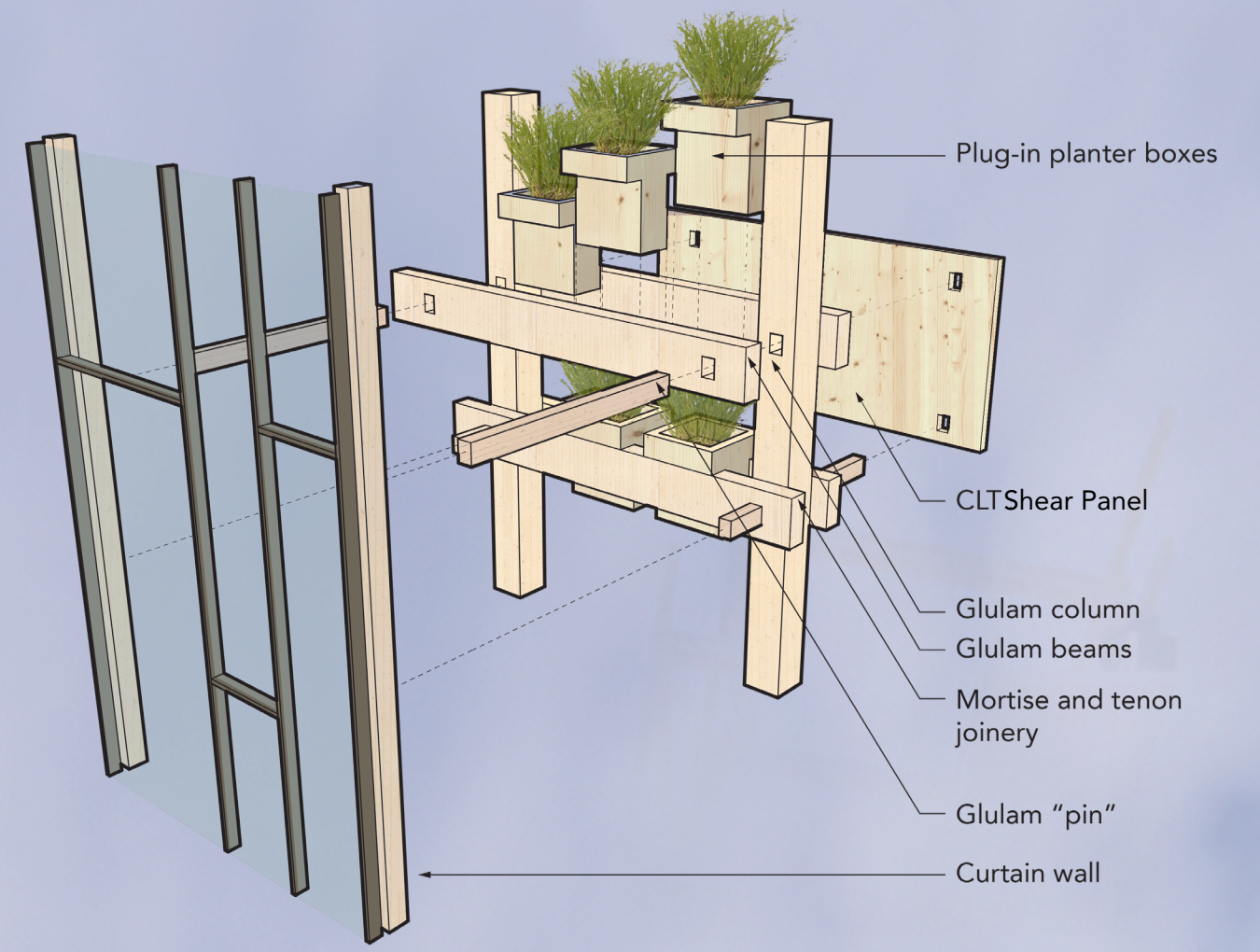


**Construction Methodology**



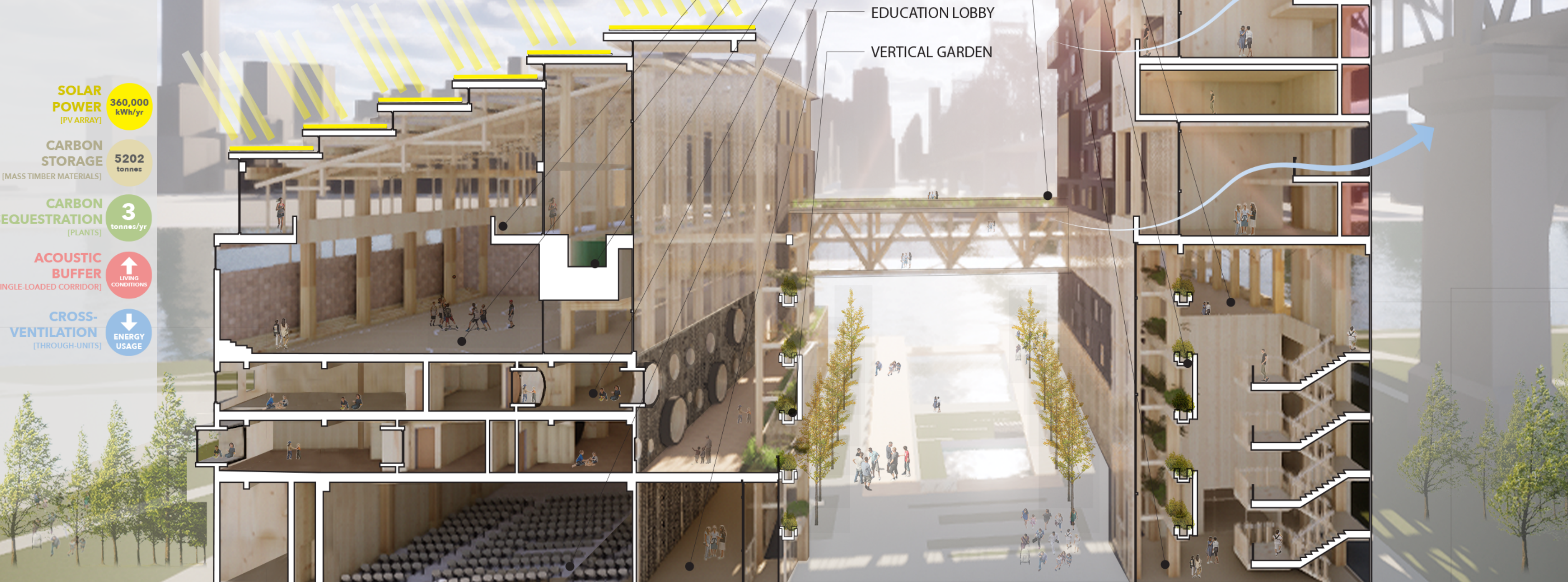
**TYPICAL VERTICAL GARDEN CONNECTION**



**Interlock**

Several different mass timber strategies are used to construct a planar residential tower and a trabeated community building. CLT panels are used in a structural "egg-crate" matrix that accentuates the modularity of the residences. Glulam columns and beams provide open and

airy spaces for the community building, while DLT walls and roof panels provide embedded acoustic baffling, lighting, and a tactile, interactive surface for classroom walls.



- SOLAR POWER** (PV ARRAY) 360,000 kWh/yr
- CARBON STORAGE** (MASS TIMBER MATERIALS) 5202 tonnes
- CARBON SEQUESTRATION** (PLANTS) 3 tonnes/yr
- ACOUSTIC BUFFER** (SINGLE-LOADED CORRIDOR) BETTER CONDITIONS
- CROSS-VENTILATION** (THROUGH-UNITS) ENERGY USAGE



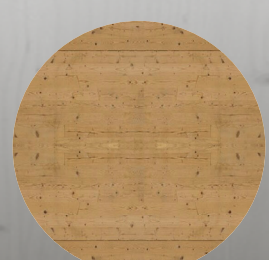
**CLT**

[floor slabs, demising walls, exterior diaphragm] 835 panels: 13' x 35' average length  
Structurally similar to poured-in-place concrete with a fraction of the construction time and transportation costs, and a net-negative carbon footprint.



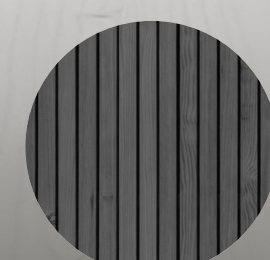
**Staggered DLT**

[Roof of community building, walls of classrooms]  
No glue used, no VOC off-gassing, embedded acoustical dampening, net-negative carbon footprint



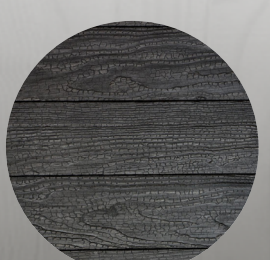
**Glulam**

[Structural system of community building and base of residential tower]  
Prefabricated columns and beams allow quick construction, minimized transportation costs, and net-negative carbon footprint



**Dark Stain Cedar Rain Screen**

[exterior cladding]  
Naturally weather resistant, reduced need for harmful chemicals



**Charred Pine Siding**

[exterior cladding]  
Naturally weather resistant, reduced need for harmful chemicals