

# BATHROOMS

## considerations

### LAYOUT OF THE 'FUNCTIONAL ZONES'



THE SINK, COUNTER TOP, STORAGE, BATH TUBS, SHOWER AND TOILET SHOULD BE ARRANGED IN MIND AND FLOWING SPACE AND EASE OF ACCESSIBILITY.

### AESTHETICS OF FITTINGS & FIXTURES



INSTALLING IN THE FAUCETS, SHOWER SYSTEMS, SINK DOORS A LONG WAY IN ADDING TO THE BEAUTY OF YOUR BATHROOMS. THESE ARE NOT JUST FOR FUNCTIONAL PURPOSES, BUT FOR OVERALL AESTHETICS.

### COLOURS & LIGHTING



FOR MASTER BATHROOMS, IT IS ESSENTIAL TO HAVE A COLOUR SCHEME THAT IS THEMATIC-BASED ON COLORS OF THE BEDROOM.  
 FOR STAND-ALONE BATHROOMS, CHOOSE CALM AND CHEERFUL SHADES AS BLUE, PINK, ORANGES, OR SUITE SHADES WHITE AND BEIGE.

### BATHROOM FLOORING & WALLS



ENSURE THAT THE WATER DOES NOT SEEP THROUGH THE WALLS AND FLOORS CAUSING MOLD, MILDEW OR OTHER DAMAGE.  
 TILING THE WALLS AND THE FLOOR IS THE BEST WAY TO WATERPROOF YOUR BATHROOM.  
 OPT FOR ACTIVE WHITE BRICK TILES FOR THE FLOOR. LARGER AND DIAGONAL TILES ADD TO THE SENSE OF SPACE.

### BATHROOM FURNITURE & STORAGE



SPACE UTILIZATION IN A BATHROOM IS IMPORTANT. AVOID CLUTTER WITH ADEQUATE STORAGE FOR TOILETRIES, TOWELS AND CLEANING PRODUCTS. SMALL POCKETS OF SPACES, BASED ON THE SIZE AND LAYOUT OF THE BATHROOM CAN BE USED FOR CABINETS.

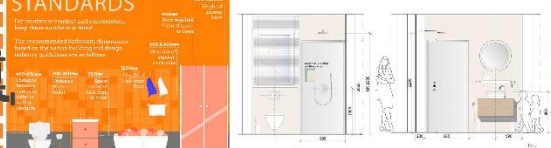
### VENTILATION



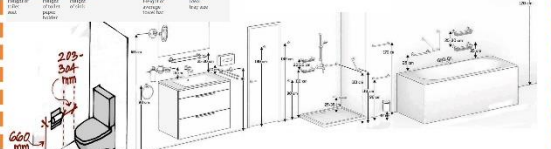
OTHER THAN LIGHTING AND DOORS, VENTS SERVE THE CRITICAL FUNCTION OF LETTING DAMP AIR OUT OF THE ROOM.  
 YOU COULD EITHER HAVE A WINDOW OR OPT FOR OTHER VENTING OPTIONS SUCH AS CEILING FANS, FANS IN LINE WITH WALL-MOUNTED FANS, VENT SWITCHES, ETC.

### STANDARDS

FOR EVERY ROOM AND AREA, THERE ARE SPECIFIC STANDARDS TO FOLLOW. THESE STANDARDS ARE BASED ON THE SIZE OF THE ROOM AND THE NUMBER OF PEOPLE USING IT.



### BATHROOM DESIGN



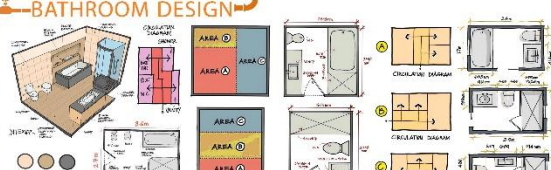
### Bathroom plumbing foundation

**First: Feeding networks:**  
The supply networks are connected to the pipes from the main water source.

**Second: Floor insulation:**  
A layer of gypsum is made to level the floor before the insulation process. It is necessary to put an insulating material that does not contain air voids and is tested within a period of up to two days by filling the ground with water to make sure that nothing leaks.

**Third: Extension of drainage networks:**  
Laying pipes to connect water to the bathroom and preparing the drainage line for the automatic washing machine.

**Fourth: Feeding bathroom appliances**




### PLANNING

PLAN YOUR NEW BURE BY HOW IT WILL BE USED.

FOR EACH BATHROOM, THERE SHOULD BE A PLAN TO SHOW THE LOCATION OF EACH APPLIANCE AND THE WAY THEY ARE CONNECTED TO THE MAIN WATER AND DRAINAGE NETWORKS.

THE BATHROOM SHOULD BE PLANNED TO BE AS EFFICIENT AS POSSIBLE. THIS MEANS THAT THE SPACE SHOULD BE USED TO ITS FULL POTENTIAL.

THE BATHROOM SHOULD BE PLANNED TO BE AS COMFORTABLE AS POSSIBLE. THIS MEANS THAT THE SPACE SHOULD BE USED TO ITS FULL POTENTIAL.



### OTHER TOILET COMPONENTS INSTALLATION

- ELECTRIC & PIPEWORK FOUNDATIONS
- WALL PREPARATION (TILING & PAINTING)
- SUITE INSTALLATION
- TILING (FLOORING)
- ELECTRICS

## CODES & SPECIFICATIONS

**Void requirements Code**  
In toilets, the free vertical distance between the tiles and the bottom of the ceiling or the bottom of any beam or object hanging from the ceiling must not be less than **2.100 metres**.

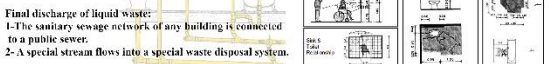
الارتفاع (المتر)	الارتفاع (المتر)	الارتفاع (المتر)	الارتفاع (المتر)	الارتفاع (المتر)	الارتفاع (المتر)
150	100	100	100	100	100
Indoor Sports, Games and Recreational Buildings (Homes)	(Homes)	(Homes)	(Homes)	(Homes)	(Homes)

**Special abilities code**  
يجب أن يكون الحد الأدنى لارتفاع السقف في الحمامات هو 2.1 متر. يجب أن يكون الحد الأدنى لارتفاع السقف في الحمامات هو 2.1 متر. يجب أن يكون الحد الأدنى لارتفاع السقف في الحمامات هو 2.1 متر.

**Electrical Installation Code**  
Any socket outlet must be at least **2.5 meters** from the shower when connecting sanitary parts and drains used to receive or dispose of liquid waste to the manholes of the building, the horizontal connection distance from the outer wall should not exceed **one meter**, especially for manholes that receive vertical drainage lines to facilitate their maintenance.

**Sanitary drainage code**  
when connecting sanitary parts and drains used to receive or dispose of liquid waste to the manholes of the building, the horizontal connection distance from the outer wall should not exceed **one meter**, especially for manholes that receive vertical drainage lines to facilitate their maintenance.

**Final discharge of liquid waste:**  
1-The sanitary sewage network of any building is connected to a public sewer.  
2-A special stream flows into a special waste disposal system.



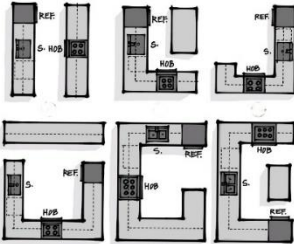
### MODEL PERSPECTIVES



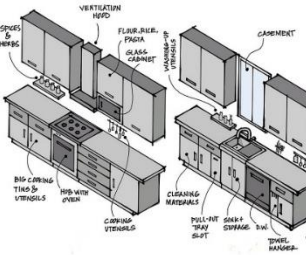
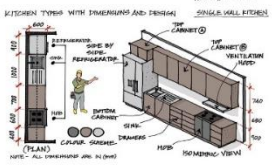
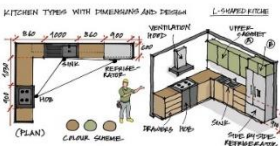
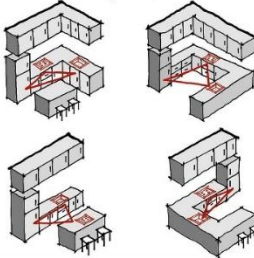
# KITCHENS

a room where food is kept, prepared, and cooked and where the dishes are washed

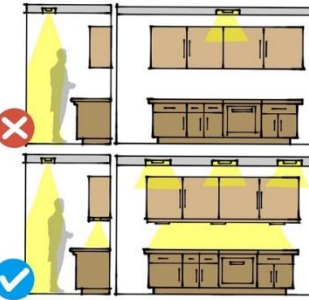
## KITCHEN LAYOUT



## KITCHEN TRIANGLE (Cook-Sink-Preparation)



## LIGHTING IN KITCHEN

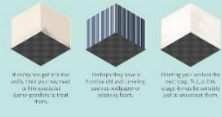


## HOW TO GET A KITCHEN FITTED

If you have decided to install a new kitchen in your property, after all there are numerous ways to proceed in a way which appears as simple as possible, with a few simple steps to follow. In this guide, we will provide you with the most effective way to get your kitchen fitted.

**1 PREPARATION**  
 Extension of feeding rails  
 It is recommended to extend the size of the rails which it is spread in the workspace.  
 Electricity establishment  
 Extension for the water heater channel  
 For under-cabinet lighting  
 Make a foam layer for the floor  
 It is a common practice, and a light foam layer is spread on the floor along with other layers that are placed to cover the pipes.  
 Waterproofing

**2 PREPARE KITCHEN WALLS**  
 Make the surface of the walls, and ceiling, and floor, waterproofing and leveling.



**3 CHOOSE A DESIGN**  
 This is the first step, and you should choose a design that is suitable for your kitchen. The design should be chosen based on the size of the kitchen and the number of people who will be using it.

**CUPBOARDS**  
 The cupboards should be chosen based on the size of the kitchen and the number of people who will be using it. The cupboards should be chosen based on the size of the kitchen and the number of people who will be using it.

**WORKTOPS**  
 The worktops should be chosen based on the size of the kitchen and the number of people who will be using it. The worktops should be chosen based on the size of the kitchen and the number of people who will be using it.

**SINKS & TAPS**  
 The sinks and taps should be chosen based on the size of the kitchen and the number of people who will be using it. The sinks and taps should be chosen based on the size of the kitchen and the number of people who will be using it.

**APPLIANCES**  
 The appliances should be chosen based on the size of the kitchen and the number of people who will be using it. The appliances should be chosen based on the size of the kitchen and the number of people who will be using it.

**SPLASHBACKS & WALL TILES**  
 The splashbacks and wall tiles should be chosen based on the size of the kitchen and the number of people who will be using it. The splashbacks and wall tiles should be chosen based on the size of the kitchen and the number of people who will be using it.

**4 ELECTRICS & GAS INSTALLATION**  
 The electrics and gas installation should be done by a professional electrician and gas fitter. The electrics and gas installation should be done by a professional electrician and gas fitter.

**TRIM LAMIN & LENS**  
 The trim lamin and lens should be chosen based on the size of the kitchen and the number of people who will be using it. The trim lamin and lens should be chosen based on the size of the kitchen and the number of people who will be using it.

**SOCKETS**  
 The sockets should be chosen based on the size of the kitchen and the number of people who will be using it. The sockets should be chosen based on the size of the kitchen and the number of people who will be using it.

**GRID**  
 The grid should be chosen based on the size of the kitchen and the number of people who will be using it. The grid should be chosen based on the size of the kitchen and the number of people who will be using it.

**FLOOR SELECTION & INSTALLATION**  
 The floor selection and installation should be done by a professional floor installer. The floor selection and installation should be done by a professional floor installer.

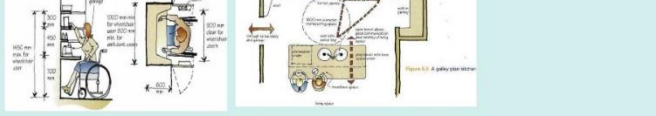


**6 FINAL PAINTING**  
 The final painting should be done by a professional painter. The final painting should be done by a professional painter.

## JORDANIAN CODES & SPECIFICATIONS

- غرفة مطبخ: جلي فرن غاز سطح حضر + خزائن سفلية وعلوية إضافات- ثلاثة ركن طعام ، ركن طبخ جلي  
 - يتم تخصيص مساحة تراوح بين (25) و (50) بامانة من مساحة الكلية للخدمات على أن لا تقل مساحة الصافية المخصصة للمطبخ عن (15) ولا تزيد على(25) .

يفضل استخدام التهوية الميكانيكية لازالة الرطوبة المفرطة في المطبخ  
 تحسب كميات الهواء المقترض توفرها بالمطبخ بناء على عدد الاشخاص  
 المطبخ المنزلية 10 اشخاص  
 المطاعم 20 شخص



## MODEL PERSPECTIVES







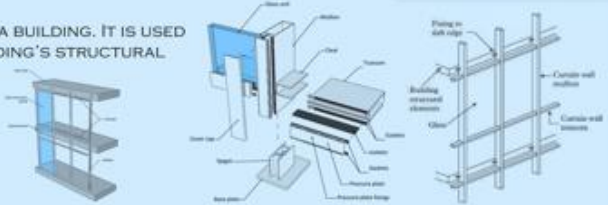
3<sup>rd</sup> Year  
Fall 2022

# CURTAIN WALLS

FORMS A CURTAIN ON THE EXTERIOR FACE OF A BUILDING. IT IS USED WITH A FRAME STRUCTURE, COVERS THE BUILDING'S STRUCTURAL FRAME, AND IS DIRECTLY SUSPENDED FROM IT

## TYPES

- GLAZING ( VISION ) CURTAIN WALLS
- CLADDING ( SPANDREL ) CURTAIN WALLS



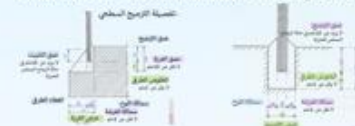
## SYSTEMS

- STICK SYSTEM
- UNITIZED SYSTEM
- UNIT AND MULLION SYSTEM
- PANEL SYSTEM
- SPIDER CURTAIN WALL SYSTEM

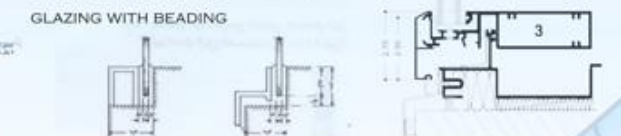
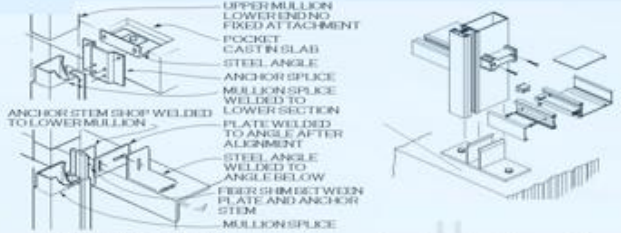


## JORDANIAN CODES COMPONENTS

- PASTES :
  - LINSEED OIL PASTE
  - OILY AND RESINOUS PASTES
  - METALWORK GLASS PASTES
- SEAL GASKETS:
  - CELLULAR ELASTOMERIC GASKETS
  - DENSE ELASTOMERIC GASKETS
- GLAZING:
  - GLAZING WITHOUT BEADING



## INSTALLATION



- 3 WAYS OF INSTALLING GLASS PANELS:
- SCREWS - CLIPS - COVER STRIPS

## PANELS STANDARDS :

القطاعات (المتر)	مساحة الزجاج (م <sup>2</sup> )	الارتفاع (متر)	العرض (متر)
من 1.2 إلى 1.5	1	من 1.8 إلى 2.1	من 0.9 إلى 1.2
1.5 إلى 2.0	2	من 2.1 إلى 2.4	من 1.2 إلى 1.5
2.0 إلى 2.5	3	من 2.4 إلى 2.7	من 1.5 إلى 1.8
2.5 إلى 3.0	4	من 2.7 إلى 3.0	من 1.8 إلى 2.1



عرض الزجاج (المتر)	حامل جميع طول واحد (المتر)	حامل جميع طول واحد (المتر)
1.2	من 1.2 إلى 1.5	من 1.2 إلى 1.5
1.5	من 1.5 إلى 2.0	من 1.5 إلى 2.0
1.8	من 1.8 إلى 2.4	من 1.8 إلى 2.4

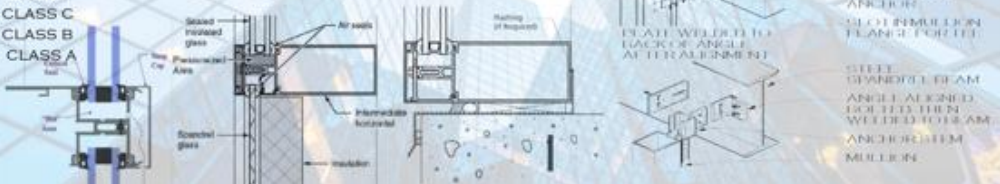


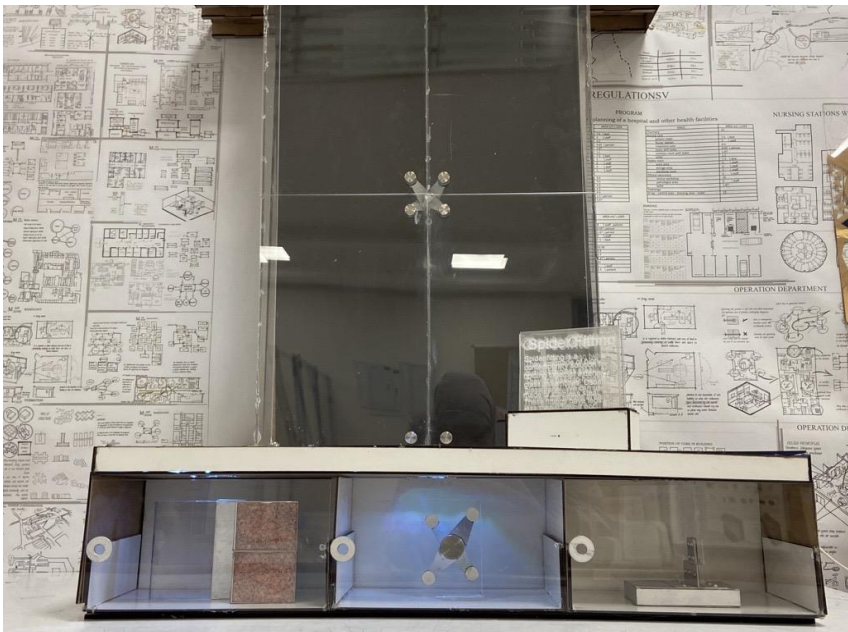
## TESTS

- AIR PERMEABILITY TEST
- WIND RESISTANCE TEST
- WATER PERMEABILITY TEST

CURTAIN WALLS ARE CLASSIFIED ACCORDING TO THEIR RESISTANCE TO AIR AS

- CLASS C
- CLASS B
- CLASS A







3<sup>rd</sup> Year

### Stone Cladding

stone cladding is a thin layer of stone that is used for the interior or exterior of a building, generally on top of a material that isn't stone, such as concrete.

Stone cladding is meant to reduce the weight of natural stone used for buildings as well as to save construction costs.

### Visual inspection

The dimensions and thickness of the stone (the hollow of the stone) It should be engraved as required but the corners of the stone should be straight



### Jordanian codes :

The joints between stones must be 10, 2, 3, being 100% in controlled by using (المسكن المصنوع) plastic edges.  
 Insulating the brick layer above doors and windows openings insulated by:  
 2 upper bars @ 12mm, 3 bottom bars @ 12mm and stirrups @ 8mm each 25 cm.

### Traditional method

**Jordanian codes :**

- use staggering method to avoid lowering courses above each other, and only 3 courses are permitted to be built daily according to the Jordanian codes to avoid collapse of courses.
- (المن المصنوع) : the surface at the bottom of a window. The surface goes inside the building with zero inclination while it needs to be inclined a little bit from outside to prevent water from going back to the building or getting congested.

### Mechanical Fixation Method

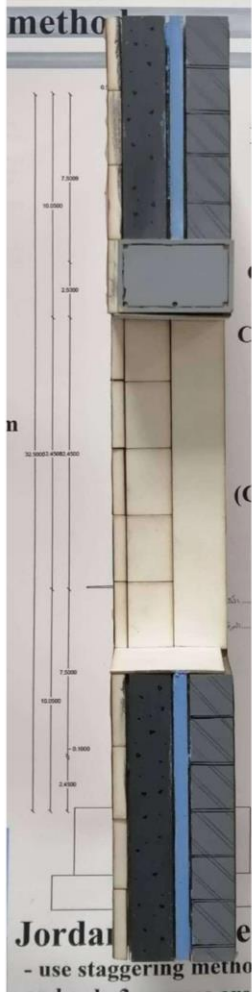
**Jordanian codes :**

- holes at the middle two sides of stone piece must be 3 cm deep to put the anchors between them.
- use 6 mm steel rebar to connect the each adjacent stones together (مسامير).

### Semi-Mechanical Fixation Method

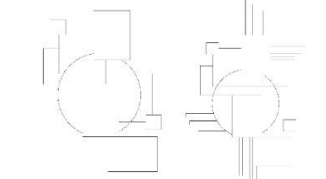
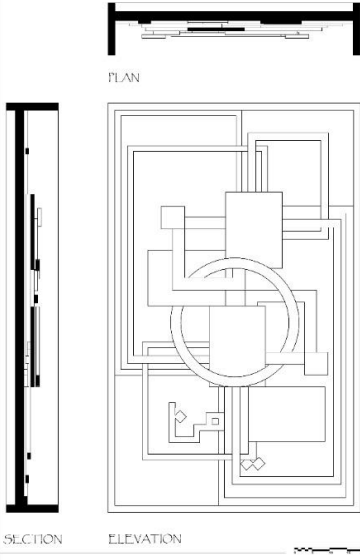
**Jordanian codes :**

- use staggering method to avoid lowering courses above each other, and only 3 courses are permitted to be built daily according to the Jordanian codes to avoid collapse of courses.
- (the max height) of pouring concrete should not exceed 1.5 m, behind 3 courses a day.



”طموعي هو أن يحظى كل أردني بأفضل نوعية من التعليم، فالإنسان الأردنيّ ميزته الإبداع، وطريق الإبداع يبدأ بالتعليم“

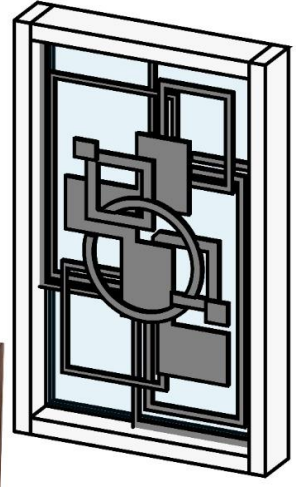
الطليح محمد صالح النابلي، ابن الصنم



تم استخدام الخط الطموحي لدعم الاسم مع التصميم، بما يتناسب مع التشكيل الناتج بعد التطوير . وأقتباساً من التراث الثقافي الأردني والتاريخي (نقد فريضة ذهب من جنوب الأردن الإسلامية والخط الشوقي الوسط (الخط المعق) الذي تعود بالرسمة الهندسية المعروفة . شاتلويج والامتطلة والتطوير، مخلصه من أي زخارف إضافية

تم تعديل أنواع الإبداع الأربعة المتبقية بما يتواءم مع المبدأ المتعارفة بأربعة مستطيلات تتصل ببعضها عن طريق الحواف (edge to edge) وتربط بينها الدائرة وهي العنصر . وتطور إلى أنطولوج . بحيث أنه العنصر الأساسي لتطور الإبداع ويعمل الأشرطة في التشكيل الناتج إلى التفاضل . بين أنواع الإبداع وتوضيح ترتيبها ببعضها

- أنواع الإبداع
- الإبداع التكنولوجي
- ووسائل الميديا والإبداع ينتج في جميع المجالات
- الوضعية والتعليمية
- الإبداع العلمي
- والموجود فيه جميع التخصصات العلمية
- شأنها في علم النفس
- الإبداع الصناعي
- في المجالات التشغيلية والصناعية
- الإبداع الدرامي
- المصنوع في العنصر المعنوية



MODEL ISOMETRIC







3<sup>rd</sup> Year  
Fall 2022

THE HASHEMITE UNIVERSITY - FACULTY OF ENGINEERING - DEPARTMENT OF ARCHITECTURE  
**BUILDING FINISHING**

**Haneen AlBakri - Raghad El-Sheikh**

Dr. S.Awawdeh, Dr. Y.Qaishat, Arch.Q.Al-Khalidi, Arch.R.Almjali

## SHADES OF BLUE

HANDS PROJECT

### PURPOSE

TO DESIGN A DOOR SCREEN RELATED TO JORDAN AND ITS HISTORY ACCORDING TO THE CONTEXT

### CONCEPTUAL THINKING

THIS PROJECT SUPPOSE TO REFLECT THE RELATION BETWEEN ISLAMIC ARCHITECTURE AND THE SHADES OF BLUE. ALSO, REFLECTING THE IMPORTANCE OF LEARNING ACCORDING TO THE ISLAMIC VIEW



COLOR SCHEME

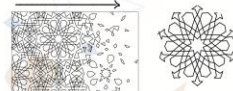
ACCORDING TO THE RELATION BETWEEN BLUE SHADES AND ISLAMIC ARCHITECTURE, THIS SCHEME WAS CHOSEN TO SIGNIFY THE IMPENETRABLE DEPTHS OF THE UNIVERSE.



USING CALLIGRAPHY TO CREATE A SUGGESTED BOOKS SHELVES



PROFFESOR'S SUGGESTIONS OF BOOKS OR OTHER STUFF COULD PUT ON THE SHELVES THAT FOLLOWS THE CONCEPT OF CALLIGRAPHY FORMING FUNCTION (SHELVES)



FLOW OF PATTERN FROM SOLID TO VOID TO CREATE PRIVACY OF DOOR SCREEN



USAGE OF AN IMPORTANT SYMBOL TO REPRESENT THE IMPORTANCE OF LEARNING

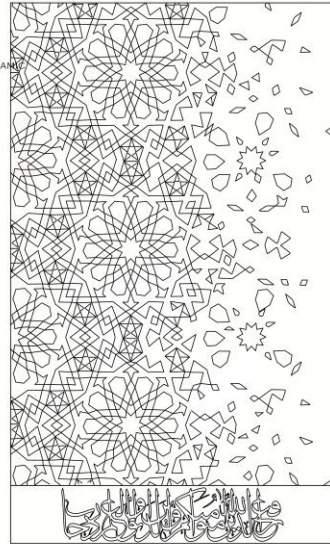


PATTERN TYPE



FROM DENSE OF PATTERN TO VOID

PLAN  
SCALE 1:150



ELEVATION SCALE 1:150  
SECTION SCALE 1:150

