



# 512GW Townhouse / Archi-Tectonics



Curated by Paula Pintos

Share

**APARTMENTS** • NEW YORK, UNITED STATES

Save



 Year: [2019](#)

 Photographs: [Evan Joseph](#), [Federica Carlet](#)

 structural Engineer: [Cantor & Seinuk](#)

Mechanical Engineering: [2LS Consulting](#)

**MORE SPECS**



Recommended Products

 Save

 Home

 Projects

 Products

Folders

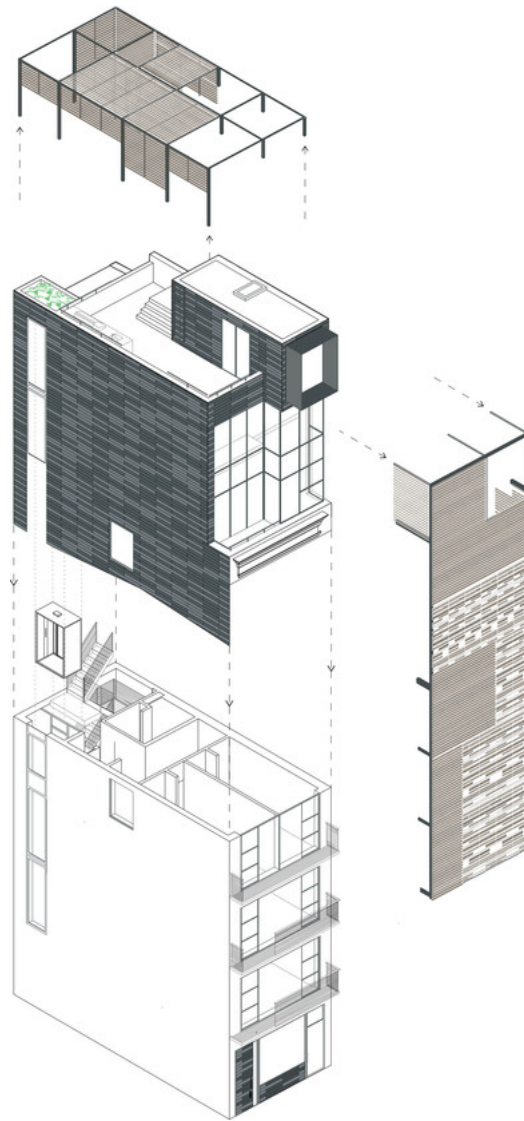
 Feed

*Text description provided by the architects.* Archi-Tectonics converted a long and narrow industrial structure in SoHo into a spacious and flexible 8-story family home. The size of the space was doubled by adding a 4-story structure to the original townhouse, and by unifying the two volumes with a 3d envelope: the Climate Control

Save



*Climate Skin.* The townhouse is inscribed within the Climate Skin, a spacious lattice envelope made of lightweight steel and folding panels clad with Trespa™ slats. When closed, they appear as one smooth surface, a facade, it wraps up and over the multi-level roofs, creating a private outdoor 'room' with green roofs and outdoor dining.



Extensive prototyping assisted in optimizing the movement of the trellis panels. This way, the façade can fold and slide open depending on the residents' changing needs, as well as simultaneously connect to and enclose from the outdoors.



Home



Projects

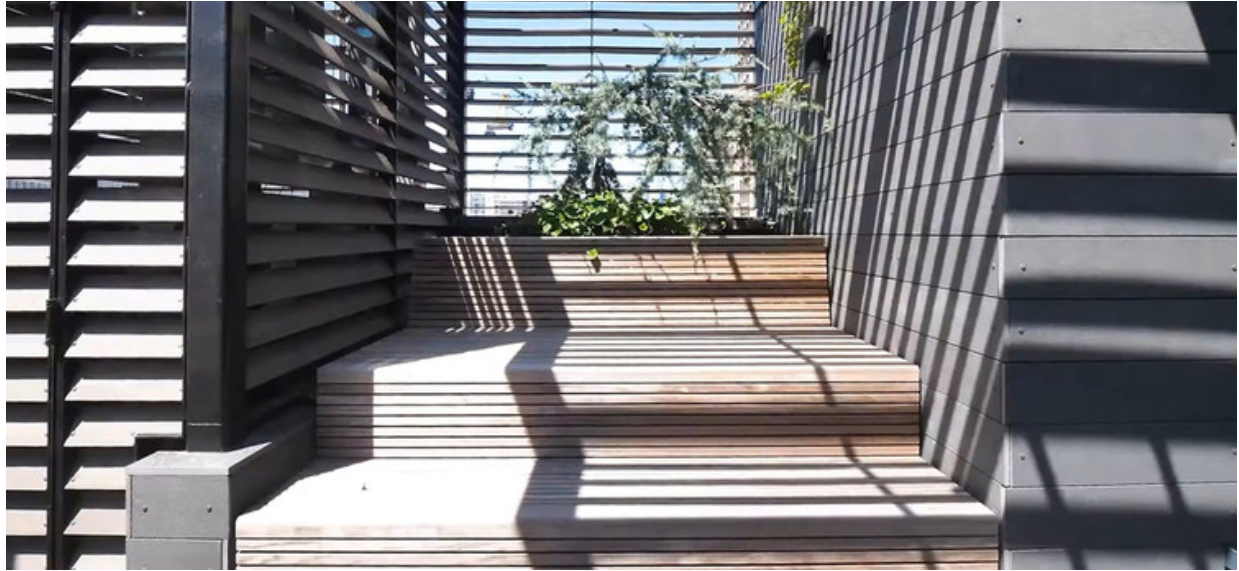


Products

Folders



Feed



This unique facade also poses interesting solutions for sustainability. By making the Climate Skin operable, residents can adjust ventilation, light, shade, and temperature so that the building naturally adapts to environmental conditions. In warmer months, the Climate Skin reduces interior radiation and lowers the need for air-conditioning. In colder months, opening the Climate Skin increases interior radiation and reduces the need for heating.



*Interiors.* Inside, the project pays respect to the building's history by restoring the existing brick and up-cycling

---

## Climate Skin, overlooking SoHo.



To enhance the building's small floorplates spatially, each floor contains a program connected through double-height voids, such as between the kitchen and dining area, and between the study and master bedroom. These allow for spatial interlacing and long views throughout.





Double-height windows, a skylight, and a dramatic south-facing continuous window slot bring ample light into what could otherwise be a dark and narrow living space. Altogether, these highlight the sensation of extreme verticality and transform mundane everyday tasks into a dynamic spatial experience.



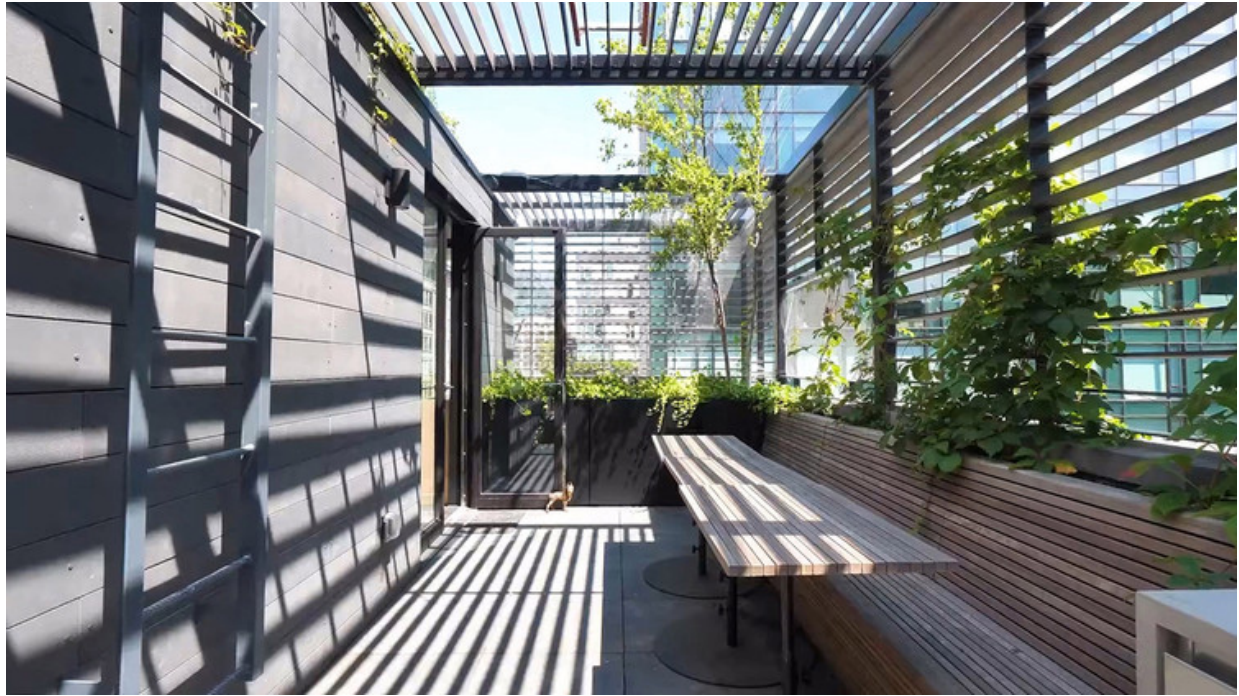


*Impact.* This Urban townhouse represents an innovative approach to densification in a city challenged by housing shortages and skyrocketing prices. The conversion not only provides residents with a diversity of

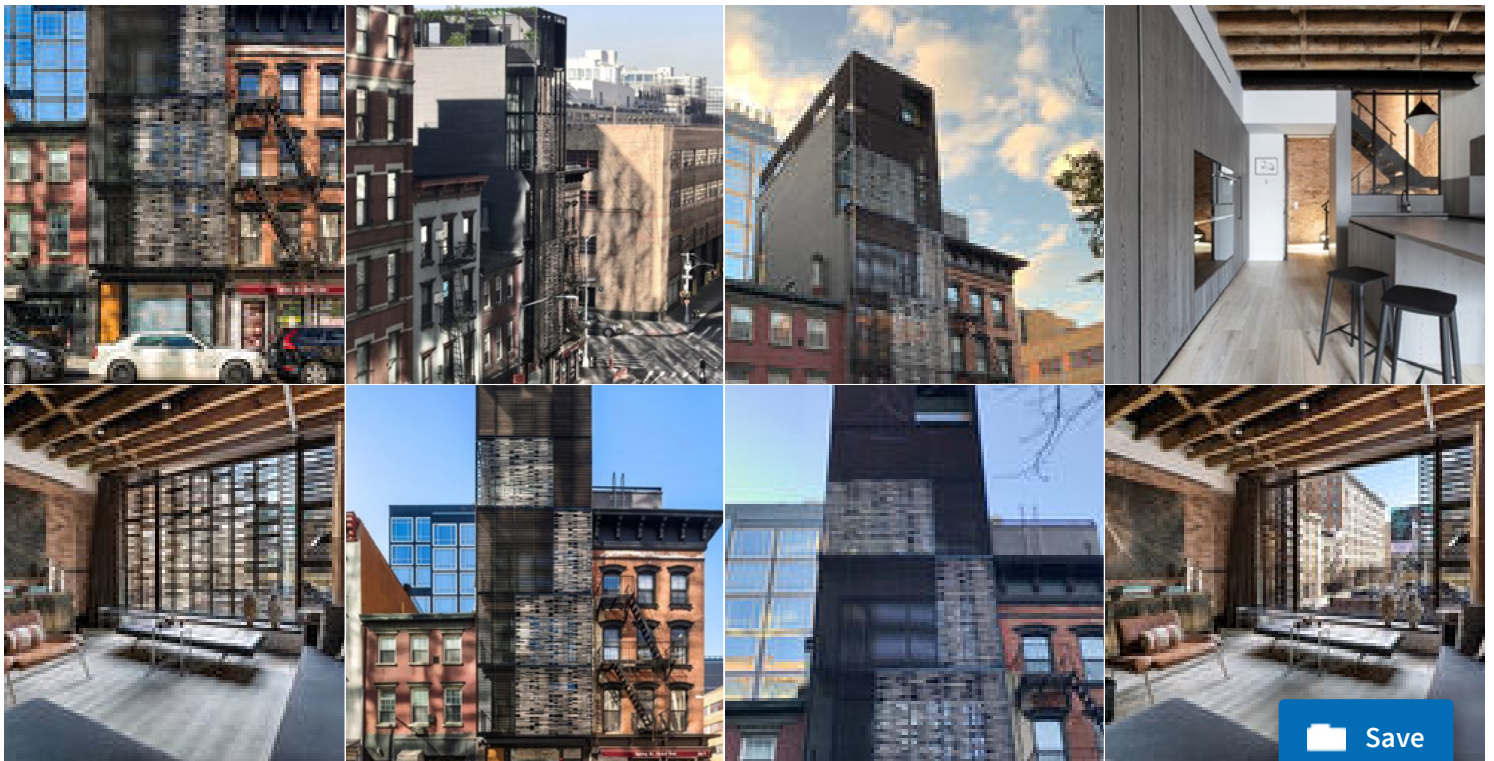


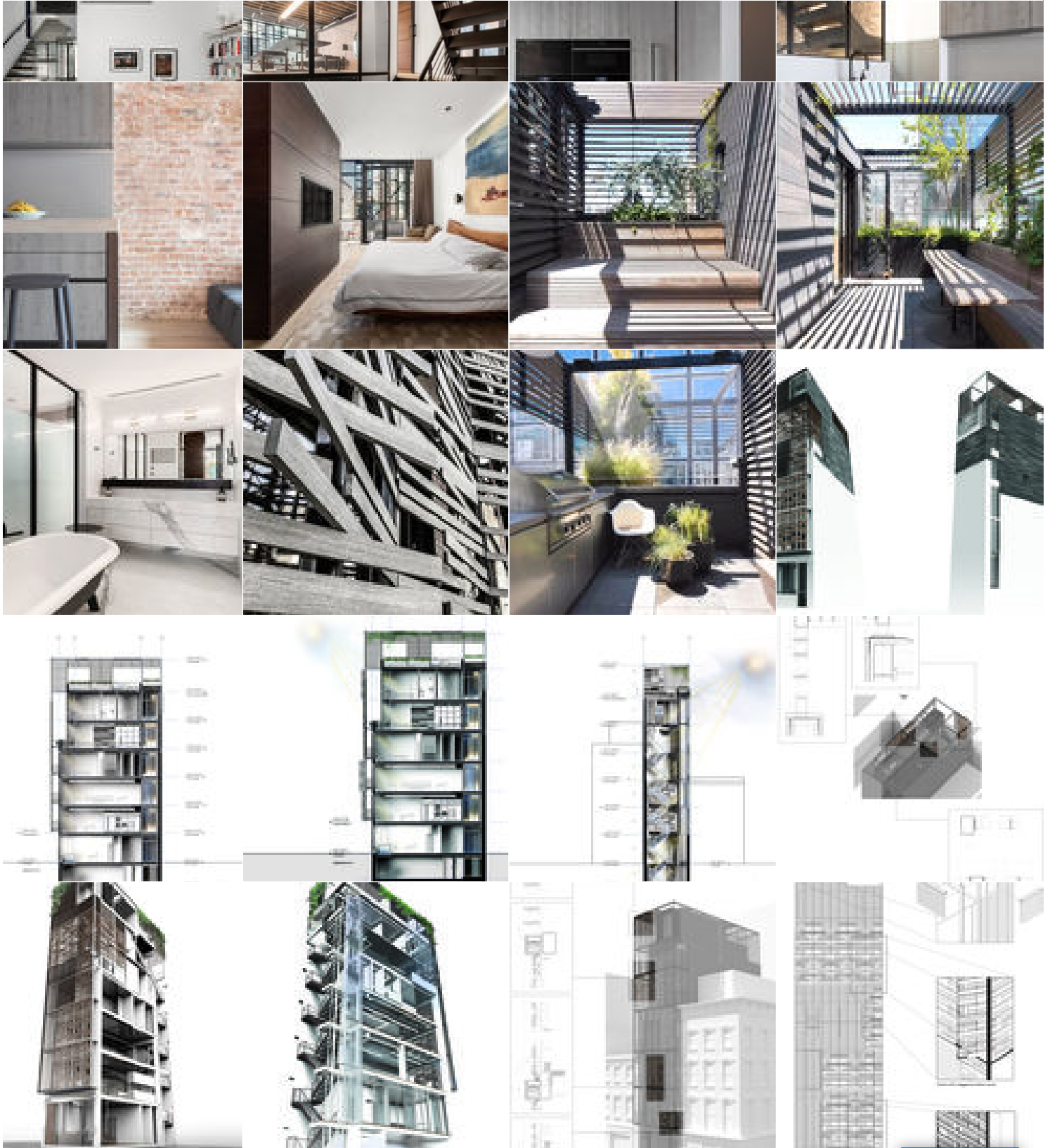


future, more sustainable design approaches to urban living.



## Project gallery





Save