ROOFSCAPES

la Biennale di Venezia
di Architettura

CLIMATE REALIGNMENT: TACTICAL ADAPTATIONS TO URBAN HEAT

An installation by Roofscapes at the 19th Venice Architecture Biennale

Press Kit, May 2025

Press contact: Eytan Levi, Co-founder, Roofscapes, eytan@roofscapes.studio

Climate Realignment:
Tactical Adaptations to Urban Heat
An installation by Roofscapes at
the 19th Venice Architecture Biennale

Location
Arsenale di Venezia, Corderie, 3rd room

Team members
Olivier Faber
Tim Cousin
Eytan Levi
Pierre Rioux
Wesley Sely
Vijay Rajkumar
Elvire Landon
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Audio
Vijay Rajkumar

Drawings
Pierre Rioux
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Tim Cousin

Sponsors
Meha Construction Bois
Topager
Association pour l'Adaptation
Climatique du Patrimoine Bâti

Special thanks
Mosaika CC
Noxant
Latifa Alkhayat
Mateo Eiletz
Marie Le Coz
Matteo Silverio
Clarisse Cheung
Tara Heuzé-Sarmini

Model in Roofscapes' installation at the Venice Achitecture Biennale
Photo: Olivier Faber, 2025

CONTEXT

Roofscapes, an MIT-born and Paris-based startup dedicated to adapting existing buildings to climate change, presents the installation ***Climate Realignment: Tactical Adaptations to Urban Heat*** in the main exhibition of the 2025 **Venice Architecture Biennale**, which takes place until November 23, 2025 at the Arsenale di Venezia. Roofscapes is one of the only French projects selected for the Venice Biennale.

The 19th Venice Architecture Biennale is organized by Carlo Ratti around the theme **Intelligens. Natural. Artificial. Collective.** For Roofscapes, it constitutes an opportunity to **materialize ongoing research** in the adaptation of existing building envelopes to heatwaves.

Roofscapes' installation *Climate Realignment: Tactical Adaptations to Urban Heat* features **thermal models** that reveal the impact of **heatwaves** on buildings in the Paris region and suggest **tactical adaptation strategies**. The installation also highlights a pilot project carried out in 2024 by Roofscapes with the City of Paris, and looks back at the company's action towards the **right to adapt to climate change**.

Model of the prevailing status quo scenario in Roofscapes' installation at the Venice Achitecture Biennale
Photo: Olivier Faber, 2025

Model of the climate realignment scenario in Roofscapes' installation at the Venice Achitecture Biennale
Photo: Olivier Faber, 2025

BACKGROUND

Climate Realignment: Tactical Adaptations to Urban Heat reveals the **invisible forces of heat shaping our cities.** Summer after summer, the **materials** cladding buildings in dense urban centers across Europe prove to be **unfit** for a warming climate. Roofs overheat, sun-exposed windows intensify indoor temperatures, and outdoor spaces suffer from a lack of vegetation. Yet, because heat is invisible, it often escapes our attention and action.

Since its inception at MIT, Roofscapes' ongoing exploration has relied on infrared imaging, thermal sensors, and interviews with residents of climatically obsolete buildings to **make heat visible and its effects tangible.** The resulting thermal intelligence then enables the design of passive, low-tech architectural strategies to adapt existing buildings to a changing climate and evolving uses.

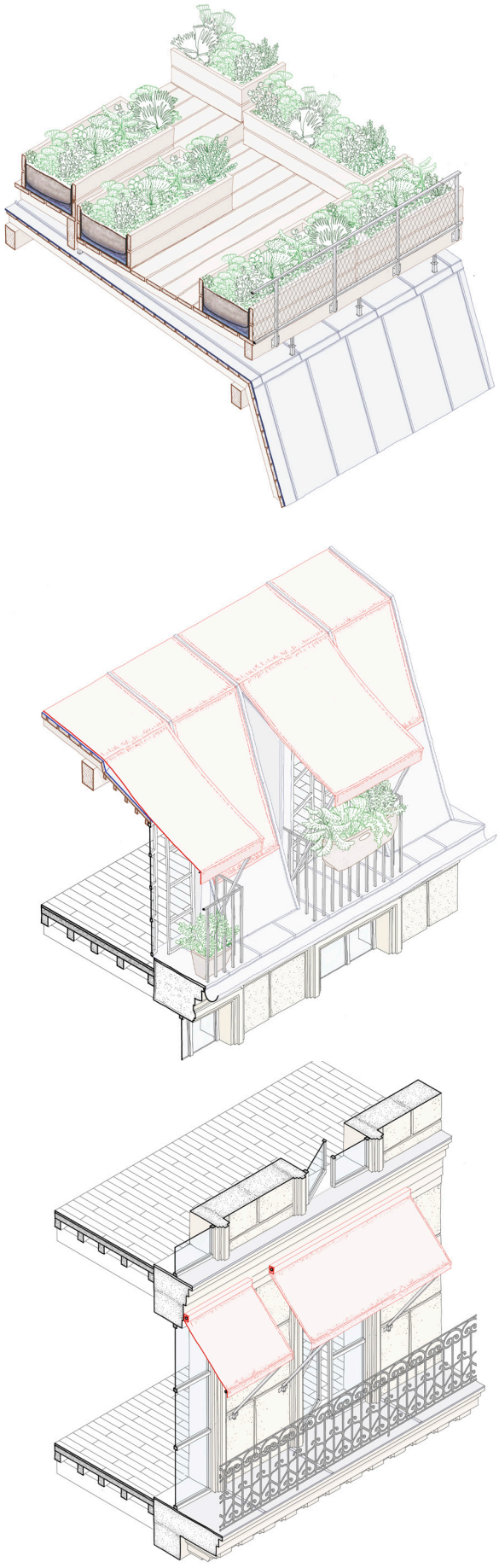
Model of different climate realignment strategies in Roofscapes' installation at the Venice Achitecture Biennale
Photo: Olivier Faber, 2025

Model of different climate realignment strategies in Roofscapes' installation at the Venice Achitecture Biennale
Photo: Olivier Faber, 2025

CONTENT

Climate Realignment: Tactical Adaptations to Urban Heat is organized around two scenarios, each consisting of **thermally activated models** of three typical Parisian buildings from different eras. The first scenario illustrates the **prevailing status quo**, with an increased use of active cooling systems, making it difficult to live outdoors, and even indoors. The second scenario details the **climate realignment** strategies developed by Roofscapes and adapted to each typology to ensure that all surfaces like roofs and façades are able to provide shade, grow plants, collect rainwater, produce energy, and offer accessible outdoor spaces.

The models featured in *Climate Realignment: Tactical Adaptations to Urban Heat* are made from zinc, stone, plaster and wood, so that their **thermal properties** are comparable to those of existing buildings. **Infrared** thermal images of the models were subsequently created with the help of leading optronics developer Noxant.



Details of adaptation strategies developed in Roofscapes' installation at the Venice Biennale
Drawings: Pierre Rioux, 2025

DEPLOYMENT

A pilot project completed in 2024 in central Paris is also featured in *Climate Realignment: Tactical Adaptations to Urban Heat*. Installed over a zinc roof on load-bearing walls, a wooden platform lowered attic temperatures by 17°C, retained rainwater, and fostered urban biodiversity. Blending **research, design, and advocacy**, *Climate Realignment: Tactical Adaptations to Urban Heat* proposes a roadmap for adapting Europe's existing building stock.

Roofscapes looks forward to continuing to develop **passive solutions** for the adaptation of existing buildings, in order to reduce the massive deployment of air conditioning while enhancing the quality of life in urban settings. **Several construction projects** are already underway in Paris and beyond, each promoting the right to adapt to a changing climate.

Roofscapes pilot project with the City of Paris at Académie du Climat
Photo: Olivier Faber, 2024

About Roofscapes

An MIT spin-off launched by Tim Cousin, Olivier Faber and Eytan Levi, Roofscapes is a company working to **reconsider roofs** as urban spaces for more resilient lifestyles. Roofscapes embodies the trio's vision for adapting existing buildings to new climatic regimes by deploying tactical, low-tech solutions. Roofscapes is based in Paris, where its team is currently building several adaptation projects with public and private building owners. Roofscapes received the European Commission's **New European Bauhaus** award in 2023 and was named by **ArchDaily** as one of the best new architectural approaches of 2024.

About the Venice Biennale

The Venice Architecture Biennale is the **world's most prestigious and visited event in the fields of architecture and urban planning**. The 2025 edition, titled *Intelligens. Natural. Artificial. Collective.* is curated by Carlo Ratti and takes place from May 10 to November 23, 2025.

Tours & interviews in Venice

The Roofscapes team is in Venice until May 12 and is available for installation **tours** and **interviews** by appointment.

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