



Design Drafting Competition 2020-2021



Design Problem and Project Description:

The Taylor Family and their Requirements

The Taylor family is living in a cramped rental apartment in NYC with young children and wish to make a lifestyle change. Dr. Jack Taylor is a professor specializing in infectious diseases and teaches at SUNY Downstate Medical College, and his wife, Dr. Ann Taylor, is a pediatrician and works near Park Slope at NY Presbyterian Hospital in Brooklyn. The time has come for a change.

They decided to purchase a vacant Lot #35, on the beautiful historic Washington Street, in the Park Slope neighborhood of Brooklyn, New York, to construct a new multi-story row house. It is up to you to provide the [RowHouz Remix](#) design.

The Taylors have three children. The two daughters are Laila and Lilou – aged 6 and 9 respectively. Their son Stephon is 3 years old. As part of their design requirements, they need an in-law suite for Ann Taylor’s mother who will assist with childcare.

In the future, as Grandma Taylor ages, the Garden/1st floor ‘in-law apartment’ requires handicapped access in the front entry and the backyard. In addition, the 2nd Floor requirements include an efficiency kitchen, living room, bedroom, ADA bath, and interior staircase.

The family’s main residence for the 2nd, 3rd 4th floor, requirements are: living room, informal family room, master bedroom, library area, 2 full baths (1 bath is part of master bedroom suite), kitchen, coat closet, walk-in closet in master bedroom, closets in each of the children’s’ bedrooms, and a 2nd floor rear balcony with stairs to the back yard.

The master bedroom will have an en-suite bathroom with a walk-in closet. Laila and Lilou will share a bedroom and Stephon will have his own bedroom. All three children will share a bath.

The informal family room will have a play area with Wi-Fi and 2 desks for the older children to do their homework. Jack Taylor, the Professor, requires a designated library area for his books and research, adjacent to the master bedroom.

The Taylors would like their home to be both environmentally responsible and cost efficient where possible. They hope to achieve much of this by using recycled salvaged construction materials when opportunities make sense (cents).

Some Quick Architecture History

What is a row house?

New York City is recognized around the world for its 20th century, glass and steel skyline. Yet architecturally, NYC is largely a 19th century city. Much of the residential architectural distinction is derived from row houses of the 1800's. The standard, narrow, three-to-five story residences were built to house an expanding middle class population, more than a century ago. Although, originally built for the growing middle class - row houses today are renovated multi-million-dollar homes.

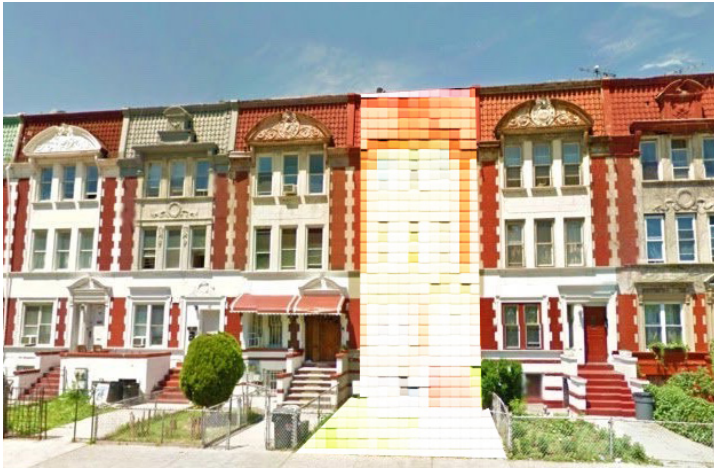
The distinctive row house residences are the dominant building type of New York City's historic districts. Their care and maintenance have a substantial impact on the unique character and value of the neighborhood.

A row house is typically 3-5 stories in height, built in rows, having the same setback and a roofline with the structures next door. It must be remembered, however, that architectural design is a creative process and not all houses in a row are the same or must be the same. Although they are linked together, each residence has its own distinctive character. The original structures had unique features fabricated by talented immigrant trade workers, builders, and drafts people from all parts of the world bringing details perhaps from their homeland. In fact, row houses in America were a borrowed idea from Europe's 'terraced houses'.

Many row houses can be identified as transitional buildings with forms and details characteristic of many different styles – and may have been altered and/or renovated since they were originally built.

Changes of one or more elements were often made to make an old row house more contemporary. These are often referred to as an "eclectic remix" style. In your [RowHouz Remix](#) - each element of your row house should be handled in accordance with your creative style, making the façade totally unique. Some of the basic architectural elements of design consists of cornices, stone lintels and sills, windows, shutters, front doors, fences, entry stoop stairs, brick, brownstone, and other mixtures of materials.

In reference to materials, many row houses in Manhattan and Brooklyn were clad in a dark chocolate sandstone quarried from New Jersey called 'brownstones'. This became a popular façade material and was more affordable than limestone.



What will you inspire your RowHouz Remix?

Size:

Garden / 1st Floor 16'-0" x 46'-0" (Adjust for optional garage, refer to plan and section drawings)

2nd Floor, 16'0" x 46'-0"

3rd Floor 16'0" x 46'-0"

4th Floor 16'0" x 46'-0"

Total Square feet: 2,944 SF (Interior Finish Dimension)

Refer to Plan and Section provided with the competition packet.

Students are to design and determine the use, per floor, and square feet based on their narrative. The per floor total is not exceed 736 SF as finished interior space. Variations to the program must be pointed out and defended in your narrative.

Site Considerations

- Provide front entry, stoop, stairs to 2nd Floor
- Provide garden/1st floor rear entry; stairs to outdoor 2nd floor deck
- Provide rear yard ground level patio, maximum 18'-0" x 20'-0"
- Provide rooftop penthouse as an optional layout; refer to setback on Section Drawing
- Provide landscaping at rear yard as an optional layout
- Life Safety Features Requirement - provide interior staircase from rooftop outdoor area to basement for Fire Egress

Required Items for Submission:

Design Drawing General Requirements (must be included in each drawing):

Title block matching the format provided in the contest guidelines. All information in the title block must be complete. Standard scale will be ¼" = 1'-0" unless otherwise noted.

Include the Entry Code number as assigned by your administrator. Do not list your name on the drawings. All units shall be in English system – no Metric system.

Itemized Points from Judging Form (Total of 185 Points)

Design Narrative/Concept (20 Points)

Describe your design, including but not limited to geographical and site considerations, special design features, innovative construction, sustainable materials or reuse practices, historic precedence references that go beyond the basic project requirements and/or aid in learning about row house styles. The narrative shall be 400-500 words, typed and submitted in 8.5 x 11 format with the code number as assigned by your administrator. Do not include your name. Staple multiple sheets together. Remember that spelling and grammar will be considered when awarding points.

Required Drawings (A-1 thru A-5):

Sheet A-1 Site Plan (25 Points)

Show the roof layout, including pitch and any Mechanical/Electrical Plumbing/Technology items that will be included.

Show landscaping and access to roadways/parking. Include walkway to main entry door and location of emergency secondary means of fire egress.

Include a North arrow.

Sheet A-2 Floor Plans (35 Points)

Garden/1st, 2nd, 3rd, 4th:

Indicate total square footage of space.

Show wall, window, front, entry, door swings, and all other openings.

Show closets, cabinetry, plumbing fixtures and appliances.

Show layout of spaces to including key furniture and equipment. Please include appliances, elevator, Smart House equipment [IoT (Internet of Things), PoE (Power over Ethernet)].

Include the name of each room, and include all relevant dimensions and section cut marks.

Sheet A-3 Floor Plan Ceiling Electrical (25 Points)

Show switches, electrical outlets, data outlets, interior and exterior lighting fixtures, custom or salvaged light fixtures, and wireless access points. If your design calls for custom or salvaged/retrofitted light fixture(s), please note this on your Electrical Symbol Legend.

Sheet A-4 Exterior Elevations (30 Points)

Two (2) elevations are the required minimum.

The main entry must be included in one of the elevations.

Show all exterior features including, but not limited to doors, windows, roof, roof pitches and overhangs.

Include a “Material Legend” for all materials used and denoted by hatches.

Call out and annotate all materials that are not indicated by hatches.

Each elevation must be labeled as North, South, East, or West.

Sheet A-5 Building Section (25 Points)

Show foundation, framing, insulation, floor and roof construction, etc.

Sections should include interior elevations.

Draw a typical wall section at 1" = 1'-0" scale.

OPTIONAL DRAWINGS FOR ADDITIONAL POINTS

OPTIONAL A-6 DRAWINGS (10 Points) (Choose One Only)

A-6a/Front façade rendering in color & section drawings

A-6b/ Landscaping Plan for rear yard; include barbeque & outdoor eating area

A-6c/ Recycled salvaged materials, sketch, photo, & legend of cost

A-6d/ Additional section drawings

A-6e/ Provide a 3D axonometric rendered section

OPTIONAL A-7 Drawings (15 Points) (Choose One Only)

A-7a/Cellar floor plan with furniture layout

A-7b /Penthouse 5th floor/refer to dotted line noting roof setbacks; provide detailed floor plan with furniture

A-7c/ Construct & photograph your original scale model

A-7d/ Solar roof panel design

A-7e/ Single car garage plan or Garden/1st floor apartment

Resources

1. Students can submit questions directly to the www.NEF-edu.org [Design Drafting Competition](#) via the RFI section if a sponsor or educator cannot assist locally. (RFI is an acronym for “Request for Information” which is a formal Q&A process). Allow 2-3 days for NEF to respond and post an answer to the website.
 - a. Check the website regularly for updates or special announcements. Review the RFI section often to see if your question has been covered before submitting duplicate questions.

- b. Site Plan and Section – download at www.NEF-edu.org Design Drafting Competition. PDF and DWG (2007 and 2018 AutoCAD) formats are provided. If .DXF format is needed, please submit your request via the RFI section.
 - c. NYC row houses – refer to the ‘Library of Photos’ of row house architectural elements that can be viewed/downloaded at www.NEF-edu.org Design Drafting Competition.
 - d. A walking tour of a historic NYC may be planned for local students. If conditions allow for broadcast of the event, an announcement will be posted to www.NEF-edu.org Design Drafting Competition if this will be Zoomed/available in future so check the website weekly!
2. <https://www1.nyc.gov/site/lpc/applications/rowhouse-manual.page>
 - a. Incorporate elements from the above link of the Row House Manual in consideration:
 - Front entry, façade material, window, sills, window style (6 over 6), smaller windows on top floor, chimneys, roof line
 - This guide will be useful for design integration of elements such as façade material (like stonework, ornamental ironwork, etc.), front entry, exterior doors, windows, sills, window style (6 over 6), smaller windows on top floor, cornices, chimneys, and roof line consistent with historic row houses.
3. To consider use of salvaged material, refer to: <https://newyorksalvage.net>
 4. Google Earth to be inspired internationally for other interpretations of what a [*RowHouz Remix*](#) could be!