

INTERIOR DESIGN



State 4-H O-Rama
Senior 4-H'ers



OBJECTIVES

This activity is designed to give 4-H members an opportunity to:

- develop the following targeted life skills:
 - decision making
 - teamwork
 - self-esteem
 - problem solving
 - critical thinking
 - planning/organizing
 - cooperation
 - accepting differences
 - contributing to group effort
- learn to recognize and use a color scheme in design solutions.
- learn to select and place appropriate furnishings and equipment within designated space restrictions.
- learn to justify solutions for selections based on knowledge of Interior Design.

Opportunities will be provided for faculty to share information about related college degrees in interior design:

- Associate Degree in Interior Design (typically 2-3 years)
- Bachelor Degree in Interior Design (typically 4-5 years)
- Master Degree in Interior Design (typically 5-7 years total bachelor + master)

Opportunities will be provided for faculty to share information about related careers in interior design: see <http://careersininteriordesign.com/>

- Residential Design
- Contract Design (health care, hospitality, retail, work spaces, educational facilities)
- Historic Preservation
- Theatrical Set Design
- Exhibition Design
- Product Line Representative
- Governmental Agencies
- Design Journalism

ELIGIBILITY

Each county may enter one team comprised of four senior 4-H members in this activity at the Arkansas 4-H O-Rama.

SCENARIO

“Move-out”

Your team members have been accepted to the University of Arkansas for Class 2028 and the team at University Housing is seeking input from incoming students who are making the transition from high school to college. You have an opportunity to design a proposal for a student apartment that sleeps two people at Adohi Hall, the on campus building where your team members expect to stay while students. It is a chance to express how students today wish to live on their own. While your personal preferences may influence your design, remember that your client (University Housing) is looking for options that could be used for students in general.

In addition to this you should keep in mind that Adohi Hall illustrates the university's commitment to diversity and sustainability through the use of new wood construction technology. Adohi is a Cherokee word for “woods.” This name honors the Cherokee who passed nearby the site following the Trail of Tears between 1837 and 1839. It was chosen in consultation with citizens of the Cherokee Nation, including members of the Cherokee speaker's bureau. Adohi Hall is the nation's first large-scale mass timber building. A bold demonstration of sustainability, it also signifies potential economic development for Arkansas' burgeoning timber industry. The complex demonstrates a pioneering use of cross-laminated timber (CLT) and an innovative approach to live-learn communities, with embedded arts and academic spaces fostering student collaboration and interactive learning.

The apartment must include:

- 2 beds
- 2 study areas
- 1 shared living area
- 1 shared kitchenette with microwave, sink, two-burner cooktop, and small refrigerator
- Bookshelves
- Individual storage for clothes and accessories.
- A bathroom is built into the apartment but requires that you locate the toilet, sink(s) and bathing area (walk-in shower or tub/shower)

Rather than buying desks, bookshelves, dressers, etc. it is expected that entries in this competition use built-in elements that make the best use of limited space. The university suggests you study ideas from the Never Too Small movement documented at <https://www.nevertotoosmall.com/> with videos at <https://www.youtube.com/c/nevertotoosmall> These sites show exciting ways that amenities can be integrated into a room to make the best use of three-dimensional space. Ori Living is a company that custom builds cabinetry and storage solutions and their products can be found at [Ori Expandable Apartments \(oringiving.com\)](http://OriExpandableApartments(oringiving.com)).

The design review committee look forward to seeing your diverse design solutions!

DESIGN PROJECT ACTIVITY

County teams will use the following guidelines to propose new, two-bed, apartment style student housing at the University of Arkansas and develop a presentation to justify their decisions. The presentation will be judged at the State 4-H O-Rama. Presentation boards should be utilized to describe and present your team's room design. Presentation may include a 3D physical or digital model. Each team can have 1 Tri-Fold Board , 36"x48".

DESIGN MATERIALS

A pdf file with the architectural drawings is provided to the participants. This pdf file is set up to print on tabloid-sized paper at a scale of 1'=1/4". When printing, there is no need to change the scale. When printed on tabloid-size paper, the pdf file will have the scale of 1'=1/4" automatically applied.

PRESENTATION AT STATE O-RAMA

Each team will have up to 10 minutes to present their solution and justify their selections in front of a panel of judges. Display boards must be used to visually present floor plans, floor and wall finishes, and other sample materials used to solve the interior design problem and convey selections and decisions to the judges.

Dress for competition is business casual. **NO shorts or jeans. *Each member is expected to participate in the presentation.***

SCORING

Scoring is based on the interior design score card and follows the guidelines provided.

AWARDS

Individual trophies will be given to each member of the first-place team. Each member of the second, third, fourth, and fifth place teams will receive ribbons. This judging contest does not recognize a high point individual.

REFERENCES

www.monster.com (Monster.com) offers career resources

Adohi Hall (The Dorm Where Your Apartment Project is Located)

<https://housing.uark.edu/halls/adohi-hall.php> (Adohi Hall)

<https://www.instagram.com/uarkadohi> (Adohi Hall Instagram)

<https://news.uark.edu/articles/40384/construction-underway-on-new-stadium-drive-residence-halls> (UARK News)

https://www.architectmagazine.com/project-gallery/university-of-arkansas-stadium-drive-residence-halls_o (ARCHITECT Magazine Article)

<https://www.theplan.it/eng/award-2020-housing/adohi-hall-a-live-learn-community-for-700-students-leers-weinzapfel-associates> (the plan Magazine Article)

Interior Design Furnishings and Material Resources

FURNITURE

Blu Dot <https://www.bludot.com/>

Hive <https://hivemodern.com/>

Danish Design <https://www.designpublic.com/>

Holly Hunt <https://www.hollyhunt.com/>

Design Within Reach (DWR) <https://www.dwr.com/>

Knoll <https://www.knoll.com/>

Cassina <https://www.cassina.com/en>

Herman Miller <https://www.hermanmiller.com/>

LIGHTING

Artemis <https://artemislightingstudio.com/>

Artemide <https://www.artemide.net/en>

Louis Poulson <https://www.louispoulsen.com/en-us/professional>

Y Lighting <https://www.ylighting.com/>

Lumens <https://www.lumens.com/>

FLOORING and CERAMIC TILE

Kravet <https://www.kravet.com/catalogs/carpet>

Solid Wood <https://www.thesolidwoodflooringcompany.com/>

Armstrong <https://www.armstrongflooring.com/commercial/en-us.html>

The Tile Shop <https://www.tileshop.com/>

FABRICS | WALLCOVERING | WINDOW TREATMENTS

Maharam <https://www.maharam.com/>

Kvadrat <https://www.kvadrat.dk/en>

Knoll <https://www.knoll.com/>

Spoonflower <https://www.spoonflower.com/>

GENERAL SOURCES (rugs, furniture, art, accessories, lighting, samples, etc)

CB2 <https://www.cb2.com/>

West Elm <https://www.westelm.com/>

Restoration Hardware (RH) <https://rh.com/us/en/>

Wayfair <https://www.wayfair.com/>

Pottery Barn <https://www.potterybarn.com/>

IKEA <https://www.ikea.com/us/en/>

Lowe's <https://www.lowes.com>

Home Depot <https://www.homedepot.com>

RECOMMENDATIONS FOR TRAINING

- Look at the resources suggested by your client as listed under the section “SCENERIO” in this competition statement.
- Look through design magazines to study and evaluate room settings and apartment designs.
- Practice putting color schemes together using fabrics, floor finishes, and wall paint samples.
- Be aware of the price of furnishings and materials so you have an idea of what a makeover really costs.

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EVALUATION METHOD

Interior Design Score Card		
Design Solution	Possible Score	Score
Responsiveness to Client and Scenario	20	
Spatial Arrangement and Circulation	20	
Furniture, Fixture, and Material Selection	20	
Color Scheme	10	
Creative Design Solutions	10	
Applied principles of design - balance, proportion, etc.	10	
Access to light and views	10	
Total	100	
Design Presentation	Possible Score	Score
Neatness and overall appearance of the board	20	
Furnishings included and labeled	10	
Finishes included and labeled (floor, wall, ceiling)	10	
Drawings are neat and accurate	10	
Team members were able to correctly answer questions	20	
All team members participated	10	
Presentation skills	20	
Total	100	
Design Solution	100	
Design Presentation	100	
Total	200	

4-H Interior Design Packet

Thinking About Design

Good design incorporates thoughtful arrangement or a clear plan. Interior designers create the form of the space inside a room or building. Interior design includes designing built-in shelves, cabinets, and furniture as well as the selection and arrangement of colors, materials, objects, and light to create order and beauty. It is an art that deals with organization, selection, and arrangement of the elements of design. In addition to the RECOMMENDATIONS FOR TRAINING, here are some basic things to consider.

The Elements of Design:

Lines: Lines may be straight, curved, or a combination of both. When you enter a space, lines help to make it easier for you to look from one part of the space to another.

- Horizontal lines can make a piece of space or object seem restful and can provide visual connection.
- Vertical lines draw the eye upward.
- Diagonal lines create action and movement.
- Objects in a room can be made to look taller or wider with the direction of lines. For example, vertical stripes at a tall window will make it look taller.

Space: Space is the essential part of any design. Your personal space is defined by walls, windows, fabrics, furniture, and other objects. The challenge in this project is to use space effectively and efficiently.

Color: Use color when planning a color scheme for your space. Some examples are:

- Monochromatic: when one color is used in shades, tints, and tones.
- Complementary: using two colors opposite of each other on the color wheel, such as red and Green or Blue and Orange.
- Analogous: when adjoining or related colors are used, such as yellow and yellow-green.

Where do I start?

There are many different ways to begin to design your space. Designers often begin a project by talking with or reading about what the client wants. Some designers start by sketching a floor plan. Some designers develop a "mood board" of colors, materials, objects, and inspiration images first. Some designers begin by researching design precedents—projects like the one they are designing—in your case, apartments and dorm rooms. If you like to use a computer, you might start exploring a design in 3D using a program like Google SketchUp. <http://www.sketchup.com/>

Or you might try the following approach and let your imagination flow. Look at the interior design magazines like:

- Architecture Digest
- Interior Design
- Dwell
- Better Homes & Gardens
- House Beautiful
- Martha Stewart Living

You could watch some home makeover shows (search www.hgtv.com or www.diynetwork.com) on television, like:

- Love It or List It
- Design on a Dime
- Fixer Upper
- Rehab Addict
- Income Property
- Property Brothers

Sometimes, inspiration comes through nature, a piece of art, or finding one piece of fabric that you could build a room around.

It is also a good idea to check your local library for books on interior design. Search online for local interior designers and architects and look at their websites.



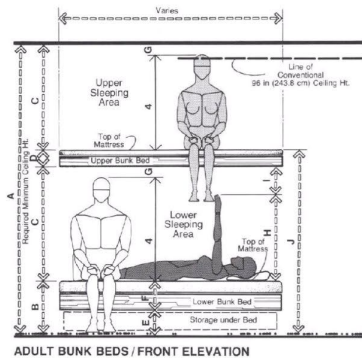
Reference: website, "Never Too Small" <https://www.nevertosmall.com/>

Once you have something in mind, begin your board by finding your paint, fabric, and flooring samples. You can also cut pieces of furniture or equipment out of catalogues and magazines to show what products you suggest using in the space. Explore many options and furniture arrangements to make sure that you will have enough room for your items.

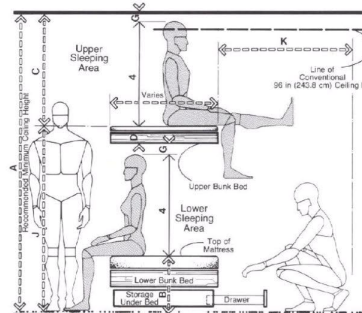
2.3 SLEEPING SPACES

Overhead sleeping facilities are a common space-saving device, particularly where the number of bedrooms or bedroom size is limited. Although standard bunk beds are available on the market, it is often necessary because of user preference or existing conditions within the interior space to custom design the bed installation. The drawing at the top of the page shows the vertical clearances necessary to accommodate an adult of large body size. The most essential body measurement anthropometrically is sitting height. If vertical space is extremely critical, it would be wise to measure the actual sitting height of the intended user in the hope that a few inches might be saved. It should be noted that 95 percent of men between the ages of 18 and 79 have a sitting height of 38.9 in, or 98.6 cm, or less. The clearance allowed between the top of the mattress and the nearest overhead obstruction is 40 in, or 101.6 cm. Theoretically, if 6 in, or 15.2 cm, is allowed for the depth of the upper bunk and 18 in, or 45.7 cm, is allowed from the floor to the top of the lower bunk, an adult of larger body size could not be accommodated within a conventional 96-in, or 243.8 cm, ceiling height unless the depth of the lower bunk is reduced. The bottom drawing shows that a horizontal clearance of 46 to 52 in, or 116.8 to 131.5 cm, is necessary for comfortable access to the underbed storage.

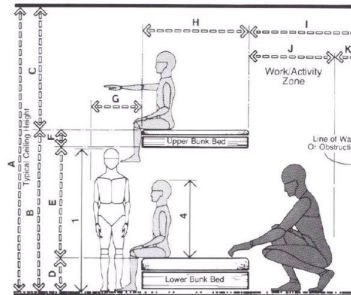
	in	cm
A	104	264.2
B	18-22	45.7-55.9
C	40-44	101.6-111.8
D	6-8	15.2-20.3
E	8-10	20.3-25.4
F	10-12	25.4-30.5
G	2	5.1
H	28-38	71-96.5
I	8-12	15.2-30.5
J	84-74	162.6-188.0
K	46-62	116.8-157.5



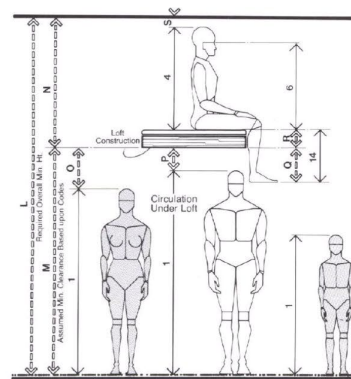
ADULT BUNK BEDS / FRONT ELEVATION



ADULT BUNK BEDS / END ELEVATION



CHILDREN'S BUNK BEDS / END ELEVATION



SLEEPING LOFTS / END ELEVATION

2.3 SLEEPING SPACES

The drawing at the top of the page shows the vertical clearances necessary to accommodate children. The critical anthropometric consideration is the sitting height. The drawing shows clearly that a conventional ceiling height of 96 in, or 243.8 cm, will be adequate to accommodate the body size of a seated child on both the lower and upper bunk. The height of the upper bunk should be established as minimally required to accommodate the sitting height of the child so that the ladder climb will not be greater than necessary. The drawing at the bottom of the page illustrates the vertical clearances necessary for a loft bed. To ensure that a person can circulate under the bed without hitting his head, the critical anthropometric dimension is the stature of the person of larger body size. Popliteal height and buttock-toe length are also useful in approximating the degree of intrusion of the leg and the foot of the seated person into the circulation space below.

It should be noted that in design situations where space below the bed is used for a function other than circulation, such as dining or a desk-related activity, the vertical clearances can be reduced accordingly.

	in	cm
A	96	243.8
B	54.5-62	138.1-157.5
C	36.5-39	92.7-99.1
D	12-15	30.5-38.1
E	36.5-39	92.7-99.1
F	6-8	15.2-20.3
G	14-18	35.6-45.7
H	30-39	76.2-99.1
I	37-39	94.0-99.1
J	34-36	86.4-91.4
K	3	7.6
L	130-136	330.2-345.4
M	84	213.4
N	46-52	116.8-132.1
O	17	43.2
P	11	27.9
Q	5-14	12.7-35.6
R	6-8	15.2-20.3
S	2	5.1

Reference: Book, "Human Dimension & Interior Space"

Helpful Hints

- ✓ Provide a floor plan to explain your ideas
- ✓ Colors, patterns, textures and finishes for floor and wall finishes (paint, wallpaper, fabric, etc.) are important aspects of the design solution.
- ✓ Consider a range of activities and the flexibility of the furniture and other features.

Furniture Arrangement

- ✓ Is the lounge furniture arranged to be comfortable, conveniently arranged, out of line of traffic, and open enough to be inviting?
- ✓ Are other areas of activity clearly defined, conveniently located, and well arranged with all necessary items?
- ✓ Place the largest pieces of furniture on the largest walls or use them to anchor a space or divide spaces if not against a wall.
- ✓ Balance the distribution of furniture in the room. Do not place heavy items all in one end.
- ✓ Plan for easy access to all areas of the room with at least 30 inches for traffic, 36 inches at doorways to allow passing, and 36 inches or more in front of drawer units.
- ✓ To make a long room look shorter, do two things: paint the far end wall a strong color and place a large piece of furniture in front of the accent wall, facing the main entrance. Use as many multiple-use pieces of furniture as possible to gain storage and have flexibility.
- ✓ Divide your rooms with area rugs, floor finish changes, and/or furniture groupings.
- ✓ If you have a television, it should be placed at a comfortable height for viewing.
- ✓ Is furniture placed to take the best advantage of space and not pushed tightly into a corner?
- ✓ Does furniture block windows?
- ✓ Where windows are near the floor, does furniture allow passage?
- ✓ Does the room have balance? Is there a feeling of unity?
- ✓ Are high and low pieces pleasingly distributed?
- ✓ Are round and rectangular pieces pleasingly distributed?
- ✓ Is lighting adequate and conveniently located?
- ✓ Does the space have a feeling of comfort and interest? Provide for required activities without being crowded or cluttered?
- ✓ Are dining areas arranged for convenience? Are there surfaces for serving?
- ✓ Carefully place mirrors to capitalize on items being reflected.
- ✓ If there is room in the entry?
- ✓ A sofa table behind a sofa can be good for lighting and an interesting place for accessories. This saves space at the ends of the sofa in a small room.

DESIGN BOARD and PRESENTATION GUIDELINES

Design Board

A design board is the tool you will use to display your design proposal. Each team can have 1 Tri-Fold Board , 36"x48".

The board you mount your materials and drawings on must be:

- Stiff illustration board or poster board (poster board or thinner boards may need to be carefully glued to a cardboard backing in order to make them rigid).
- A neutral color (white, black, or gray).

Your design board should include:

1. Material finishes and color scheme.
2. Floor plan with furniture arrangement.
3. Any other items you would like to make such as perspective sketches, wall elevations or model.
4. List of your team member names and your county on the back of the board.

Below is a more detailed description of the design board requirements and a little advice.

- *Floor Plan with Furniture Arrangement* - Use a 1/4" = 1'-0" scaled floor plan to create a presentation drawing of the design solution. Include appropriate symbols for furniture and accessories. Color may be added to communicate your design intentions.
- *Floors, Walls, and Ceiling Finishes* - Use sample swatches of flooring samples, paint samples, wall treatments, etc. (free at most building supply stores). Mount these to board to show what type finish materials you will use. **YOU MUST HAVE 1 EXAMPLE OF EACH: FLOOR AND WALL.** You may have more. (Example: ceilings or two different wall treatments in one room.)
- *Fabrics* - Include a minimum of two swatches of fabric that will be used in the space. (Example: upholstery, pillows, window treatment, etc.) Fabric should be either cut with pinking shears or wrapped around a flat board. To wrap fabric, cut a square from poster board or cardboard. Wrap fabric around this square gluing or taping raw edges to the back of the square.
- *Additional Items* - You may use pictures from magazines to illustrate your ideas. (Great for furniture, accessories, lighting, etc.). Cut them out and use them on the board. You may also include additional drawings such as wall elevations or perspective sketches, but these are *not* required.
- *Labels* - Label board and any swatches of fabric, paint or floor samples for their use. (Example: Window Treatment, Upholstery, etc.) Label the floor plan scale as 1/4" = 1'-0". It's best if labels are mounted on the board and not on the fabric.
- *Arrangement of Items* – Items on board should form nice, clean lines when looking at the board. Neatness of the board will be judged. Look at the board from all angles. Place the material finish samples on the board in the following order:
 - Top - Place things at the top of the board that will be at the top of the space (examples: ceiling paint, window treatments)

- Middle - Place wall and trim materials/colors in the middle.
- Bottom - Place things at the bottom of the board that will be towards the bottom of the room (examples - flooring, chair, etc).
- Don't overcrowd your board, simple is better.
- When you are happy with the board, securely glue the items in place.



Above: Example of a collaged Design Board showing Samples of Material Finishes



Above: Example of a Rendered Floor Plan showing Furniture Arrangement

Design 3-Dimensional Model and Perspective Drawings

You should also consider including a 3-dimensional physical model and/or perspective sketches of your design space with your presentation. If you choose to do a model it should be made to scale, such as $1/4" = 1'-0"$. Though they are encouraged, you will *not* be penalized if you do not include a model or perspective drawings.



Above: Example of exposed wood joist ceiling and 3-dimensional Perspective Drawing



Above + Right: Example of 3-Dimensional Models

Design Presentation

Presentation skills will be judged.

Explain

- ! Who you designed the space for based on the given design scenario.
- ! The materials, textures and finishes you are using on each major surface in the space (Example: carpet, tile, wallpaper or paint samples on your Design Board).
- ! The type of color scheme you are using in the room (monochromatic, complementary, or analogous).
- ! The furniture arrangement and about the traffic patterns of the space.
- ! How you applied the principles of design to your plan.
- ! How the fabrics you chose will be used in the room.

Below is a Sample Script for a Presentation

Prepare your presentation and emphasize the reasoning behind your team's solution. This is a sample to assist you in the process:

"The two-bed apartment style student housing unit was designed for ____." *[insert client name and identity]*

"The solution features a *[insert specific scheme]* color scheme of ____." *[insert specific colors]*

"The furniture placement allows for ____." *[insert important design rationale such as a view to the outdoors, a separation of activity areas, or other considerations made by your design team]*

"The finishes in the space feature ____." *[summarize your selections]*

"The design solution also takes advantage of ____." *[Your team could identify the important existing features.]*

"The design solution utilizes ____." *[principles of design].*

"Are there any questions?"

(Remember: this is an example script only. Do not use this exact wording for the presentation.)

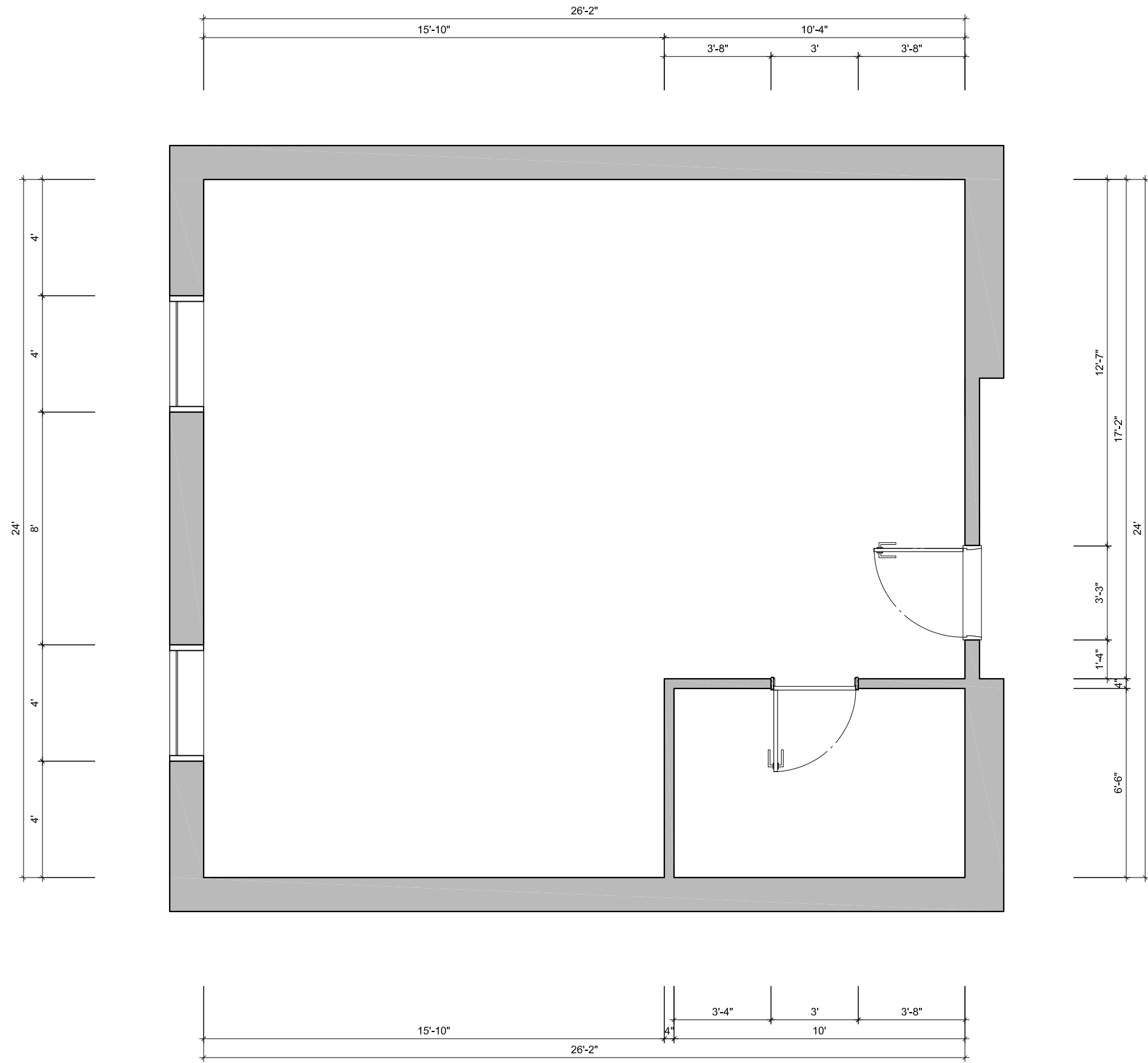
Make sure you have your team member's names and county on the back of the board.

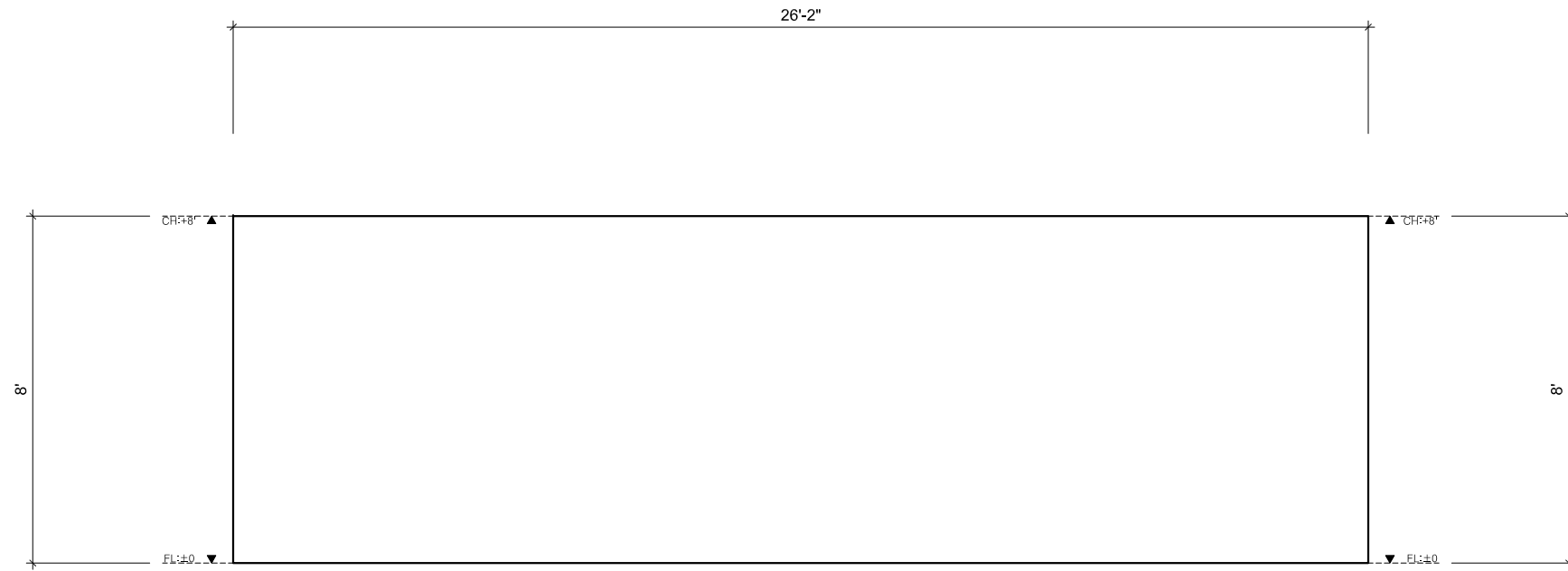
Labels for Design Board *(You may carefully cut out the labels and use them on your design board.)*

FLOOR FINISH	PAINT	BOOKCASE
FLOOR FINISH	PAINT	LAMP
WALL FINISH	PAINT	LAMP
WALL FINISH	PAINT	ACCESSORIES
CEILING FINISH	CHAIR	ACCESSORIES
CEILING FINISH	CHAIR	ACCESSORIES
CARPET	LOUNGE CHAIR	ACCESSORIES
CARPET	LOUNGE CHAIR	LIGHT FIXTURE
RUG	CHAISE LOUNGE	LIGHT FIXTURE
RUG	BENCH	COUNTERTOP
RUG	STOOL	COUNTERTOP
MIRROR	STOOL	CABINET
MIRROR	SOFA	CABINETS
APPLIANCE	SOFA	VANITY
APPLIANCE	BED	WINDOW TREATMENT
TRIM	BED	WINDOW TREATMENT
TRIM	OTTOMAN	WINDOW TREATMENT
MILLWORK	OTTOMAN	UPHOLSTERY
MILLWORK	TABLE	UPHOLSTERY
MILLWORK	TABLE	UPHOLSTERY
LOW CABINET	END TABLE	FURNITURE FINISH
HIGH CABINET	END TABLE	FURNITURE FINISH

Labels for Design Board *(You may carefully cut out the labels and use them on your design board.)*

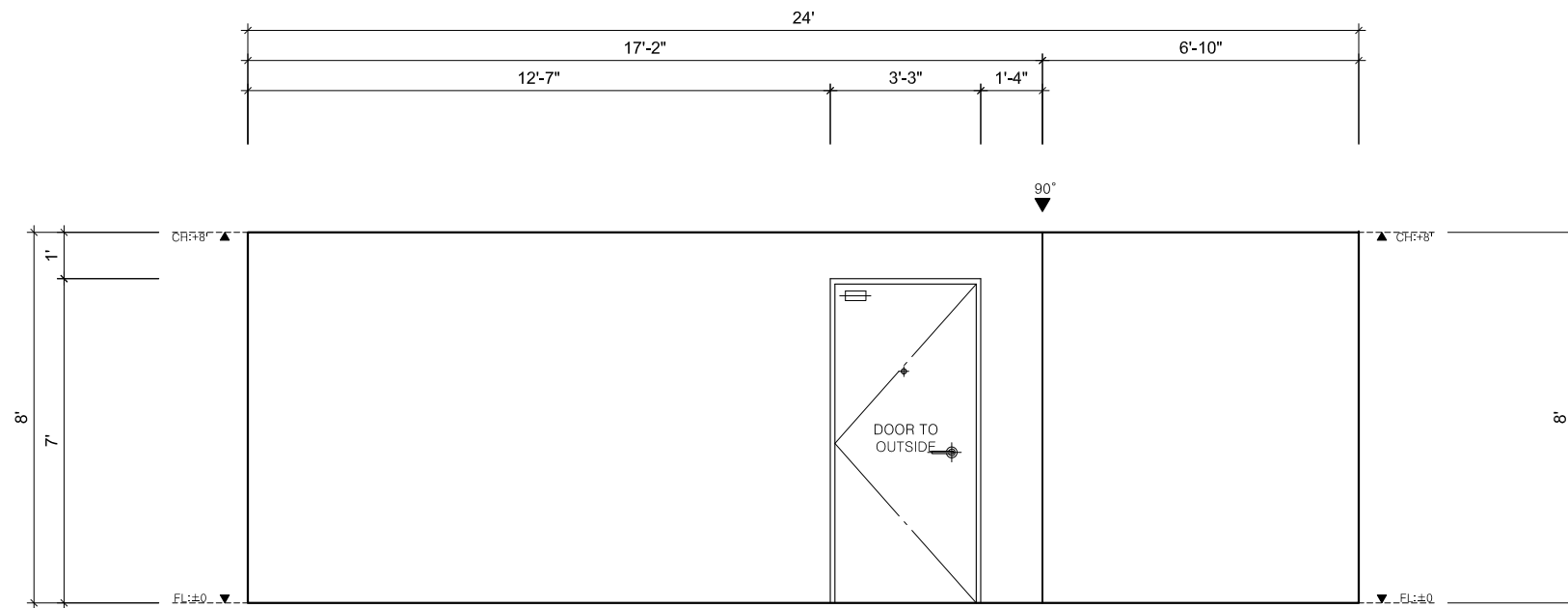
FLOOR PLAN	1" = 1'-0"
FLOOR PLAN	1" = 1'-0"
SHARED AREA	ALLEY
SERVICE AREA	
SLEEPING AREA	
SLEEPING AREA	
STORAGE	
STORAGE	
STORAGE	
TOILET	
TOILET	
LOUNGE	
LOUNGE	
DINING AREA	
EATING AREA	
FOOD PREP.	
FOOD PREP.	





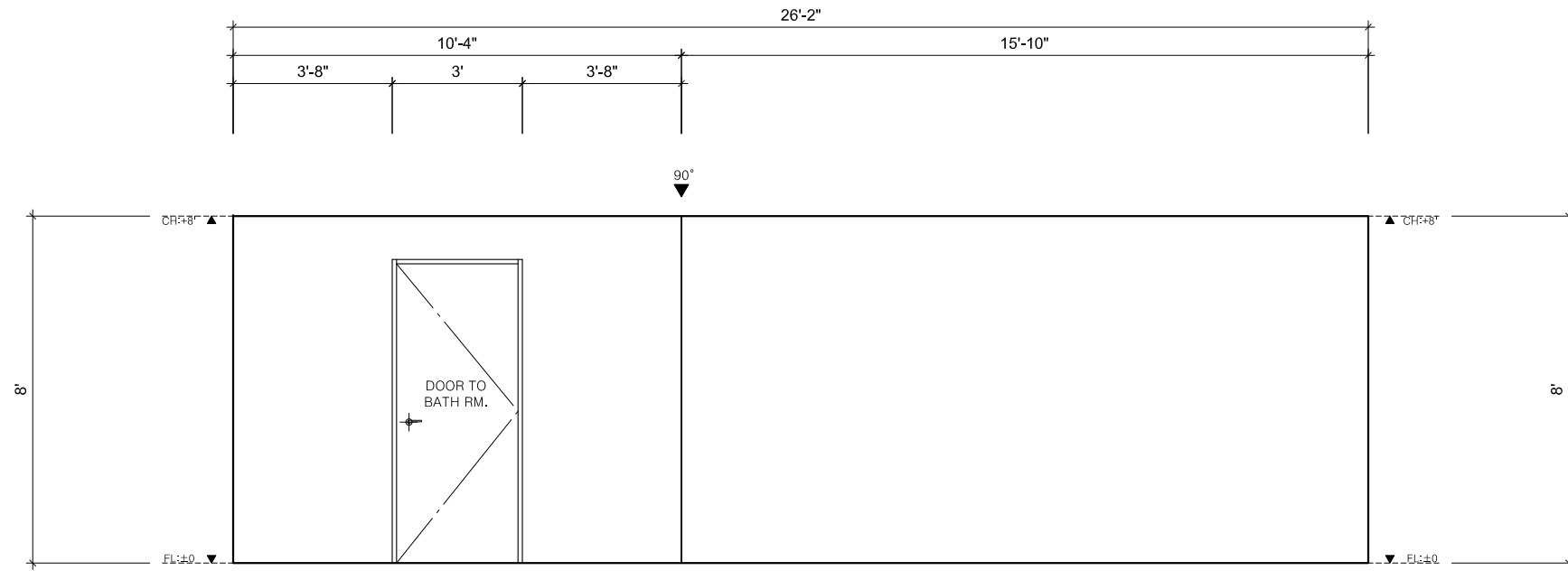
1 UNIT_ELEVATION_01_Northside

SCALE
Tabloid : 1/4"=1'-0"



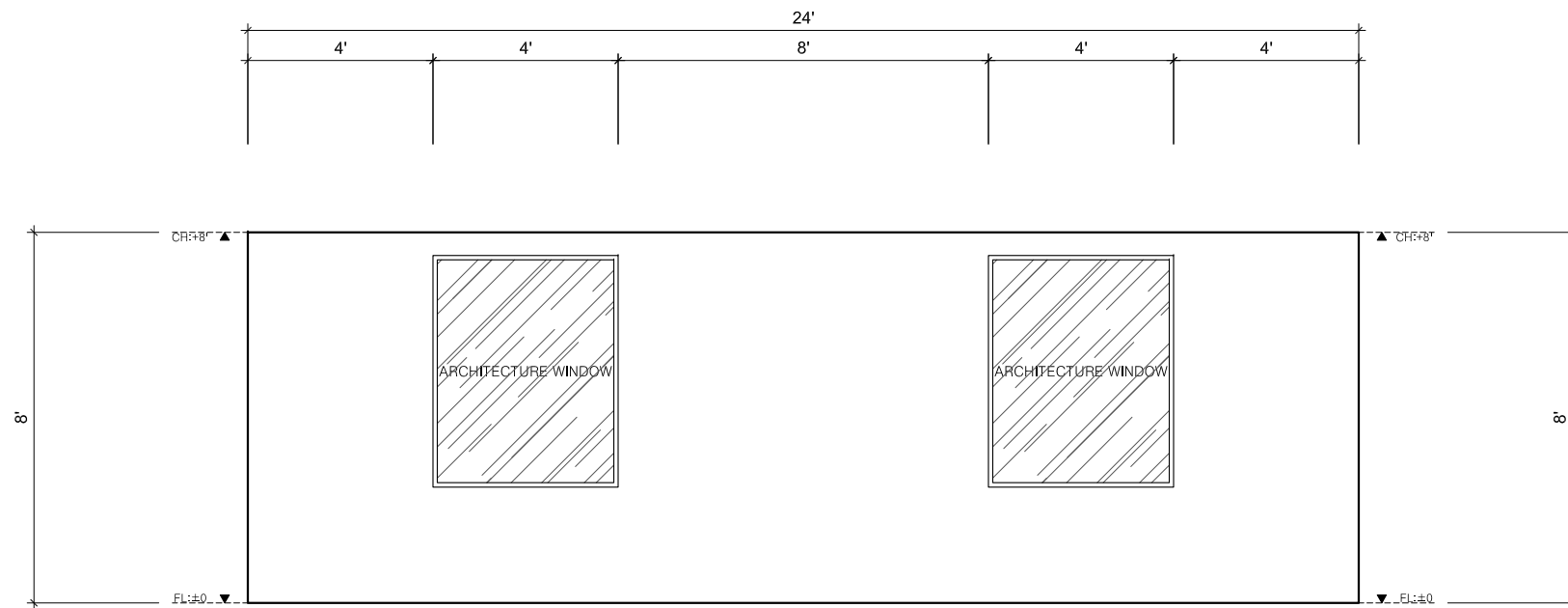
2 UNIT_ELEVATION_02_Eastside

SCALE
Tabloid : 1/4"=1'-0"



1 UNIT_ELEVATION_03_Southside

SCALE
Tabloid : 1/4"=1'-0"



1 UNIT_ELEVATION_04_Westside

SCALE
Tabloid : 1/4"=1'-0"

