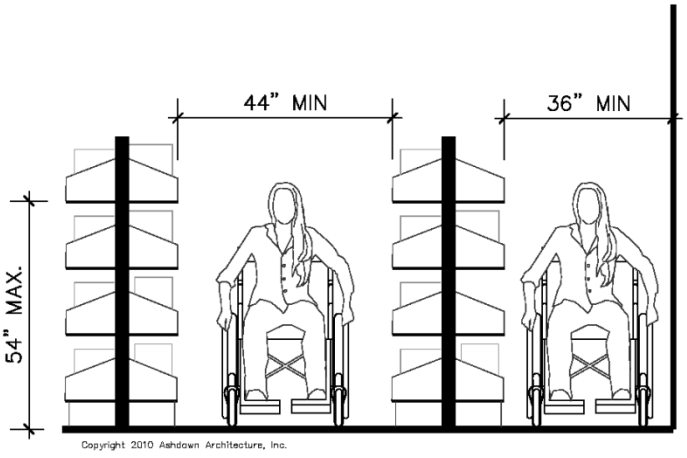


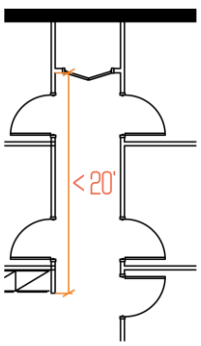
Fig. 29
Grab Bars at Water Closets



- See image below for ADA clearances around book stacks



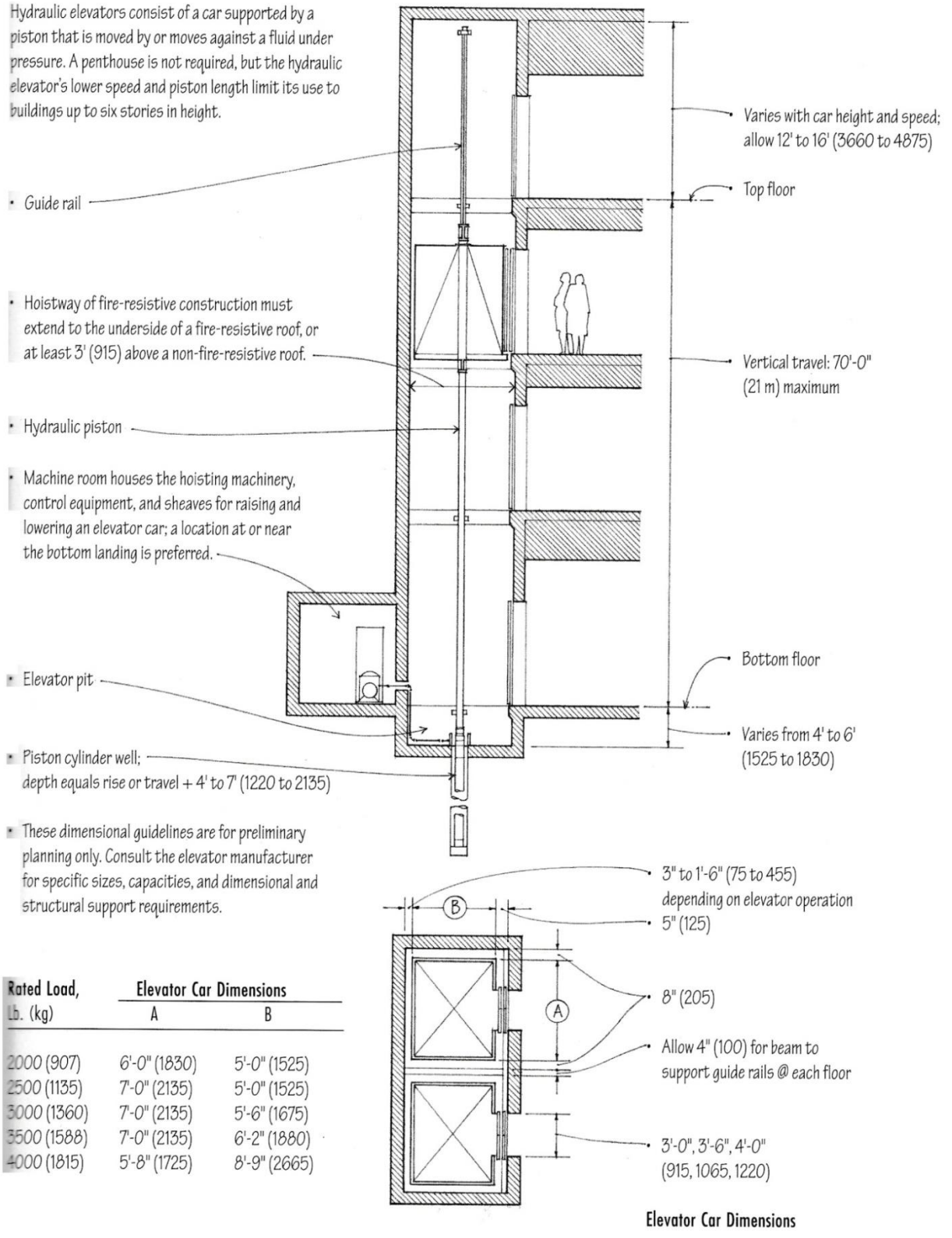
- Avoid dead-end corridors (must be 20' or less)



UNIVERSITY OF MARYLAND
ARCHITECTURE PROGRAM
ARCH 401 – FALL 2019

ELEVATORS

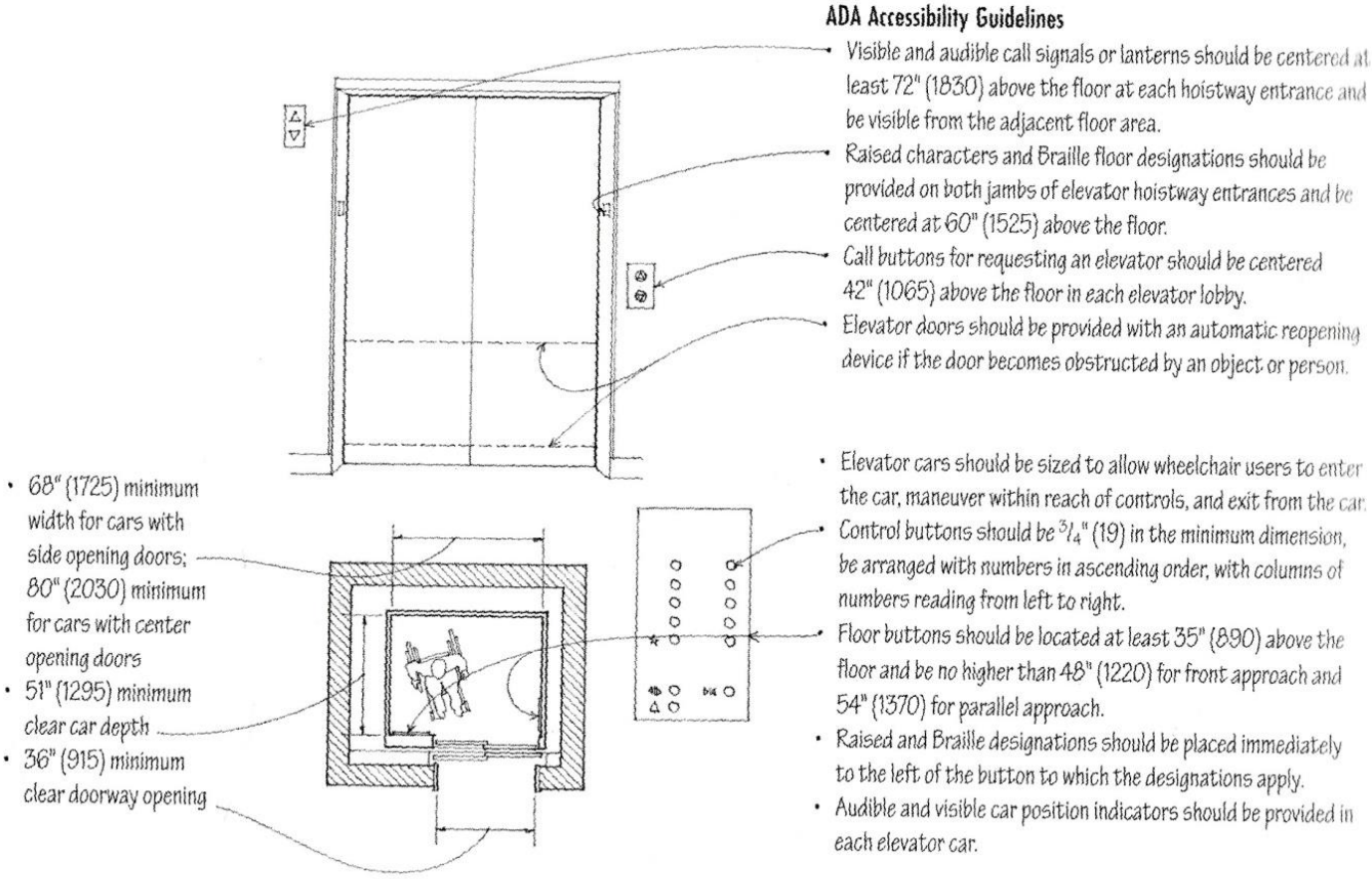
Based on our 50-ft height limit you are allowed to use a hydraulic elevator. Hydraulic elevators are used extensively in buildings up to 5 or 6 stories high. These elevators do not use the large overhead hoisting machinery the way geared and gearless traction systems do.



Rated Load, Lb. (kg)	Elevator Car Dimensions A	B
2000 (907)	6'-0" (1830)	5'-0" (1525)
2500 (1135)	7'-0" (2135)	5'-0" (1525)
3000 (1360)	7'-0" (2135)	5'-6" (1675)
3500 (1588)	7'-0" (2135)	6'-2" (1880)
4000 (1815)	5'-8" (1725)	8'-9" (2665)

Elevator Car Dimensions

ELEVATOR: ADA GUIDELINES



STRUCTURAL CONSIDERATIONS

Use a structural system to define space and the overall architectural character of the building. Develop a structural logic that will heighten your *parti* and ideas for the project. The structural system will be modified throughout the design process (***TIP***: refer to *Architect's Studio Companion* and *Building Construction Illustrated* by F. Ching for structural, assembly and construction details).

To start, develop a grid system on plan view. You may use reinforced concrete, steel framing, wood framing (heavy timber) or a mix of these systems. Please follow the construction specifications below:

Column span:

Reinforced Concrete: 24' max. span (exposed or covered)
Steel: 40' max. span (exposed or covered)
Wood (heavy timber): 30' max. span (exposed)

Column sizing:

Reinforced Concrete

- Square columns:
  Dimensions: 12”x12”
- Round columns:
  Dimensions: 12” diameter

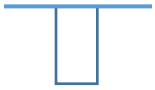
Steel: varies (W shapes, C shapes, or HSS shapes)

Heavy timber: 8”x8” (beams and girders: 6”x10”)

Reinforced Concrete Beam sizing:

Beams spanning 12’-0” to 25’-0” [spans to be measured from centerline of support (column or wall) to centerline of support]

Beam depth - 24”
Beam width – 12”



Beams spanning under 12’-0”

Beam depth - 18”
Beam width – 12”

WALL SYSTEMS

Students are allowed to use rectilinear (straight) walls or splayed (angular) walls on both exterior and interior uses. If used, curved walls are only allowed inside the building.

Exterior Building Envelope

The Exterior should reflect the interior spaces. Students are encouraged to examine the facades from neighboring buildings. Exterior finish materials are based on the designer’s choice (e.g., stone, brick, concrete, steel, wood, glass, NANA wall, etc.). Students may propose the structural system to be exposed and expressed on the outside. Students are allowed to incorporate elements from their 2nd project (Façade Design).

Glazing systems

All glazing supported by steel mullions (6” x 6”) lateral support required every 12’-0”
Fixed Glazing – 10’-0” x 8’-0” maximum glass size
Operable glazing required @ librarian’s office

Exterior walls = 12” thick (except large glazed areas or curtain wall systems)

Interior Partitions = 6" thick
Steel stud construction is typical for commercial and civic spaces

Fire Exit Stair

8" thick walls all around (either reinforced concrete or CMU). If a wall (or walls) of the fire exit staircase is part of an exterior wall, then that wall (or walls) must be 12" thick.

2-hour fire rated space

Elevator Shaft Walls

8" thick walls all around (either reinforced concrete or CMU) or Tempered glass. If a wall (or walls) of the elevator shaft is part of an exterior wall, then that wall (or walls) must be 12" thick
*For further elevator information, find manufacturer specs (such as DOVER or OTIS).

PRESENTATION REQUIREMENTS/LIMITATIONS (*means and methods per student*)

- Process work: sketches, precedent images, and study models
- Location Map 1"=500'
- Individual Site Analysis NTS
- Site plan, showing urban context 1/32" = 1' – 0"
- Roof plan with context 1/16" = 1' – 0"
- Floor Plans (all levels with section tags, label all rooms) 3/16" = 1' – 0"
- (2) Sections: longitudinal and transverse 3/16" = 1' – 0"
  show context and people
- (2) Elevations (*show context and people)* 3/16" = 1' – 0"
  East / West facades
- (2) Interior Perspectives NTS
- (1) Exterior Perspectives of building in context NTS
- Individual Building Analysis (4 to 5 diagrams) NTS
  (e.g., parti, structure, circulation, program, hierarchy)
- Final Model (must fit Site Model) 3/16" = 1' – 0"

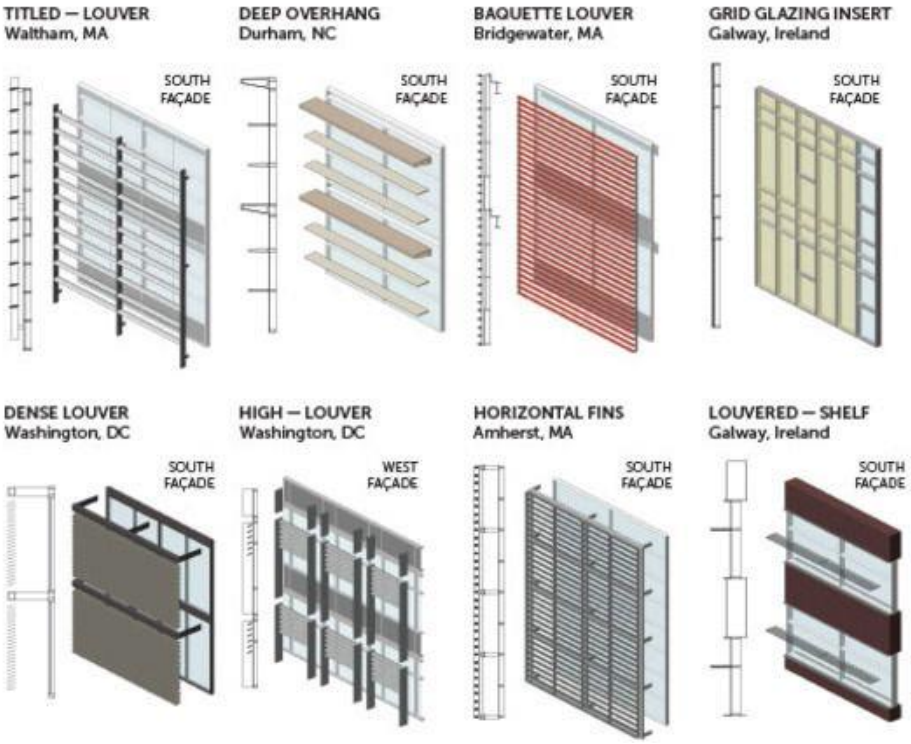
NOTE 1: On all plans show the North arrow and scale. Label all drawings.

NOTE 2: Show people (human scale) in all sections, elevations, perspectives and models.

- **Title-block**: (1st page only)
  YOUR Building Title (1" height)
  Your Name / Date: December 9, 2019 (1/2" height)
  ARCH 401 / Prof. Name (1/2" height)

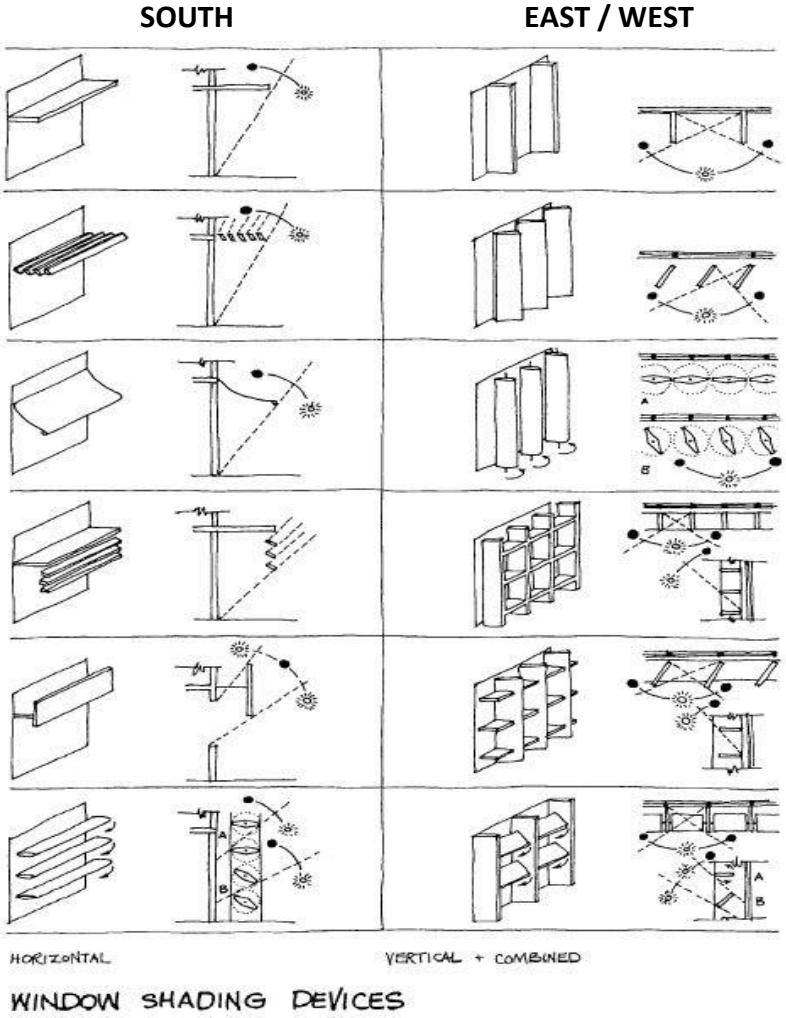
DUE: Monday, December 9, 2019

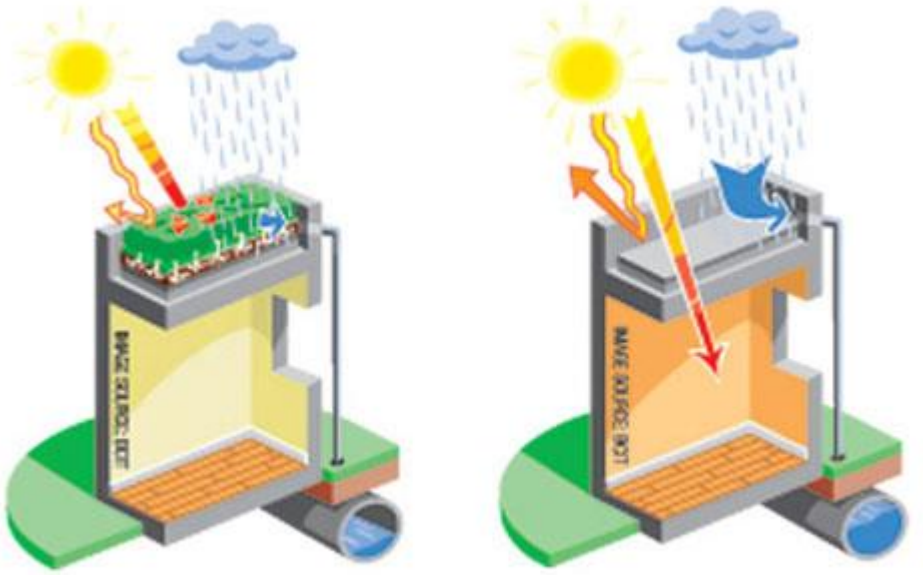
PASSIVE SUSTAINABLE STRATEGIES



(1) <u>Sun Shading devices</u>

Can also function as light reflectors which bounce natural light for daylighting deep into building interiors.





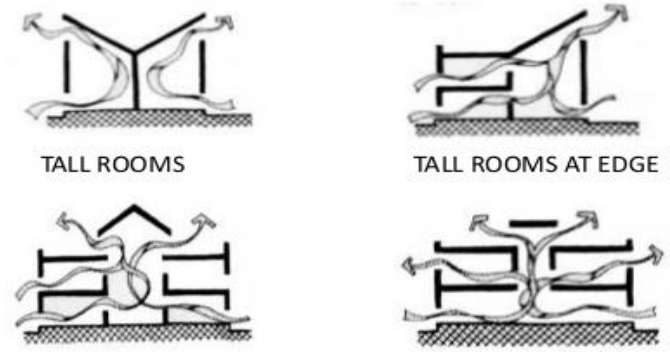
GREEN ROOF

TRADITIONAL ROOF

(2) Green Roofs

to help reduce urban heat island effect

STACK VENTILATION SECTIONS :-



TALL ROOMS

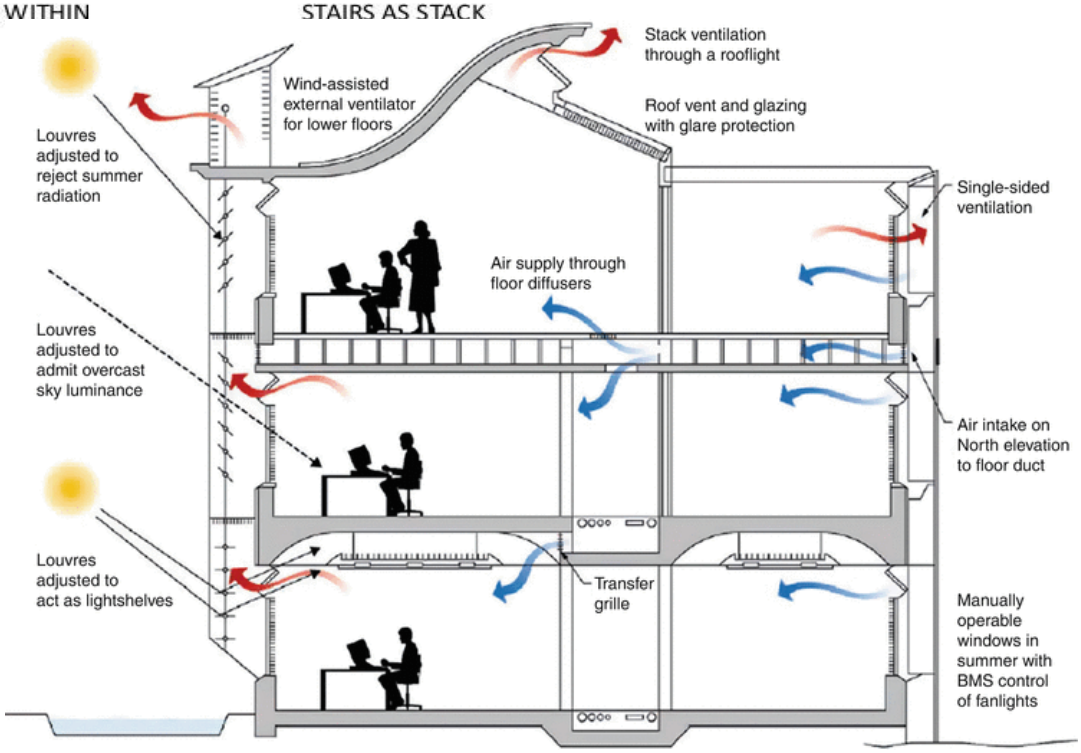
TALL ROOMS AT EDGE

TALL ROOMS WITHIN

STAIRS AS STACK

(3) Natural Ventilation

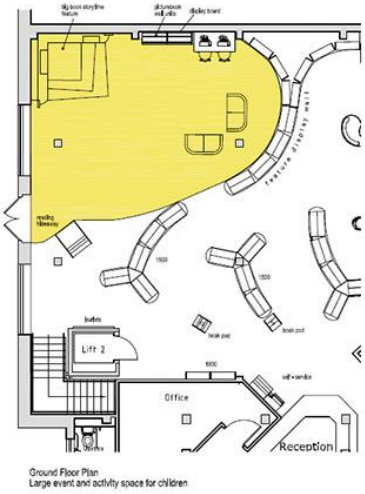
the process of supplying and removing air from an indoor space without using mechanical systems



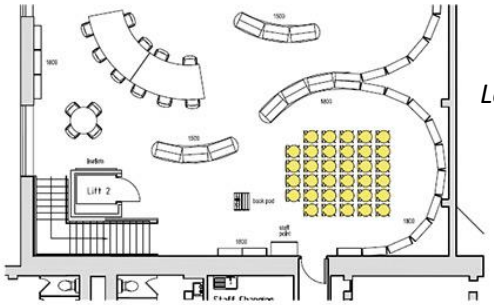
CASE STUDY EXAMPLE #1:

Modern Library with a flexible 'free plan'

Flexible spaces

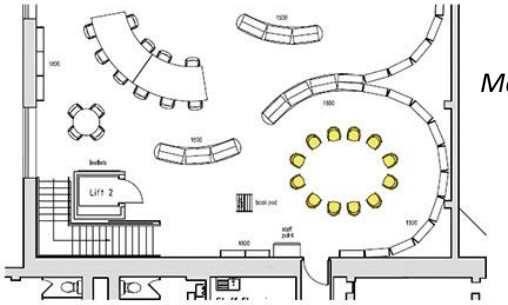


Ground Floor Plan
Large event and activity space for children



First Floor Plan
Seated event for up to 34

Lecture



First Floor Plan
Reading group type event for up to 12

Meeting

CASE STUDY EXAMPLE #2:

Huntingdon Library and Archives

Opened: 2009
Client: Cambridgeshire County Council
Architect: Crampin Pring McCartney Gant
Project description: public library
Library size: 1,750 square metres
Cost: £4.6 million
Visitor numbers: 1,000 per day

Designed by Crampin Pring McCartney Gant and opened in 2009, this new library and archive is part of a larger development in the central neighbourhood of this market town with a population of 32,000. It is built on the site of the old library, which was demolished. The design was a collaboration between senior library management and the architects, with the particular involvement of Library Design Consultant Leonore Charlton, who has specialised in library interiors for many years, working in Cambridgeshire and other counties.

The building occupies 1,750 square metres, incorporates the Huntingdonshire Archives, a specialist Cromwell Collection linked to the nearby Cromwell Museum, two meeting rooms, IT Learning Centre, café and toilets. Lighting and temperature is automatically adjusted for different parts of the building, though in the case of the Huntingdonshire Archives, the study area and store are especially designed to maintain the correct *ambient conditions as well as to guard against fire or water* ingress – which is additionally expensive compared to standard library building requirements. Total cost was £4.6 million, which included £400k fit-out costs.

The exterior consists largely of Cambridge brickwork, with a distinctive curve at one corner, and a cedar-clad first floor overhang or jetty to the north which partly accommodates the archive. The ground floor lending library is one large, high-ceilinged open-plan area with excellent signage and clear

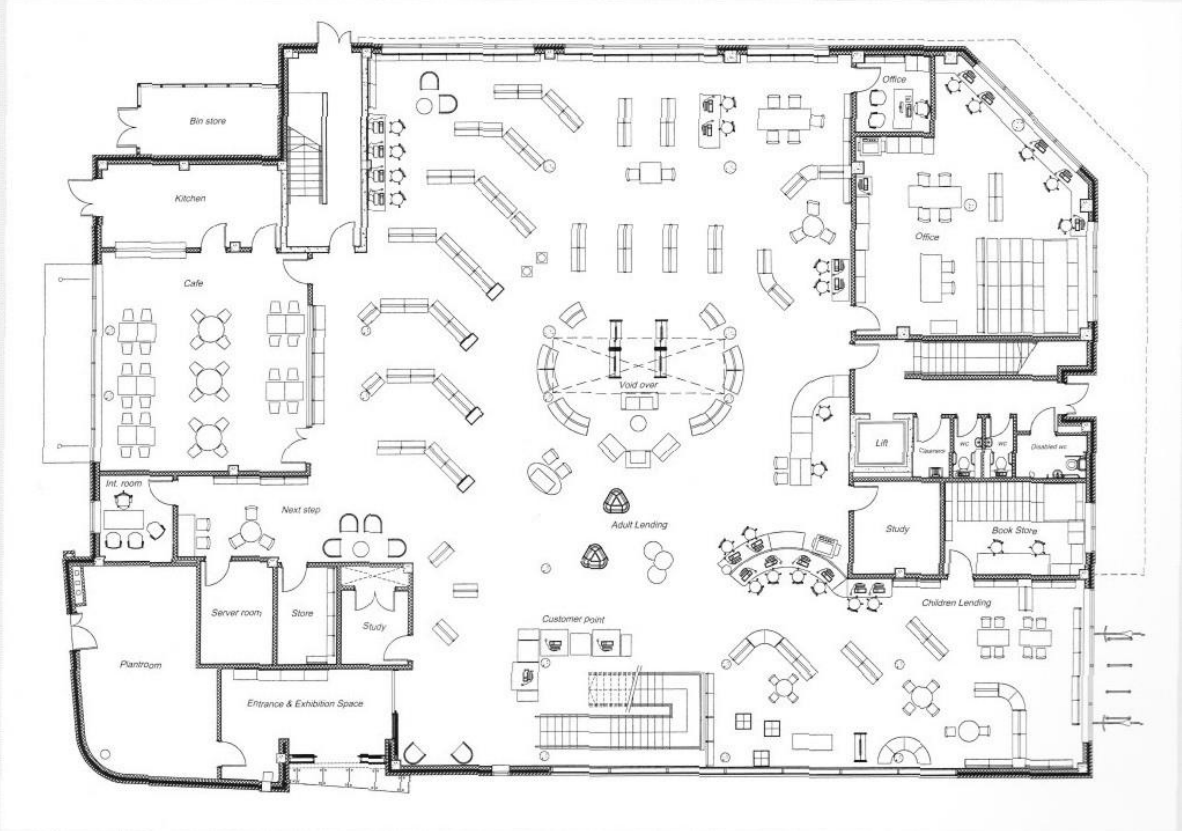


Figure 9.32 Huntingdon Library: ground floor plan. Courtesy of CPMG Architects Limited

sight-lines across the whole space, so that the different library sections and services can be taken in a single view on entry into the building. The high ceiling is supported by polished concrete columns, and a light well illuminates the central floor area. The building is entered by automatic sliding doors which open into a small lobby, where pushchairs or mobility scooters can be stored, with a further sliding door leading into the main library space. Though sliding doors are more expensive than automatic doors that open inwards or outwards, designer Leonore Charlton thinks they are much more efficient and easier for customers to use.

At the entrance an attractive chrome and plate glass staircase leads to the first floor archives, IT learning centre, meeting rooms and study areas. The walls are enlivened by high quality photographic panels which depict local historic houses, gardens and other scenes from the town's heritage, which add a sense of identity to the interior; equally, end panels of some bookshelf stands are also decorated with photographic panels, to good effect. The library café is very popular, serving cooked meals as well as providing snacks and refreshments, and is managed by Cambridgeshire Catering Service. The library is visited by up to 1,000 users on a busy day.

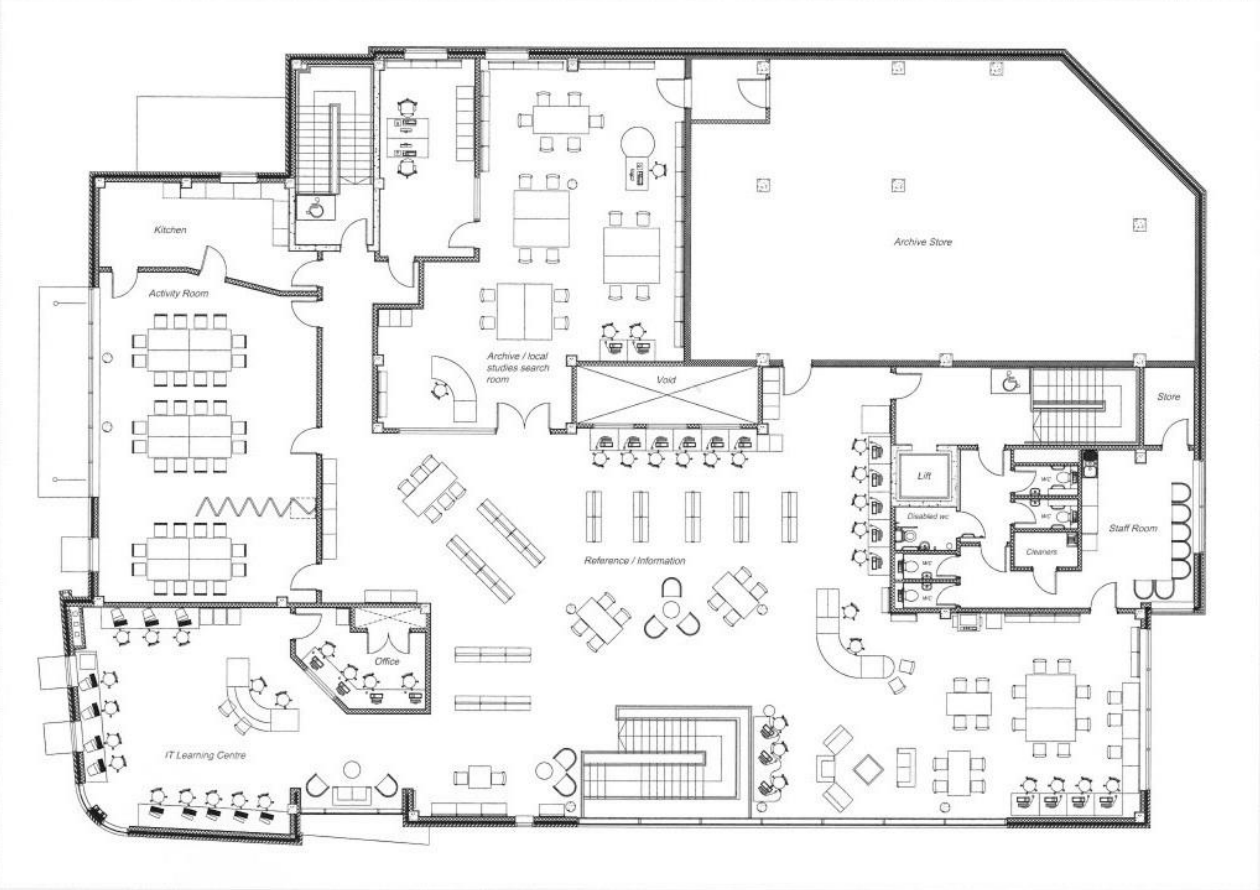


Figure 9.33 Huntingdon Library: first floor plan. Courtesy of CPMG Architects Limited

PROJECT 3B GRADING CRITERIA

Every student will receive an individual grade for work completed in Project 3.
Project 3B: Process (40%) + Product (60%) = Product (**40%** of semester grade)

PROCESS – 40%

- Daily Attendance, assignment completion, and class participation
- Mid-Review grade (November 11th)
- Ability to use drawings, diagrams and sketches to effectively communicate formal ordering principles
- Design process: exploration of concept through study models and weekly development
- Site Design strategies in response to Site Conditions (based on site analysis)
- Design process: Façade Studies (exploration through drawings and models)
- Design process: Structural system studies (exploration through drawings and models)
- Critic's Overall Assessment of PROCESS

PRODUCT – 60%

- Verbal presentation
- Design: Final iteration of the overall building design
- Design: Final Space Planning and ADA requirements
- Design: Final response to existing Site Conditions (based on site analysis)
- Design: Final Façade design
- Design: Final Structural system
- Graphic quality of final drawings and diagrams
- Composition: overall graphic layout (sheets)
- Model: craftsmanship and completeness of final models / physical evidence of concept
- Critic's Overall Assessment of PRODUCT

NAAB LEARNING OUTCOMES

Project 3 reaffirms the following NAAB Student Performance Criteria:

A.1 **Professional Communication Skills:** *Ability* to write and speak effectively and use representational media appropriate for both professional and public settings.

A.2 **Design Thinking Skills:** *Ability* to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards

A.3 **Investigative Skills:** *Ability* to gather, assess, record, and comparatively evaluate relevant information and performance, in order, to support conclusions related to a specific project or assignment.

A.4 **Architectural Design Skills:** *Ability* to effectively use basic formal organizational and environmental principles and the capacity of each to inform two- and three- dimensional design.

A.5 **Ordering Systems:** *Ability* to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform design development.

A.6 **Use of Precedents:** *Ability* to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.

A.7 **History and Global Culture:** *Understanding* of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.

B.2 **Site Design:** *Ability* to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.

B.5 **Structural Systems:** *Ability* to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

SCHEDULE (subject to change)

Date	Topic	In-Class	Assignment-DUE
Oct 28	**Project 3.A ends** **Project 3.B starts (intro)** **Abrams GS, Matthews GS, Alexander 1101, McKenley 1103, Crawford 1105**	2pm student-faculty retrospective (midterm) 3pm: 3.B starts (auditorium) 4-6pm: 3.A presentation	3.A REVIEW (see deliverables)
Oct 30	Conceptual Design	2pm: Library discussion (Cindy Frank) 3-6pm: Concept (desk crits and discussion) 6pm: AIAS Portfolio Workshop (Great Space)	(3) *parti* models (ideas) and diagrams. ***Parti* models** do not have to be site specific or program specific. It's about the idea. Draw the square footage of each space (3/16" scale)
Nov 1	Conceptual Design	2pm: Program Design lecture by Prof. Crawford (auditorium) 3-6pm: Concept (desk crits and discussion)	(6) *massing* models (relating to the site)
Nov 4	Conceptual Design	Building / Structure	(2) study models (to fit on site) with rough plans and sections and parti diagrams
Nov 6	Conceptual Design	Building / Structure	Revised study model with grid layout on plan and parti diagram
Nov 8	Conceptual Design	Building / Structure / Facades **4:30pm Omar Hakeem- Building Community Lecture (Great Space)**	Revised study model. Plus, structural 3D diagram, parti, and drawings (plans, elevations, sections)
Nov 11	**Mid-Review Project 3B** **Abrams GS, Matthews 1111, Alexander 1101, McKenley 1103, Crawford 1105**	**instructors to invite guest jurors* *Review focus: concept, structure, main spaces and west façade*	Deliverables: Site Plan, Floor plans, (2) sections, (2) elevations, diagrams and study model (*to scale), and precedent images/analysis
Nov 13	Schematic Design: Space Planning	2pm: Building Codes/ADA lecture by Prof. Abrams (auditorium)	Revised Study models and drawings (from jury comments)
Nov 15	Schematic Design	Space planning / Facades	Work on plans, sections and elevs

Nov 18	Schematic Design	Facades / Codes (plan and section)	East/West Façade Section @ ¼"scale East/West Façade Elevation @ ¼"scale
Nov 20	Schematic Design	Facades / Codes (plan and section) **4:30pm KEA Lecture: Pablo Guiraldes** **(Great Space)**	Revised study models and drawings
Nov 22	Schematic Design	Concept Clarity	Revised study models and drawings

Nov 25	Design Development Internal Review	Space Planning / Façade / Building Section	Revised study models and drawings
Nov 27	No-Class	**Thanksgiving Break**	
Nov 29	No-Class	**Thanksgiving Break**	

Dec 2	Design Development	Concept Clarity Representation / Layouts	Drafts of final drawings (plans, sections, elevations, perspectives, axons, sectional perspectives, conceptual diagrams, etc.)
Dec 4	Final Production	Work-in studio	Draft of final layouts / Start final model
Dec 6	Final Production	Work-in studio	Final Model, study model(s) and all drawings on final boards

Dec 9	**FINAL REVIEW: Project 3A+B** **Abrams 1101 Matthews GS, Alexander 1103, McKenley GS, Crawford 1105**	Final Presentation (pin-up at 1:30pm) ***LAST DAY OF CLASSES!***	High quality drawings and models, plus process work --see deliverables for info
Dec 11	**DIGITAL FILES due!!!**	**DIGITAL FILES due!!!**	**DIGITAL FILES due!!!**
Dec 13		**5pm ARCH Program Student-Faculty Retrospective** (Great Space)	

Wed, Dec 11	**SUBMISSION ****	Submit digital files on ELMS, Google Docs, Dropbox or as a USB jump-drive. (USB jump-drive: leave on top of desk by 1pm) NO LATER THAN 2:00PM!	Must include photos of study models, final models, scanned images of final drawing sheets. Please save as JPG or TIFF (150 to 300 dpi)

**** <u>DIGITAL WORK FILES</u>:**

-Create 3 main <u>folders</u>: **Project 1 / Project 2/ Project 3**

-Create <u>sub-folders</u> in each folder: **Final Boards / Final Models / Process Work** (include sketches and study models. Please no more than 10 images per Final Model (3 per Study Model); make sure to take photos of the Final Model (Project 2 and 3) within the SITE.

-Save all files as either JPEG or TIFF (please no PDFs!!!)

-Students must provide their work to their instructor either via ELMS, Google Docs, Dropbox (please email link), or provide a USB jump-drive.

- No Digital Files = No Grade!