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Architecture Portfolio

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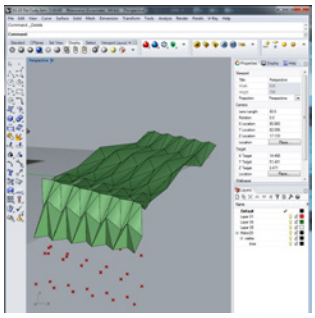
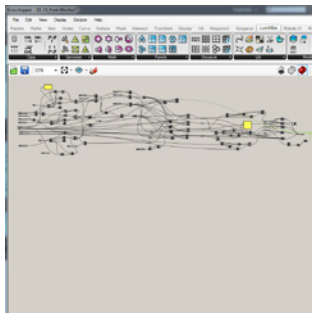
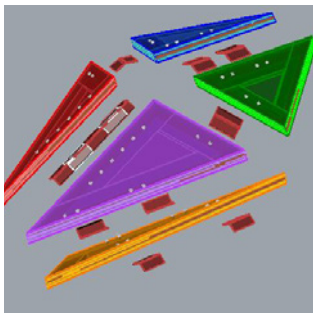
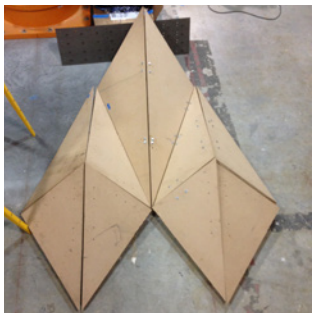










Performative Structures

Blacksburg | Virginia
Professor Nathan King
Fall 2015

This is a study of the use of folded plate technology as a long-span structure, and as a beautiful alternative to conventional post-and-beam structures. This research proposes a way of expressing cross-lams within the design in an experimental fashion, and a joint that responds to custom angles and differently sized pieces, inherent to a folded plate structure. The joinery method introduces a third element, a bent metal plate, similar to a biscuit joint where the wooden plates are slit and that metal plate bent at the appropriate angle is inserted in the slits and bolted through the board to keep it in place.

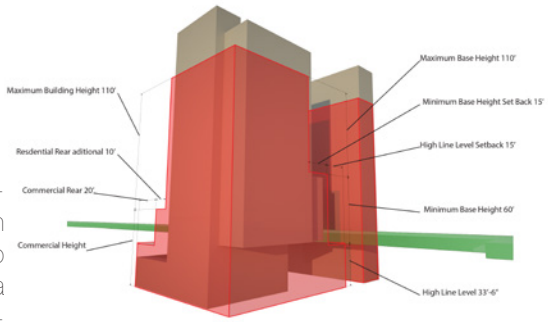
Integrating the computer as much as possible and as early as possible in the design phase as an apparatus to quickly create and iterate on ideas, refine them and generate the construction algorithm to execute by the machines, is key in making it an integral part of the process from the sketching to the construction phase.

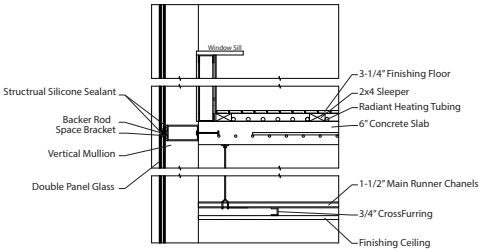
511 West 28 Street

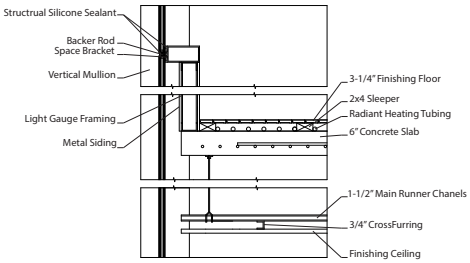
New York City I New York
Professor Joe Wheeler & DXA Studio
Fall 2014

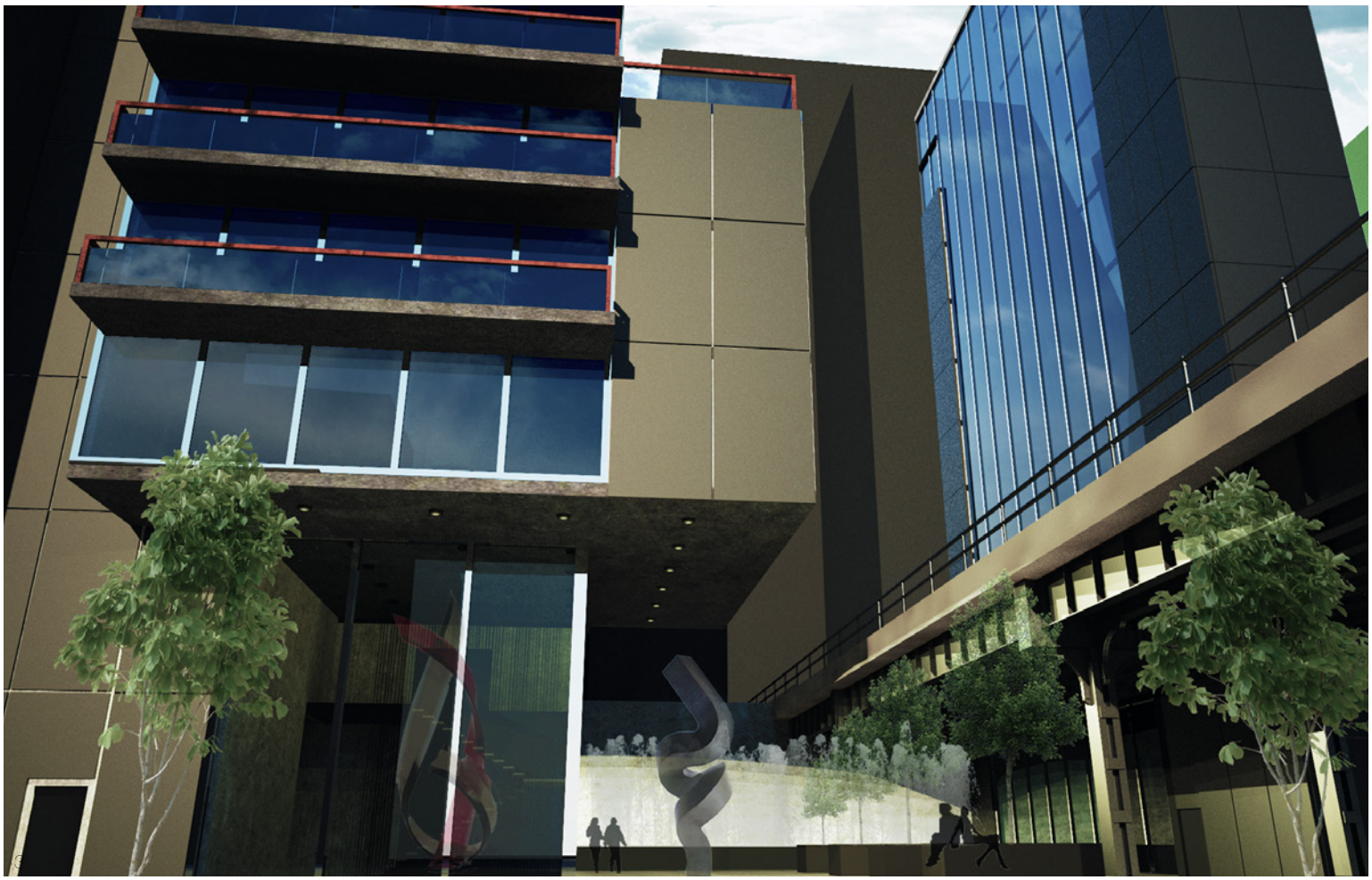
511 West 28th Street is a mid-rise residential apartment with a site cut through by the High Line in New York City. We had the opportunity to work with DXA, a New York City based firm, on a weekly bases over web-comm to explore the balance between design and development . One of the questions that is most frequently asked throughout the semester that I struggled with the most is how does an architect maintain their idea under limitations such as developers and zoning codes.

The proposition aims to create a central public plaza that links the east and west tower. The first three levels of the towers are commercial spaces due to the value of having a store front facing the highly visited High Line and privacy issues. The residential tower have a separate entrance and circulation core that has access to each level. The tower consists of units ranging from studio apartments to four bedroom apartments and penthouses. Spaces such as bathrooms and closets are located towards the center of the tower to free up valuable perimeter space for the living quarters.



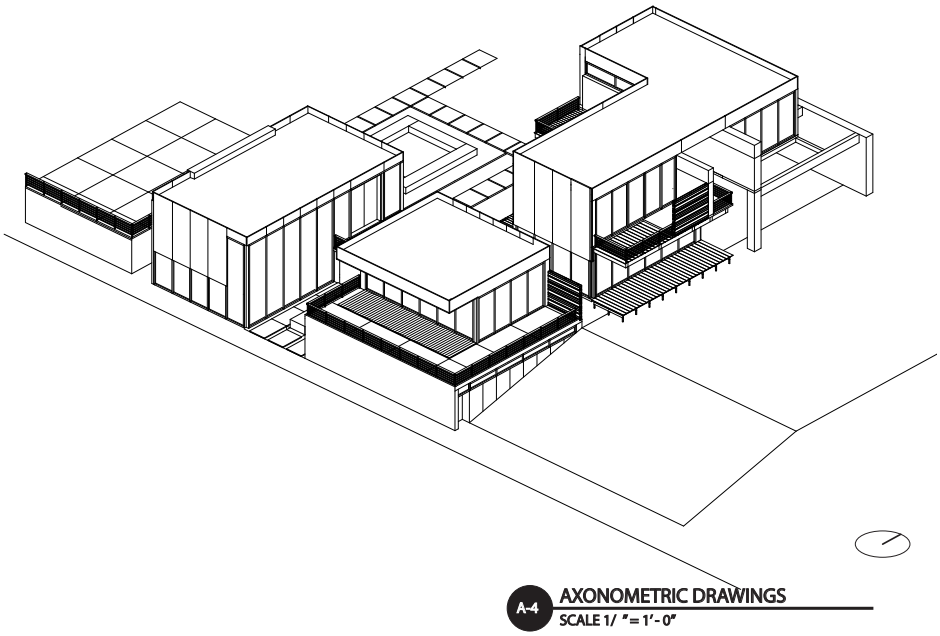






Test Cell Dwelling

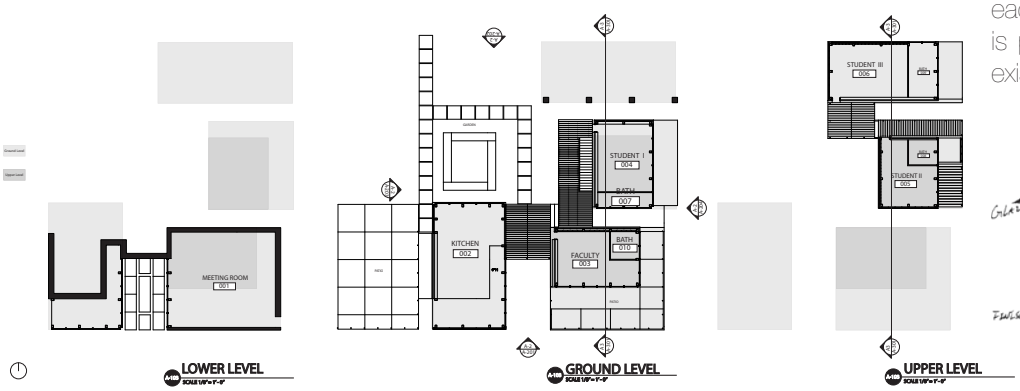
Blacksburg | Virginia
Professor Patrick Doan
Spring 2014



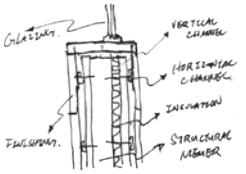
A-4 AXONOMETRIC DRAWINGS
SCALE 1/ "= 1'- 0"

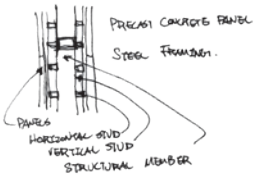
The Test Cell Dwelling is a project targeted to provide temporary housing to the researching staff at the Research Development Complex (RDF) in Blacksburg. The project includes four units of living quarters with individual bathrooms for one professor and three students, an open work space and a dinning area. The proposed project is three steel frame structures with mostly metal claddings. Dark colored concrete and wood finishing are used for specific walls to achieve certain spacial qualities desired.

This is the first project that I had expressed what true beauty in architecture means to me and begin to formulate my own set of language and style; a sense of complex geometrical spaces that form not just the interior, but more so the exterior space of the project. As a result, each building and unit has a unique relationship with another and each space is experienced differently. Each space is planned through a grid that follows through the existing test cell buildings.



LOWER LEVEL
GROUND LEVEL
UPPER LEVEL



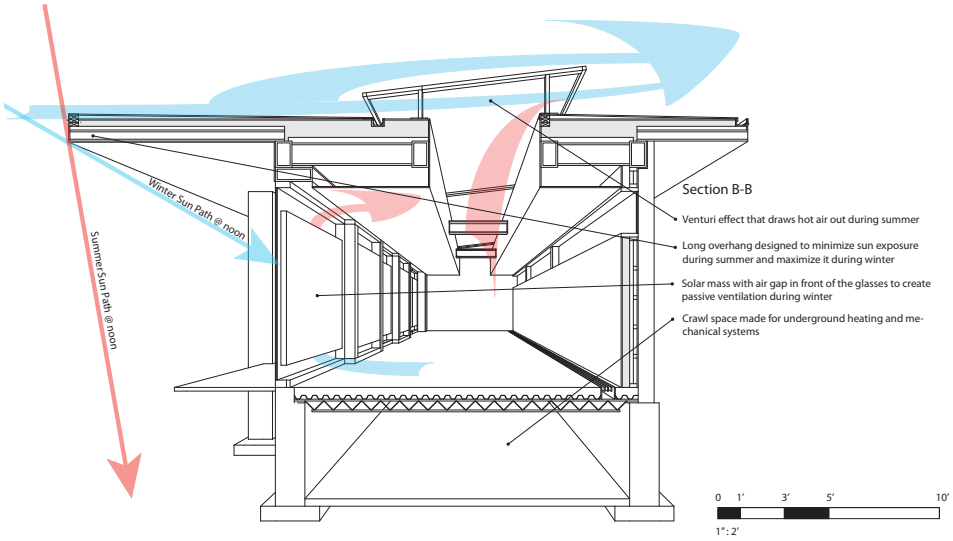


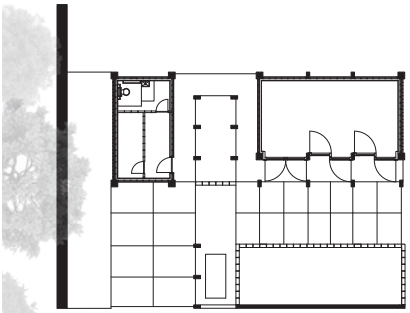
Clerk's Office

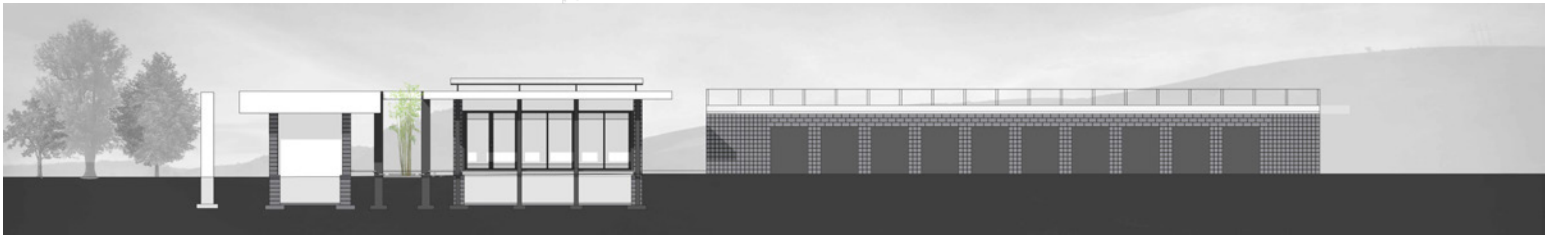
Blacksburg | Virginia
Professor Patrick Doan
Fall 2013

The Clerk's Office is part of the complex of the RDF, Research Development Complex, project. The purpose of the building is to provide office space that oversees the complex. It houses a main office space, a rest space and a restroom. This is the project where I began questioning the importance of an architect versus that of an engineer. What values architects may add to a project by holding certain visions that eventually forms into spaces of unique experience.

Originally a simple rectangular plan was chosen for a focus on how the building operates such as the orientation of the building, the roof angle and extension, solar mass, passive heating and cooling, connection between materials and other sustainable elements. The question of spacial quality rises later in the project which led to the division of the building and formation of the garden.







Industrial Design & Supplement Materials

The study of industrial design has helped me communicate my architectural ideas through different design medias and perspectives. It was more than just the knowledge of how a two point perspective is composed free handed, how burning and dodging works in Photoshop or how to make prototype models. But how it can help me describe certain experience of spaces and how I am able to engage the user and audience in a different way that allows a better delivery of my idea.